

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1240262  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1240262

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  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*  
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*  
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

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

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Dorothy 1-3
Doc ID	1240262

All Electric Logs Run

Dual IND
Dual Comp. Porosity
Sonic
Micro

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Dorothy 1-3
Doc ID	1240262

Tops

Name	Top	Datum
Heebner	2709	-921
Toronto	2736	-948
Douglas	2749	-961
Lansing	2858	-1010
BKC	3169	-1426
Congl.	3214	-1426
Simpson	3258	-1470
Arbuckle	3286	-1498



# ALLIED OIL & GAS SERVICES, LLC

063975

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Great Bend

DATE <u>10-30-14</u>	SEC. <u>3</u>	TWP. <u>18</u>	RANGE <u>8</u>	CALLED OUT	ON LOCATION <u>7:45pm 10/29/14</u>	JOB START <u>3:30 AM</u>	JOB FINISH <u>4 AM</u>
LEASE <u>Dorothy</u>	WELL # <u>1-3</u>	LOCATION <u>Genesee 4/14 West - 15 - 3/4 E</u>			COUNTY <u>Rock</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Duke &  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D.  
 CASING SIZE 8 7/8 DEPTH 444.60  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15 FT  
 PERFS.  
 DISPLACEMENT 26.93 H<sub>2</sub>O

OWNER  
 CEMENT  
 AMOUNT ORDERED 275.58 class A  
3 1/2 cc 2 1/2 gel

COMMON	<u>275</u>	@ <u>17.90</u>	<u>4,922.50</u>
POZMIX		@	
GEL	<u>517</u>	@ <u>.50</u>	<u>258.50</u>
CHLORIDE	<u>775</u>	@ <u>1.10</u>	<u>852.50</u>
ASC			
Material Total			<u>6,033.50</u>
Disc 20%			<u>1,206.70</u>
HANDLING			<u>297.37</u>
MILEAGE <u>13.57 x 29 x</u>			<u>2.75</u>
			<u>737.48</u>
			<u>1,082.31</u>

EQUIPMENT  
 PUMP TRUCK CEMENTER Josh Isaac  
 # 366 HELPER Ben Maxwell  
 BULK TRUCK  
 # 871-112 DRIVER Jose Tracheta (TWS)  
 BULK TRUCK  
 # DRIVER

REMARKS:

On location - Reg up - had safety meeting  
Run 8 7/8 casing - Break circulation  
pump 5 bbl H<sub>2</sub>O  
mix 275 sx class A 3 1/2 cc 2 1/2 gel  
Drop plug  
Displace 26.93 bbl H<sub>2</sub>O  
Start in 4 AM  
Cement did circulate  
plug down

DEPTH OF JOB 444.60  
 PUMP TRUCK CHARGE 1512.35  
 EXTRA FOOTAGE @  
 MILEAGE Hum 29 @ 7.70 223.30  
 MANIFOLD @  
Hum 29 @ 4.40 127.60

CHARGE TO: American Warror  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

TOTAL 3,682.34  
 Disc 20% 736.57

PLUG & FLOAT EQUIPMENT

Rubber plug @ 131.00  
 @  
 @  
 @  
 @

TOTAL 131.00  
 Disc 20% 26.20

To: Allied Oil & Gas Services, LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 9,847.34  
 20% 1,969.47  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME X STEVE H STEPHENS

SIGNATURE X Steve H Stephens

7,877.87



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

TICKET 27899

PAGE 1 OF 2

SERVICE LOCATIONS  
 1. Ness City KS WELL/PROJECT NO. 1-3 LEASE Dorothy COUNTY/PARISH Rice STATE KS CITY Geneseo DATE 5 Nov 14 OWNER  
 2. TICKET TYPE  SERVICE CONTRACTOR DUKE RIG NAME/NO. 8 SHIPPED VIA CT DELIVERED TO location ORDER NO.  
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE cement long string WELL PERMIT NO. WELL LOCATION 3-18-8  
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRX 114	80	m			6.00	480.00
578		1			Pump Charge	1	ea			1500.00	1500.00
402		1			Centralizer	5 1/2	in	1	ea	70.00	560.00
403		1			Cement Basket	5 1/2	in	1	ea	300.00	300.00
406		1			Latch down plug & baffle	5 1/2	in	1	ea	275.00	275.00
407		1			Insert float shoe w/ AUTO FILL	5 1/2	in	1	ea	375.00	375.00

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

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

X [Signature]  
 DATE SIGNED \_\_\_\_\_ TIME SIGNED \_\_\_\_\_  
 A.M.  
 P.M.

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				1	3490.00
WE UNDERSTOOD AND MET YOUR NEEDS?				2	5964.50
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				subtotal	9454.50
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				Rice TAX 7.15%	456.99
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL	9911.49
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					



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

TICKET CONTINUATION

TICKET No. 27899

CUSTOMER American Warrior WEE Dorothy 1-3 DATE 5 NOV 14 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY		U/M		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF			QTY	U/M	QTY	U/M			
325		1				STANDARD cement (For EA-2)	175	sk			14.50	2537.50	
284		1				calscal	800	lb	8	sk	35.00	280.00	
283		1				salt	900	lb			0.20	180.00	
292		1				halad-322	125	lb			8.00	1000.00	
276		1				flocce	50	lb			2.50	125.00	
281		1				mud flush	500	gal			1.25	625.00	
221		1				KCL liquid	2	gal			25.00	50.00	
290		1				D-AR	2	gal			42.00	84.00	
581		1				SERVICE CHARGE	175				2.00	350.00	
583		1				MILEAGE CHARGE	18325	TOTAL WEIGHT	80	LOADED MILES	733	733.00	

CONTINUATION TOTAL 5964.50



**JOB LOG**

**SWIFT Services, Inc.**

DATE **5 NOV 14** PAGE NO. **1**

CUSTOMER **American Warrior** WELL NO. **1-3** LEASE **Dorothy** JOB TYPE **Cement long string** TICKET NO. **27899**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175 sk EA-2 cement w/ 1/4" floccle 83 jts 5 1/2" x 14" casing total pipe 3400' TD = 3400' shoe jt 21' Bshut #3 Centriact, 2, 456, 8, 10, 13
	0830							on loc TRK 114
	0900							start 5 1/2" x 14" casing in well
	1020							Drop ball - circulate
	1120	4	12				200	Pump 500 gal mid flush
		4	20				200	Pump 20 bbl KCL flush
	1130		7					Plug BH - MH <del>30SK - 20"</del>
	1137	4 1/2	35				200	mix EA-2 cement <del>125SK</del> @ 15.3 <del>FFG</del>
								Drop latch down plug wash out pump & line
	1152	6					200	Displace plug
		6	79				700	
	1208	6	83				1500	Land the plug
	1210							Release pressure to truck - dried up
	1212							Wash truck
								Rack up
	1250							job complete Thank Blaine, Flint & Jared

1. The first part of the experiment was to determine the effect of temperature on the rate of reaction.

2. The second part of the experiment was to determine the effect of concentration on the rate of reaction.

3. The third part of the experiment was to determine the effect of surface area on the rate of reaction.

4. The fourth part of the experiment was to determine the effect of catalyst on the rate of reaction.

5. The fifth part of the experiment was to determine the effect of pressure on the rate of reaction.

6. The sixth part of the experiment was to determine the effect of light intensity on the rate of reaction.

7. The seventh part of the experiment was to determine the effect of pH on the rate of reaction.

8. The eighth part of the experiment was to determine the effect of solvent on the rate of reaction.

9. The ninth part of the experiment was to determine the effect of ionic strength on the rate of reaction.

10. The tenth part of the experiment was to determine the effect of dielectric constant on the rate of reaction.



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Wyatt Urban

### **Dorothy #1-3**

### **3-18s-8w Rice,KS**

Start Date: 2014.11.02 @ 02:10:00

End Date: 2014.11.02 @ 09:14:30

Job Ticket #: 61880                      DST #: 1

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

Printed: 2014.11.08 @ 09:54:27



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Wyatt Urban

**3-18s-8w Rice,KS**  
**Dorothy #1-3**  
Job Ticket: 61880 **DST#: 1**  
Test Start: 2014.11.02 @ 02:10:00

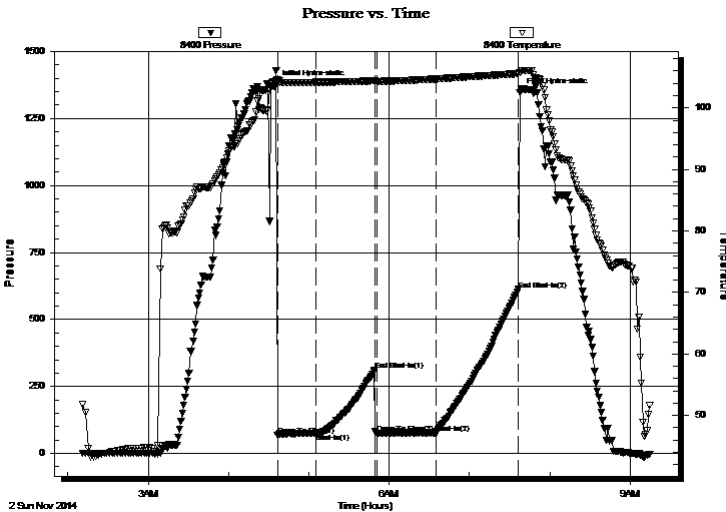
## GENERAL INFORMATION:

Formation: **LKC A-C**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 04:36:30  
Time Test Ended: 09:14:30  
Interval: **2846.00 ft (KB) To 2900.00 ft (KB) (TVD)**  
Total Depth: 2900.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jared Scheck  
Unit No: S5  
Reference Elevations: 1788.00 ft (KB)  
1780.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8400 Inside**  
Press@RunDepth: 76.65 psig @ 2880.00 ft (KB) Capacity: 5000.00 psig  
Start Date: 2014.11.02 End Date: 2014.11.02 Last Calib.: 2014.11.02  
Start Time: 02:11:00 End Time: 09:14:30 Time On Btm: 2014.11.02 @ 04:35:00  
Time Off Btm: 2014.11.02 @ 07:37:30

**TEST COMMENT:** IFP-30 Minutes-Weak blow built 7"  
ISIP-45 Minutes-No blow back  
FFP-45 Minutes-Weak blow built 7"  
FSIP-60 Minutes-No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1375.11	104.32	Initial Hydro-static
2	66.69	104.51	Open To Flow (1)
30	75.31	104.17	Shut-In(1)
74	311.21	104.41	End Shut-In(1)
76	74.45	104.31	Open To Flow (2)
120	76.65	104.69	Shut-In(2)
182	611.54	105.56	End Shut-In(2)
183	1345.84	105.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	mud	0.91

## Gas Rates

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
 PO Box 399  
 Garden City, KS 67846  
 ATTN: Wyatt Urban

**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
 Job Ticket: 61880 **DST#: 1**  
 Test Start: 2014.11.02 @ 02:10:00

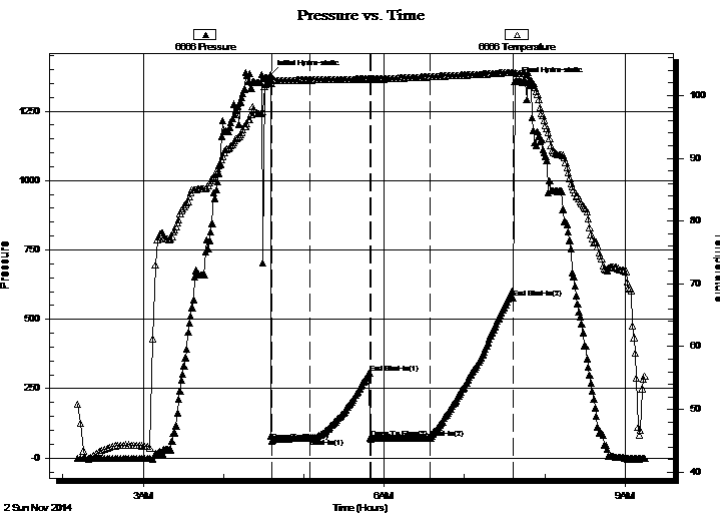
## GENERAL INFORMATION:

Formation: **LKC A-C**  
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 Total Depth: 2900.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: S5  
 Reference Elevations: 1788.00 ft (KB)  
 1780.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 6666

Press@RunDepth: 575.86 psig @ ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.11.02 End Date: 2014.11.02 Last Calib.: 2014.11.02  
 Start Time: 02:11:00 End Time: 09:14:30 Time On Btm: 2014.11.02 @ 04:35:00  
 Time Off Btm: 2014.11.02 @ 07:37:30

TEST COMMENT: IFP-30 Minutes-Weak blow built 7"  
 ISIP-45 Minutes-No blow back  
 FFP-45 Minutes-Weak blow built 7"  
 FSIP-60 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1381.00	102.12	Initial Hydro-static
1	62.06	102.38	Open To Flow (1)
30	71.40	102.47	Shut-In(1)
74	305.95	102.66	End Shut-In(1)
75	70.11	102.59	Open To Flow (2)
120	72.45	102.98	Shut-In(2)
182	575.86	103.66	End Shut-In(2)
183	1356.28	103.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	mud	0.91

## 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: Wyatt Urban

**3-18s-8w Rice,KS**  
**Dorothy #1-3**  
Job Ticket: 61880 **DST#: 1**  
Test Start: 2014.11.02 @ 02:10:00

**Tool Information**

Drill Pipe:	Length: 2849.00 ft	Diameter: 3.80 inches	Volume: 39.96 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 39.96 bbl		Tool Chased 10.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2846.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	82.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2823.00	
Hydraulic tool	5.00			2828.00	
Jars	6.00			2834.00	
Safety Joint	2.00			2836.00	
Packer	5.00			2841.00	28.00 Bottom Of Top Packer
Packer	5.00			2846.00	
Change Over Sub	0.75			2846.75	
Drill Pipe	31.50			2878.25	
Change Over Sub	0.75			2879.00	
Recorder	1.00	8400	Inside	2880.00	
Recorder	1.00	8525	Outside	2881.00	
Anchor	16.00			2897.00	
Bullnose	3.00			2900.00	54.00 Bottom Packers & Anchor

**Total Tool Length: 82.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Wyatt Urban

**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
Job Ticket: 61880      **DST#: 1**  
Test Start: 2014.11.02 @ 02:10:00

### Mud and Cushion Information

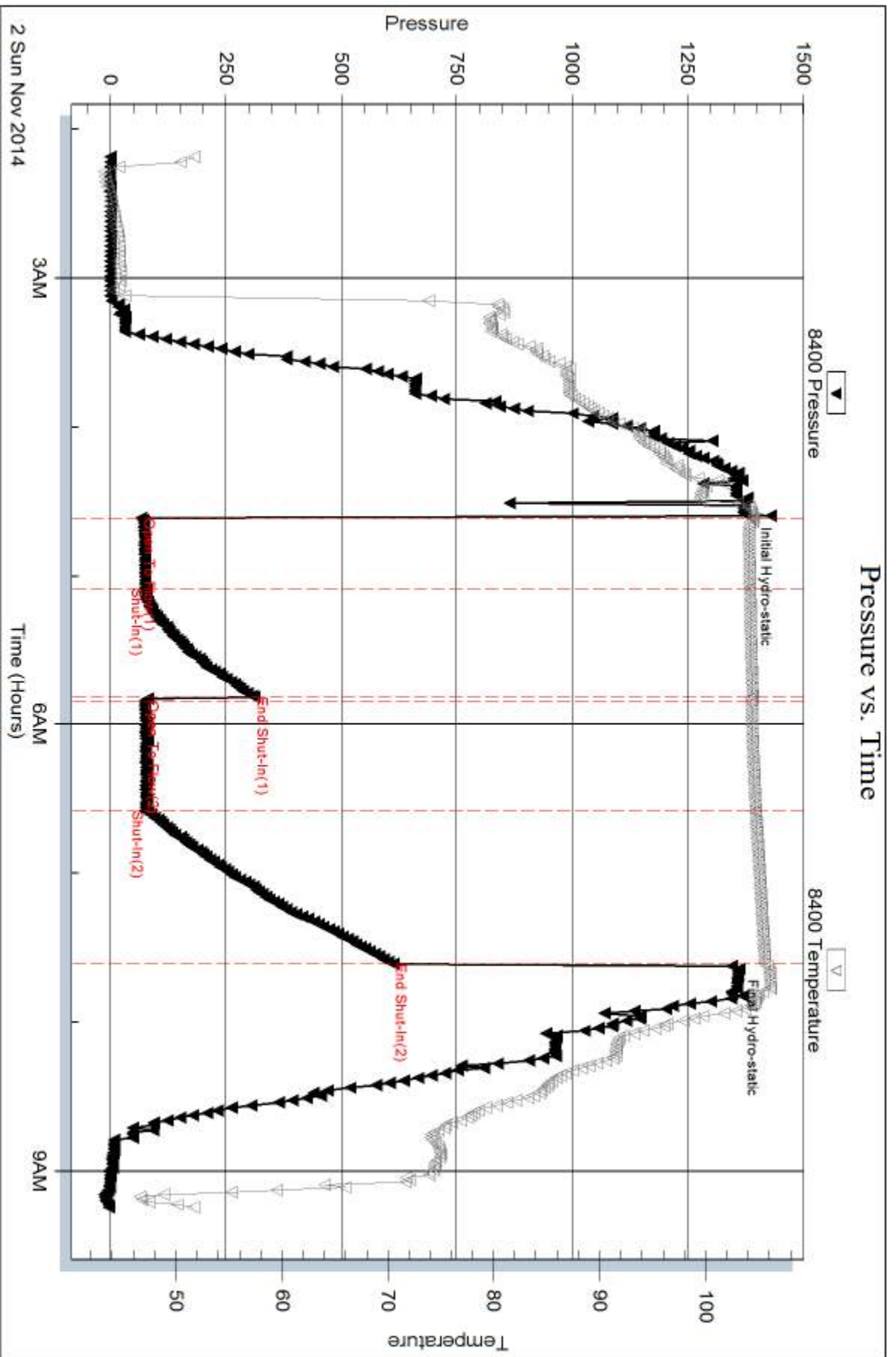
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4900.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

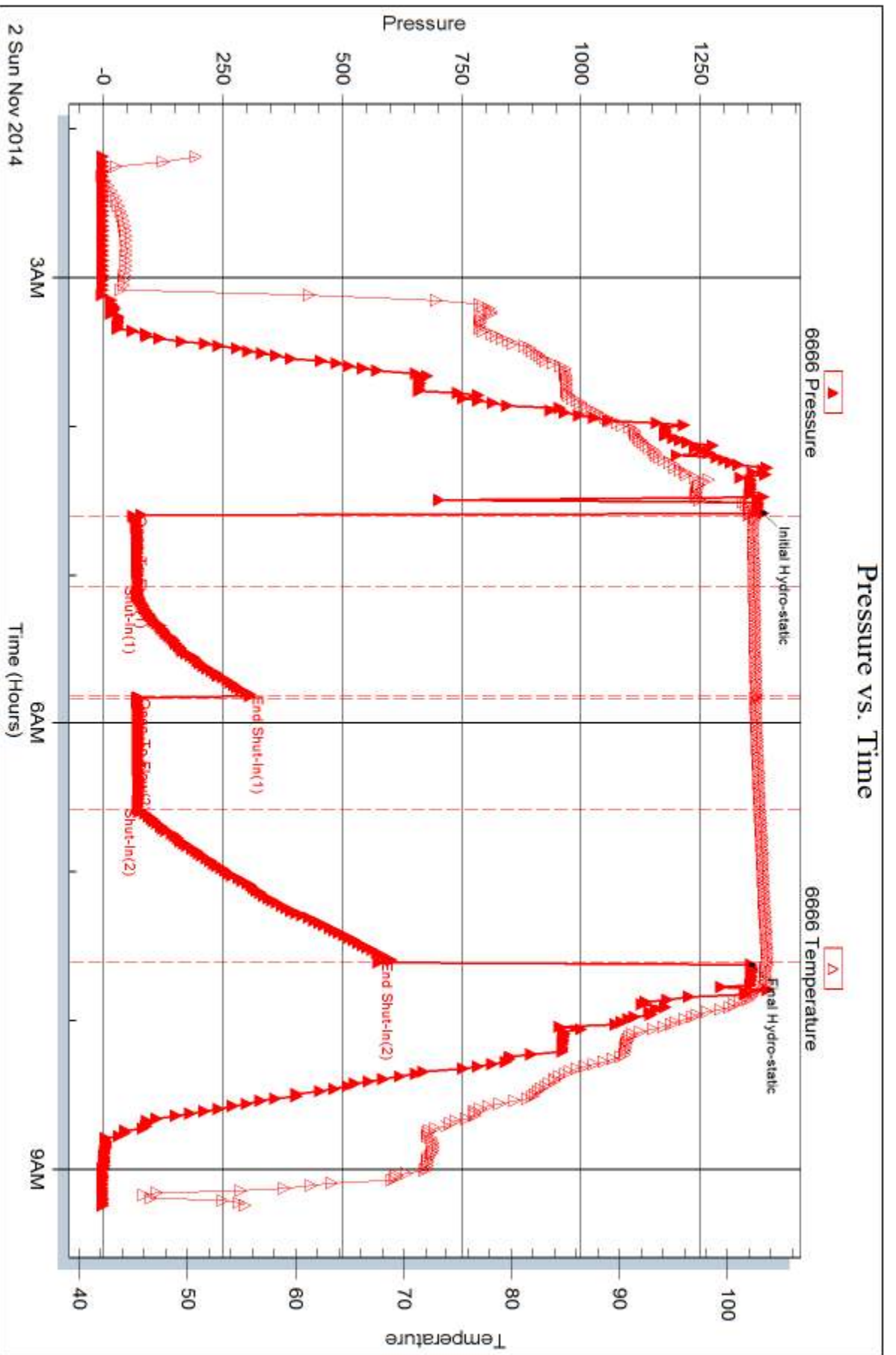
Recovery Table

Length ft	Description	Volume bbl
65.00	mud	0.912

Total Length: 65.00 ft      Total Volume: 0.912 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:









## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Wyatt Urban

### **Dorothy #1-3**

#### **3-18s-8w Rice,KS**

Start Date: 2014.11.03 @ 09:00:00

End Date: 2014.11.03 @ 14:37:00

Job Ticket #: 61881                      DST #: 2

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

Printed: 2014.11.08 @ 09:53:44



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Wyatt Urban

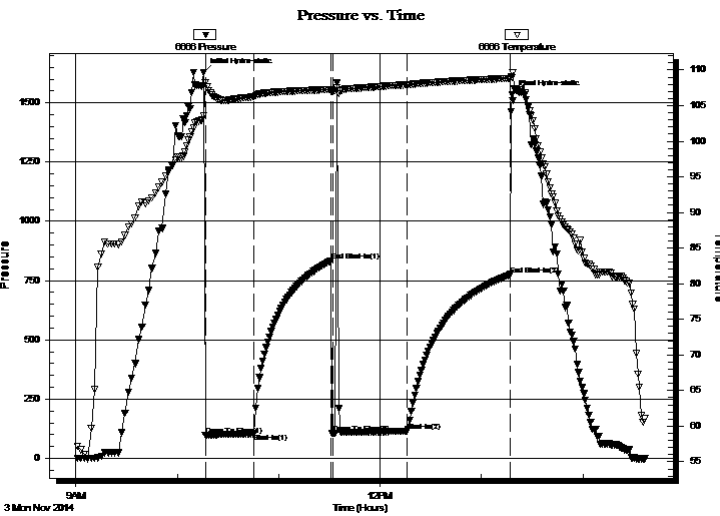
**3-18s-8w Rice,KS**  
**Dorothy #1-3**  
Job Ticket: 61881 **DST#: 2**  
Test Start: 2014.11.03 @ 09:00:00

## GENERAL INFORMATION:

Formation: **Conglomerate**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 10:16:30  
Time Test Ended: 14:37:00  
Interval: **3142.00 ft (KB) To 3253.00 ft (KB) (TVD)**  
Total Depth: 3253.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jared Scheck  
Unit No: S5  
Reference Elevations: 1788.00 ft (KB)  
1780.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 6666 Inside**  
Press@RunDepth: 113.27 psig @ 3249.00 ft (KB) Capacity: 5000.00 psig  
Start Date: 2014.11.03 End Date: 2014.11.03 Last Calib.: 2014.11.03  
Start Time: 09:01:00 End Time: 14:37:00 Time On Btm: 2014.11.03 @ 10:15:30  
Time Off Btm: 2014.11.03 @ 13:18:00

**TEST COMMENT:** IFP-30 Minutes-Weak blow built 7 1/2" tool chased 15 feet to bottom  
ISIP-45 Minutes-No blow back  
FFP-45 Minutes-No blow flushed tool weak surge built 1 1/4"  
FSIP-60 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.25	103.55	Initial Hydro-static
1	97.18	108.21	Open To Flow (1)
30	104.46	106.28	Shut-In(1)
76	833.01	107.26	End Shut-In(1)
77	106.17	107.09	Open To Flow (2)
121	113.27	107.93	Shut-In(2)
182	774.96	108.84	End Shut-In(2)
183	1533.45	108.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud spot oil 100% mud	0.98

## 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: Wyatt Urban

**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
Job Ticket: 61881 **DST#: 2**  
Test Start: 2014.11.03 @ 09:00:00

**Tool Information**

Drill Pipe:	Length: 3130.00 ft	Diameter: 3.80 inches	Volume: 43.91 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 43.91 bbl</u>	Tool Chased 15.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3142.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	111.00 ft			
Tool Length:	139.00 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>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut In Tool	5.00			3119.00	
Hydraulic tool	5.00			3124.00	
Jars	6.00			3130.00	
Safety Joint	2.00			3132.00	
Packer	5.00			3137.00	28.00 Bottom Of Top Packer
Packer	5.00			3142.00	
Anchor	5.00			3147.00	
Change Over Sub	0.75			3147.75	
Drill Pipe	63.50			3211.25	
Change Over Sub	0.75			3212.00	
Anchor	36.00			3248.00	
Recorder	1.00	6666	Inside	3249.00	
Recorder	1.00	8525	Outside	3250.00	
Bullnose	3.00			3253.00	111.00 Bottom Packers & Anchor

**Total Tool Length: 139.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Wyatt Urban

**3-18s-8w Rice,KS**  
**Dorothy #1-3**  
Job Ticket: 61881      **DST#: 2**  
Test Start: 2014.11.03 @ 09:00:00

### Mud and Cushion Information

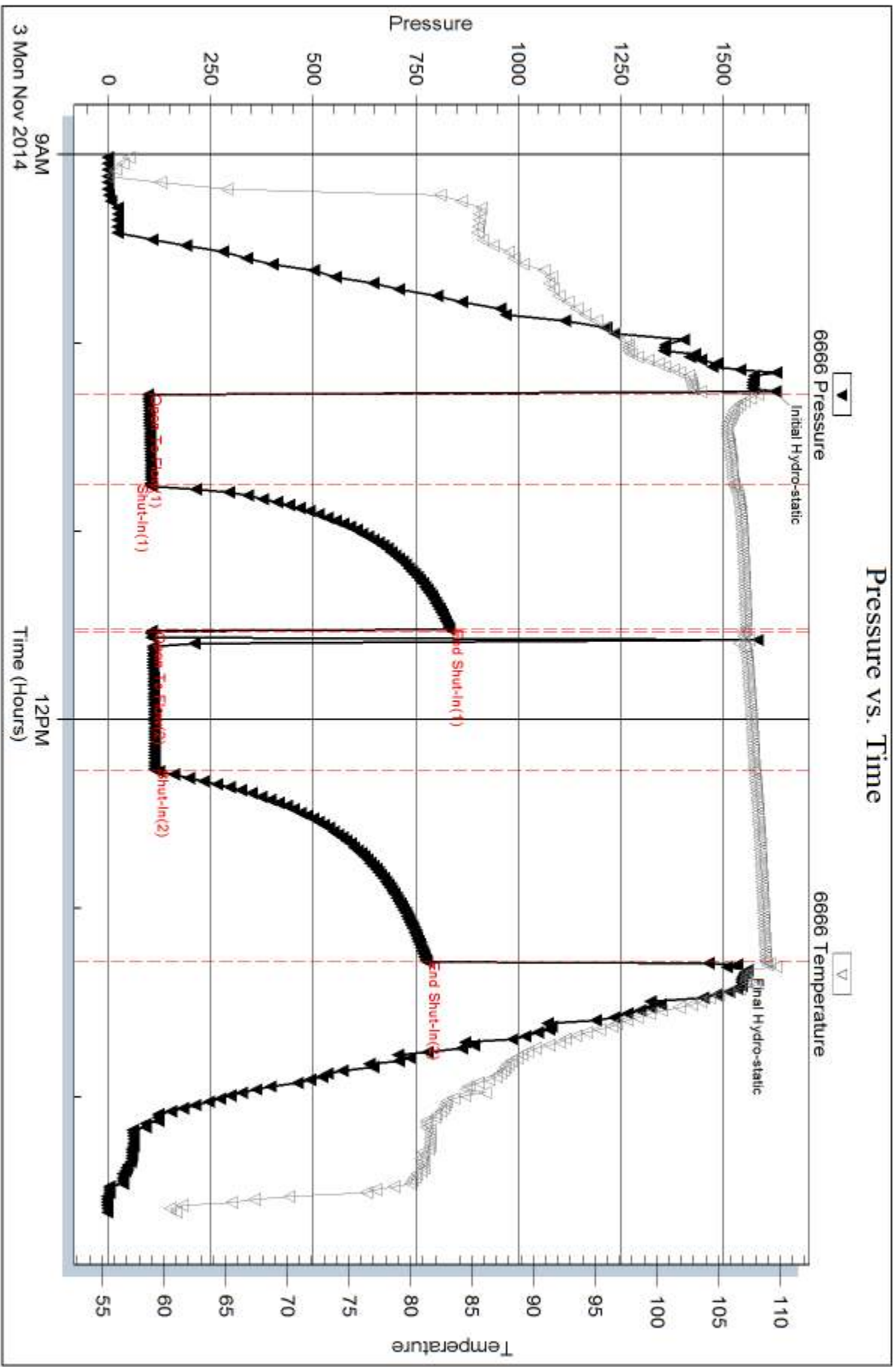
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5900.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	mud spot oil 100% mud	0.982

Total Length: 70.00 ft      Total Volume: 0.982 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Wyatt Urban

### **Dorothy #1-3**

#### **3-18s-8w Rice,KS**

Start Date: 2014.11.03 @ 21:50:00

End Date: 2014.11.04 @ 03:55:00

Job Ticket #: 61882                      DST #: 3

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

Printed: 2014.11.08 @ 09:53:02



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
 PO Box 399  
 Garden City, KS 67846  
 ATTN: Wyatt Urban

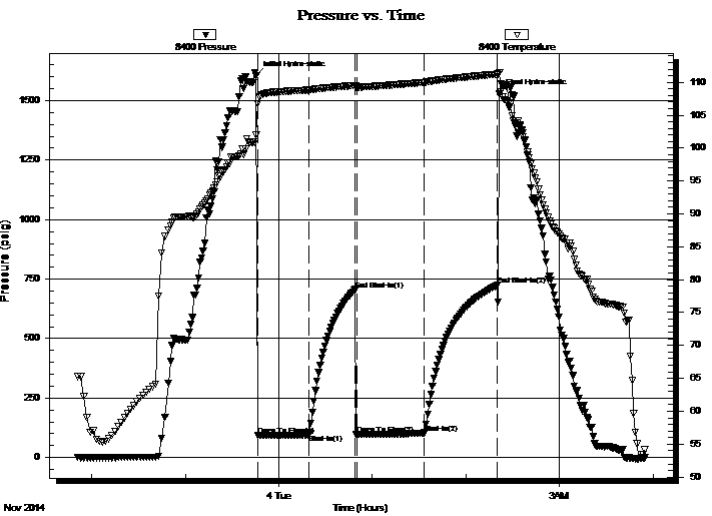
**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
 Job Ticket: 61882 **DST#: 3**  
 Test Start: 2014.11.03 @ 21:50:00

## GENERAL INFORMATION:

Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:46:30  
 Time Test Ended: 03:55:00  
 Interval: **3145.00 ft (KB) To 3263.00 ft (KB) (TVD)**  
 Total Depth: 3263.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: S5  
 Reference Elevations: 1788.00 ft (KB)  
 1780.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8400 Inside**  
 Press@RunDepth: 101.56 psig @ 3259.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.11.03 End Date: 2014.11.04 Last Calib.: 2014.11.04  
 Start Time: 21:51:00 End Time: 03:55:00 Time On Btm: 2014.11.03 @ 23:45:30  
 Time Off Btm: 2014.11.04 @ 02:21:30

**TEST COMMENT:** IFP-30 Minutes-Weak blow built 4" into water tool chased 8 to 10't  
 ISIP- 30 Minutes-No blow back  
 FFP- 45 Minutes-Weak blow built 4"  
 FSIP- 45 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.28	102.02	Initial Hydro-static
1	92.00	106.80	Open To Flow (1)
34	95.66	108.81	Shut-In(1)
64	705.51	109.50	End Shut-In(1)
65	98.17	109.27	Open To Flow (2)
108	101.56	109.98	Shut-In(2)
155	723.73	111.23	End Shut-In(2)
156	1530.09	111.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO& Mud 5%g5%o 90%mud	0.84

## Gas Rates

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





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
 PO Box 399  
 Garden City, KS 67846  
 ATTN: Wyatt Urban

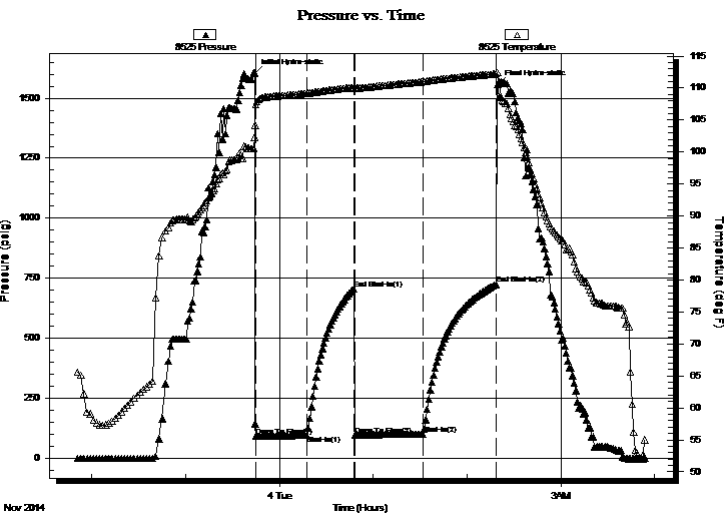
**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
 Job Ticket: 61882 **DST#: 3**  
 Test Start: 2014.11.03 @ 21:50:00

## GENERAL INFORMATION:

Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:46:30  
 Time Test Ended: 03:55:00  
 Interval: **3145.00 ft (KB) To 3263.00 ft (KB) (TVD)**  
 Total Depth: 3263.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: S5  
 Reference Elevations: 1788.00 ft (KB)  
 1780.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8525 Outside**  
 Press@RunDepth: 724.87 psig @ 3260.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.11.03 End Date: 2014.11.04 Last Calib.: 2014.11.04  
 Start Time: 21:51:00 End Time: 03:53:30 Time On Btm: 2014.11.03 @ 23:44:00  
 Time Off Btm: 2014.11.04 @ 02:19:30

**TEST COMMENT:** IFP-30 Minutes-Weak blow built 4" into water tool chased 8 to 10't  
 ISIP- 30 Minutes-No blow back  
 FFP- 45 Minutes-Weak blow built 4"  
 FSIP- 45 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.61	102.32	Initial Hydro-static
1	91.88	107.42	Open To Flow (1)
34	95.37	109.17	Shut-In(1)
64	706.47	110.12	End Shut-In(1)
65	97.96	109.98	Open To Flow (2)
108	101.54	111.00	Shut-In(2)
155	724.87	112.23	End Shut-In(2)
156	1557.46	112.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO& Mud 5%g5%o 90%mud	0.84

## 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: Wyatt Urban

**3-18s-8w Rice, KS**  
**Dorothy #1-3**  
Job Ticket: 61882      **DST#: 3**  
Test Start: 2014.11.03 @ 21:50:00

**Tool Information**

Drill Pipe:	Length: 3132.00 ft	Diameter: 3.80 inches	Volume: 43.93 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 43.93 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3145.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	118.00 ft			
Tool Length:	146.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: tool chased 10 feet

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

Shut In Tool	5.00			3122.00	
Hydraulic tool	5.00			3127.00	
Jars	6.00			3133.00	
Safety Joint	2.00			3135.00	
Packer	5.00			3140.00	28.00      Bottom Of Top Packer
Packer	5.00			3145.00	
Anchor	5.00			3150.00	
Change Over Sub	0.75			3150.75	
Drill Pipe	63.50			3214.25	
Change Over Sub	0.75			3215.00	
Anchor	43.00			3258.00	
Recorder	1.00	8400	Inside	3259.00	
Recorder	1.00	8525	Outside	3260.00	
Bullnose	3.00			3263.00	118.00      Bottom Packers & Anchor

**Total Tool Length: 146.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
ATTN: Wyatt Urban

**3-18s-8w Rice,KS**  
**Dorothy #1-3**  
Job Ticket: 61882      **DST#: 3**  
Test Start: 2014.11.03 @ 21:50:00

### Mud and Cushion Information

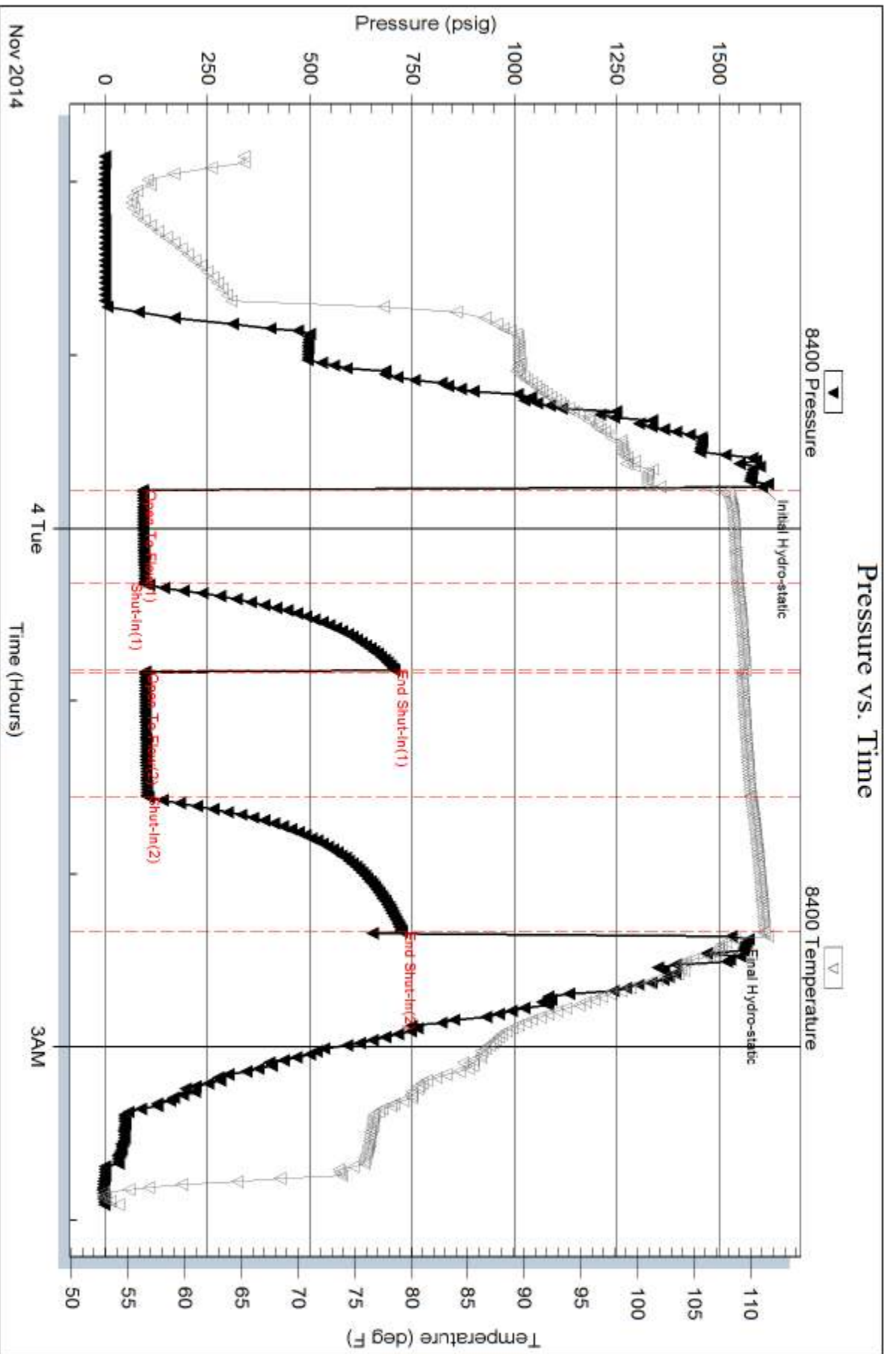
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3800.00 ppm			
Filter Cake: 1.00 inches			

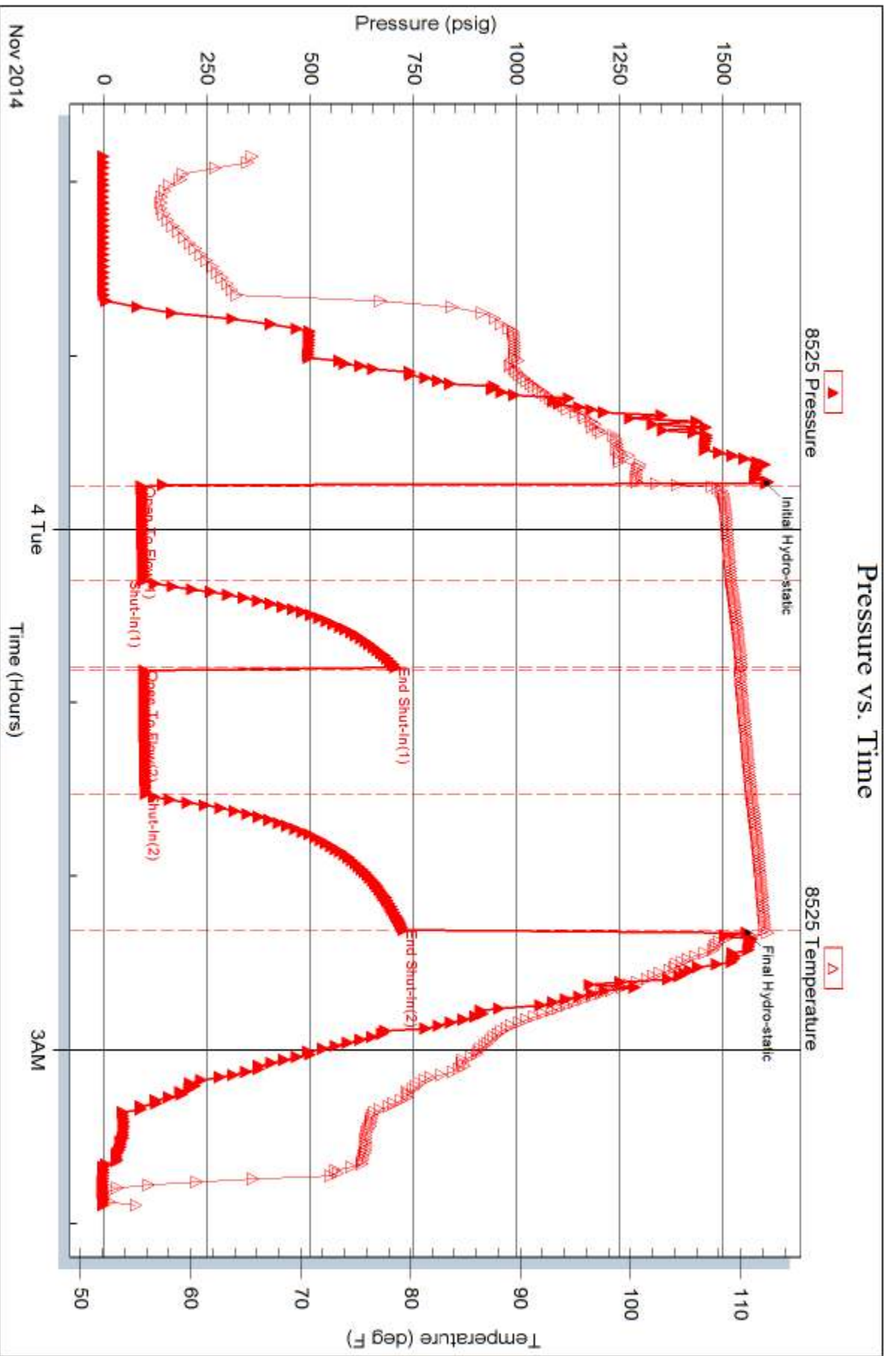
### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GO& Mud 5%g5%o 90%mud	0.842

Total Length: 60.00 ft      Total Volume: 0.842 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: tool chased 10 feet







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61880

Well Name & No. Dorothy #1-3 Test No. 1 Date 11-2-2014  
 Company American Warrior Inc Elevation 1788 KB 1780 GL  
 Address 3118 Cummings RD Garden City KS 67846  
 Co. Rep / Geo. Wyatt Urban Rig Duke Rig #8  
 Location: Sec. 3 Twp. 18 Rge. 8 Co. Rice State KS

Interval Tested 2846 - 2900 Zone Tested Lansing A-C  
 Anchor Length 54 Drill Pipe Run \_\_\_\_\_ Mud Wt. 8.8  
 Top Packer Depth 2841 Drill Collars Run - Vis 4.8  
 Bottom Packer Depth 2846 Wt. Pipe Run - WL 2.2  
 Total Depth 2900 Chlorides 4,900 ppm System LCM 0

Blow Description I FP - Weak Blow Built 7 inches into water in 30 minutes  
I SIP - NO Blow Back  
FFP - Weak Blow Built 7 inches into water in 45 minutes  
F SIP - NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>mud</u>				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

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

(A) Initial Hydrostatic <u>1375</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1:45</u>
(B) First Initial Flow <u>66</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2:10</u>
(C) First Final Flow <u>75</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>3:40</u>
(D) Initial Shut-In <u>311</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>6:40</u>
(E) Second Initial Flow <u>74</u>	<input type="checkbox"/> Hourly Standby _____	T-Out _____
(F) Second Final Flow <u>76</u>	<input checked="" type="checkbox"/> Mileage <u>100 RT Great Bend</u> 155	Comments <u>Tool chased 10 feet to Bottom</u>
(G) Final Shut-In <u>611</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1345</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1630</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1630</u>	

Approved By \_\_\_\_\_ Our Representative \_\_\_\_\_

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. 61881

Well Name & No. Dorothy #1-3 Test No. 2 Date 11-3-2014  
 Company American Warrior Inc Elevation 1789 KB 1780 GL  
 Address 3118 Cummings RD Garden City KS 67840  
 Co. Rep / Geo. Watt Urban Rig Deke Rig #8  
 Location: Sec. 3 Twp. 18 Rge. 8 Co. Rice State KS

Interval Tested 3142 - 3253 Zone Tested Conglomerate  
 Anchor Length 111 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.0  
 Top Packer Depth 3137 Drill Collars Run - Vis 50  
 Bottom Packer Depth 3142 Wt. Pipe Run - WL 7.2  
 Total Depth 3253 Chlorides 5900 ppm System LCM 0

Blow Description I/FP - Weak Blow Built 7 1/2 inches into water Tool chases 15 feet to bottom  
ISIP - NO Blow Back  
FFP - NO Blow Flushed Tool Weak Surge Built 1/2 inch in 45 minutes  
FSIP - NO Blow

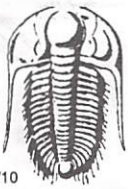
Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>Mud spoil</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic 1627  Test 1150 T-On Location 8:50A  
 (B) First Initial Flow 97  Jars 250 T-Started 9:00A  
 (C) First Final Flow 104  Safety Joint 75 T-Open 10:17  
 (D) Initial Shut-In 833  Circ Sub \_\_\_\_\_ T-Pulled 1:17  
 (E) Second Initial Flow 106  Hourly Standby \_\_\_\_\_ T-Out \_\_\_\_\_  
 (F) Second Final Flow 113  Mileage 100 RT Great Bend 155 Comments Tool chases 15 feet to bottom / Flushed Tool 2nd open chase & Tool  
 (G) Final Shut-In 774  Sampler \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 (H) Final Hydrostatic 1533  Straddle \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Recorder \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 66.67  
 Day Standby 1d 2h Total 1696.67  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1630

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. 61882

Well Name & No. Dorothy #1-3 Test No. 3 Date 11-3-2014  
 Company American Warrior Inc Elevation 1788 KB 1780 GL  
 Address 3118 Cummins, Rd Garden City KS 67846  
 Co. Rep / Geo. Wyatt Urban Rig Duke Rig #8  
 Location: Sec. 3 Twp. 18 Rge. 8 Co. Rice State KS

Interval Tested 3145-3263 Zone Tested Cong sd  
 Anchor Length 118 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.3  
 Top Packer Depth 3140 Drill Collars Run - Vis 68  
 Bottom Packer Depth 3145 Wt. Pipe Run - WL 6.4  
 Total Depth 3263 Chlorides 3800 ppm System LCM ~~○~~

Blow Description IFP-Weak Blow Built 4 inches into water  
ISIP- NO Blow Back  
FFP- Weak Blow Built 4 inches into water  
FSIP- NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>60 cut mud</u>	<u>5</u>	<u>5</u>	<u>90</u>	<u>90</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 111 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1604  Test 1150 T-On Location 9:15  
 (B) First Initial Flow 93  Jars 250 T-Started 9:50  
 (C) First Final Flow 95  Safety Joint 75 T-Open 10:45  
 (D) Initial Shut-In 205  Circ Sub \_\_\_\_\_ T-Pulled 2:15  
 (E) Second Initial Flow 98  Hourly Standby \_\_\_\_\_ T-Out \_\_\_\_\_  
 (F) Second Final Flow 101  Mileage 100 RT Grant Band 155 Comments Tool Closed 8 to 10 feet  
 (G) Final Shut-In 723  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1530  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Total 1630  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1630

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 45  
 Final Shut-In 45

Approved By \_\_\_\_\_ Our Representative \_\_\_\_\_

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.





# Mudgrove

Petroleum Geology  
212 Main Street, Claflin KS

## NOTES

Company: American Warrior, Inc.  
Lease: Dorthy 1-3  
Field: Geneseo-Edwards  
Location: NW-SE-SE-SE  
Sec: 3 Twsp: 18S Rge: 8W  
County: Rice State: Kansas

KB: 1788' GL: 1780'  
API #: 15-159-22804-00-00  
Contractor: Duke Drilling Inc. (Rig #8)  
Spud: 10/29/2014 Comp: 11/4/2014  
RTD: 3400' LTD: 3382'  
Mud Up: 2600' Type Mud: Chemical

Samples Saved From: 2600' to RTD  
Drilling Time Kept From: 2600' to RTD  
Samples Examined From: 2600' to RTD  
Geological Supervision from: 2600' to RTD  
Surface Casing: 8 5/8@ 444'  
Production Casing: 5 1/2@3395'

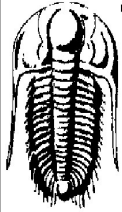
Geologist On Well: Wyatt Urban  
Electronic Surveys: Logged by Pioneer Energy Services :DIL, CNL/CDL, MEL/ BHCS

## Image Header 02

## American Warrior, Inc. well comparison sheet

DRILLING WELL					COMPARISON WELL				
American Warrior- Dorthy 1-3 NW-SE-SE-SE 3-18S-8W					American Warrior- Jean 1-2 NE-SW-SE-SW 2-18S-8W				
1788 KB					1784 KB				Structural Relationship
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	
Heebner	2710	-922	2709	-921	2695	-911	-11	-10	
Toronto	2734	-946	2736	-948	2718	-934	-12	-14	
Douglas	2750	-962	2749	-961	2733	-949	-13	-12	
Brown Lime	2830	-1042	2832	-1044	2821	-1037	-5	-7	
Lansing	2858	-1070	2857	-1069	2848	-1064	-6	-5	
BKC	3168	-1380	3169	-1381	3166	-1382	2	1	
Congl. Sd.	3238	-1450	3224	-1436	3221	-1437	-13	1	
Arbuckle	3290	-1502	3287	-1499	3287	-1503	1	4	
RTD	3400	-1612	3400	-1612	3365	-1581	-31	-31	
LTD	3382	-1594	3382	-1594	3366	-1582	-12	-12	

## Image Header 03



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

American Warrior Inc  
3118 Cummings Rd Garden City KS 67846  
ATTN: Wyatt Urban

**3-18-8 Rice**  
**Dorothy #1-3**  
Job Ticket: 61880 **DST#: 1**  
Test Start: 2014.11.02 @ 02:10:00

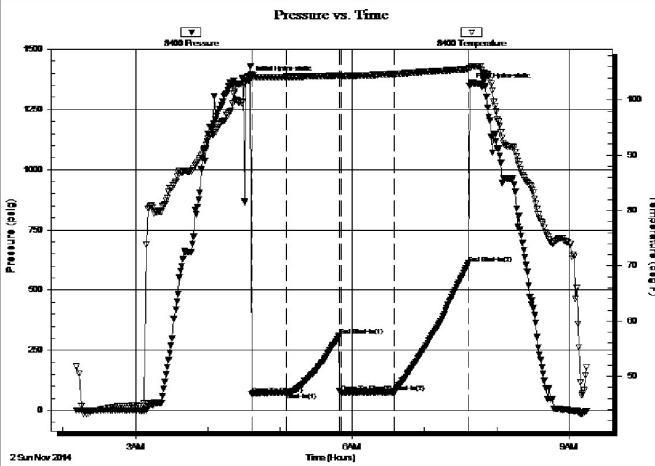
**GENERAL INFORMATION:**

Formation: **Lansing A-C**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 04:36:30  
Time Test Ended: 09:14:30  
Interval: **2846.00 ft (KB) To 2900.00 ft (KB) (TVD)**  
Total Depth: 2900.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jared Scheck  
Unit No: S5-Great Bend-100  
Reference Elevations: 1788.00 ft (KB)  
1780.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8400**

Press@RunDepth: 76.65 psig @ ft (KB) Capacity: 5000.00 psig  
Start Date: 2014.11.02 End Date: 2014.11.02 Last Calib.: 2014.11.02  
Start Time: 02:11:00 End Time: 09:14:30 Time On Btm: 2014.11.02 @ 04:35:00  
Time Off Btm: 2014.11.02 @ 07:37:30

TEST COMMENT: IFF-30 Minutes-Weak blow built 7 inches into bucket w water  
ISIP-45 Minutes-No blow back  
FFP-45 Minutes-Weak blow built 7 inches into w water  
FSIP-60 Minutes-No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1375.11	104.32	Initial Hydro-static
2	66.69	104.51	Open To Flow (1)
30	75.31	104.17	Shut-In(1)
74	311.21	104.41	End Shut-In(1)
76	74.45	104.31	Open To Flow (2)
120	76.65	104.69	Shut-In(2)
182	611.54	105.56	End Shut-In(2)
183	1345.84	105.79	Final Hydro-static

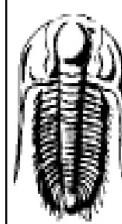
**Recovery**

Length (ft)	Description	Volume (bbl)
65.00	mud	0.91

**Gas Rates**

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

**Image Header 04**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

American Warrior Inc  
3118 Cummings Rd Garden City KS 67846  
ATTN: Wyatt Urban

**3-18-8 Rice**  
**Dorothy #1-3**  
Job Ticket: 61881 **DST#: 2**  
Test Start: 2014.11.03 @ 09:00:00

**GENERAL INFORMATION:**

Formation: **Conglomerate**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 10:16:30  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jared Scheck

Time Test Ended: 14:37:00

Unit No: S5-Great Bnd -100

Interval: 3142.00 ft (KB) To 3253.00 ft (KB) (TVD)

Reference Elevations: 1788.00 ft (KB)

Total Depth: 3253.00 ft (KB) (TVD)

1780.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 6666**

Press@RunDepth: 113.27 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.11.03

End Date: 2014.11.03

Last Calib.: 2014.11.03

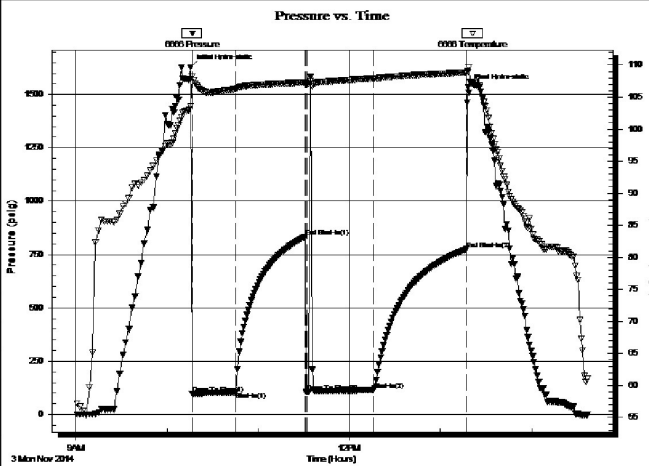
Start Time: 09:01:00

End Time: 14:37:00

Time On Btm: 2014.11.03 @ 10:15:30

Time Off Btm: 2014.11.03 @ 13:18:00

TEST COMMENT: IFF-30 Minutes-Weak blow built 7 1/2 inches tool chased 15 feet to bottom  
 ISIP-45 Minutes-No blow back  
 FFP-45 Minutes-No blow flushed tool w eak surge built 1 1/4 into bucket  
 FSIP-60 Minutes-No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.25	103.55	Initial Hydro-static
1	97.18	108.21	Open To Flow (1)
30	104.46	106.28	Shut-In(1)
76	833.01	107.26	End Shut-In(1)
77	106.17	107.09	Open To Flow (2)
121	113.27	107.93	Shut-In(2)
182	774.96	108.84	End Shut-In(2)
183	1533.45	108.98	Final Hydro-static

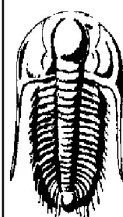
**Recovery**

Length (ft)	Description	Volume (bbl)
70.00	mud spot oil 100% mud	0.98

**Gas Rates**

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

**Image Header 05**



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

American Warrior Inc

**3-18-8 Rice**

3118 Cummings Rd Garden City KS 67846

**Dorothy #1-3**

Job Ticket: 61882

**DST#: 3**

ATTN: Wyatt Urban

Test Start: 2014.11.03 @ 21:50:00

**GENERAL INFORMATION:**

Formation: **Cong.sd**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:46:30

Time Test Ended: 03:55:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: S5-Great Bend -100

Interval: 3145.00 ft (KB) To 3263.00 ft (KB) (TVD)

Reference Elevations: 1788.00 ft (KB)

Total Depth: 3263.00 ft (KB) (TVD)

1780.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400**

Press@RunDepth: 101.56 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.11.03

End Date: 2014.11.04

Last Calib.: 2014.11.04

Start Time: 21:51:00

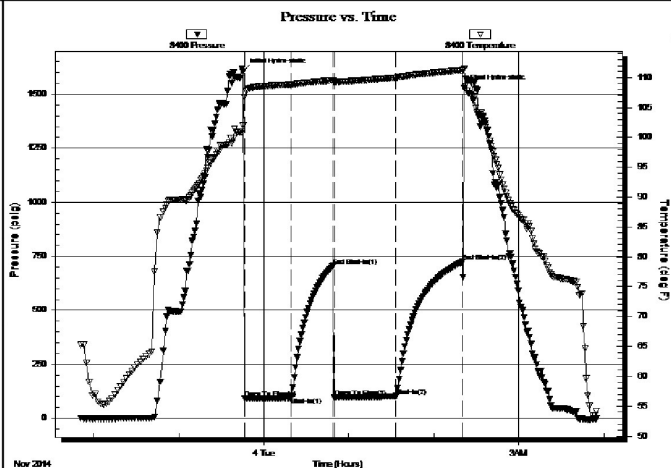
End Time: 03:55:00

Time On Btm: 2014.11.03 @ 23:45:30

Time Off Btm: 2014.11.04 @ 02:21:30

TEST COMMENT: IFF-30 Minutes-Weak blow built 4 inches into water tool chased 8 to 10 feet

ISIP- 30 Minutes-No blow back  
 FFP- 45 Minutes-Weak blow built 4 inches into water  
 FSIP- 45 Minutes-No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.28	102.02	Initial Hydro-static
1	92.00	106.80	Open To Flow (1)
34	95.66	108.81	Shut-In(1)
64	705.51	109.50	End Shut-In(1)
65	98.17	109.27	Open To Flow (2)
108	101.56	109.98	Shut-In(2)
155	723.73	111.23	End Shut-In(2)
156	1530.09	111.50	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
60.00	GO& Mud 5%g5%o 90%mud	0.84

**Gas Rates**

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

**ROCK TYPES**

Dolprim  
 shale, grn  
 Carbon Sh  
 Ss  
 Lmst fw<7  
 shale, gry  
 shale, red

**ACCESSORIES**

**STRINGER**  
 Sandstone

**OTHER SYMBOLS**

**Oil Show**  
 ● Good Show  
 ○ Fair Show  
 ○ Poor Show  
 ○ Spotted or Trace  
 ○ Questionable Strn  
 D Dead Oil Strn  
 ■ Fluorescence  
 \* Gas

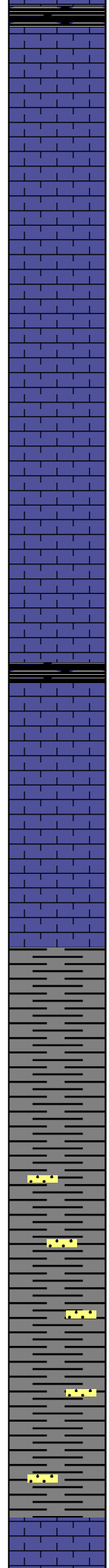
**DST**  
 ■ DST Int  
 ■ DST alt  
 ■ Core  
 ■ tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.7 (www.grsi.ca)

Curve Track #1		Depth   Intervals	DST	Lithology	Oil Show	Geological Descriptions	TG, C1 - C5					
ROP (min/ft)	Gamma (API)						Cal (in)	Total Gas (units)	C1 (units)	C2 (units)	C3 (units)	C4 (units)
0	150	7					0	100	100	100	100	100
6	16	16				LS, cream, gry, FXL, poor visible porosity, chalky, no shows	0	100	100	100	100	100

2620  
2640  
2660  
2680  
2700  
2720  
2740  
2760  
2780  
2800  
2820

ROP (min/ft) 7  
Gamma (API) 150  
Cal (in) 16



Black carb Sh.

LS, tan, brown, FXL, foss, poor scattered porosity, chalky, no shows

LS, tan, brown, FXL, foss, chalky, no shows, no odor

LS, gry, brown, foss, poor scattered porosity, chalky, no shows

**Heebner 2710.0 (-922.0)**

Black carb Sh.

**Toronto 2726.0 (-938.0)**

LS, tan, brown, FXL, few foss, poor scattered porosity, chalky in parts, no shows, no odor

**Douglas 2748.0 (-960.0)**

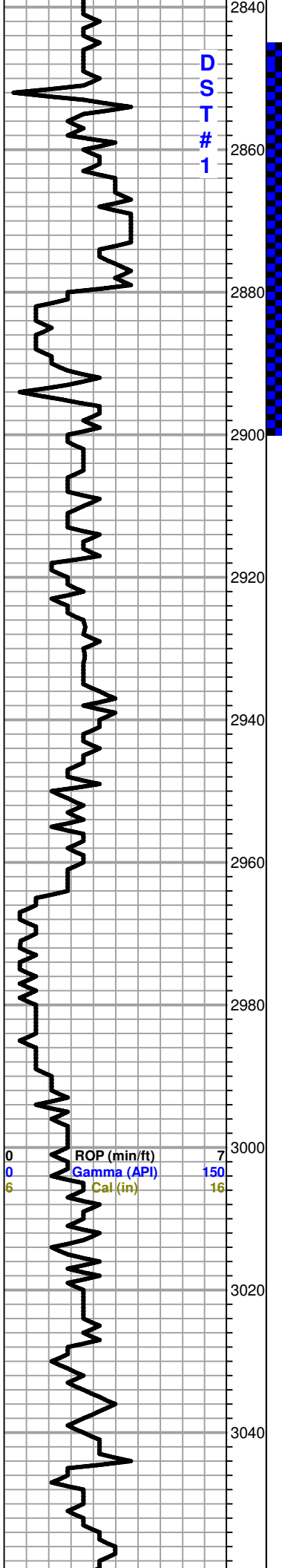
Sh, gry, maroon, greenish, waxey

Sh, gry, maroon, green, waxey Sd. gry, V. F. grain, well sorted, rounded, no shows,

Sh, A/A, Trc. Sd. gry, V. F. grain, well sorted, no shows

**Brown Lime 2830.0 (-1042.0)**

0 Total Gas (units) 100  
0 C1 (units) 100  
0 C2 (units) 100  
0 C3 (units) 100  
0 C4 (units) 100



LS, brown, FXL, poor visible porosity, cherty, no shows

LS, tan, brown, FXL, desnse, poor visible porosity, no shows

**Lansing 2858.0 (-1070.0)**

LS, tan, FXL, gran, few foss, poor scattered porosity, no shows

● LS, tan, buff, oom, good fair vuggy oom porosity, SFO, good odor, Lt. brown stain

LS, tan, buff, FXL, poor visible porosity, chalky, no shows,

LS, tan, brown, FXL, dense, cherty in parts, poor visible porosity, no shows

LS, tan, brown, FXL, few foss, poor scattered porosity, no shows

○ LS, cream, tan, F-Med XLN, ool, poorly developed, poor visible porosity, trc SFO, no odor, Lt. brown stain

○ LS, cream, white, oom, chalky, fair oom vuggy porosity, Lt. SFO, Lt. brown stain, no odor

LS, cream, white, FXL, chalky, few foss, no shows,

LS, tan, brown, few gry, FXL, poor visible porosity, chalky, no shows

○ LS, brown, tan, FXL, ool, poor scattered vuggy porosity, chalky, NSFO, trc. brown stain, no odor

LS, tan, F-Med XLN, ool, poor oom vuggy porosity, no shows, no odor

**DST#1 2846-2900**  
30-45-45-60

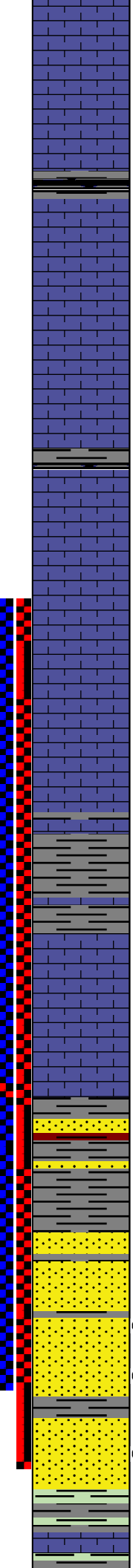
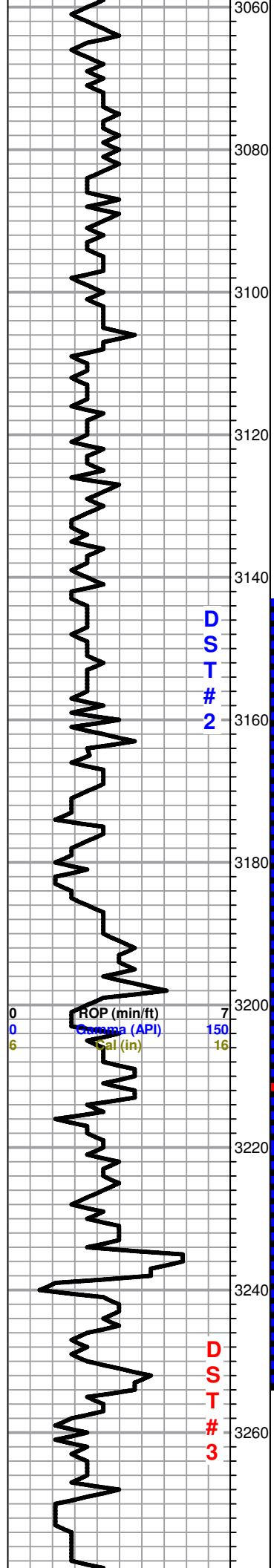
Blow: Weak

Tool Slid 10' to bottom

Recovery: 65' Mud

Pressure:  
ISIP 311 psi  
FSIP 611 psi  
IFP 66-75 psi  
FFP 74-76 psi  
HSH 1375-1345 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



LS, cream, tan, FXL, dense, cherty, no shows

LS, tan, brown, FXL, few foss, poor visible porosity, chalky, no shows, trc. few brown cherts

LS, tan, brown, FXL, dense, poor visible porosity, no shows

LS, cream, white, FXL, dense, chalky in parts, few foss, trc. brown stain, NSFO, no odor

LS, white, cream, FXL, dense, poor visible porosity, trc. cherts, brown, tan, no shows

**BKC 3168.0 (-1380.0)**

Sh, black, greenish, gry, silty

Sh, A/A, trc. pyrite

LS, cream, tan, FXL, dense, poor visible porosity, no shows, no odor

LS, tan, oom, good vuggy porosity, chalky, trc. black stain, NSFO, no odor

Sh. V. C. maroon, soft silty, Trc. Sd, gry, V. F. grain, sub rounded, well sorted, no shows

V.C, shales, trc. Sd. A/A

**Cong. Sand 3238.0 (-1450.0)**

Sd. white, V.F. grain, well sorted, rounded, Lt. trc. SFO, black stain, no odor

Sd, white, gry, Med. grain, rounded, loose sub rounded qtz, SFO

Sh, maroon, greenish, maroon, mica, few silty

**DST # 2 3142-3253**  
30-45-45-60

Blow: Weak

Recovery:  
70' Oil Spotted Mud

Pressures:  
ISIP 833 psi  
FSIP 774 psi  
IFP 97-104 psi  
FFP 106-113 psi  
HSH 1627-1533 psi

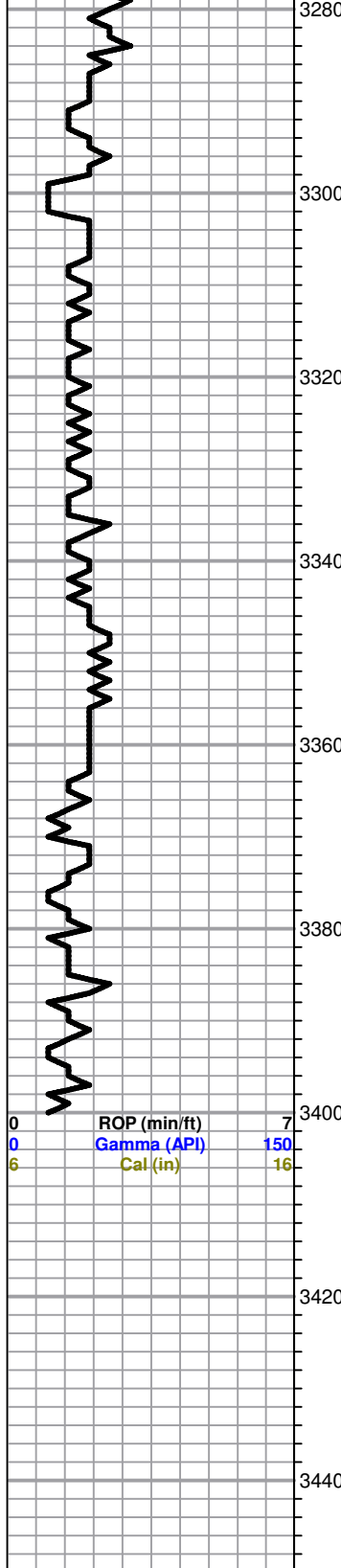
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

**DST#3 3145-3263**  
30-30-45-45

Blow: Weak

Recovery:  
60' GOCM  
(5%G, 5%O, 90%M)

Pressures:  
ISIP 705 psi  
FSIP 723 psi  
IFP 92-95 psi  
FFP 98-101 psi  
HSH 1604-1530 psi



Sh, maroon, aqua green, gray

**Arbuckle 3290.0 (-1502.0)**

Dol. tan, brown, FXL, poor to fair scattered vuggy porosity, Lt. SFO, trc. brown stain, fair odor

Dol. tan, FXL, dense, poor scattered vuggy porosity, Lt. SFO, fair odor, Lt. brown stain

Dol. tan, FXL, poor scattered porosity, trc brown stain, faint odor, Trc. white chert

Dol. tan, FXL, poor scattered porosity, poor INXLN porosity, NSFO, faint odor

Dol. A/A, trc. white, cherts

Dol. tan, brown FXL, dense, poor visible porosity, trc. white, opaque cherts, NSFO, no odor

**RTD 3400.0 (-1502.0)**

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100