



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1196605
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
-----------------------------------	-----------------	---

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: _____

1196605

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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

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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
--	---	---

ALLIED OIL & GAS SERVICES, LLC 062654

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Great Bend

DATE <u>1-21-14</u>	SEC. <u>5</u>	TWP. <u>16</u>	RANGE <u>10</u>	CALLED OUT	ON LOCATION	JOB START <u>10:00</u>	JOB FINISH <u>10:30 AM</u>
LEASE <u>Grubb D</u>	WELL # <u>1-5</u>	LOCATION <u>Wooden blt top 9N 1 1/2 E</u>			COUNTY <u>Ellsworth</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Duke 8

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D.

CASING SIZE 8 3/4 DEPTH 364.97

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15ft

PERFS.

DISPLACEMENT 22.29 bbl freshwater

OWNER

CEMENT AMOUNT ORDERED 275 SKS Class A

3% CC 2% gel

COMMON	<u>275</u>	@ <u>17.90</u>	<u>4,922.50</u>
POZMIX		@	
GEL	<u>5</u>	@ <u>23.40</u>	<u>117.00</u>
CHLORIDE	<u>775</u>	@ <u>.80</u>	<u>620.00</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>297.36</u>	@ <u>2.48</u>	<u>737.25</u>
MILEAGE	<u>13.57 x 30 x</u>	<u>2.60</u>	<u>1058.76</u>
			TOTAL <u>7,455.51</u>

EQUIPMENT

PUMP TRUCK CEMENTER Dash / spec

366 HELPER Mike Scoborn

BULK TRUCK

609-239 DRIVER W.C. J. Guest

BULK TRUCK

DRIVER

REMARKS:

on location - Rig up - had safety meeting

run 8 3/4 casing - Breakdown - u/d rig used

Pump 5 bbl freshwater

mix 275 sks class A 3% cc 2% gel

Drop plug

Displaced 22.29 bbl freshwater

Shut in 10:20 am

Cement did carbonate

Rig down

CHARGE TO: American

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE 1512.25

EXTRA FOOTAGE @

MILEAGE Hum 30 @ 7.70 231.00

MANIFOLD @

Hum 30 @ 4.40 132.00

TOTAL 1,875.25

PLUG & FLOAT EQUIPMENT

Wooden plug @ 107.64 107.64

@

@

@

TOTAL 107.64

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.

PRINTED NAME X Steve H. Stephens

SIGNATURE X Steve H. Stephens

Thank you!!

SALES TAX (If Any)

TOTAL CHARGES 9,438.30

DISCOUNT 1,887.64 IF PAID IN 30 DAYS

7,550.64



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

TICKET 25813

PAGE 1 OF 2

SERVICE LOCATIONS: 1. NESS CITY, KS
 WELL/PROJECT NO.: 1-5 LEASE: GRUBB "D" COUNTY/PARISH: ELLSWORTH STATE: Ks CITY: DATE: 1-27-14 OWNER: SAME
 TICKET TYPE: SERVICE SALES CONTRACTOR: DUKE DRUG #8 RIG NAME/NO.: SHIPPED VIA: CT DELIVERED TO: LOCATION ORDER NO.:
 WELL TYPE: Oil WELL CATEGORY: DEVELOPMENT JOB PURPOSE: 5 1/2" LONGSTRING WELL PERMIT NO.: WELL LOCATION: N1 HOLYROOD, Ks
 REFERRAL LOCATION: INVOICE INSTRUCTIONS:

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		2			MILEAGE # 113	70		ME		6.00	420.00
578		2			PUMP CHARGE	1	3400	JOB	FT	1500.00	1500.00
221		2			LIQUID KCL	2		GAL		25.00	50.00
281		2			MUDFLUSH	500		GAL		1.25	625.00
402		1			CENTRALIZERS	8	5 1/2"	EA		70.00	560.00
403		1			CEMENT BASKET	1		EA		300.00	300.00
406		1			LATCH DOWN PLUG - BAFFLE	1		EA		275.00	275.00
407		1			INSERT FLOAT SHOE w/AUTO FILL	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: 1-27-14 TIME SIGNED: 1430
 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	4105.00
WE UNDERSTOOD AND MET YOUR NEEDS?				#2	5281.88
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				subtotal	9386.88
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				TAX	463.00
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO			Ellsworth 7.15%	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	9849.88

JOB LOG

SWIFT Services, Inc.

DATE 1-27-14 PAGE NO. 1

CUSTOMER AMERICAN WARRIOR Inc WELL NO. 1-5 LEASE GROBB "D" JOB TYPE 5 1/2" LONGSTRING TICKET NO. 25813

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL/GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1430							ON LOCATION
	1515							START 5 1/2" CASING IN WELL
								TD-3400' SETC 3399'
								TP-3399' 5 1/2" - 14"
								SS-21'
								CENTRALIZERS-1,3,5,7,9,11,13,15
								CMT BSKT-4
	1645							DROP BALL - CIRCULATE
			12		✓			PUMP 500 GAL MUD FLOSH
			20		✓			PUMP 20 BBLS KCL - FLUSH
			7					PLUG RH (30SKS)
			35		✓			MIX CEMENT - 145 SKS EA-2 @ 15.4 PPG
								WASH OUT PUMP + LINES
								RELEASE LATCH DOWN PLUG
		9/8	0		✓			DISPLACE PLUG
		7/4	60					500 1500 CANCEL LIFT
	1820	5	82.4					PLUG DOWN - PSE UP LATCH IN PLUG
	1825							OK RELEASE PSE - HELD
	1830							WASH TRUCK
	1900							JOB COMPLETE

THANK YOU
WAYNE, DOW, JOHN, DOUG



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399
Garden City, KS 67646

ATTN: Jim Musgrove

Grubb D #1-5

5-16s-10w Ellsworth,KS

Start Date: 2014.01.26 @ 11:10:05

End Date: 2014.01.26 @ 18:28:25

Job Ticket #: 56047 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.28 @ 09:20:11



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

American Warrior Inc.
PO Box 399
Garden City, KS 67646
ATTN: Jim Musgrove

5-16s-10w Ellsworth, KS

Grubb D #1-5

Job Ticket: 56047

DST#: 1

Test Start: 2014.01.26 @ 11:10:05

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:16:55
 Time Test Ended: 18:28:25
 Interval: **3225.00 ft (KB) To 3280.00 ft (KB) (TVD)**
 Total Depth: 3280.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Tate Lang
 Unit No: 49
 Reference Elevations: 1793.00 ft (KB)
 1785.00 ft (CF)
 KB to GR/CF: 8.00 ft

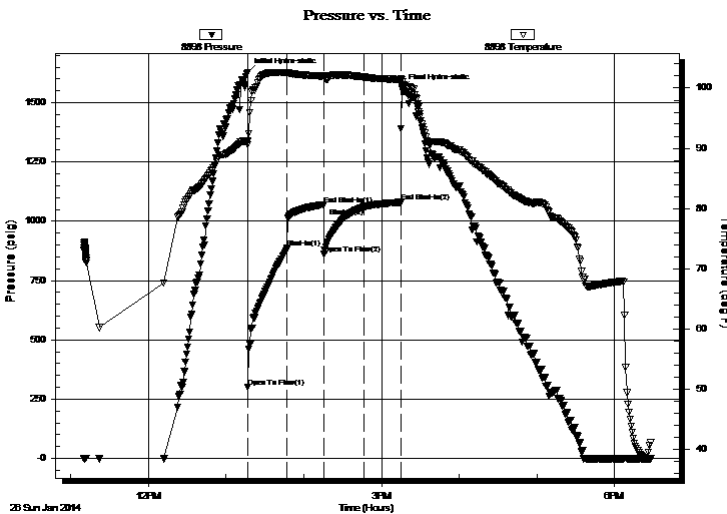
Serial #: 8898

Outside

Press@RunDepth: 1058.65 psig @ 3243.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.26 End Date: 2014.01.26 Last Calib.: 2014.01.26
 Start Time: 11:10:06 End Time: 18:28:25 Time On Btm: 2014.01.26 @ 13:16:45
 Time Off Btm: 2014.01.26 @ 15:15:45

TEST COMMENT: B.O.B. In 1 min
 Dead no blow back
 B.O.B. In 1 min
 Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1627.88	91.19	Initial Hydro-static
1	300.25	90.64	Open To Flow (1)
31	885.68	102.51	Shut-In(1)
59	1070.26	101.98	End Shut-In(1)
59	862.36	101.86	Open To Flow (2)
90	1058.65	101.84	Shut-In(2)
119	1080.27	101.42	End Shut-In(2)
119	1560.61	101.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1090.00	25%O 50%W 25%M	15.29
960.00	10%O 70%W 20%M	13.47
360.00	95%W 5%M	5.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc.

5-16s-10w Ellsworth,KS

PO Box 399
Garden City, KS 67646

Grubb D #1-5

Job Ticket: 56047

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.01.26 @ 11:10:05

Tool Information

Drill Pipe:	Length: 3223.00 ft	Diameter: 3.80 inches	Volume: 45.21 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume: 45.21 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	26000.00 lb
Depth to Top Packer:	3225.00 ft			Final	34000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	55.00 ft				
Tool Length:	75.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3210.00	
Hydraulic tool	5.00			3215.00	
Packer	5.00			3220.00	20.00 Bottom Of Top Packer
Packer	5.00			3225.00	
Stubb	1.00			3226.00	
Perforations	17.00			3243.00	
Recorder	0.00	8897	Inside	3243.00	
Recorder	0.00	8898	Outside	3243.00	
Change Over Sub	1.00			3244.00	
Drill Pipe	32.00			3276.00	
Change Over Sub	1.00			3277.00	
Bullnose	3.00			3280.00	55.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc.

5-16s-10w Ellsworth,KS

PO Box 399
Garden City, KS 67646

Grubb D #1-5

Job Ticket: 56047

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.01.26 @ 11:10:05

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:

48000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

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
1090.00	25%O 50%W 25%M	15.290
960.00	10%O 70%W 20%M	13.466
360.00	95%W 5%M	5.050

Total Length: 2410.00 ft Total Volume: 33.806 bbl

Num Fluid Samples: 0

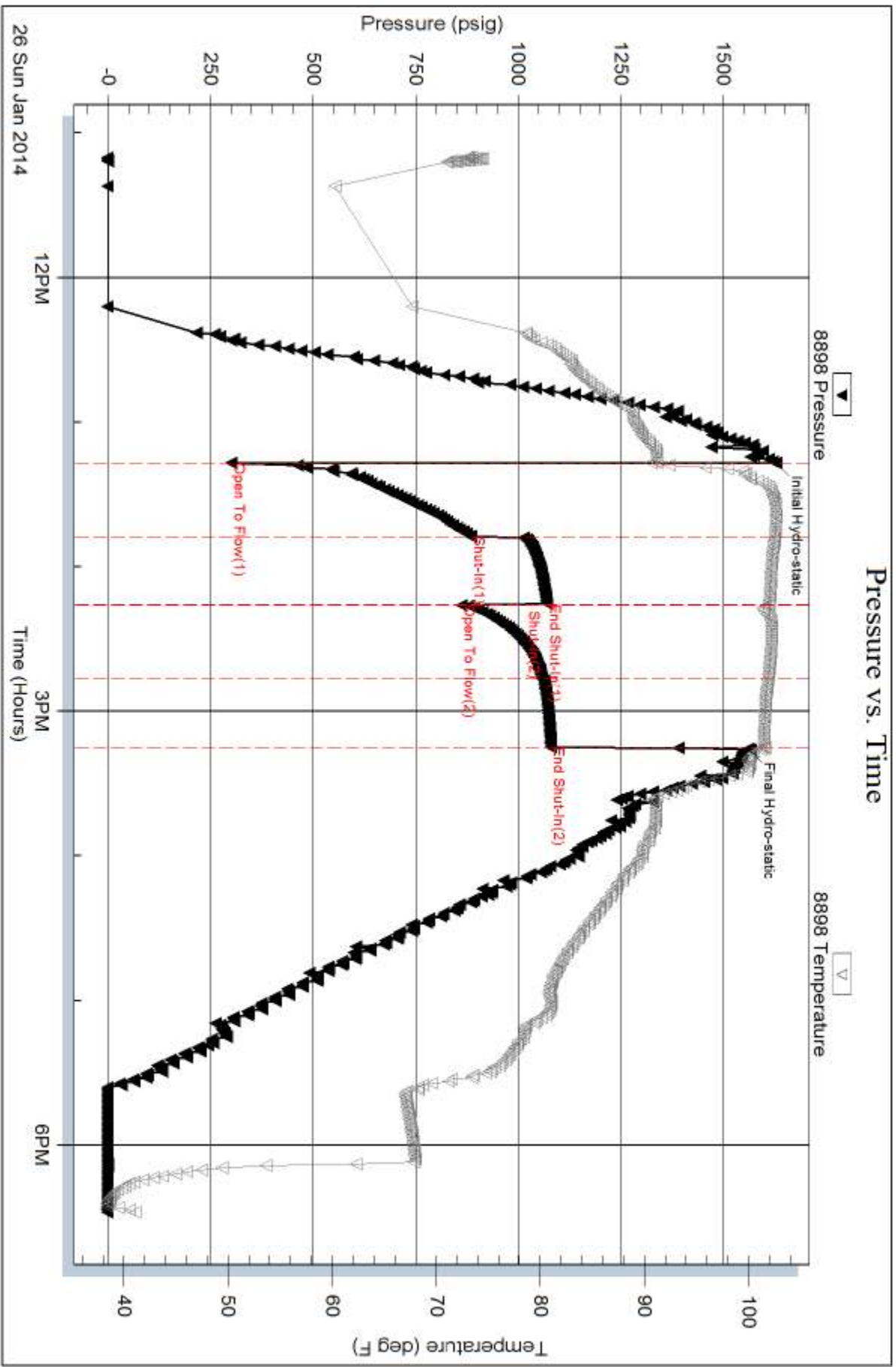
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



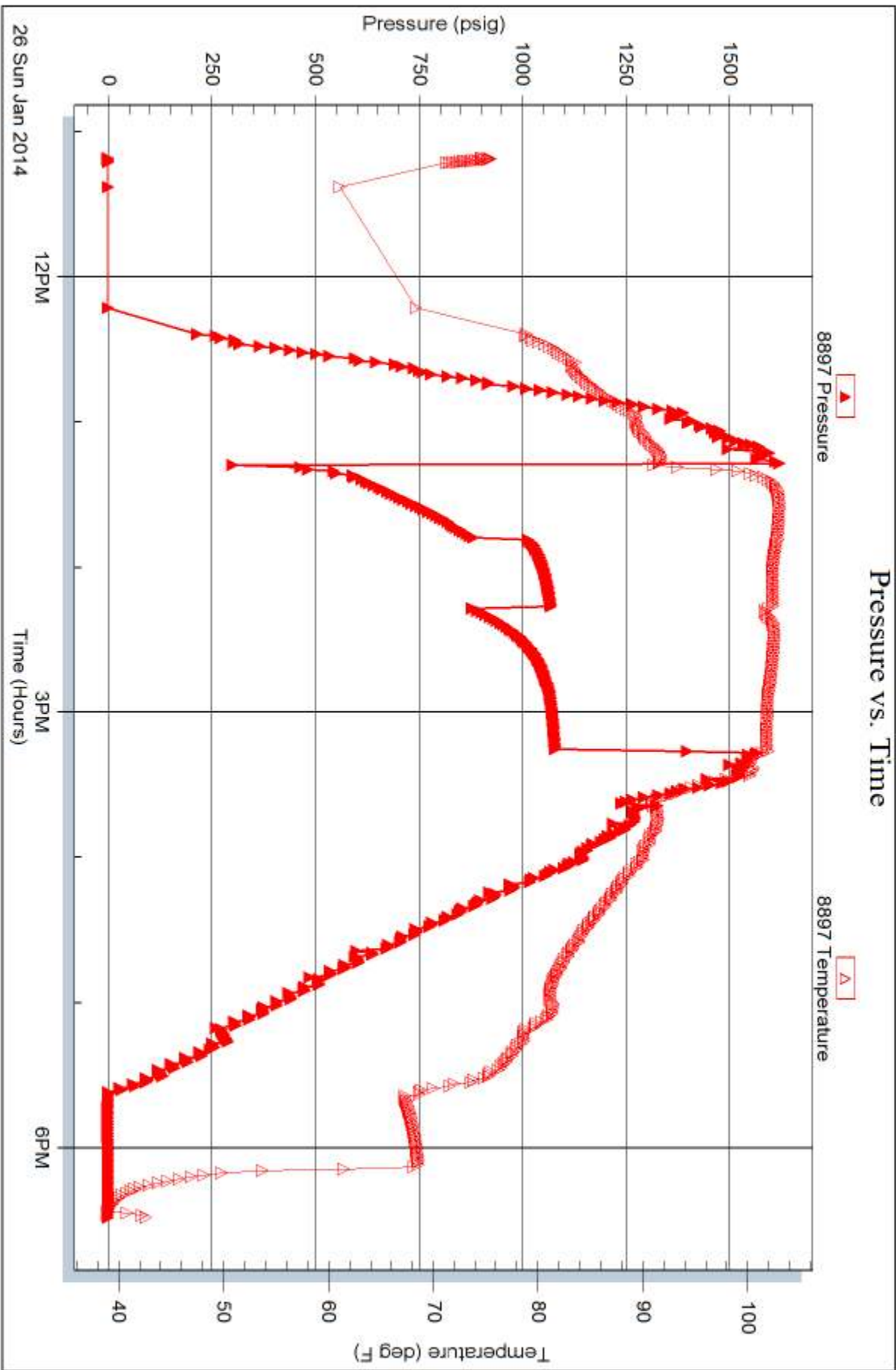
Serial #: 8897

Inside

American Warrior Inc.

Grubb D#1-5

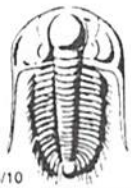
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56047

Printed: 2014.01.28 @ 09:20:13



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56047

Well Name & No. Grubb D # 1-5 Test No. 1 Date 1-26-13
 Company American Warrior Inc Elevation 1793 KB 1785 GL
 Address 3118 Cummings Rd PO Box 399 Garden City, KS 67646
 Co. Rep / Geo. Sim Musgrove Rig Dylite #8
 Location: Sec. 5 Twp. 16S Rge. 10W Co. Ellsworth State KS

Interval Tested 3225 3280 Zone Tested Arbuckle
 Anchor Length 55 Drill Pipe Run 3223 Mud Wt. 9.0
 Top Packer Depth 3221 Drill Collars Run 0 Vis 61
 Bottom Packer Depth 3225 Wt. Pipe Run 0 WL 7.2
 Total Depth 3280 Chlorides 3800 ppm System LCM 0 #

Blow Description B.O.B. IN 1 min
Dead No blow back
B.O.B. FN 1 min
Dead No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>1090</u>	<u>OCMW</u>	<u>25</u>	<u>50</u>	<u>25</u>	<u>0</u>
<u>960</u>	<u>OCMW</u>	<u>10</u>	<u>70</u>	<u>20</u>	<u>0</u>
<u>360</u>	<u>MCW</u>	<u>95</u>	<u>5</u>	<u>0</u>	<u>0</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2410 BHT 101 Gravity _____ API RW 223 @ 48 °F Chlorides 4800 ppm
 Test 1150
 Jars _____
 Safety Joint _____
 Circ Sub _____
 Hourly Standby _____
 Mileage 115 RT
 Sampler _____
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1328.25

(A) Initial Hydrostatic 1628 T-On Location 09:30
 (B) First Initial Flow 300 T-Started 11:10
 (C) First Final Flow 886 T-Open 13:16
 (D) Initial Shut-In 1070 T-Pulled 15:16
 (E) Second Initial Flow 862 T-Out 18:29
 (F) Second Final Flow 1059 Comments Load after test
 (G) Final Shut-In 1680
 (H) Final Hydrostatic 1562

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

JAMES C. MUSGROVE

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

Office (620) 588-4250

Res. Claflin (620) 587-3444

American Warrior Inc.
Grubb 'D' #1-5
NW-SW-NE-SW (1698' FSL & 1644' FWL)
Section 5-16s-10w
Ellsworth County, Kansas
Page 1

5 1/2" Production Casing Set

Contractor: Duke Drilling Co. (Rig #8)
Commenced: January 21, 2014
Completed: January 27, 2014
Elevation: 1793' K.B; 1791' D.F; 1785' G.L.
Casing program: Surface; 8 5/8" @ 364'
Production; 5 1/2" @ 3399'
Sample: Samples saved and examined 2700' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2700 ft. to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tests: There was one (1) Drill Stem Test ran by Trilobite Testing Co.
Electric Log: By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity Log, and Micro Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	598	+1195
Base Anhydrite	624	+1169
Heebner	2827	-1034
Toronto	2847	-1054
Douglas	2858	-1065
Brown Lime	2928	-1135
Lansing	2944	-1151
Base Kansas City	3235	-1442
Arbuckle	3271	-1478
Rotary Total Depth	3400	-1607
Log Total Depth	3403	-1610

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

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

TOPEKA SECTION

2692-2980' Limestone; tan, finely crystalline, slightly cherty, trace brown edge staining, no free oil and no odor.
2982-2987' Limestone; tan, finely crystalline, granular, scattered porosity, brown stain, weak show of free oil and no odor in fresh samples.

TORONTO SECTION

2847-2858' Limestone; tan, gray, finely crystalline, chalky, cherty in part, no shows.

LANSING SECTION

2944-2950' Limestone; gray/tan, oolitic, dense, trace poor brown stain, no show of free oil and faint odor, plus tan oolitic chert.

2961-2966' Limestone; tan, finely crystalline, scattered pinpoint porosity, questionable stain, no free oil and faint odor in fresh samples.

2976-2984' Limestone; gray, tan, fossiliferous, scattered porosity, trace golden brown stain, trace of free oil and no odor in fresh samples.

3002-3014' Limestone; tan, gray, fossiliferous, shaley in part, no shows.

3021-3026' Limestone; tan, fossiliferous, finely crystalline, scattered intercrystalline type porosity, brown stain, trace of free oil and questionable odor in fresh samples.

3035-3050' Limestone; gray, tan, oomoldic, fair oomoldic porosity, poor stain, weak show of free oil and no odor in fresh samples.

3104-3112' Limestone; gray, white, oolitic, chalky in part, few cherty, poor visible porosity, no shows.

3117-3132' Limestone; gray, tan, sub oomoldic, chalky, poor visible porosity, few with black/gray stain, no show of free oil and no odor in fresh samples.

3160-3180' Limestone; gray, finely crystalline, fossiliferous in part, slightly cherty (dense).

3196-3214' Limestone; gray, white, fossiliferous in part, dense, trace tan/amber chert.

ARBUCKLE SECTION

3271-3283' Dolomite; tan, brown, oomoldic, fair oomoldic and vuggy type porosity, brown stain and saturation, show of free oil and faint odor in fresh samples.

Drill Stem Test #1 **3225-3250' (log measurements 3228-3283)**

Times: 30-30-30-30

Blow: Strong

Recovery: 1090' oil and gas cut muddy water
(25% oil, 50% water, 25% mud)
960' oil cut muddy water
(10% oil, 70% water, 20% mud)
360' muddy water

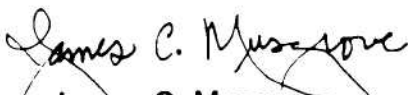
Pressures: ISIP 1070 psi
FSIP 1059 psi
IFP 300-886 psi
FFP 862-1059 psi
HSH 1628-1562 psi

- 3283-3290' Dolomite; tan, brown, finely crystalline, slightly cherty, poor visible porosity, no shows.
- 3290-3310' Dolomite; as above, sandy in part, no shows.
- 3310-3330' Dolomite; tan, fine and medium crystalline, sub oomoldic, scattered oomoldic and vuggy type porosity, no shows.
- 3330-3350' Dolomite; tan/gray, fine and medium crystalline, scattered vuggy porosity, plus white translucent chert.
- 3350-3360' Dolomite and chert; as above.
- 3360-3380' Dolomite; gray, white, tan, finely crystalline, sucrosic, slightly cherty, few with scattered vuggy porosity, no shows.
- 3380-3403' Dolomite; as above, plus amber chert and white chalk.

Rotary Total Depth 3400 (-1607)
Log Total Depth 3403 (-1610)

Recommendations: 5 1/2" production casing was set and cemented in the American Warrior Grubb 'D' #1-5.

Respectfully submitted;


James C. Musgrove,
Petroleum Geologist

