



**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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- 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

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

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

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

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

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

Total 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**

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



1103521

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

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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 Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	O'Brate - Gray 1-8
Doc ID	1103521

Tops

Name	Top	Datum
Anhy	1449'	+1420
B/Anhy	1465'	+1403
Heebner	4068'	-1200
Lansing	4120'	-1252
Stark	4449'	-1581
B/KC	4583'	-1715
Marmaton	4604'	-1736
Ft.Scott	4700'	-1832
St.Louis	4876'	-2008





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

TICKET No 23461

PAGE 1 OF 2

SERVICE LOCATIONS 1. Ness City, KS WELL/PROJECT NO. 1-8 LEASE OBrate - Gray COUNTY/PARISH Gray STATE KS CITY Graden City DATE 6 Nov 12 OWNER  
 2. TICKET TYPE  SERVICE CONTRACTOR Done RIG NAME/NO. 5 SHIPPED ET DELIVERED TO Location ORDER NO.  
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE cement long string WELL PERMIT NO. WELL LOCATION 8-24-30  
 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 TRK 114	80		mi		6.00	480	00
578		1			Pump Charge	1		ea		1500.00	1500	00
402		1			Centralizer	52	10	in	kg	70.00	700	00
403		1			Cement Basket	52	2	in	ea	250.00	500	00
404		1			Port Collar	52	1	in	ea	2400.00	2400	00
406		1			Latch down plug & baffle	52	1	in	ea	250.00	250	00
419		1			Rotating head rental	52	1	in	ea	200.00	200	00
407		1			insert float shoe w/AUTO FILL	52	1	in	ea	350.00	350	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  
 DATE SIGNED \_\_\_\_\_ TIME SIGNED 1420  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?				6380	00
WE UNDERSTOOD AND MET YOUR NEEDS?				5719	25
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				12,099	25
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				673	20
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL	12,772.45

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.  
 SWIFT OPERATOR Asbell APPROVAL \_\_\_\_\_  
 Thank You!



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

TICKET CONTINUATION

TICKET No. 23461

CUSTOMER American Warrior WELL 1-8 DATE 6 NOV 12 PAGE 2 OF 7

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY		UNIT		PRICE	AMOUNT	
		LOC	ACCT.	IDF			QTY	UOM	QTY	UOM			
325		1				STANDARD cement (for 84-2)	175	SK			13.50	2362.50	
284		1				calseal	80	lb	8	sk	35.00	280.00	
283		1				salt	900	lb			0.20	180.00	
292		1				hald-322	125	lb			7.75	968.75	
276		1				flake	50	lb			2.00	100.00	
290		1				D-AIR	2	gal			35.00	70.00	
281		1				mudflush	500	gal			1.25	625.00	
221		1				KCL flush liquid	2	gal			25.00	50.00	
581		1				SERVICE CHARGE	175				2.00	350.00	
583		1				MILEAGE CHARGE	13325	TOTAL WEIGHT	80	LOADED MILES	733	TON MILES	733.00

CONTINUATION TOTAL 5719.25





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

TICKET  
 No 23465

PAGE 1 OF 1

SERVICE LOCATIONS  
 1. Ness City KS WELL/PROJECT NO. 1-8 LEASE ORATE-GRAY COUNTY/PARISH GRAY STATE KS CITY Garden City DATE 13 NOV 12 OWNER  
 2. TICKET TYPE  SERVICE  SALES CONTRACTOR CO TOOLS RIG NAME/NO. SHIPPED VIA CT DELIVERED TO Location ORDER NO.  
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE cement port collar WELL PERMIT NO. WELL LOCATION 8-24-30  
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRK 114	80		mi		6.00	480.00
576D		1			Pump Charge	1		ea		1250.00	1250.00
330		1			SUD cement	160		sk		16.50	2640.00
276		1			Flocele	50		lb		2.00	100.00
290		1			D-AIR	2		gal		35.00	70.00
104		1			PORT COLLAR TOOL Rental	1		ea		250.00	250.00
581		1			Service charge	200		sk		2.00	400.00
583		1			Drayage	19902		lb	796.08 TM	1.00	796.08

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  
 DATE SIGNED TIME SIGNED  A.M.  P.M.  
11:00

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
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				5986.08
WE UNDERSTOOD AND MET YOUR NEEDS?				
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				
Gray TAX 7.45%				227.97
TOTAL				6214.05

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

SWIFT OPERATOR ABeybell APPROVAL

Thank You!



## JOB LOG

## SWIFT Services, Inc.

DATE 13 NOV 12

PAGE NO.

CUSTOMER American Warrior WELL NO. 1-8 LEASE ORRATE - GRAY JOB TYPE Cement part collar TICKET NO. 23465

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
				T	C			
								200 sk SMD w/ 1/4" fiberline
								part collar - 1795 2 3/8 x 5 1/2
	0830							on loc YRK 114
	0900					1000	1000	test to 100psi - hold
	0905	2	2			400		inj rate 2 bbl @ 400 psi
	0912	2 1/2				400		Mix SMD cement @ 11.2 ppg
		2 1/2	13			400		fluid to surface
		2 1/2	81			500		→ cement to surface ←
								{ 160 sks mixed } 150 pit }
		2 1/2	6			500		Displace 6 bbl H <sub>2</sub> O
	0913					1000	1000	close port collar test to 100psi - hold
								Run 5 <del>Flow</del> Joints
	1000		20					Reverse hole clean - 2 cement plugs -
	1100							wait on water
	1100							wash up trucks
								RACK UP
	1130							job complete flunks
								JONES, TJ, DAUER, & BLANK



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior  
 3118 Cummings Rd.  
 P.O. Box 399  
 Garden City KS 67846  
 ATTN: Kevin Timson

**8-24-30 Gray Co KS**

**O Brate Gray 1 8**

Job Ticket: 49865

**DST#: 1**

Test Start: 2012.11.04 @ 17:11:15

## GENERAL INFORMATION:

Formation: **Marrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:35:45

Time Test Ended: 23:33:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 65

**Interval: 4831.00 ft (KB) To 4864.00 ft (KB) (TVD)**

Reference Elevations: 2868.00 ft (KB)

Total Depth: 4864.00 ft (KB) (TVD)

2856.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 12.00 ft

**Serial #: 8646**

**Inside**

Press @ Run Depth: 23.57 psig @ 4832.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.04

End Date:

2012.11.04

Last Calib.: 2012.11.04

Start Time: 17:11:15

End Time:

23:33:45

Time On Btm: 2012.11.04 @ 19:35:15

Time Off Btm: 2012.11.04 @ 20:46:45

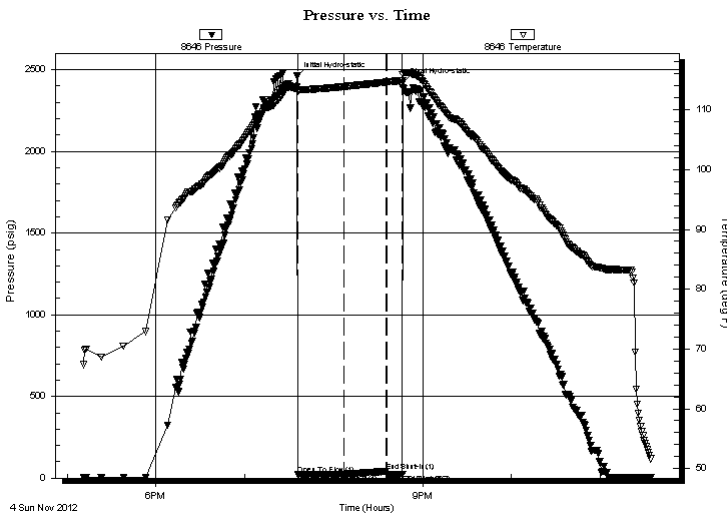
**TEST COMMENT:** IF:Weak surface blow died in 4 min.

IS:No return blow

FF:No blow

FS:PULLED Test

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2460.59	113.81	Initial Hydro-static
1	21.59	113.10	Open To Flow (1)
32	23.57	113.88	Shut-In(1)
60	42.01	114.62	End Shut-In(1)
61	24.59	114.64	Open To Flow (2)
71	24.77	114.92	End Shut-In(2)
72	2420.30	115.96	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w ith oil spots	0.02

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior

**8-24-30 Gray Co KS**

3118 Cummings Rd.  
P.O. Box 399  
Garden City KS 67846  
ATTN: Kevin Timson

**O Brate Gray 1 8**

Job Ticket: 49865

**DST#: 1**

Test Start: 2012.11.04 @ 17:11:15

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3100.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w ith oil spots	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

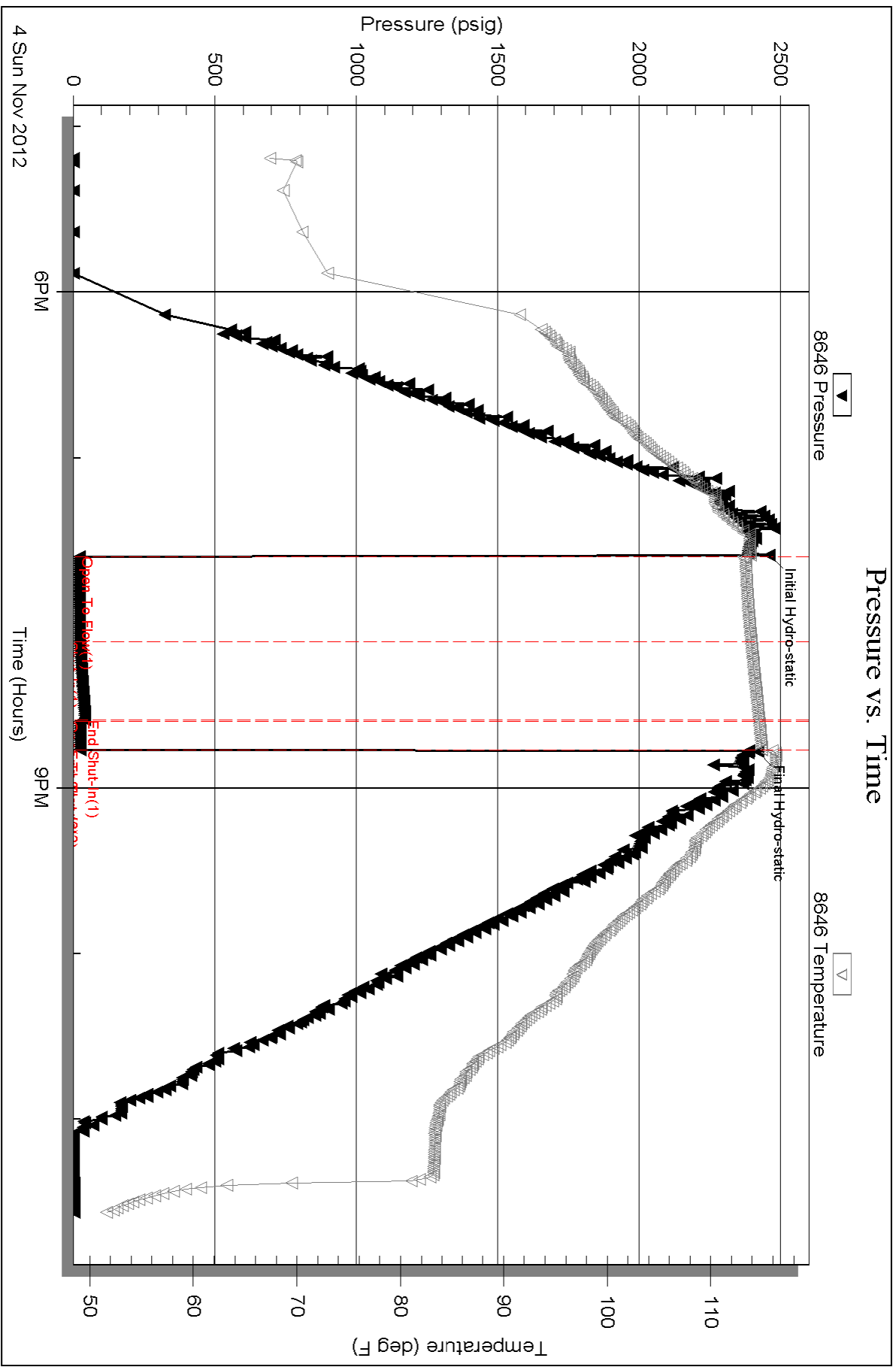
Serial #: 8646

Inside

American Warrior

O Bate Gray 1 8

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 49865

Printed: 2012.11.04 @ 23:45:15

# Geological Report

American Warrior, Inc.

**O'Brate-Gray #1-8**

335' FSL & 845' FEL

Sec. 8, T24s, R30w

Gray County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
O'Brate-Gray #1-8  
335' FSL & 845' FEL  
Sec. 8, T24s, R30w  
Gray County, Kansas  
API # 15-069-20403-0000

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: October 25, 2012

Completion Date: November 6, 2012

Elevation 2857' Ground Level  
2868' Kelly Bushing

Directions: From Southeast side of Garden City, KS at intersection of Hwy 50 and Pole Line Rd. Go 6 miles East on Pole Line Rd to 3 Rd. Now go 1 mile North on 3 Rd to C Rd. Go North across the intersection on 3 Rd. and immediately turn West into location.

Casing: #23 8 5/8" surface casing set @ 258' with 150 sacks Class A, 3% c.c, 2% gel. #15.5 5 1/2" production casing set @ 4777 with 125 sacks EA-2. Port collar set @ 1795.

Samples: 4000' to RTD 10' wet and dry,

Drilling Time: 4000' to RTD

Electric Logs: Pioneer "C. Desaire" Dual Compensated Porosity, Dual Induction, Microresistivity.

Drillstem Tests: One Trilobite Testing "Mike Roberts"

## Formation Tops

### Formation

Anhydrite

Base

Heebner

Lansing

Stark

BKc

Marmaton

Pawnee

Fort Scott

Cherokee

Atoka

Morrow

St. Gen

St. Louis

RTD

American Warrior, Inc.

O'Brate-Gray #1-8

Sec. 8, T24s, R30w

335' FSL & 845' FEL

1448' +1420

1465' +1403

4068' -1200

4120' -1252

4449' -1581

4583' -1715

4604' -1736

4677' -1809

4700' -1832

4717' -1849

4817' -1949

4848' -1980

4862' -1994

4876' -2008

5000' -2132

## Sample Zone Descriptions

**Morrow Sand (4848', -1983):** Covered in DST #1

Sandstone. Grey. Fine to medium grain. Poorly sorted rounded grains mixed in with angular grains. Good stain and good saturation. Good show of free oil. Slight to fair odor. 20 unit gas kick.

**St. Louis (4876', -2008):** Not Tested

Limestone. Tan. Sub to fine crystalline. Poor oolytic porosity. Barren. Slight to fair odor. 25 unit gas kick.

### Drill Stem Tests

Trilobite Testing Inc.

"Sam Esparza"

#### DST #1

#### Morrow Sand

Interval (4831' – 4864') Anchor Length 33'

IHP - 2460 #

IFP - 30" – Weak surface blow died in 4 min 21-23 #

ISI - 30" – No Return 42 #

FFP - 10" – No Blow NA

FSIP - Pull tool – No Return NA

FHP - 2420 #

BHT - 120 ° F

Recovery: 5' Mud (spots of oil)



## Structural Comparison

Formation	American Warrior, Inc.			American Warrior, Inc.			American Warrior, Inc.		
	O'Brate-Gray #1-8 Sec. 8, T24s, R30w 335' FSL & 845' FEL	Gates #8-16 Sec. 16, T24s, R30w 2300' FNL & 1750' FWL			Wehkamp #1-15 Sec. 15, T24s, R30w 394' FNL & 652' FWL				
Anhydrite	1448' +1420	NA	NA	NA	NA	NA	NA	NA	
Base	1465' +1403	NA	NA	NA	NA	NA	NA	NA	
Heebner	4068' -1200	4053' -1190	-10	4052' -1196	-4	4052' -1196	-4	-4	
Lansing	4120' -1252	4111' -1248	-4	4101' -1245	-7	4101' -1245	-7	-7	
Stark	4449' -1581	4435' -1572	-9	4424' -1568	-13	4424' -1568	-13	-13	
BKC	4583' -1715	4568' -1705	-10	4573' -1717	+2	4573' -1717	+2	+2	
Marmaton	4604' -1736	4586' -1723	-13	4597' -1741	+5	4597' -1741	+5	+5	
Pawnee	4677' -1809	4660' -1797	-12	4670' -1814	+5	4670' -1814	+5	+5	
Fort Scott	4700' -1832	4690' -1827	-5	4696' -1840	+8	4696' -1840	+8	+8	
Cherokee	4717' -1849	4702' -1839	-10	4710' -1854	+6	4710' -1854	+6	+6	
Atoka	4817' -1949	4804' -1941	-8	4801' -1945	+4	4801' -1945	+4	+4	
Morrow	4848' -1980	4838' -1975	-5	4839' -1983	+3	4839' -1983	+3	+3	
St. Gen	4862' -1994	4852' -1989	-5	NA	NA	NA	NA	NA	
St. Louis	4876' -2008	4868' -2005	-3	NA	NA	NA	NA	NA	