

Confid	entiali	ty Requested:
Yes		No

## Kansas Corporation Commission Oil & Gas Conservation Division

1198772

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 #			API No. 15				
Name:			Spot Description:				
Address 1:			SecTwpS. R				
Address 2:			Feet from North / South Line of Section				
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section		
Contact Person:			Footages Calculated from I	Nearest Outside Section C	Corner:		
Phone: ()			□ NE □ NW	V □SE □SW			
CONTRACTOR: License #			GPS Location: Lat:	, Long: _			
Name:				(e.g. xx.xxxxx)	(e.gxxx.xxxxx)		
Wellsite Geologist:			Datum: NAD27	NAD83 WGS84			
Purchaser:			County:				
Designate Type of Completion:			Lease Name:	W	/ell #:		
	e-Entry	Workover	Field Name:				
	_		Producing Formation:				
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW □ SIGW	Elevation: Ground:	Kelly Bushing:	:		
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total C	Depth:		
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet		
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No		
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet		
Operator:			If Alternate II completion, c	cement circulated from:			
Well Name:			feet depth to:	w/	sx cmt.		
Original Comp. Date:							
Deepening Re-perf	•	NHR Conv. to SWD	Drilling Fluid Managemer	nt Plan			
☐ Plug Back	Conv. to G		(Data must be collected from the				
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	e: bbls		
Dual Completion			Dewatering method used: _				
SWD			Location of fluid disposal if	hauled offsite			
☐ ENHR			1				
GSW	Permit #:		Operator Name:				
_ <del>_</del>			Lease Name:	License #:_			
Spud Date or Date R	eached TD	Completion Date or	Quarter Sec	TwpS. R	East _ West		
Recompletion Date		Recompletion Date	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:	

Page Two



Operator Name:				_ Lease N	lame: _			Well #:		
Sec Twp	S. R	East	West	County:						
open and closed, flow and flow rates if gas t Final Radioactivity Lo	now important tops of for ving and shut-in pressu to surface test, along w ng, Final Logs run to ob ed in LAS version 2.0 o	ires, whet ith final ch tain Geop	her shut-in pre nart(s). Attach physical Data a	ssure reach extra sheet nd Final Ele	ned stati t if more ectric Lo	c level, hydros space is need	static pressures ded.	s, bottom hole tempe	erature, fl	luid recovery,
Drill Stem Tests Taker (Attach Additional		Ye	s No		L	og Forma	og Formation (Top), Depth and Datum Sample			
Samples Sent to Geo	Samples Sent to Geological Survey				Nam	е		Тор	[	Datum
Cores Taken Electric Log Run										
List All E. Logs Run:										
			CASING	RECORD	☐ Ne	w Used				
		Repor	t all strings set-c	onductor, sur	rface, inte	ermediate, produ	uction, etc.			
Purpose of String	Size Hole Drilled		Casing (In O.D.)	Weig Lbs./		Setting Depth	Type of Cement			and Percent dditives
			ADDITIONAL	CEMENTIN	IG / SQL	JEEZE RECOF	RD			
Purpose: Depth Top Bottom  Perforate Top Bottom  Protect Casing Plug Back TD		Туре	ype of Cement # Sacks Used		Type and Percent Additives					
Plug Off Zone										
Does the volume of the t	ulic fracturing treatment or total base fluid of the hydra ring treatment information	aulic fractur	-		-	Yes Yes Yes	No (If N	lo, skip questions 2 and lo, skip question 3) lo, fill out Page Three c		D-1)
Shots Per Foot			D - Bridge Plugs ach Interval Perf				racture, Shot, Ce	ement Squeeze Record		Depth
	2000		asir morvar ronolated					, , , , , , , , , , , , , , , , , , , ,		
TUBING RECORD:	Size:	Set At:		Packer At	:	Liner Run:	Yes	No		
Date of First, Resumed	Production, SWD or ENH	IR.	Producing Meth	od:	,	Gas Lift	Other (Explain)			
Estimated Production Per 24 Hours	Oil B	bls.		Mcf	Wate		Bbls.	Gas-Oil Ratio		Gravity
DISPOSITI  Vented Solo	ON OF GAS:		N pen Hole	IETHOD OF	_	Comp.	Commingled	PRODUCTIO	N INTER	VAL:
(If vented, Su	bmit ACO-18.)	По	ther (Specify)		(SUDITIIL )	(S	Submit ACO-4)			

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Shadow 6-17
Doc ID	1198772

# All Electric Logs Run

Induction		
Porosity		
micro		
Sonic		

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Shadow 6-17
Doc ID	1198772

# Tops

Name	Тор	Datum
Heebner	4131'	-1313
Lansing	4227'	-1409
Stark	4595'	-1777
Marmaton	4737'	-1919
Pawnee	4820'	-2002
Cherokee	4869'	-2051
Atoka	5009'	-2191
Morrow	5079'	-2261
Mississippian	5118'	-2300

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Shadow 6-17
Doc ID	1198772

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.250	8.625	24	1743	Class A		3%CC,6% gel
Production	8.875	5.50	15.5	5284	EA-2	125	



## CEMENTING LOG

**CEMENT DATA** 53085 3/11/2014 District Liberal # 21 Ticket No. Spacer Type 10 bbl water **American Warrior** Rig Duke #9 Sks Yield ft<sup>a</sup>/sk Density Company shadow Well No Lease 4-17 GRAY State County Ks LEAD: Time hrs. Type CLASS A Location Field 65/35, 6%GEL, 3%BWOC CC,1/4 FLOSEAL 50% Casing Data Conductor ☐ PTA Squeeze Misc. Amt. 625 Sks Yield 2 ft³/sk Density PPG ✓ Surface \_\_\_ Intermediate ☐ Production Liner TAIL: Time hrs. Type CLASS A 8 5/8 Type 3%cc,,1/4 floseal Weight 24 Collar Excess PPG Amt. 200 Sks Yield ft³/sk Density 15.63 WATER Lead 10.9 Gal/sk Tail 5.2 Gal/sk Total **BBLS** Bottom 1743 Pump Trucks Used: 700-686 Casing Depths Top 562-467 **Bulk Equipment** 531-744 LIN. FT/BBL Drill Pipe: BBLS/LIN. FT Float Equipment: Manufacturer WEATHERFORD Open Hole: BBLS/LIN. FT LIN. FT/BBL **GUIDE SHOE** 1743 Capacity Factors: BBLS/LIN. FT LIN. FT/BBL Shoe: Type Depth 0.0637 Float: Type **AFU Insert Valve** Depth 1701 Casing BBLS/LIN. FT LIN. FT/BBL Open Holes BBLS/LIN. FT LIN. FT/BBL Centralizers: Quantity 3 Plugs Top **Bottom Drill Pipe** BBLS/LIN. FT LIN. FT/BBL Stage Collars BBLS/LIN. FT 0.0735 LIN. FT/BBL 13.6037 Special Equipment 1 Cement Basket @ 680 ft **Annulus** LIN. FT/BBL H2O Amt 108.3 bbls Weight 8.34 PPG BBLS/LIN. FT Disp: Fluid Type Perforations From ft to ft Amt Mud Type Weight

COMPANY REPRESENTATIVE \_\_\_\_\_ CEMENTER \_\_\_\_\_ ALDO ESPINOZA

TIME	PRESSU	IRES PSI	FLU	JID PUMPED D	ATA			
АМ/РМ	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	PUMPED PER TIME PERIOD	RATE BBLS/MIN	REMARKS		
230PM						ARRIVE TO LOCATION RUN FLOAT EQUIPMENT		
300PM						RIG UP		
530PM						CASING ON BOTTOM		
600PM						SAFETY MEETING		
615PM	2500					PRESSURE TEST		
630PM	150		10		6	10 BBL WATER SPACER		
635PM	150		233		6	PUMP 223 BBL OF LEAD SLURRY CEMENT		
712PM	180		276		6	PUMP 43 BBL OF TAIL SLURRY CEMENT		
728PM					4	RELEASE PLUG- START DISPLACEMENT		
732PM	30		296		6	20 BBL GONE		
736PM	120		316		6	40 BBL GONE		
740PM	230		336		6	60BBLGONE		
743PM	360		356		6	80 BBL GONE		
746PM	400		376		3	100 BBL GONE SLOW DOWN TO 3 BPM		
748PM	1000		384		3	BUMP PLUG		
754PM						RELEASE PRESSURE, CHECK FLOATS		
756PM						RIG DOWN		
830PM						LEAVE LOCATION		
						53 BBL OF CEMENT BACK		
						BY EMIGDIO'S REQUEST MIX LEAD SLURRY @ 13 # / G		

FINAL DISP. PRESS.	400	PSI	BUMP PLUG TO	1000	PSI	BLEEDBACK	0.5	BBLS	THANK YOU

SWIFT
Services, Inc.

HARGE TO	American	11/050,00	
ADDRESS	HIWERCON	Warrior	
ITV STATE	ZIP CODE		

TICKET	2603	9

PAGE OF 2

SERVICE LOCATIONS 1. KS Lty KS	WELL/PROJECT NO.	5 hadow	COUNTY/PARISH	KS	Copeland	19 MAR 14 OWNER
2.	TICKET TYPE CONTRACTOR SERVICE SALES	DUKE	RIG NAME/NO.	SHIPPED	DELIVERED TO	ORDER NO.
4.	WELL TYPE	1 1 - 1	urpose ement long sking		WELL PERMIT NO.	WELL LOCATION 17-28-30
REFERRAL LOCATION	INVOICE INSTRUCTIONS		1-11.0		•	

PRICE	SECONDARY REFERENCE/	1	ACCOUNTIN	IG	PERCENTION					UNIT	*******	
REFERENCE	PART NUMBER		LOC ACCT DF		DESCRIPTION	QTY. U/M		QTY. U/M		PRICE	AMOUNT	
575		1			MILEAGE 7RK 114	90	mei			600	5400	
578		1			Pump Charge	/	09			15000	15009	
402		1			Centralizer	53	iù	10	lea	70100	7001	
403		1			Coment Boshet	5½	in	/	200	3000	300	
406		1			Latch down Dux & bapfle	52	ù	/	eg	27500	275	
407		1			Insert Floor shoe of AUTOFILL	52	ù		129	37500	375	
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		+		1			-		1			
	Alle II	+		1 8					$\vdash$		<del>i</del>	
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	2			1					1		690	
	Luctomor boroby acknowled				CITE	RVEY	LACE	EE DECIDE	DIS-		2710	

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

DATE SIGNED TIME SIGNED 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	/	3720	00
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				PAGE TOTAL	6056	13
WE UNDERSTOOD AND MET YOUR NEEDS?				111	9776!	13
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				Subtotal	4	
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				Gray 7.3%	476	80
ARE YOU SATISFIED WITH OUR SE		NO		1	1	- 37-31-
☐ CUSTOMER DID NOT			TOTAL	10,222	93	

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



PO Box 466 Ness City, KS 67560

## TICKET CONTINUATION

No. 26039

CUSTOMER MIKICAN WELShadow 6-17 PAGE 19 aux 14 Off: 785-798-2300 ACCOUNTING SECONDARY REFERENCE/ PRICE UNIT DESCRIPTION TIME AMOUNT REFERENCE PART NUMBER PRICE ACCT U/M DF QTY. QTY. U/M 325 fir SA-Z ISK 800 115 calsea 00 halad-322 25 00 SERVICE CHARGE CUBIC FEET 175 350,00 LOADED MILES MILEAGE TOTAL WEIGHT 18325 TON MILES 824.63 CONTINUATION TOTAL

4m	upican W	arrior	WELL NO.	6-1	7	LEASE SV	hadoev	JOB TYPE JONG SKING TICKET NO. 2603
ART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMI		PRESSUR		DESCRIPTION OF OPERATION AND MATERIALS
		(or m)	(SAL)		Ĭ	IOBING		17566 SA-7 coment on 14# Flored
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					$\vdash$		$\vdash$	53×15.5# casing 126; ts 5299.3.  TO 5300' shoe jt 4215' 5307'  Contribut 43  Biskut #3
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	1420							Drop ball - circulate
	1456	32	12		Ш		200	Pup 20661 KCL flush
		32	20				200	Pup 20661 KCL Alush
	1505		7					Plug RH-MH 3086 - 2000
	1512	4章	35				200	Mix EA-2 cement 255 @ 15.3
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								wash out pup \$ line
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								Drop latch down plug
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	11/12	64	438		1		750	Displace plog
	1600	64					150	
	1000	69	125		$\vdash$		1300	Land plug
$\rightarrow$	1/ 1/2		1		$\vdash$		-	D.A. a.
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-	// -		<del></del>		$\sqcup$			
_	1607				4			wash truck
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	1645					2.3	1	job complete
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Prepared For: American Warrior Inc.

PO Box 399

Garden City KS 67846

ATTN: Wyatt Urban

## **Shadow #6-17**

## 17-28s-30w Gray,KS

Start Date: 2014.03.17 @ 16:48:00 End Date: 2014.03.18 @ 02:26:25 Job Ticket #: 56322 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.03.25 @ 09:36:08



American Warrior Inc.

17-28s-30w Gray,KS

PO Box 399

Garden City KS 67846

**Shadow #6-17** Job Ticket: 56322

DST#: 1

ATTN: Wyatt Urban

Test Start: 2014.03.17 @ 16:48:00

## **GENERAL INFORMATION:**

Formation: **Morrow Sand** 

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Initial) No ft (KB)

Time Tool Opened: 19:18:40 Time Test Ended: 02:26:25

Tester: Unit No: 72

Will MacLean

2818.00 ft (KB)

Reference Elevations:

2805.00 ft (CF)

5051.00 ft (KB) To 5125.00 ft (KB) (TVD)

Total Depth: 5125.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good Hole Diameter:

KB to GR/CF: 13.00 ft

Serial #: 8674 Press@RunDepth:

Interval:

Start Date:

Start Time:

Inside

532.83 psig @ 2014.03.17

16:48:00

5052.00 ft (KB) End Date:

End Time:

2014.03.18

02:26:25

Capacity: Last Calib.: 8000.00 psig

2014.03.18 Time On Btm: 2014.03.17 @ 19:17:10

Time Off Btm:

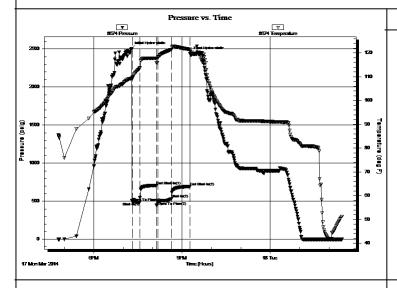
2014.03.17 @ 21:16:39

TEST COMMENT: IF- Strong Surface Blow Built to BOB in 22 sec Gas to Surface in 8 min

ISI- BOB

FF- Strong Surface Blow Built to BOB in 6 sec

FSI- BOB



## PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2502.67	109.20	Initial Hydro-static
2	492.00	109.50	Open To Flow (1)
17	486.79	113.63	Shut-In(1)
51	708.15	117.74	End Shut-In(1)
54	492.60	118.09	Open To Flow (2)
82	532.83	121.44	Shut-In(2)
119	694.91	121.52	End Shut-In(2)
120	2439.69	121.00	Final Hydro-static
		ı	

### Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCO 4%g 24%m 72%oil	0.61
440.00	20min Sample GMCO 4%g 23%m 73%	05.63
440.00	15min Sample GMCO 20%g 28%m 52	%6.17
440.00	10min Sample GMCO 5%g 18%m 779	<b>6</b> (6.17
443.00	5min Samlpe MGCO 11%m 15%g 749	<b>6</b> (6.21
31.00	OGCM 7%oil 12%g 81%m	0.43

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	30.00	1276.45
Last Gas Rate	1.00	18.00	931.46
Max. Gas Rate	1.00	30.00	1276.45

Ref. No: 56322 Printed: 2014.03.25 @ 09:36:09 Trilobite Testing, Inc



American Warrior Inc.

17-28s-30w Gray,KS

PO Box 399

**Shadow #6-17** 

Garden City KS 67846

Job Ticket: 56322 DST#: 1

ATTN: Wyatt Urban Test Start: 2014.03.17 @ 16:48:00

## **GENERAL INFORMATION:**

Formation: **Morrow Sand** 

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Initial) No ft (KB)

Time Tool Opened: 19:18:40 Time Test Ended: 02:26:25

72

Unit No:

Tester:

Will MacLean

5051.00 ft (KB) To 5125.00 ft (KB) (TVD)

2818.00 ft (KB)

Total Depth: 5125.00 ft (KB) (TVD) Reference Elevations:

2805.00 ft (CF) 13.00 ft

Hole Diameter:

KB to GR/CF:

7.88 inches Hole Condition: Good

Serial #: 8355 Outside Press@RunDepth:

psig @

5052.00 ft (KB)

Capacity: Last Calib.: 8000.00 psig

Start Date: 2014.03.17 End Date:

2014.03.18 02:28:15

Time On Btm:

2014.03.18

16:48:05

Start Time:

Interval:

End Time:

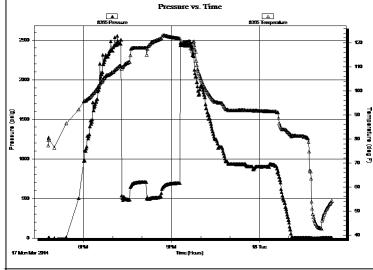
Time Off Btm:

TEST COMMENT: IF- Strong Surface Blow Built to BOB in 22 sec Gas to Surface in 8 min

ISI- BOB

FF- Strong Surface Blow Built to BOB in 6 sec

FSI- BOB



## PRESSURE SUMMARY

	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
•				
, ,				
,				

### Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCO 4%g 24%m 72%oil	0.61
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443.00	5min Samlpe MGCO 11%m 15%g 749	<b>6</b> (6.21
31.00	OGCM 7%oil 12%g 81%m	0.43

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	30.00	1276.45
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Max. Gas Rate	1.00	30.00	1276.45

Trilobite Testing, Inc Ref. No: 56322 Printed: 2014.03.25 @ 09:36:09



**TOOL DIAGRAM** 

American Warrior Inc.

17-28s-30w Gray,KS

PO Box 399

**Shadow #6-17** 

Garden City KS 67846

Job Ticket: 56322 DST#: 1

ATTN: Wyatt Urban

Test Start: 2014.03.17 @ 16:48:00

**Tool Information** 

Drill Pipe: Heavy Wt. Pipe: Length: Drill Collar: Length: 184.00 ft Diameter:

Length: 4870.00 ft Diameter: 0.00 ft Diameter:

3.80 inches Volume: 68.31 bbl 0.00 bbl 0.00 inches Volume: 2.25 inches Volume: 0.90 bbl

Total Volume:

6.75 inches

Tool Weight: 2000.00 lb Weight set on Packer: 30000.00 lb Weight to Pull Loose: 14000.00 lb 69.21 bbl

Drill Pipe Above KB: 30.00 ft Depth to Top Packer: 5051.00 ft

ft

Tool Chased String Weight: Initial 76000.00 lb Final 80000.00 lb

Depth to Bottom Packer: Interval between Packers: 74.00 ft Tool Length: 101.00 ft

Number of Packers: 2 Diameter:

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5025.00		
Shut In Tool	5.00			5030.00		
Hydraulic tool	5.00			5035.00		
Jars	5.00			5040.00		
Safety Joint	2.00			5042.00		
Packer	5.00			5047.00	27.00	Bottom Of Top Packer
Packer	4.00			5051.00		
Stubb	1.00			5052.00		
Recorder	0.00	8355	Outside	5052.00		
Recorder	0.00	8674	Inside	5052.00		
Perforations	3.00			5055.00		
Change Over Sub	1.00			5056.00		
Drill Pipe	63.00			5119.00		
Change Over Sub	1.00			5120.00		
Bullnose	5.00			5125.00	74.00	Bottom Packers & Anchor

**Total Tool Length:** 101.00

Trilobite Testing, Inc Ref. No: 56322 Printed: 2014.03.25 @ 09:36:10



**FLUID SUMMARY** 

American Warrior Inc. 17-28s-30w Gray,KS

PO Box 399 Shadow #6-17

Garden City KS 67846 Job Ticket: 56322 DST#:1

ATTN: Wyatt Urban Test Start: 2014.03.17 @ 16:48:00

## **Mud and Cushion Information**

Mud Type: Gel Chem Cushion Type: Oil API: 25 deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: ppm

Viscosity: 50.00 sec/qt Cushion Volume: bbl

Water Loss: 7.98 in<sup>3</sup> Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 2800.00 ppm Filter Cake: 1.00 inches

## **Recovery Information**

## Recovery Table

Length ft	Description	Volume bbl
124.00	GMCO 4%g 24%m 72%oil	0.610
440.00	20min Sample GMCO 4%g 23%m 73%oil	5.625
440.00	15min Sample GMCO 20%g 28%m 52%oil	6.172
440.00	10min Sample GMCO 5%g 18%m 77%oil	6.172
443.00	5min Samlpe MGCO 11%m 15%g 74%oil	6.214
31.00	OGCM 7%oil 12%g 81%m	0.435
0.00	3118' of GIP	0.000

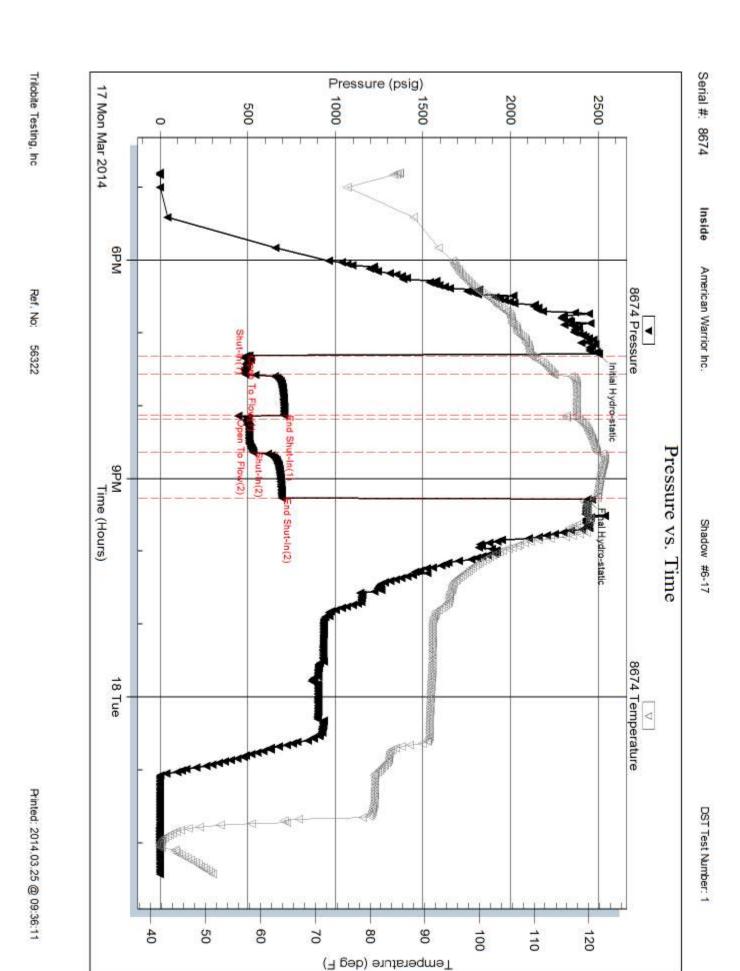
Total Length: 1918.00 ft Total Volume: 25.228 bbl

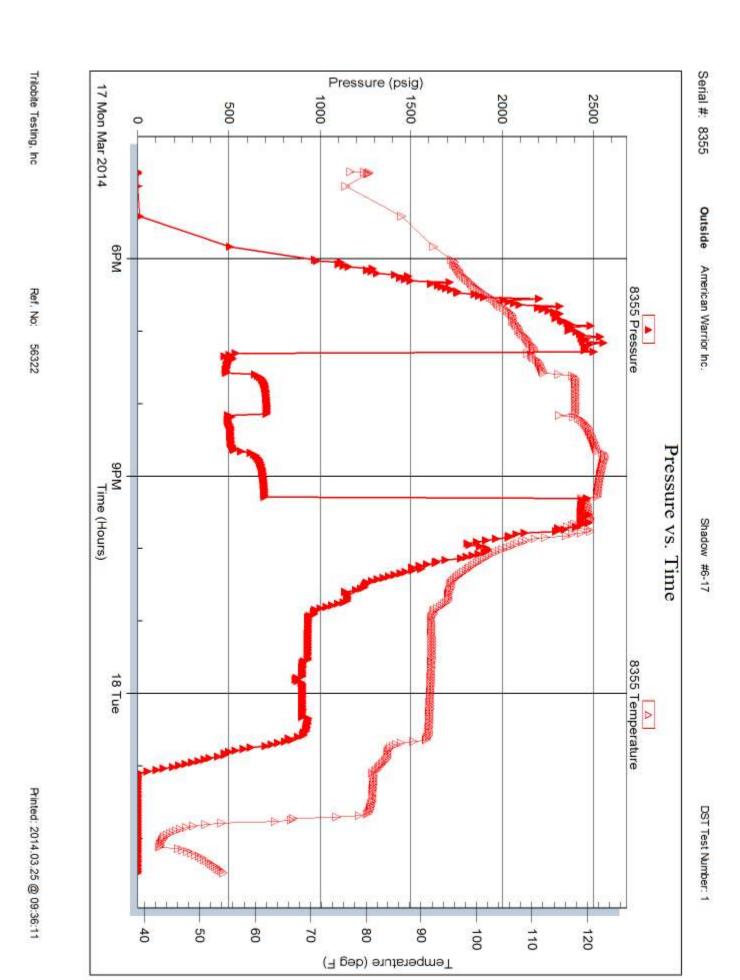
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: API is 24 @ 50f = 25

Trilobite Testing, Inc Ref. No: 56322 Printed: 2014.03.25 @ 09:36:10







# RILOBITE ESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## **Test Ticket**

NO.

56322

Well Name & No. Shadow # C-17	Test No. DST	#) Date 3-17-14
Company American Warrior	Elevation 28	-/
Address Po Box 399 Garden		
Co. Rep / Geo. Watt	Rig Dake	#9
Location: Sec		State K5
Interval Tested 5051 - 5125	Zone Tested Moryow Sound	
Anchor Length 74	Drill Pipe Run 4870	Mud Wt9.3
Top Packer Depth 5047	Drill Collars Run 184	Vis
Bottom Packer Depth 505	Wt. Pipe Run	WL_ 8.0
Total Depth	Chlorides <u>2800</u> ppm Sys	stem LCM 216
Blow Description IF - 5trong Surta	ce Blow Built to BOB in 22 50	c Ors to Surtay in 8mn
TSI-BOB		
FF-Strong Sortace	Blow Built to BOB in 6500	
FSI-BOB		
Rec 31 Feet of 66-CM	06-CM /2 %gas 7	%oil %water 8/ %mud
Rec 443 Feet of Smin Sample	MG-CO /5%gas 7	%oil %water // %mud
Rec Polo Feet of Main Sengtr	C-MCO 5 %gas 7	7 %oil %water /8 %mud
Rec 440 Feet of 15 kin Simple	C-MCO 20 %gas 50	%oil %water 98%mud
Rec 440 Feet of 20 hin Sample	C-MCO 4 %gas 7	%oil %water 23%mud
Rec Total BHT 121	Gravity 25 API RW @7	°F Chloridesppm
(A) Initial Hydrostatic 2502	Test 1350	T-On Location 14:10
(B) First Initial Flow 492	Jars 250	T-Started 16-48
(C) First Final Flow 486	Safety Joint	T-Open 19/18
(D) Initial Shut-In 708	1 Circ Sub Dropped Bar 50	T-Pulled
(E) Second Initial Flow 492	☐ Hourly Standby	T-Out 2:26
(F) Second Final Flow 532	Mileage 170 R/T272.80	3118 of CIP
(G) Final Shut-In 694	□ Sampler	011001 (741
(H) Final Hydrostatic 2439	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open /5	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 36	☐ Extra Recorder	Sub Total 0
Final Flow	☐ Day Standby	Total 1997.80
Final Shut-In 36		MP/DST Disc't
The state of the s	Sub Total 1997.80	
	Our Penracentative Ch	" n M



Remarks:



# **Gas Volume Report**

P.O. Box 1733 • Hays, Kansas 67601

American Warnish	Shadow # 6-17	#1
Operator	Well Name and No.	DST No.

Min.	Insjokwaler PSIG	Orifice Size	CF/D	Min.	In of Water	Orifice Size	CF/D
10	30	1	1276,447	5	16	l	873964
15	30		1276447	10	18	1	931,462
			J 1, /	15	18	1	931,462
				20	14		873964 931,462 931,462 816,466
					311		
			The state of the s				
					2, 3		
					1		
				- 2			



## **NOTES**

Company: American Warrior, Inc.

Lease: Shadow 6-17

Field:Shadow

Location: NW-SE-NE-NW (799' FNL & 2279' FWL)

Sec:17

Twsp:<u>28S</u>

Rge:30W

County: Gray

State: Kansas

GL:2805' KB:2818'

API #: 15-069-20470-00-00

Contractor: Duke Drilling Inc. (Rig #9)

Spud:03/10/2014

Comp: 03/19/2014

RTD: 5300'

LTD:

Mud Up: 3800'

Type Mud: Chemical

Samples Saved From: 3900' to RTD Drilling Time Kept From: 3900' to RTD Samples Examined From: 3900' to RTD Geological Supervision from: 3900' to RTD

Geologist on Well: Wyatt Urban

Surface Casing: 8 5/8@1743'

Electronic Surveys: Logged by Pioneer Energy Services: DIL/ MEL/BHCS

## American Warrior Well Comparison

		DRILLING WELL COMPARISON WELL					COMPARIS	ON WELL				
	Americ	an Warrio	r- Shado	w 6-17	Americ	an Warric	r- Shadov	r 2-17	Ameri	American Warrior-Shadow 3-17		
		NW-SE-NE-	NW			SW-NE-SE	-NW			NE-SW-NE-NW		
		17-28S-30	W			17-28S-3	OW			17-28S-30W		
	2818	кв			2810	Stru 2810 KB Rela			2821	кв	Struct Relatio	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	4131	-1313		2818	4125	-1315	2		4133	-1312	-1	
Lansing	4227	-1409		2818	4220	-1410	1		4228	-1407	-2	
Stark	4595	-1777		2818					4599	-1778	1	
Marmaton	4737	-1919		2818	4729	-1919	0	4737	4738	-1917	-2	
Pawnee	4820	-2002		2818					4828	-2007	5	
Cherokee	4869	-2051		2818	4861	-2051	0	4869	4874	-2053	2	
Atoka	5009	-2191		2818	5028	-2218	27	5036	5018	-2197	6	
Morrow	5079	-2261		2818	5070	-2260	-1	5078	5079	-2258	-3	
Morrow Sd. upr	5086	-2268		2818	5087	-2277	9	5095				
Morrow Sd. Lwr	5114	-2296		2818	5107	-2297	1	5115				
Miss	5118	-2300		2818	5117	-2307	7	5125		, and the second		
RTD	5300	-2482	, and the second	2818	5249	-2439	-43	5257		, and the second	, and the second	
LTD		2818		2818	5249	-2439	5257	5257			The state of the s	



## DRILL STEM TEST REPORT

American Warrior Inc.

17-28s-30w Gray Co. KS.

P.o Box 399 Shadow #6-17 Garden City KS 67846

Job Ticket: 56322

DST#:1

ATTN: Wyatt Test Start: 2014.03.17 @ 16:48:00

GENERAL INFORMATION:

Formation: Morrow Sand

ft (KB) Test Type: Conventional Bottom Hole (Initial) Deviated: No Whipstock:

Time Tool Opened: 19:18:40

Time Test Ended: 02:26:25

Interval: 5051.00 ft (KB) To 5125.00 ft (KB) (TVD)

Total Depth: 5125.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good Unit No: 72

Tester: Will MacLean

2818.00 ft (KB)

Reference Elevations: 2805.00 ft (CF)

> KB to GR/CF: 13.00 ft

Serial #: 8674 Inside

5052.00 ft (KB) Press@RunDepth: 532.83 psig @ Capacity: 8000.00 psig Start Date: 2014.03.17 End Date: 2014.03.18 Last Calib.: 2014.03.18 Start Time: 16:48:00 End Time: 02:26:25 Time On Btm: 2014.03.17 @ 19:17:10

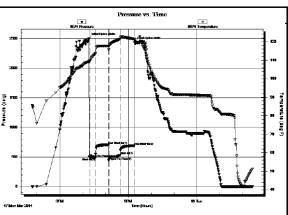
Time Off Btm: 2014.03.17 @ 21:16:39

TEST COMMENT: IF- Strong Surface Blow Built to BOB in 22sec Gas to Surface in 8min

ISI- BOB

FF- Strong Surface Blow Built to BOB in 6sec

FSI- BOB



PRESSURE SUMMARY									
Time	Pressure	Temp	Annotation						
(Min.)	(psig)	(deg F)							
0	2502.67	109.20	Initial Hydro-static						
2	492.00	109.50	Open To Flow (1)						
17	486.79	113.63	Shut-ln(1)						
51	708.15	117.74	End Shut-In(1)						
54	492.60	118.09	Open To Flow (2)						
82	532.83	121.44	Shut-ln(2)						
119	694.91	121.52	End Shut-In(2)						
120	2439.69	121.00	Final Hydro-static						

#### Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCO 4%g 24%m 72%oil	0.61
440.00	20min Sample GMCO 4%g 23%m 73%	05.63
440.00	15min Sample GMCO 20%g 28%m 52	%6.17
440.00	10min Sample GMCO 5%g 18%m 779	6c6.17
443.00	5min Samlpe MGCO 11%m 15%g 749	6c6.21
31.00	OGCM 7%oil 12%g 81%m	0.43

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	30.00	1276.45
Last Gas Rate	1.00	14.00	816.47
Max. Gas Rate	1.00	30.00	1276.45



sdy Imst



Lmst fw<7 Lmst fw7>



**STRINGER** 

Sandstone

^^~ Chert

shale, grn shale, gry



Carbon Sh shale, red



#### **ACCESSORIES**

#### **MINERAL**

- ▲ Chert, dark
- Sandy
- · Silty
- △ Chert White

#### **FOSSIL**

- F Fossils < 20%
- Oolite
- Pellets
- Oomoldic Fussilinid

**DST** BST Int

BST alt

Core II tail pipe

#### ---- Shale green shale == carb shale

#### **TEXTURE**

C Chalky

CX Cryptocrystalline

FX FinexIn

MX MicroxIn

### **OTHER SYMBOLS**

### Oil Show

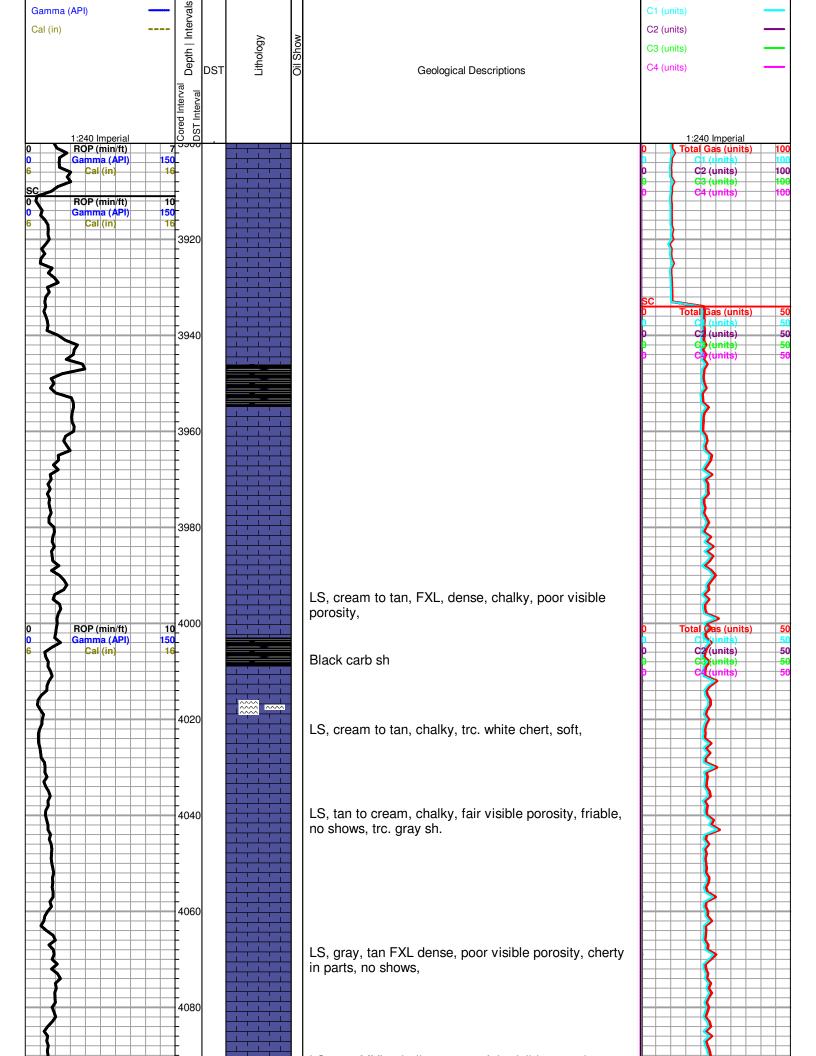
- Good Show
- Fair Show
- Poor Show
- O Spotted or Trace
- O Questionable Stn
- D Dead Oil Stn
- Fluorescence
- \* Gas

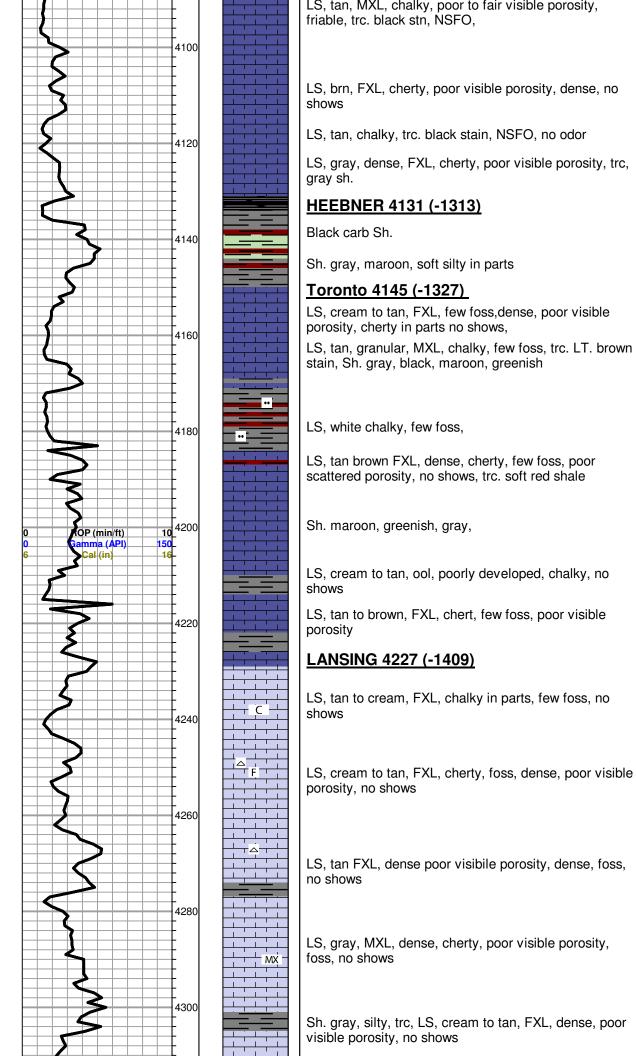
Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #1 ROP (min/ft)

TG, C1 - C5

Total Gas (units)





CP (units) 😘 (units) **CALL POINT** 

