KOLAR Document ID: 1390824

Confidentiality Requested:

Yes No

### Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City:	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ DH ☐ EOR	Total Vertical Depth: Plug Back Total Depth:
☐ OG ☐ GSW	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used? Yes No
Cathodic Other (Core, Expl., etc.):	
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to: sx cmt.
Original Comp. Date: Original Total Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content:ppm Fluid volume:bbls
Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Location of hald disposal in hadica offsite.
GSW Permit #:	Operator Name:
_	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	QuarterSecTwpS. 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 ☐ Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II Approved by: Date:

KOLAR Document ID: 1390824

#### Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No					
		B	CASING eport all strings set-c		New Used	ion, etc.		
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD			
Purpose:		epth T Bottom	ype of Cement	# Sacks Used		Type and F	Percent Additives	
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a     Does the volume     Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)		
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:				
TODING RECORD:	. 3126.	Set	n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	BRAD 1-23
Doc ID	1390824

# Tops

Name	Тор	Datum
Anhydrite	1462	779
Heebner	3725	-1484
Lansing	3773	-1532
ВКС	4094	-1853
Pawnee	4206	-1965
Ft. Scott	4284	-2043
Cherokee	4308	-2067
Mississippian	4377	-2136
RTD	4399	-2158

Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	BRAD 1-23
Doc ID	1390824

# Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight		Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	211	common		3% CC, 2% gel
Production	7.875	5.5	15.5	4398	EA-2	175	1/4# flocele



CHARGE TO:	American	Cive High	5	
ADDRESS				

Services, Inc.	CITY, STATE, ZIP CODE		PAGE OF
SERVICE LOCATIONS WELL/PROJECT NO. LI	LEASE COUNTY/PARISH	STATE CITY POST STATE	DATE OWNER
TICKET TYPE CONTRACTOR  A SALES  ON THE CONTRACTOR	RIG NAME/N	DELIVERED TO	
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the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and		WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS?	1460 35
LIMITED WARRANT PROVISIONS.	SWIFT SERVICES, INC.	OUR SERVICE WAS PERFORMED WITHOUT DELAY?	
START OF WORK OR DELIVERY OF GOODS.	P.O. BOX 466	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	
DATE SIGNED A.M.			
	CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.	ges receipt of the materials and services lis	ed on this ticket.
COSTOMER ACCEPTANCE OF MATERIA	ALS AND SERVICES The customer hereby acknowled	ges receipt of the materials and services lis	ed on this ticket.

SWIFT OPERATOR

APPROVAL

Thank You!

DATE 1-24-18 PAGE NO. SWIFT Services, Inc. **JOB LOG** CUSTOMER WELL NO. LEASE JOB TYPE Fort Coller TICKET NO. # 1-72 CHART NO. RATE (BPM) VOLUME (BBL) (GAL) PUMPS PRESSURE (PSI)
TUBING CASING TIME DESCRIPTION OF OPERATION AND MATERIALS TC 1400 location P.C. - 1441 1545 0 0 1000 AHOUX Acssure P.C. 1555 31/2 5 300 Injection 1600 400 35 shs 5mp 1/41 flo @ 11.2 ppa to Sw face tirculale cement 500 1/30 \* Hold \* 1000 4315 3/2 140 Reverse 20 300 Clean BS sks local\* \* 20 sks to pil \* 1715 Thank You Proslon Issue



CHARGE TO:	10:32 W 1 30M
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CITY, STATE, ZIP CODE	ODE

TICKET SOLOTON

	d on this ticke	services liste	aterials and	of the ma	dges receipt	CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.	AND SERVICES The	MATERIALS	CE OF	ER ACCEPTAN	CUSTOM	
_		O RESPOND	HSIM.	USTOMER D				□ P.M.				
		os.		TH OUR SERVIC	RE YOU SATISFIED WI		785-79	A.M.	7	TIME SIGNED		DATE SIGNED
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SWIFT OPERATOR

Thank You!

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CUSTOM	Phenium	Wass,	WELL NO.	1-2	23	LEASE	Bra	d JOB TYPE TICKET NO. 3/137	— 7
CHART. NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)		MPS C		URE (PSI)  CASING	DESCRIPTION OF OPERATION AND MATERIALS	
			7(			TODING	CASING		100
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CHARGE TO: A
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TICKET 31185

IS   MELLIPROJECTIVO:   LEASE   Br.u.k   COUNTY/PARISH   STATE CITY   P.2. v. c.   MTE   R.2. v. c.   MTE	SWIFT OPERATOR Description APPROVAL		TIME SIGNED A.M.	MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.  N		 LEGAL TERMS: Customer hereby acknowledges and agrees to	3	281				) <del>/</del> //	278 11 16	325	5765 Pu	S/S	PRICE SECONDARY REFERENCE/ ACCOUNTING PART NUMBER LOC ACCT DF	REFERRAL LOCATION INVOICE INSTRUCTIONS	WELL TYPE	3. SALES DISTOLETY DE LINES	J-23 LEASE	
DELIVERED TO  DELIVERED TO  DELIVERED TO  DELIVERED TO  ORDER NO  L. C. I. CAN  WELL PERMIT NO.  WELL PERMIT NO.  WELL CCA  J. J		SERVICES The customer hereby acknowledges receipt	ARE YOU SATISFIED		•		Diazeye	Charac				5	(7)	haid Coment	Charge - Shallow Sw	Trk	DESCRIPTION		JOB PURPOSE	HIG NAMENO.	COUNTY/PARISH	
		of the materials and services listed on this t	☐ NO T WISH TO RESPOND		TDELAY?	AGREE UNDECIDED DISAGREE	1 1 1 25/	SO sk			2 ac	س)	7   SKS	50 6	20% Print   1   1   1   1   1   1   1   1   1		U/M QTY. U/M			DELIVERED TO	OITY BLZING	

SWIFT Services, Inc. **JOB LOG** 1-3-18 CUSTOMER WELL NO. American Warria VOLUME (BBL) (GAL) PUMPS TIME PRESSURE (PSI) DESCRIPTION OF OPERATION AND MATERIALS 2000 2100 Street 898" 234 casing in well 2130 2140 8/1/8 45 Pump Still water Spicer m.x 150 sks STD 2966ell 39666 14.799 41/2 215S XXXX Displace Cement 41) circulate Coment to surface \$ 20 skx 2200 46 wash up truck 223() Job Complete Thank You Dave Preston Kirby

Application of the Control of the Co



# Drilling Time and Sample Log

Lease Brad			No.	1-23	GL	2233'		
API # <b>15-135</b>	-25987-0	0000			Casi Surface	ing Record		
Field Wildcan	t			o i	8 5/8" @ 210' Production			
Location 2200	' FSL &	£ 1525'	FWL		5 1/2" @ 4398' Electrical Survey			
Sec. 23	Twp.	20s	Rge.	22w	Biccu	None		
County N	ess	State	Kai	nsas				
Formati	on	Log	Tops	Sampl	le Tops	Struct Comp		
Anhydrite				1462	' +779	-7		
Base				1499	' +742			
Heebner				3725'	-1484	FL		
Lansing				3773'	-1532	FL		
BKC				4094'	-1853			
Pawnee				4206'	-1965			
Fort Scott				4284'	-2043	+10		
Cherokee					-2067			
Mississippian Wa					-2136	+18		
Mississippian Osa	ge			4389'	-2148	+37		
Total Depth				4399'	-2158			

Reference Well For Structural Comparison Mid-Continent Energy Corp Bondurant #1

1650' FNL & 1650' FWL Sec. 23 T20s R22w Ness County, Kansas

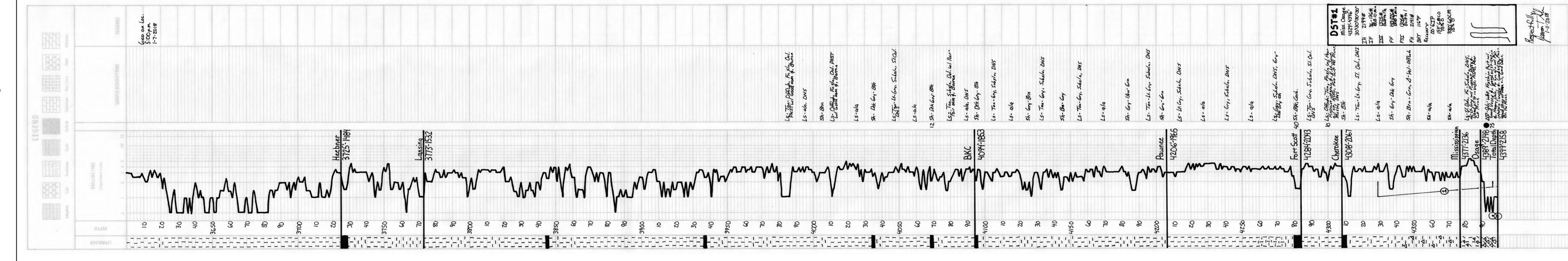
illing Contract	tor	Discovery D	rilling, Inc.	Rig #4	
mmenced	1-3-20	18 Con	mpleted	1-10-2018	
mples Saved I	From	4000'	To	RTD	
illing Time Ko	ept From	3600'	To	RTD	
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eological Supe	rvision From	4000'	То	RTD	
splacement	3500'	Mud Type	Chemica	l	

# Summary and Recommendations

new well ran structurally as expected via the survey. One Drill Stem Test was conducted which recovered commercial amounts of oil from the Mississippian Osage Formation. After all gathered data had been examined the decision was made to run 5 1/2 inch production casing to further evaluate the Brad #1-23 well.

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.



# **Geological Report**

American Warrior, Inc.

Brad #1-23
2200' FSL & 1525' FWL
Sec. 23 T20s R22w
Ness County, Kansas



American Warrior, Inc.

# **General Data**

Well Data:	American Warrior, Inc. Brad #1-23 2200' FSL & 1525' FWL Sec. 23 T20s R22w Ness County, Kansas API # 15-135-25987-0000
Drilling Contractor:	Discovery Drilling Rig #4
Geologist:	Jason T Alm
Spud Date:	January 3, 2018
Completion Date:	January 10, 2018
Elevation:	2233' Ground Level 2241' Kelly Bushing
Directions:	Bazine KS, South 10 mi. to 30 rd. West 2 mi. South ½ mi. East into location.
Casing:	210' 8 5/8" surface casing 4398' 5 1/2" production casing
Samples:	10' wet and dry, 4000' to RTD
Drilling Time:	3600' to RTD
Electric Logs:	None
Drillstem Tests:	One, Trilobite Testing, Inc. "Brannan Lonsdale"
Problems:	None

None

Remarks:

# **Formation Tops**

	American Warrior, Inc.
	Brad #1-23
	Sec. 23 T20s R22w
Formation	2200' FSL & 1525' FWL
Anhydrite	1462' +779
Base	1499' +742
Heebner	3725' -1484
Lansing	3773' -1532
BKC	4094' -1853
Pawnee	4206' -1965
Fort Scott	4284' -2043
Cherokee	4308' -2067
Mississippian	4377' -2136
Osage	4389' -2148
RTD	4399' -2158

# **Sample Zone Descriptions**

# Mississippian Osage (4389', -2148): Covered in DST #1

 $\Delta$  – White, fresh in part with good vuggy porosity, good oil stain and saturation in porosity, heavy dolomite, fine sucrosic crystalline with fair inter-crystalline and vuggy porosity, good oil stain, fair to good show of free oil, good odor, bright yellow fluorescents, 75 units hotwire.

### **Drill Stem Tests**

Trilobite Testing, Inc. "Brannan Lonsdale"

# DST #1 Mississippian Osage

Interval (4329' – 4396') Anchor Length 67'

IHP - 2199 #

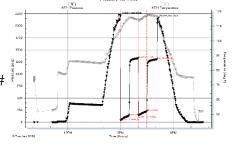
IFP -30" – B.O.B. 10 min. 36-136 #

ISI -30" – Built to 1 ½ in. 1325 #

FFP - 30" - B.O.B. 7 min. 143-226 #

FSI - 30" - Built to 1 in. 1305 #

FHP - 2141 # BHT - 114°F



Recovery: 20' GIP

159' GMCO 75% Oil 380' GOCM 25% Oil

# **Structural Comparison**

Formation	American Warrior, Inc. Brad #1-23 Sec. 23 T20s R22w 2200' FSL & 1525' FWL	Mid-Continent Energy Bondurant #1 Sec. 23 T20s R22w 1650' FNL & 1650' FWL		Vincent Oil Corp Goatley #1 Sec. 23 T20s R22w 1320' FSL & 2495' FWL	
Anhydrite	1462' +779	1437' +786	(-7)	1433' +771	(+8)
Base	1499' +742	NA	NA	NA	NA
Heebner	3725' -1484	3707' -1484	FL	3696' -1492	(+8)
Lansing	3773' -1532	3755' -1532	FL	3744' -1540	(+8)
BKC	4094' -1853	NA	NA	4073' -1869	(+16)
Pawnee	4206' -1965	NA	NA	4187' -1983	(+18)
Fort Scott	4284' -2043	4276' -2053	(+10)	4267' -2063	(+20)
Cherokee	4308' -2067	NA	NA	4291' -2087	(+20)
Mississippian	4377' -2136	4381' -2158	(+22)	4374' -2170	(+34)
Osage	4389' -2148	4408' -2185	(+37)	Not Reached	NR

## **Summary**

The location for the Brad #1-23 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. One Drill Stem Test was conducted which recovered commercial amounts of oil from the Mississippian Osage Formation. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Brad #1-23 well.

## **Recommended Perforations**

**Primary:** 

Mississippian Osage (4389' – 4396') DST #1

**Before Abandonment:** 

Fort Scott (4296' – 4301') Not Tested

Respectfully Submitted,

Jason T Alm Hard Rock Consulting, Inc.



Prepared For: American Warrior, Inc.

PO Box 399 Garden City, KS 67846

ATTN: Jason T Alm

#### Brad #1-23

### 23-20S-22W Ness, KS

Start Date: 2018.01.09 @ 10:03:59 End Date: 2018.01.09 @ 19:41:19 Job Ticket #: 63342 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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



American Warrior, Inc.

23-20S-22W Ness, KS

Brad #1-23

Tester:

PO Box 399

Garden City, KS 67846 Job Ticket: 63342

ATTN: Jason T Alm

Test Start: 2018.01.09 @ 10:03:59

#### GENERAL INFORMATION:

Formation: Miss

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:59:50 Time Test Ended: 19:41:19

Interval: 4329.00 ft (KB) To 4396.00 ft (KB) (TVD)

Total Depth: 4396.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair Test Type: Conventional Bottom Hole (Initial) Brannan Lonsdale

Unit No: 73

Reference Elevations: 2241.00 ft (KB)

2233.00 ft (CF)

DST#: 1

KB to GR/CF: 8.00 ft

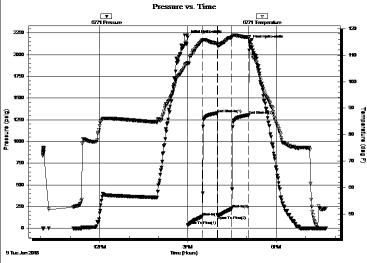
Serial #: 6771 Inside

Press@RunDepth: 4359.00 ft (KB) Capacity: 226.36 psig @ 8000.00 psig

Start Date: 2018.01.09 End Date: 2018.01.09 Last Calib.: 2018.01.09 Start Time: 10:04:00 End Time: 19:41:19 Time On Btm: 2018.01.09 @ 14:59:20 Time Off Btm: 2018.01.09 @ 17:05:50

TEST COMMENT: 30- IF- BOB 10 mins

30- ISI- Slow ly built to 1 1/2" 30- FF- BOB 7 mins 30- FSI- Slow ly built to 1"



	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2198.65	107.02	Initial Hydro-static
	1	36.90	106.95	Open To Flow (1)
	30	136.46	115.44	Shut-In(1)
,	61	1324.67	114.38	End Shut-In(1)
	62	143.59	113.71	Open To Flow (2)
	90	226.36	116.75	Shut-In(2)
(1)	125	1304.76	116.65	End Shut-In(2)
9	127	2141.40	115.32	Final Hydro-static
			1	

PRESSURE SUMMARY

#### Recovery

Length (ft)	Description	Volume (bbl)
380.00	GOCM, 20%G 15%O 65%M	5.09
159.00	GMCO, 10%G 75%O 15%M	2.25
0.00	20' GIP	0.00

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

Trilobite Testing, Inc. Ref. No: 63342 Printed: 2018.01.10 @ 09:10:36



American Warrior, Inc.

23-20S-22W Ness, KS

PO Box 399

Job Ticket: 63342

Tester:

Brad #1-23

DST#: 1

2233.00 ft (CF)

Garden City, KS 67846
ATTN: Jason T Alm

Test Start: 2018.01.09 @ 10:03:59

#### GENERAL INFORMATION:

Formation: Miss

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:59:50
Time Test Ended: 19:41:19

:41:19 Unit No: 73

Interval: 4329.00 ft (KB) To 4396.00 ft (KB) (TVD)

Total Depth: 4396.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2241.00 ft (KB)

Test Type: Conventional Bottom Hole (Initial)

Brannan Lonsdale

KB to GR/CF: 8.00 ft

Serial #: 8524 Outside

 Press@RunDepth:
 psig
 @
 4359.00 ft (KB)
 Capacity:
 8000.00 psig

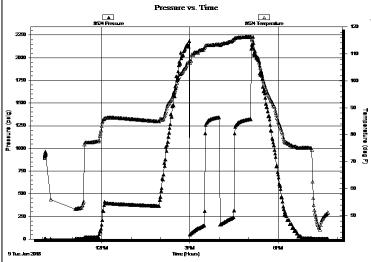
Start Date: 2018.01.09 End Date: 2018.01.09 Last Calib.: 2018.01.09

Start Time: 10:04:04 End Time: 19:41:23 Time On Btm:

Time Off Btm:

TEST COMMENT: 30- IF- BOB 10 mins

30- ISI- Slow ly built to 1 1/2" 30- FF- BOB 7 mins 30- FSI- Slow ly built to 1"



PRESSURE S	UMMARY
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	1							
Ī	Time	Pressure	Temp	Annotation				
	(Min.)	(psig)	(deg F)					
1								
`								
,								

#### Recovery

Description	Volume (bbl)
GOCM, 20%G 15%O 65%M	5.09
GMCO, 10%G 75%O 15%M	2.25
20' GIP	0.00
	GOCM, 20%G 15%O 65%M GMCO, 10%G 75%O 15%M

#### Gas Rates

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

Trilobite Testing, Inc Ref. No: 63342 Printed: 2018.01.10 @ 09:10:36



**TOOL DIAGRAM** 

American Warrior, Inc.

23-20S-22W Ness, KS

PO Box 399

**Brad #1-23**Job Ticket: 63342

DST#: 1

Garden City, KS 67846

ATTN: Jason T Alm

Test Start: 2018.01.09 @ 10:03:59

**Tool Information** 

Drill Pipe: Length: 4280.00 ft Diameter:

3.82 inches Volume:

60.67 bbl Tool Weight:
- bbl Weight set or

Tool Weight: 2500.00 lb Weight set on Packer: 25000.00 lb

Heavy Wt. Pipe: Length: Drill Collar: Length:

Length: ft Diameter: Length: 32.00 ft Diameter: inches Volume: - bbl 2.25 inches Volume: 0.16 bbl

Weight to Pull Loose: 71000.00 lb Tool Chased 0.00 ft

Drill Pipe Above KB: 11.00 ft

Total Volume: - bbl

String Weight: Initial 62000.00 lb

Depth to Top Packer: 4329.00 ft Depth to Bottom Packer: ft String Weight

Initial 62000.00 lb Final 66000.00 lb

Interval between Packers: 67.00 ft
Tool Length: 95.00 ft

יו סות 2 Diameter: 6.75 inches

Tool Comments:

Number of Packers:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4302.00		
Shut In Tool	5.00			4307.00		
Hydraulic tool	5.00			4312.00		
Jars	5.00			4317.00		
Safety Joint	3.00			4320.00		
Packer	5.00			4325.00	28.00	Bottom Of Top Packer
Packer	4.00			4329.00		
Stubb	1.00			4330.00		
Perforations	29.00			4359.00		
Recorder	0.00	6771	Inside	4359.00		
Recorder	0.00	8524	Outside	4359.00		
Change Over Sub	1.00			4360.00		
Drill Pipe	32.00			4392.00		
Change Over Sub	1.00			4393.00		
Bullnose	3.00			4396.00	67.00	Bottom Packers & Anchor

Total Tool Length: 95.00

Trilobite Testing, Inc Ref. No: 63342 Printed: 2018.01.10 @ 09:10:36



**FLUID SUMMARY** 

ppm

American Warrior, Inc. 23-20S-22W Ness, KS

PO Box 399

Brad #1-23

Garden City, KS 67846 Job Ticket: 63342 DST#: 1

ATTN: Jason T Alm Test Start: 2018.01.09 @ 10:03:59

**Mud and Cushion Information** 

Mud Type: Gel Chem Cushion Type: Oil API: 35 deg API Water Salinity:

Mud Weight: Cushion Length: 9.00 lb/gal ft

Viscosity: 52.00 sec/qt Cushion Volume: bbl

Water Loss: 8.79 in<sup>3</sup> Gas Cushion Type:

Resistivity: Gas Cushion Pressure: ohm.m psig

Salinity: 8500.00 ppm Filter Cake: inches

#### **Recovery Information**

#### Recovery Table

Length ft	Description	Volume bbl	
380.00	GOCM, 20%G 15%O 65%M	5.090	
159.00	GMCO, 10%G 75%O 15%M	2.254	
0.00	20' GIP	0.000	

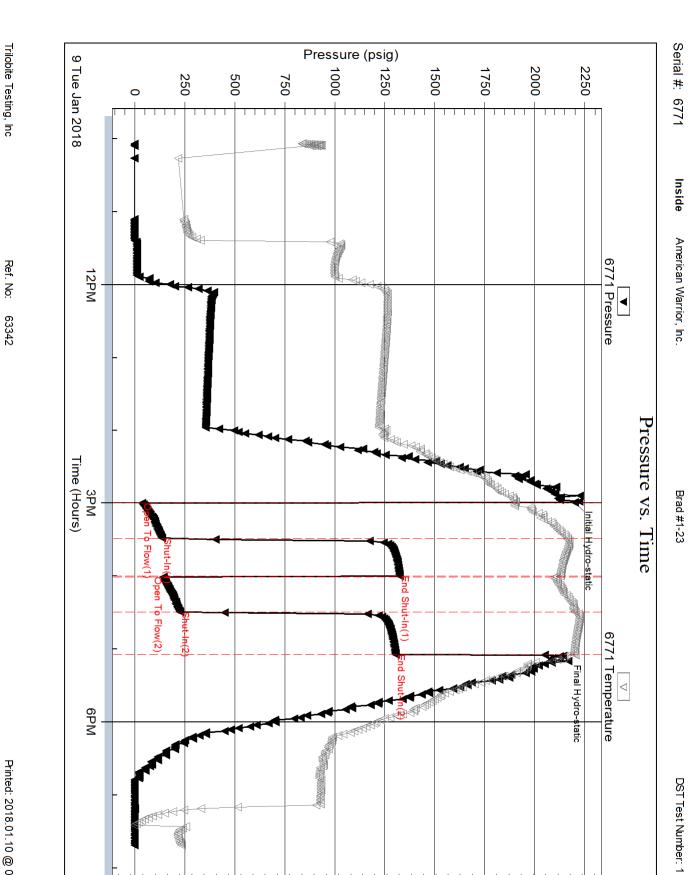
Total Length: 539.00 ft Total Volume: 7.344 bbl

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

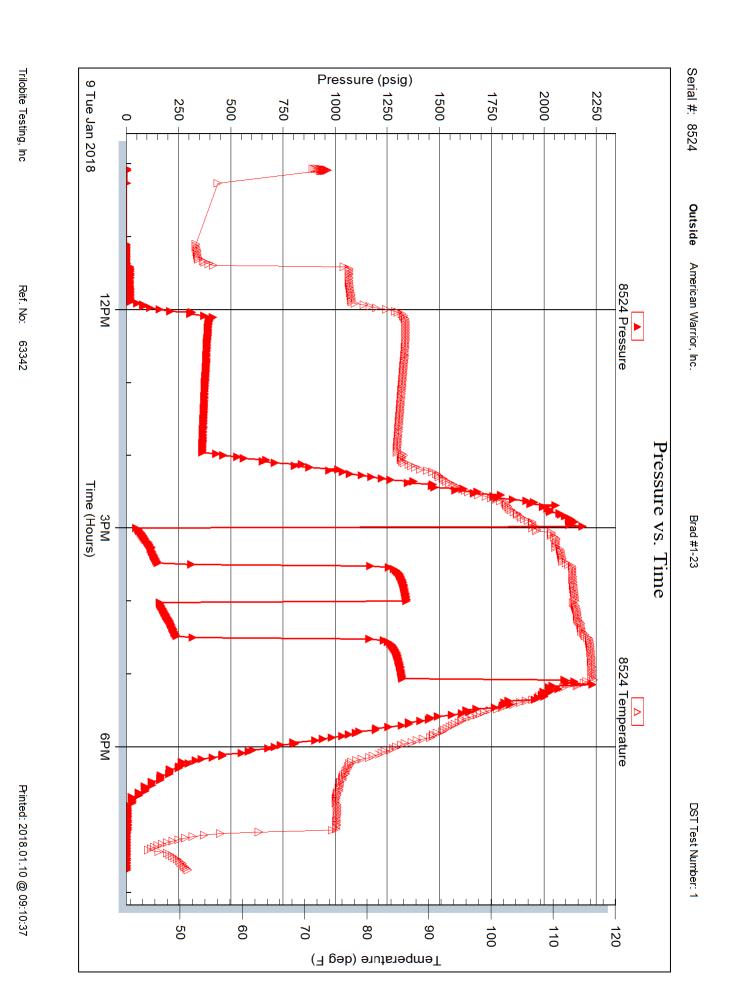
Laboratory Name: Laboratory Location:

Recovery Comments:

Printed: 2018.01.10 @ 09:10:36 Trilobite Testing, Inc Ref. No: 63342



Temperature (deg F)





Test Ticket

NO. 63342

RILOBITE

ESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

410 - 17 - 19					<del>,                                    </del>
Well Name & No. Brack F1-23		Test No		Date	2/18
Company America Warriog In	C.	Elevation	ب چرک	//_кв	2233 GL
Address PO Box 399 Carlos C	dy K5 6	7846			
Ca. Rep / Geo. Jason 7 Alm	//	Rig_Dtsc	overy =	4	
Location: Sec. <u>23</u> Twp <u>212</u> S	Rge. <u>22</u> V	<u>√</u> Co	<u>/ ਐ</u>	<u> </u>	55
Interval Tested 4329 - 4396	Zone Tested	1			
Anchor Length 67	Drill Pipe Run		4280	Mud Wt.	9.3
Top Packer Depth	Drill Collars Run	ı	_32	Vis	
Bottom Packer Depth 4329	Wt. Pipe Run			WL	8.8
Total Depth 4396	_ Chlorides	8,500	om System	LCM	17
Blow Description IF - BOB 10min	3				
ISI- Sorly half	to 1'b"				· · · · · · · · · · · · · · · · · · ·
FF- BOB 7mins					· · · · · · · · · · · · · · · · · · ·
F51-					
Rec 380 Feet of 60CM		20%gas	/5 %ail	%water	65%mud
Rec Feet of GM CO	. ***	/ O%gas	75 %cil	%water	/ 7 %mud
RecFeet of 20' G.T.P		%gas	%cil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%cil	%water	%mud
Rec Total BHT	Gravity 3	_API RW	.e	F Chlorides	
(A) Initial Hydrostatic 2199	<b>Test</b> 1150	<del></del>	T-On t	ocation	
(B) First Initial Flow 3/	Jars		<del>-</del>	ted	
(C) First Final Flow	🗖 Safety Joint	75	T-Ope		1500
(D) Initial Shut-In 1325	Circ Sub	<del></del>		ed	A (2)
(E) Second Initial Flow	☐ Hourly Standby				<del></del>
(F) Second Final Flow26	III Mileage 13	5 RT 102		nents	
(G) Final Shut-In 13.05	☐ Sampler		_		· -·
(H) Final Hydrostatic 2141	☐ Straddle	<u></u>		uined Shale Packe	ır
	☐ Shale Packer			uined Packer	
Initial Open30	☐ Extra Packer			dra Copies	
Initial Shut-In30_	☐ Extra Recorder			otal 0	
Final Flow30	☐ Day Standby		Total_	1577	
Final Shut-In30	Accessibility	, . <del></del>	МР/С	OST Disc't	
	Sub Total 157		<u>ਨ</u>	) ^	
Annowed Rv	0	ur Representative	Knama	n Isnel	)-(1)