

### Kansas Corporation Commission Oil & Gas Conservation Division

### 1081918

Form ACO-1 June 2009 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: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	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: sx cmt
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Original Total Depth: Conv. to ENHR	Chloride content: ppm Fluid volume: bbls  Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	QuarterSec TwpS. R East West
ENHR Permit #:	County: Permit #:
GSW Permit #:	
Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date	

### **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:					

Side Two



Operator Name:			Lease Name	e:			_ Well #:	
Sec Twp	S. R	East West	County:					
time tool open and clos	sed, flowing and shut s if gas to surface tes	I base of formations per in pressures, whether set, along with final chart well site report.	shut-in pressure	reached s	static level,	hydrostatic press	sures, bottom h	ole temperature, fl
Orill Stem Tests Taken (Attach Additional S		Yes No		Log	Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolo		☐ Yes ☐ No	N	lame			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	I Electronically	Yes No Yes No Yes No						
List All E. Logs Run:			RECORD [		Used			
	Size Hole	Report all strings set- Size Casing	-conductor, surface Weight		ate, producti Setting	on, etc.  Type of	# Sacks	Type and Percen
Purpose of String	Drilled	Set (In O.D.)	Lbs. / Ft.		Depth	Cement	Used	Additives
		ADDITIONA	L OFMENTING (	00115575	DECORD			
		ADDITIONA	L CEMENTING / :	SQUEEZE	RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	d		Type and F	Percent Additives	
Shots Per Foot		ON RECORD - Bridge Plu ootage of Each Interval Pe				cture, Shot, Cement mount and Kind of Ma	•	d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Line	r Run:	Yes No		
Date of First, Resumed I	Production, SWD or ENI	HR. Producing Me	thod:	Gas Li	ift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf	Water	В	bls. (	Gas-Oil Ratio	Gravity
DISPOSITIO	Used on Lease	Open Hole	METHOD OF COM Perf. D	MPLETION: ually Comp omit ACO-5)	. Cor	nmingled mit ACO-4)	PRODUCTIO	ON INTERVAL:
(If vented, Sub	mit ACO-18.)	Other (Specify) _						

Form	ACO1 - Well Completion				
Operator	American Warrior, Inc.				
Well Name	Brehm-Kleweno 4-19				
Doc ID	1081918				

### Tops

Name	Тор	Datum
Anhydrite	1397	747
Heebner	3601	-1457
Lansing	3647	-1503
Base Kansas City	3965	-1821
Pawnee	4048	-1904
Ft. Scott	4128	-1984
Cherokee	4143	-1999
Mississippian	4224	-2080
TD	4242	-2098

## **Geological Report**

American Warrior, Inc. **Brehm-Kleweno #4-19**1675' FNL & 860' FWL
Sec. 19 T18s R21w
Ness County, Kansas



American Warrior, Inc.

### **General Data**

Well Data:	American Warrior, Inc.
	Brehm-Kleweno #4-19
	1675' FNL & 860' FWL

1675' FNL & 860' FWL Sec. 19 T18s R21w Ness County, Kansas API # 15-135-25255-0000

Drilling Contractor: Petromark Drilling, LLc. Rig #1

Geologist: Jason Alm, Austin Klaus

Spud Date: October 30, 2011

Completion Date: November 6, 2011

Elevation: 2138' Ground Level

2144' Kelly Bushing

Directions: Bazine KS, North on DD rd. 2 mi. East on 150 rd.

½ mi. South and West into location.

Casing: 1414' 8 5/8" surface casing

4241' 5 1/2" production casing

Samples: 10' wet and dry, 3500' to RTD

Drilling Time: 3500' to RTD

Electric Logs: None

Drillstem Tests: Two, Trilobite Testing, Inc. "Chuck Smith"

Problems: None

Remarks: None

### **Formation Tops**

•	
	American Warrior, Inc.
	Brehm-Kleweno #4-19
	Sec. 19 T18s R21w
<b>Formation</b>	1675' FNL & 860' FWL
Anhydrite	1397', +747
Base	1428', +716
Heebner	3601', -1457
Lansing	3647', -1503
BKc	3965', -1821
Pawnee	4048', -1904
Fort Scott	4128', -1984
Cherokee	4143', -1999
Mississippian	4224', -2080
RTD	4242', -2098

### **Sample Zone Descriptions**

Mississippian Osage (4224', -2080): Covered in DST #1,2

Dolo –  $\Delta$  – Fine sucrosic crystalline with poor to fair vuggy and inter-crystalline porosity, heavy chert, triptolitic, weathered, with fair to good vuggy porosity, light to fair oil stain, slight show of free oil, fair odor, good yellow fluorescents. 62 units hotwire.

### **Drill Stem Tests**

Trilobite Testing, Inc. "Chuck Smith"

### DST #1 <u>Mississippian Osage</u>

Interval (4172' – 4234') Anchor Length 62'

IHP − 2098 #

IFP - 30" - Built to 1 in. 18-34 #
ISI - 30" - Dead 1117 #
FFP - 30" - Built to ½ in. 37-51 #
FSI - 30" - Dead 1043 #

FHP - 2045 # BHT - 107°F

Recovery: 30' GIP

20' GCO

70' OCM 5% Oil

### DST #2 <u>Mississippian Osage</u>

Interval (4228' – 4239') Anchor Length 11'

IHP - 2141 #

IFP - 30" - Built to 1 in. 23-29 #
ISI - 30" - Dead 1155 #
FFP - 30" - Built to ½ in. 31-32 #
FSI - 30" - Dead 1048 #
FHP - 2070 #

BHT  $-106^{\circ}$ F

Recovery: 45' OSM

### **Structural Comparison**

	A	A		M. LOTG	
	American Warrior, Inc.	American Warrior, Inc.		Mack Oil Co.	
	Brehm-Kleweno #4-19	Brehm-Kleweno #1-19		Roth #1	
	Sec. 19 T18s R21w	Sec. 19 T18s R21w		Sec. 19 T18s R21w	
Formation	1675' FNL & 860' FWL	1965' FNL & 1245' FWL		2310' FNL & 500' FWL	
Anhydrite	1397', +747	1402', +740	(+7)	1416', +734	(+13)
Base	1428', +716	1436', +706	(+10)	NA	NA
Heebner	3601', -1457	3594', -1452	(-5)	NA	NA
Lansing	3647', -1503	3642', -1500	(-3)	3664', -1505	(+2)
BKc	3965', -1821	3962', -1821	FL	NA	NA
Pawnee	4048', -1904	4042', -1900	(-4)	4068', -1909	(+5)
Fort Scott	4128', -1984	4120', -1978	<b>(-6)</b>	4142', -1983	<b>(-1)</b>
Cherokee	4143', -1999	4140', -1998	<b>(-1)</b>	NA	NA
Mississippian	4224', -2080	4227', -2085	(+5)	4239', -2080	FL

### **Summary**

The location for the Brehm-Kleweno #4-19 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two drill stem tests were conducted both of which were inconclusive. After all gathered data had been examined the decision was made to run 5 1/2 inch production casing to further evaluate the Brehm-Kleweno #4-19 well.

### **Recommended Perforations**

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PΥ	ımarv	•
1 1	imary	٠

Mississippian Osage (4224' – 4239') DST #1,2

Respectfully Submitted,

Jason Alm Hard Rock Consulting, Inc.

		DRILL STEM TESTS																	T
Hard Rock Consulting, Inc.  Jason Alm Petroleum Geologist  P.O. Box 1260  Hays, KS 67601  APT# IS-I3S-ZSZSS-OCCO  GEOLOGIST'S REPORT	DATE DEPTH NO SEE NAME TYPE DEPTH OUT PEET HOUSE	No. Interval IFP/Time ISP/Time FFP/Time FSP/Time Interval ISP/Time	REMARKS  Pon focation  Doa.m. 10-4-2011												DST#1 Mississippien 4/72:4234' 30":30":30":30" 2098# 18:34#/1". T VB-34# 12:34#	W79,02 079,02 dI9,02 dJ9,02	DST#2  Mississippien  4228: 4239' 30":30":30":30": 2141 # 23-25 # 1  Built to 1  185 # 106°F  106°F  106°F  106°F  106°F		Essen TAL (1880 TAL 11-8-2011
OPERATOR American Warrior, Inc.  LEASE Brehm-Klewenowell No. 4-19  FIELD Wonder  LOCATION 1675' FNL \$ 860' FWL.  SEC. 19 TWP. 185 RGE ZIW  COUNTY Ness STATE Kansas  CASING RECORD  SURFACE 85/8" @ 1414'	FORMORS RITERING DESCRIPTION OF SIGNS CLOS MANAGES & S. S. S.		WPLE DESCRIPTIONS  WELL DESCRIPTIONS  WELL Stry Possift.	s. tossi, Myttleff	K. Carb.  Ry-Bin-Gin  Fruh-Lt-Gry Fr Knin	Entre General Some Borns of Bo	or. Ben The bey Shir	la, DNS  on- Hourd own G, Berry on- Hourd own G, Berry on- Lassen, En-Subklu,	14-13en 34-12-64, Subxlm, 14-3cm, Subxlm,	St. L. Whit. Cange wo kin.  Tan - Lt Bother Fair Sub kin.  Off whi - Lt Bother Con. of the	Tan-1+ Ording Fr. xln.  Tan-1+ Ording Fr. xln.  ool w/ Pair Som g.  an-1+ Ording Fr. xln.  sarrey	Tan-It fory, Fr-sub sth.  3ry Brn.  It - Drk Gry.  No-Lt. Gry. Sub sth, DM.	Tan - Lt. Cary. Sub xln.  Tan - Lt. Cary. Fa Sub xln.  Tan - Lt. Cary. Fa Sub xln.	ry8cm6nom. an Lt. Grry. FnSub sin.	Tan-Buy. Sub xIn. DNS  Tan-Buy. Sub xIn., DNS IS  for Ian	Ork. Gary.  SIK., Carb.  Sub. xin. Mostly.	27-2. Chry. Old Sub Eymold Surial Control of	of Whit- Li Ban For Sugar	
COMM: 10°30° 2011 COMP- 11°6°2011  RTD 4242' LOG TO NOME  SAMPLES SAVED FROM 3500' TO RTD  GRILLING TIME KEPT FROM 3500' TO RTD  GEOLOGICAL SUPERVISION FROM 3700' TO RTD  GEOLOGICAL SUPERVISION FROM 3700' TO RTD  MUD UP 3400' TYPE MUD Chemical  FORMATION TOP DATUM TOP DATUM COMP.			LEGEND LEGEND Shale Carb sh Lin  (a)  10 15 20 30  Sh. L	7.5.2 2.5.2 7.4.3.2	cebner 65-457 5h. B 5h. B	147'-1503 Ls. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	54. 6 1. 45. 1 2. 5. 1 2. 5. 1	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	5/4·6 5.72 2.72 2.72	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	48 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	24-15 24-15	- 1821 -	5h-6 125-7 125-7 100-6	048'-1904 1.5-	24 Soft 22 Sh- 1128'-1984 Sh- herakee		24 - 2080 62 08/20 24 - 2080 62 08/20 25/2	
Anhydrite 1397' +747 +7 Base 1428' +716 +10  Heebner 3601' -1457 -5 Lansing 3647' -1503 -3 BKc 3965' -1821 FL Pawnee 4048' -1904 -4 Fort Scott 4128' -1984 -6 Cherokee 4143' -1999 -1 Mississippian 4224' -2080 +5  Total Depth 4242' -2098		The location for the Brehm. Klewence #4-19 was found via 3.0 seismic survey. The mew well ran structurally as expected via the survey. Two drill stem tests were run both were inconclusive. After all gethered data had been examined the decision was made to run s'/z inch production casing to further evaluate the	Tite Scit Sandstor  Logarithmic Sca	M				WWW CMVVV	WYY/WWW/W/	WW									
		Brehm. Klewene #4-19 well.  Respectfully Submitteel,		300 40 40 60 60 70 70 70	M	40 40 60 80 80	33	40 60 80 80	ñ	9850 60 70 80	02 01 038 038	3950	02 03 04 000h	00 00 00 00 00	0504	30 20 40	4150 60 70 90 4200 10	2 8 2 2 8 2	
Brehm-Kleweno # 1-19 1965 FNL: 1075 FWL Sec. 19 T185 RZIW		11-8-2011 11-8-2011	тотония гое луот													1-1-1-1-1		41 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	



Prepared For: American Warrior, Inc

PO Box 399

Garden City, KS 67846

ATTN: Jason Alm

### **Brehm-Kleweno #4-19**

### 19-18s-21w Ness, KS

Start Date: 2011.11.05 @ 20:15:00 End Date: 2011.11.06 @ 02:32:50 Job Ticket #: 44470 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



American Warrior, Inc

ATTN: Jason Alm

19-18s-21w Ness, KS

PO Box 399

Garden City, KS 67846

Brehm-Kleweno #4-19

Job Ticket: 44470 **DST#:1** 

Test Start: 2011.11.05 @ 20:15:00

### GENERAL INFORMATION:

Formation: Mississippian

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

Time Tool Opened: 22:19:00 Tester: Chuck Smith

Time Test Ended: 02:32:50 Unit No: 37

 Interval:
 4172.00 ft (KB) To
 4234.00 ft (KB) (TVD)
 Reference ⊟evations:
 2144.00 ft (KB)

Total Depth: 4234.00 ft (KB) (TVD) 2138.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 6.00 ft

Serial #: 8018 Inside

Press@RunDepth: 51.50 psig @ 4176.00 ft (KB) Capacity: 8000.00 psig

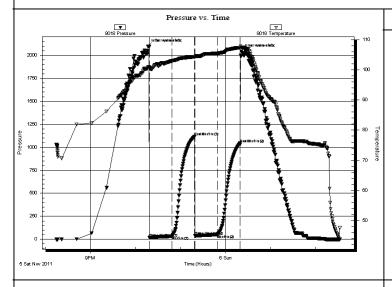
 Start Date:
 2011.11.05
 End Date:
 2011.11.06
 Last Calib.:
 2011.11.06

 Start Time:
 20:15:02
 End Time:
 02:32:49
 Time On Btm:
 2011.11.05 @ 22:17:10

Time Off Btm: 2011.11.06 @ 00:21:40

TEST COMMENT: 1" Blow.

No return. 1/2" Blow . No return.



Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2098.16	100.84	Initial Hydro-static
2	18.49	100.44	Open To Flow (1)
32	34.27	102.96	Shut-In(1)
62	1117.14	104.31	End Shut-In(1)
63	37.34	104.22	Open To Flow (2)
93	51.50	105.47	Shut-In(2)
123	1043.59	107.32	End Shut-In(2)
125	2045.12	107.41	Final Hydro-static

PRESSURE SUMMARY

### Recovery

Length (ft)	Description	Volume (bbl)
70.00	OCM 50 95m	0.34
20.00	GO 5g 95o	0.10
0.00	30 Feet weak GIP	0.00

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

Trilobite Testing, Inc Ref. No: 44470 Printed: 2011.11.10 @ 11:03:58



**TOOL DIAGRAM** 

American Warrior, Inc

19-18s-21w Ness, KS

Brehm-Kleweno #4-19

PO Box 399

Job Ticket: 44470

DST#: 1

Garden City, KS 67846 ATTN: Jason Alm

Test Start: 2011.11.05 @ 20:15:00

Tool Information

Drill Collar:

Drill Pipe: Heavy Wt. Pipe: Length:

Length: 4038.00 ft Diameter: Length:

0.00 ft Diameter: 120.00 ft Diameter: 3.80 inches Volume: 56.64 bbl 0.00 inches Volume: 2.25 inches Volume: Total Volume:

0.00 bbl 0.59 bbl

57.23 bbl

Tool Weight: 2500.00 lb Weight set on Packer: 20000.00 lb Weight to Pull Loose: 80000.00 lb 0.00 ft

Tool Chased String Weight: Initial 60000.00 lb

Final 61000.00 lb

Drill Pipe Above KB: 13.50 ft Depth to Top Packer: 4172.00 ft

Depth to Bottom Packer: ft Interval between Packers: 62.00 ft Tool Length: 89.50 ft

Number of Packers:

2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4145.50		
Shut In Tool	5.00			4150.50		
Hydraulic tool	5.00			4155.50		
Jars	5.00			4160.50		
Safety Joint	2.50			4163.00		
Packer	5.00			4168.00	27.50	Bottom Of Top Packer
Packer	4.00			4172.00		
Stubb	1.00			4173.00		
Perforations	3.00			4176.00		
Recorder	0.00	8018	Inside	4176.00		
Recorder	0.00	6751	Outside	4176.00		
Perforations	22.00			4198.00		
Change Over Sub	1.00			4199.00		
Drill Pipe	31.00			4230.00		
Change Over Sub	1.00			4231.00		
Bullnose	3.00			4234.00	62.00	Bottom Packers & Anchor

Total Tool Length: 89.50

Printed: 2011.11.10 @ 11:03:59 Trilobite Testing, Inc Ref. No: 44470



**FLUID SUMMARY** 

American Warrior, Inc

19-18s-21w Ness, KS

Brehm-Kleweno #4-19

PO Box 399

Garden City, KS 67846 Job Ticket: 44470

ATTN: Jason Alm

o Ticket: 44470 DST#:1

Test Start: 2011.11.05 @ 20:15:00

### **Mud and Cushion Information**

Mud Type:Gel ChemCushion Type:Oil API:41 deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft
Viscosity: 47.00 sec/qt Cushion Volume: bbl

9.97 in<sup>3</sup> Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 8000.00 ppm
Filter Cake: 1.00 inches

### **Recovery Information**

Water Loss:

### Recovery Table

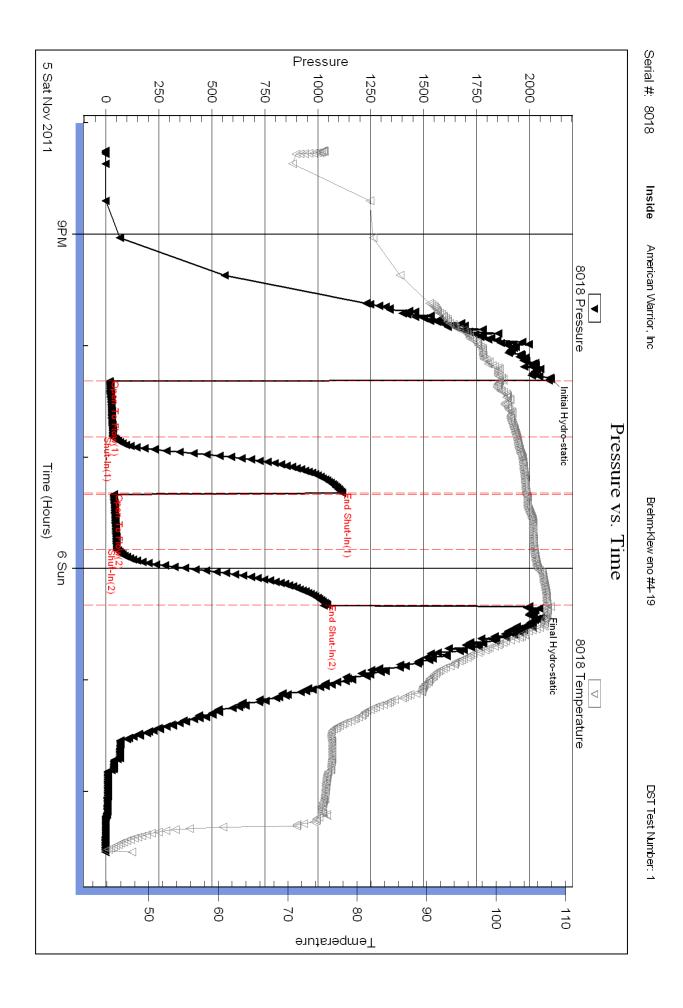
Length ft	Description	Volume bbl
70.00	OCM 50 95m	0.344
20.00	GO 5g 95o	0.098
0.00	30 Feet w eak GIP	0.000

Total Length: 90.00 ft Total Volume: 0.442 bbl

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

Laboratory Name: Laboratory Location: Recovery Comments: API: 41 @ 50 degrees F = 41.

Trilobite Testing, Inc Ref. No: 44470 Printed: 2011.11.10 @ 11:04:00



Trilobite Testing, Inc

Ref. No:

44470

Printed: 2011.11.10 @ 11:04:01



Prepared For: American Warrior, Inc

PO Box 399

Garden City, KS 67846

ATTN: Jason Alm

### **Brehm-Kleweno #4-19**

### 19-18s-21w Ness, KS

Start Date: 2011.11.06 @ 08:02:00 End Date: 2011.11.06 @ 14:10:50 Job Ticket #: 44471 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



American Warrior, Inc

19-18s-21w Ness, KS Brehm-Kleweno #4-19

Tester:

PO Box 399

Garden City, KS 67846 Job Ticket: 44471

Test Start: 2011.11.06 @ 08:02:00

ATTN: Jason Alm

### **GENERAL INFORMATION:**

Formation: Mississippian

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

Time Tool Opened: 10:22:00 Time Test Ended: 14:10:50

Interval: 4228.00 ft (KB) To 4239.00 ft (KB) (TVD)

Total Depth: 4239.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Unit No: 37

Chuck Smith

Reference Elevations: 2144.00 ft (KB) 2138.00 ft (CF)

KB to GR/CF: 6.00 ft

DST#: 2

Serial #: 8018 Inside

Press@RunDepth: 32.40 psig @ 4231.00 ft (KB) Capacity: 8000.00 psig

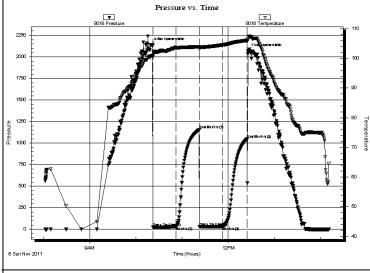
 Start Date:
 2011.11.06
 End Date:
 2011.11.06
 Last Calib.:
 2011.11.06

 Start Time:
 08:02:02
 End Time:
 14:10:49
 Time On Btm:
 2011.11.06 @ 10:18:50

 Time Off Btm:
 2011.11.06 @ 12:25:39

TEST COMMENT: 1" Blow.

No return. 1/2" Blow . No return.



	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2141.40	100.29	Initial Hydro-static
	4	23.66	100.49	Open To Flow (1)
	33	29.61	103.62	Shut-In(1)
	64	1155.29	103.94	End Shut-In(1)
1	64	31.16	103.15	Open To Flow (2)
	94	32.40	104.50	Shut-In(2)
5	126	1048.34	106.04	End Shut-In(2)
	127	2070.27	106.46	Final Hydro-static

PRESSURE SUMMARY

### Recovery

Length (ft)	Description	Volume (bbl)
45.00	OSM 100m	0.22
* Recovery from mul	tiple tests	

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

Gas Rates

Trilobite Testing, Inc Ref. No: 44471 Printed: 2011.11.10 @ 11:04:34



**TOOL DIAGRAM** 

DST#: 2

American Warrior, Inc

19-18s-21w Ness, KS

Brehm-Kleweno #4-19

String Weight: Initial 62000.00 lb

Final 63000.00 lb

PO Box 399

Garden City, KS 67846 Job Ticket: 44471

ATTN: Jason Alm Test Start: 2011.11.06 @ 08:02:00

Tool Information

Drill Pipe: Length: 4101.00 ft Diameter: 3.80 inches Volume: 57.53 bbl Tool Weight: 2500.00 lb 0.00 inches Volume: 0.00 bbl Heavy Wt. Pipe: Length: 0.00 ft Diameter: Weight set on Packer: 22000.00 lb Drill Collar: Length: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 95000.00 lb Total Volume: 58.12 bbl Tool Chased 0.00 ft

Drill Pipe Above KB: 20.50 ft
Depth to Top Packer: 4228.00 ft

Depth to Bottom Packer: ft
Interval between Packers: 11.00 ft
Tool Length: 38.50 ft

Number of Packers: 2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4201.50		
Shut In Tool	5.00			4206.50		
Hydraulic tool	5.00			4211.50		
Jars	5.00			4216.50		
Safety Joint	2.50			4219.00		
Packer	5.00			4224.00	27.50	Bottom Of Top Packer
Packer	4.00			4228.00		
Stubb	1.00			4229.00		
Perforations	2.00			4231.00		
Recorder	0.00	8018	Inside	4231.00		
Recorder	0.00	6751	Outside	4231.00		
Perforations	5.00			4236.00		
Bullnose	3.00			4239.00	11.00	Bottom Packers & Anchor

Total Tool Length: 38.50

Trilobite Testing, Inc Ref. No: 44471 Printed: 2011.11.10 @ 11:04:35



**FLUID SUMMARY** 

American Warrior, Inc

19-18s-21w Ness, KS

Brehm-Kleweno #4-19

PO Box 399

Job Ticket: 44471

Serial #:

DST#: 2

Garden City, KS 67846

ATTN: Jason Alm

Test Start: 2011.11.06 @ 08:02:00

**Mud and Cushion Information** 

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft
Viscosity: 47.00 sec/qt Cushion Volume: bbl

Water Loss: 9.97 in<sup>3</sup> Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 8000.00 ppm Filter Cake: 1.00 inches

### **Recovery Information**

### Recovery Table

Length ft	Description	Volume bbl
45.00	OSM 100m	0.221

Total Length: 45.00 ft Total Volume: 0.221 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 44471 Printed: 2011.11.10 @ 11:04:35

Trilobite Testing, Inc

Ref. No:

44471

Printed: 2011.11.10 @ 11:04:36





NO.

P.O. Box 1733 • Ha	ys, Kansas 6760ay:		4	4470	
Well Name & No. Brehm-Kleweno Company American Warrior					GL
Address POB 399 Garden City,	KS 67846				
Co. Rep / Geo		Rig Petro	mask =1	/	
Location: Sec	Rge. 21w	Co	55	State K	5
Interval Tested 4/172 - 423 4	Zone Tested	Mississipp	ian		
Anchor Length	Drill Pipe Run	4038	Mu	ud Wt	
Top Packer Depth 4/168	Drill Collars Rui	120	Vis	47	
Bottom Packer Depth 4/72		0	WI	10.0	
Total Depth 4234	Chlorides	8000 ppm	System LC	MO	
Blow Description 1"Blow.					
No return					
1/2" Blow.					
No Teturn					
Rec Feet of		%gas	%oil	%water	%mud
Rec 20 Feet of GO		_	25 %oil	%water	%mud
Rec 70 Feet of OCM			5 %oil		95 %mud
Rec Feet of 30 Feet Wa	ak GIP	%gas	%oil	%water	%mud
RecFeet of		%gas	%oil	%water	%mud
Rec Total 90 BHT 107	Gravity 4/		— °F C		
(A) Initial Hydrostatic 2098	and the same of th	5-		ition 7.	
(B) First Initial Flow		50		8:	
(C) First Final Flow34	Safety Joint			10:	19 pm
(D) Initial Shut-In		N/C	T-Pulled _	120	
(E) Second Initial Flow	☐ Hourly Standby		T-Out	2:3	33
(F) Second Final Flow		RT 148.40	Comments	s	
(G) Final Shut-In 1044		7K1 (10.3*	-		
(H) Final Hydrostatic 2045			12	50-000 to -22 - 27	
(ii) i mai i i jordana				d Shale Packer	
Initial Open30		-	- Hamet	d Packer	
Initial Shut-In30			- Land	Copies	
Final Flow30					
	25.00			098.40	
Final Shut-In30	11 1	1840	MP/DST	Disc't	
	•		100	1	
Approved By Chan	\~	Our Representative(	Kuch	Justh	

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.



# RILOBITE ESTING INC.

NOV 0 8 2011

### **Test Ticket**

NO. 4447

P.O. Box 1733 • Hays, Kansas 67601

Well Name & No. Brehm-Kleweno #	4-19	Test No.	2	Date //-6-//	,
Company American Wassion		Elevationa	2144	KB 2138	GL
Address POB 399 Garden City, KS	67846				
Co. Rep/Geo. Jason Alm		Rig Per	romerk #1	/	
Location: Sec					
Interval Tested 4228 - 4234	Zone Tested	Missi	ssippian		
Anchor Length //		4101		Mud Wt	
Top Packer Depth 4224	Drill Collars Run	120		Vis 47	
Bottom Packer Depth 4228	Wt. Pipe Run	0		WL 10.0	
Total Depth 4234	Chlorides	8000 pp	om System	LCM O	
Blow Description / Blow.					
No return.					
1/2"Blow.					
No return					
Rec Feet of		%gas	%oil	%water	%mud
Rec 45 Feet of OSM		%gas	%oil	%water /00	%mud
Rec Feet of		%gas	%oil	%water	%mud
RecFeet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Total 45 BHT 106	Gravity	API RW	@°F	Chlorides	ppm
(A) Initial Hydrostatic 2/4/	▼ Test 1225		T-On Lo	cation	
(B) First Initial Flow 24	🛛 Jars <u>250</u>	-		d 8:0=	
(C) First Final Flow30	Safety Joint 7	5		10:22	
(D) Initial Shut-In //55	Circ Sub	NIC		12:25	
(E) Second Initial Flow	☐ Hourly Standby _			/4://	
(F) Second Final Flow32	Mileage JOOR	7 148.40	Comme	ents	
(G) Final Shut-In /048	☐ Sampler				
(H) Final Hydrostatic 2070	☐ Straddle		— □ Ruir	ned Shale Packer	
	☐ Shale Packer			ned Packer 320	
Initial Open 30	☐ Extra Packer		/ Itali	ra Copies	
Initial Shut-In 30	☐ Extra Recorder _			al 320 -	
Final Flow 30	☐ Day Standby			2018.40	
Final Shut-In 30	☐ Accessibility			ST Disc't	
	Sub Total 1699	1	-01	1	
Approved By Jaken	Ou	r Representative_	( Kuch	& Smith	
Trilobite Testing Inc. shall not be liable for damaged of any kind of the property equipment, or its statements or opinion concerning the results of any test, tool					he use of its

B LO			WELL NO.		SWIFT		JOB TYPE  JOB TYPE  August Section 2  TICKET NO.  23 59
Fra (	<u> </u>		4-1	7 I PUMPS	PRESSUR		
HART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)		C TUBING	CASING	TD /// DESCRIPTION OF OPERATION AND MATERIALS
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,							Selw Tok
	1230						Res fin run resing
	1210						Fill 1200
	1250						Stait CIR
							Chain down Casing
	1320						Ris fin cip - Hock on Swift
	1225-		/12			700	Then sucal Man Aust
,		5	30	32		32°C	Pen D 30 BELL Hick
							Fill Tout
		5-				300	
		-	4/2				150 5 ts @ 12.5 #/gal
		-	99				100 STS @ 13 4/5al
		-	133				75 50 (@ 145 # hal
			148				Fin cont - Rolroso Top Phy.
		10 1/2	1773			200	Chat Diss/
١		64,				410	Coul (ie (0 +12 851 Displ  Fin Displ Plus Dean  Hold - Release + Hold  Wesh up & Rack up Th
-	0215	<u>G</u> /2	874			100	Fin Direct - Plan Dry Al
	0315		15/7			300	11-11-2 loss + H.()
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CITY, STATE, ZIP CODE	의
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TICKET 20399

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	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER		- []
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3. WELL	WELL TYPE		JOB PURPOSE			WELL LOCATION			ı
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REFERRAL LOCATION INVO	INVOICE INSTRUCTIONS		,						1

Thank You!

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The

APPROVAL



CHARGE TO:			
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	7 1200	フタア・ウェ	3
ADDRESS			

SWIF	CHA	CHARGE TO: A Merican Werrior	Varcor		TICKET
	ADD ADD	ADDRESS			Nº 22437
Services Inc		CITY, STATE, ZIP CODE			PAGE OF
ERVICE LOCATIONS /	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE ICITY	DATE JOWNER
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<	TICKET TYPE CONTRACTOR		RIG NAME/NO.	SHIPPED DELIVERED TO	ORDER NO.
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1 200	TIME SIGNED	START OF WORK OR DELIVERY OF GOODS	IN IT PROVISIONS.	but are not limited to, PAYMENT, RELEASE, INDEMNITY, and	the terms and conditions on the reverse side hereof which include,	LEGAL TERMS: Customer hereby acknowledges and agrees to												SECONDARY REFERENCE/ PART NUMBER
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/ 00-/ 90-2300	7000	P.O. BOX 466 WE OPERATED THE EQUIPMENT AT CALCULATIONS OF SATISFACTORILY?	SWIFT SERVICES, INC.   OUR SERVICE WAS   PERFORMED WITHOUT DELAY?		REMIL PAYMENT IO: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	SURVEY SURVEY				7	Robert Book Contract Co	insect Flort She without FILL	latch drum phase balle	anut Bosket	an tractizate	Pump Charles	MILEAGE TEX 114	DESCRIPTION
CUSTOMER DID NOT WISH TO RESPOND	RE YOU SATISFIED WITH OUR SERVICE?	HE EQUIPMENT	HOUT DELAY?	DAND S?	PERFORMED DOWN?	,		 -			447	52 ju	52 2	53/2	52 in	1 ou	Mal	QTY. UM
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SWIFT OPERATOR

F OF WATERIALS AND SERVICES

Thank You!



# TICKET CONTINUATION

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ica Uh	RATE	VOLUME	PUMPS	PRESSUR	E (PSI)	DESCRIPTION OF OPERATION AND MATERIALS
11000	(BPM)	(BBL) (GAL)	T C	TUBING	CASING	175 sks ZA-2 w/flrace
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	14	20			250	Pup 20 bbl KCL flewh
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TICKET **22513** 

	DATE SIGNED	x Scott	MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS	LIMITED WARRANTY provisions	the terms and conditions on the tare not limited to PAYI	LEGAL TERMS: Customer				82	28/	240	276	320	5765	575	PRICE SECO	REFERENCE LOCATION	4.			SERVICE LOCATIONS + VS	Services,	
44.57	TIME SIGNED		CUSTOMER'S AGENT PRIOR TO	visions.	the terms and conditions on the reverse side hereof which include, but are not limited to PAYMENT DELEASE INDEMNITY and	LEGAL TERMS: Customer hereby acknowledges and agrees to								1.	-		SECONDARY REFERENCE/ PART NUMBER LOC ACCT	INVOICE INSTRUCTIONS		WEIL TYPE W	CONTRACTOR	WELL/PROJECT NO II	Inc.	
		NESS CITY KS 67560	DO BOY AGE	SWIFT SERVICES INC	STAYMENT C:					Drayou (min)	Service Charge	D-AIN	£ Wele	SAD coment	Puro Chage	MILEAGE TRK 114	DF DESCRIPTION		Development comment butting	WEI CATEGORY TORD IDDOOR	RIG NAME	LEASE COUNTYPARISH	; ZIP CODE	
CUSTOMER	THE TOO SHIPTED WITH OUR SERVICE	AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	WE OPERATED THE EQUIPMEN	MET YOUR NEEDS?	OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	SURVEY													WELL		믜	STATE CITY		
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Ş		16.30	77.00	<u>. L</u>	PAGE IOIAL					200	<i>a</i> 2	35 00	- 1	<i>//</i> / 150		60	UNIT		WELL LOCATION		ORDER NO.	DATE ON DAY	PAGE 1	7
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SWIFT OPERATOR

APPROVAL

Thank You!

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JOB LO		, A						ices, Inc. DATES DEC 11 PAGEN
CUSTOMER	ican W	irr or	WELL NO.	-19		Bream	Klew	eno Coment backside TICKETNO. 22513
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMI T	PS C	PRESSUR TUBING	E (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
						1		1255ks SMO N/ fixele
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	e eppe	y - 1	·					Pazire well service over the tela
	1100							anla TRXIII
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	1115						7/00	Open textaile - pressur less the 100/5:
	1120	24	-				C3A	
· ————	1120	27	52				300	MIX SMD@ 12.2 ppg
		234	z				500	pump Z bb/ HD
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