



KANSAS CORPORATION COMMISSION 1053641  
OIL & GAS CONSERVATION DIVISION

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 # 4058  
Name: American Warrior, Inc.  
Address 1: 3118 Cummings Rd  
Address 2: PO BOX 399  
City: GARDEN CITY State: KS Zip: 67846 +  
Contact Person: Scott Corsair  
Phone: ( 785 ) 398-2270  
CONTRACTOR: License # 33323  
Name: Petromark Drilling, LLC  
Wellsite Geologist: Jason Alm  
Purchaser: NCRA

Designate Type of Completion:  
 New Well     Re-Entry     Workover  
 Oil     WSW     SWD     SLOW  
 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 #: \_\_\_\_\_  
08/03/2010    08/11/2010    01/17/2011  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 15-165-21856-00-00  
Spot Description: \_\_\_\_\_  
SE NW SW NW Sec. 31 Twp. 19 S. R. 20  East  West  
1,978 Feet from  North /  South Line of Section  
359 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Rush  
Lease Name: Schlegel Well #: 1-31  
Field Name: \_\_\_\_\_  
Producing Formation: Mississippian  
Elevation: Ground: 2275 Kelly Bushing: 2281  
Total Depth: 4416 Plug Back Total Depth: 4413  
Amount of Surface Pipe Set and Cemented at: 222 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 1463 Feet  
If Alternate II completion, cement circulated from: 1463  
feet depth to: 0 w/ 110 sx cmt.

Drilling Fluid Management Plan  
(Data must be collected from the Reserve Pit)  
Chloride content: 25000 ppm Fluid volume: 240 bbls  
Dewatering method used: Evaporated  
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: Deanna Garrison Date: 04/11/2011



1053641

Operator Name: American Warrior, Inc. Lease Name: Schlegel Well #: 1-31  
 Sec. 31 Twp. 19 S. R. 20  East  West County: Rush

**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 (Attach Additional Sheets)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input checked="" type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name Attached	Top Attached	Datum Attached
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Submitted Electronically (If no, Submit Copy)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				
Dual Receiver Cement Bond				

CASING RECORD <input checked="" 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
Surface	12.25	8.625	23	222	Common	150	2% gel, 3% CC
Production	7.875	5.5	15.5	4415	EA-2	175	1/4# flocele

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	0-1463	SMD	110	1/4# Flocele
	-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
8	4402.5-4412.5		

TUBING RECORD:	Size: <u>2.375</u>	Set At: <u>4410</u>	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>01/17/2011</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbbls. <u>20</u>	Gas Mcf	Water Bbbls. <u>2</u>	Gas-Oil Ratio <u>37</u>

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled (Submit ACO-5) <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>4402.5-4412.5</u>
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Schlegel 1-31
Doc ID	1053641

Tops

Anhydrite	1502	779
Heebner	3792	-1511
Lansing	3840	-1559
BKC	4170	-1889
Pawnee	4294	-2013
Ft. Scott	4321	-2040
Cherokee	4336	-2055
Mississippian	4400	-2119
TD	4416	-2135



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

TICKET  
**18779**  
 PAGE 1 OF 1

SERVICE LOCATIONS 1. Ness City, KS WELL/PROJECT NO. 1-31 LEASE Schlogel COUNTY/PARISH Rush STATE KS CITY Bazine DATE 4 AUG 10 OWNER \_\_\_\_\_  
 2. TICKET TYPE  SERVICE CONTRACTOR Peterson RIG NAME NO. #1 SHIPPED VA CT DELIVERED TO location ORDER NO. \_\_\_\_\_  
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE Cement surface pipe WELL PERMIT NO. \_\_\_\_\_ WELL LOCATION Rush 31-45-20N  
 4. REFERRAL LOCATION \_\_\_\_\_ INVOICE INSTRUCTIONS \_\_\_\_\_

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			UM		UM		
<del>5765</del> 575					MILEAGE TRK 114	25	mi			5 00	125 00
5765					Pump Charge - shallow surface	1	hr			750 00	750 00
325					Standard Cement	150	sk			12 00	1800 00
279					Gel	3	sk			25 00	75 00
278					Calcium Chloride	4	sk			35 00	140 00
581					Service charge	150	sk			1 50	225 00
582					Minimum Drayage	1	hr			250 00	250 00
290					D-AIR	1	gal			35 00	35 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

Signed: [Signature] TIME SIGNED  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	3400 00
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					
WE UNDERSTOOD AND MET YOUR NEEDS?					
OUR SERVICE WAS PERFORMED WITHOUT DELAY?					
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				TAX	
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO			TOTAL	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					

**JOB LOG**

**SWIFT Services, Inc.**

DATE 9 AUG 10 PAGE NO. 1

CUSTOMER American Warriors WELL NO. \_\_\_\_\_ LEASE \_\_\_\_\_ JOB TYPE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

CHART NO.	TIME	RATE (GPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								150 sks std 2% gal 3% CC 8 1/2 25"
	<del>1930</del>							on location TRK 114
	<del>1930</del>							pipe in hole - hook up to circulate
	1935	6	5			200		stop circulation - chain down pipe pump 5 bbl H <sub>2</sub> O
	1939	4	36			200		start cement shut down cement caught 2 sample cups
	1950							start displacement
	1955	4 1/2	13			300		stop displacement (13 bbl)
	1957							close in well - release pressure
								wash up truck
	2015							job complete
								Thanks Brett, for, Law, Dave, Blain



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

TICKET  
**18785**

PAGE 1 OF 2

SERVICE LOCATIONS 1. <u>1000 City KS</u>	WELL/PROJECT NO. <u>1-31</u>	LEASE <u>Schlegel</u>	COUNTY/PARISH <u>Rush</u>	STATE <u>KS</u>	CITY <u>Bazine</u>	DATE <u>11 AUG 10</u>	OWNER
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Roto-Mech</u>	RIG NAME/NO. <u>01</u>	SHIPPED <u>VIA CT</u>	DELIVERED TO <u>LOCATION</u>	ORDER NO.	
3.	WELL TYPE <u>0.1</u>	WELL CATEGORY <u>Development</u>	JOB PURPOSE <u>Cement long string</u>	WELL PERMIT NO.	WELL LOCATION <u>3145-20W RUSH</u>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT	DF			UM		UM	
575		1			MILEAGE TRK 114	20	mi	20	00	5.00 <del>100.00</del> 150.00
578		1			Pump Charge - long string	1	hr			1400.00 1400.00
407		1			10SCOT FLOAT SLAC 4 Auto F. 11	5 1/2	in	1	ea	275.00 275.00
406		1			latch down plug & handle	5 1/2	in	1	ea	225.00 225.00
403		1			Cement baskets	5 1/2	in	2	ea	200.00 400.00
402		1			Centralizer	5 1/2	in	5	400	55.00 <del>275.00</del> 275.00
290		1			D-A-R			2	gal	35.00 70.00
281		1			MUD FLUSH			500	gal	1.00 500.00
221		1			KCL			2	gal	25.00 50.00
					ROTATING HEAD RENTAL	5 1/2		1	hr	150.00 150.00

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REMIT PAYMENT TO:

SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

*[Signature]*

DATE SIGNED TIME SIGNED  A.M.  P.M.

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				
WE UNDERSTOOD AND MET YOUR NEEDS?				
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				TAX
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				

SWIFT OPERATOR

*[Signature]*

APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 1/14/61

CUSTOMER American Water Co. WELL NO. Schlegel LEASE 1-31 JOB TYPE Cement long string TICKET NO. 18785

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								+D 4416 Pipe = 4418 direct = 47'
								100 joints 5 1/2 15.5# (total 457)
								concrete 1, 2, 3, 4, 6, 6
								Blocks 5, 6, 7 put in 67-1463
								(Portulak #58) H-D water truck on loc
								175 sacks EA-2 w/ 1/2 water
	0400							on location - rig changing over
	0510							start pipe
	0610							TRK 114 on location
	0710							Drop ball - hook up to pipe
								circulate mud - rotating
	0800	4 1/2	32				200	Pump mix flash & KCL
		2	7				0	pump cement in rat hole - 30 sacks
	0810	4 1/2					200	start downhole with EA-2 cement
								rotating
	0825	4 1/2	34				200	<del>start pump</del> Finish cement 340 bbls
								105 sacks
								Wash pump & line
	0828	6 3/4					200	Drop plug - start displacement
		6 3/4	94				400	stop rotating
	0842	6 3/4	104				800	land plug
							1500	1500 lbs
	0844							release pressure - flood hold
								Wash up truck
	0910							rack up
								job complete
								Thank Rick, Dave & Bob







CHARGE TO: **AMERICAN WARRIOR**  
 ADDRESS:  
 CITY, STATE, ZIP CODE:

TICKET  
**18929**

PAGE 1 OF 1

SERVICE LOCATIONS 1. <b>NESS CITY, KS</b>	WELL/PROJECT NO. # <b>1-31</b>	LEASE <b>Schlegel</b>	COUNTY/AREA <b>RUSH</b>	STATE <b>KS.</b>	CITY <b>BAZINE, KS.</b>	DATE <b>19 AUG 10</b>	OWNER
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <b>H DOILFIELD SERU.</b>	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO <b>LOCATION</b>	ORDER NO.	
3.	WELL TYPE <b>DIL</b>	WELL CATEGORY <b>DEVELOPMENT</b>	JOB PURPOSE <b>CEMENT PORT COLLAR</b>	WELL PERMIT NO.	WELL LOCATION <b>4E, 6S, 2E, 1/2S, E/NE 1/4</b>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	UM		
575		1			MILEAGE #110	25	MIL	5 <sup>00</sup>	125 <sup>00</sup>
576D		1			PUMP CHARGE	1	PT	1100 <sup>00</sup>	1100 <sup>00</sup>
290		1			D-AIR	1	PT	35 <sup>00</sup>	35 <sup>00</sup>
105		1			PORT COLLAR OPENING TOOL	1	PT	300 <sup>00</sup>	300 <sup>00</sup>
276		1			FLOCELE	28	lbs	150	42 <sup>00</sup>
330	1	1			SWIFT MULTI DENSITY STANDARD	110	SK	15 <sup>00</sup>	1650 <sup>00</sup>
581		1			SERVICE CHARGE CEMENT	175	SK	1 <sup>50</sup>	262 <sup>50</sup>
582		1			MINIMUM DRAINAGE	17384	lbs	217.30 <sup>00</sup>	250 <sup>00</sup>

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MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X Scott

DATE SIGNED: **19 AUG 10** TIME SIGNED: **1745**  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	3764 <sup>50</sup>
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					
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				TOTAL	3892 <sup>20</sup>

Rush TAX @ 3% 127<sup>70</sup>

SWIFT OPERATOR: [Signature] APPROVAL: [Signature]

**Thank You!**

JOB LOG

SWIFT Services, Inc.

DATE 19 AUG 11 PAGE NO.

CUSTOMER AMERICAN WARRIOR

WELL NO.

LEASE SCHWEGEL 1-31

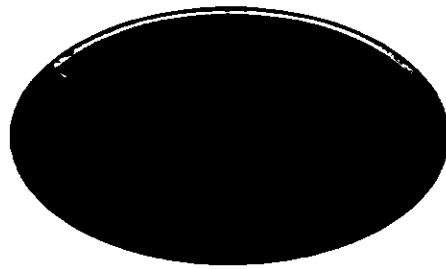
JOB TYPE CEMENT PORT COLLAR

TICKET NO. 18929

CHART NO.	TIME	RATE (GPM)	VOLUME (OBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1540							ON LOCATION PORT COLLAR @ 1463'
	1624				✓		1000	PRESSURE UP - HELD - RELEASED
	1624	3			✓		300	OPEN PORT COLLAR TAKE LWS. RATE.
	1633	4	61		✓		300	MIX CEMENT. 1105x STD @ 11.2 ppg. - 205x To PIT
	1651				✓		1000	CLOSE PORT COLLAR PRESSURE UP HELD RUN 4 JTS.
	1706	3	20		✓		300	REVERSE CEMENT OUT  WASH TRUCK
	1745							JOB COMPLETE  THANKS #110 JASON, JEFF, RUSS, WAYNE.

# **Geological Report**

American Warrior, Inc.  
**Schlegel #1-31**  
1980' FNL & 365' FWL  
Sec. 31 T19s R20w  
Rush County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Schlegel #1-31  
1980' FNL & 365' FWL  
Sec. 31 T19s R20w  
Rush County, Kansas  
API # 15-165-21856-0000

Drilling Contractor: Petromark Drilling, LLc. Rig #1

Geologist: Jason Alm

Spud Date: August 3, 2010

Completion Date: August 11, 2010

Elevation: 2275' Ground Level  
2281' Kelly Bushing

Directions: Alexander KS, 7 mi. South, 2 mi. West on X Ave.  
½ mi. South, East into location.

Casing: 222' 8 5/8" surface casing  
4415' 5 1/2" production casing

Samples: 10' wet and dry, 3700' to RTD

Drilling Time: 3700' to RTD

Electric Logs: None

Drillstem Tests: One, Trilobite Testing, Inc. "Andy Carrera"

Problems: None

Remarks: None

## Formation Tops

	American Warrior, Inc. Schlegel #1-31 Sec. 31 T19s R20w 1980' FNL & 365' FWL
<b>Formation</b>	
Anhydrite	1502', +779
Base	1534', +747
Heebner	3792', -1511
Lansing	3840', -1559
BKc	4170', -1889
Pawnee	4294', -2013
Fort Scott	4321', -2040
Cherokee	4336', -2055
Mississippian	4400', -2119
RTD	4416', -2135

## Sample Zone Descriptions

**Mississippian Osage (4400', -2119):** Covered in DST #1  
Dolo - Δ - Fine sucrosic crystalline with fair vuggy porosity, heavy chert, triptolitic, weathered with good vuggy porosity, light to good oil stain and saturation, show of free oil, light to fair odor, good yellow cut fluorescents, 36 units hotwire.

**Drill Stem Tests**  
Trilobite Testing, Inc.  
"Andy Carrera"

**DST #1**

**Mississippian Osage**

Interval (4404' - 4412') Anchor Length 8'

IHP	- 2265 #	
IFP	- 45" - B.O.B. 40 min.	27-92 #
ISI	- 45" - V.W.S.B.	1229 #
FFP	- 45" - B.O.B. 43 min.	97-139 #
FSI	- 45" - V.W.S.B.	1178 #
FHP	- 2160 #	
BHT	- 117°F	

Recovery: 186' GIP  
206' GCO  
62' MCGO 60% Oil  
62' OCGM 30% Oil

**Structural Comparison**

	American Warrior, Inc. Schlegel #1-31 Sec. 31 T19s R20w 1980' FNL & 365' FWL	McCoy Petroleum Co. Young 'A' #1-31 Sec. 31 T19s R20w 3960' FSL & 4950' FEL		Sheilds Oil Prod. Young 'A' #1 Sec. 31 T19s R20w C SW NW	
<b>Formation</b>					
Anhydrite	1502', +779	NA	NA	1496', +779	FL
Base	1534', +747	NA	NA	NA	NA
Heebner	3792', -1511	3802', -1509	(-2)	3780', -1505	(-6)
Lansing	3840', -1559	3850', -1557	(-2)	3827', -1552	(-7)
BKc	4170', -1889	NA	NA	NA	NA
Pawnee	4294', -2013	4300', -2007	(-4)	NA	NA
Fort Scott	4321', -2040	4335', -2042	(-2)	4308', -2033	(-7)
Cherokee	4336', -2055	4348', -2055	FL	4325', -2050	(-5)
Mississippian	4400', -2119	4408', -2115	(-4)	4396', -2121	(+2)

## **Summary**

The location for the Schlegel #1-31 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 Schlegel #1-31 well.

## **Recommended Perforations**

<b>Mississippian Osage:</b>	<b>(4400' – 4415')</b>	<b>DST #1</b>
-----------------------------	------------------------	---------------

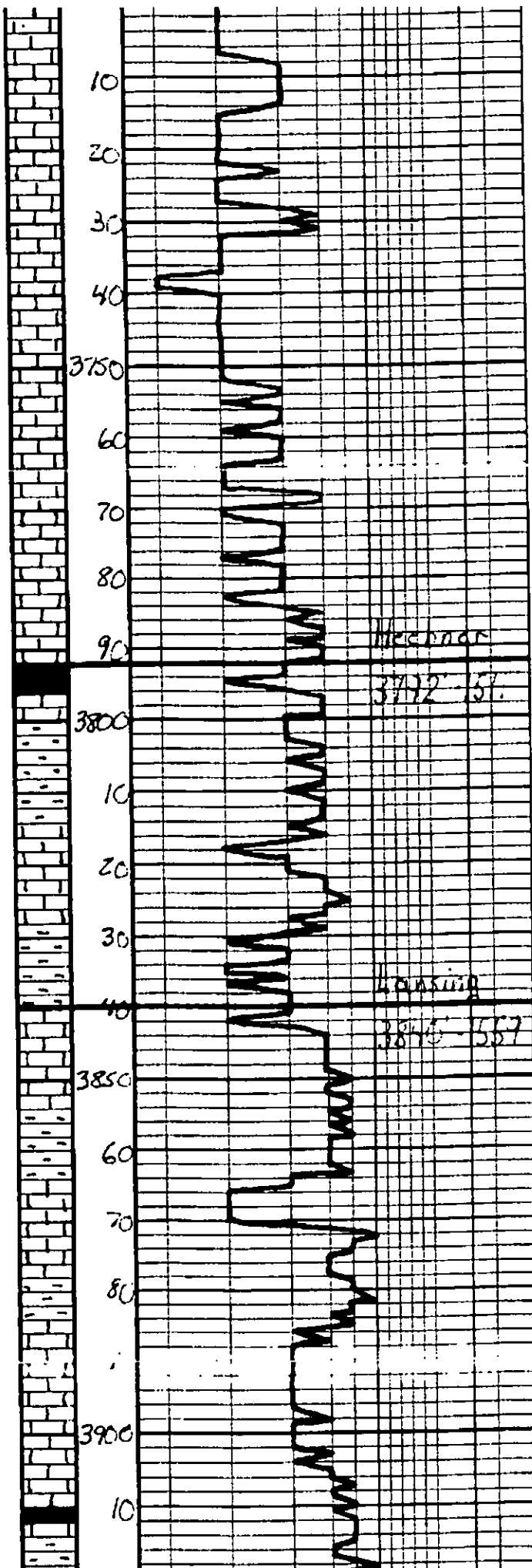
Respectfully Submitted,

Jason Alm  
Hard Rock Consulting, Inc.

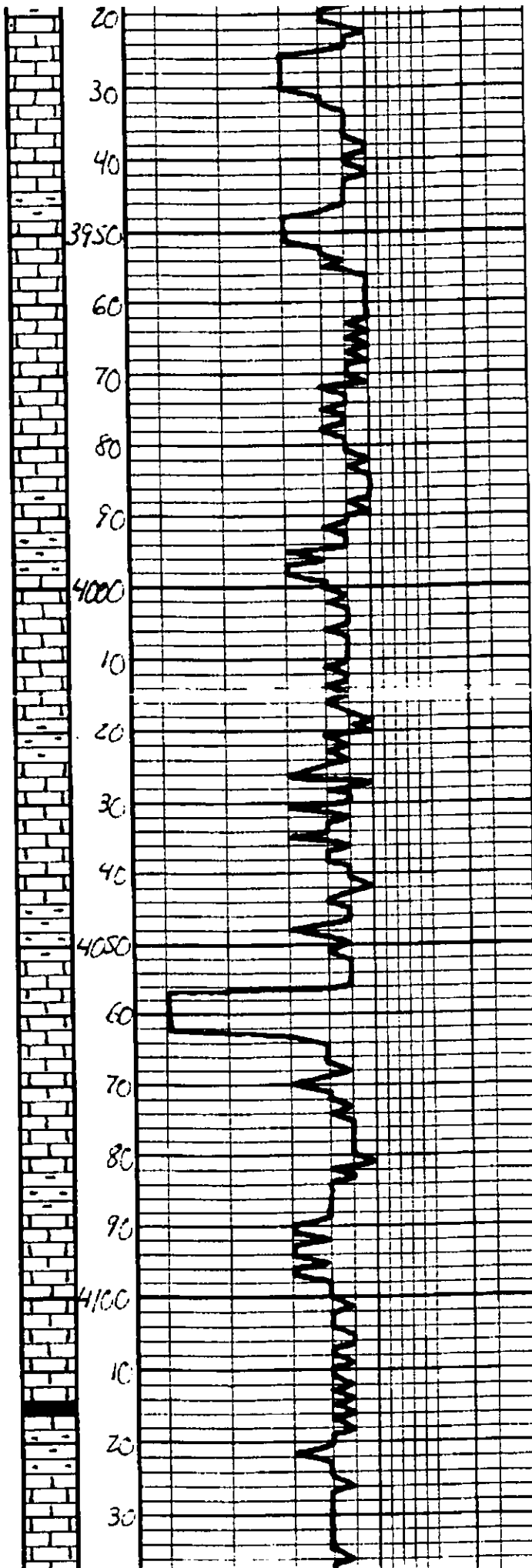




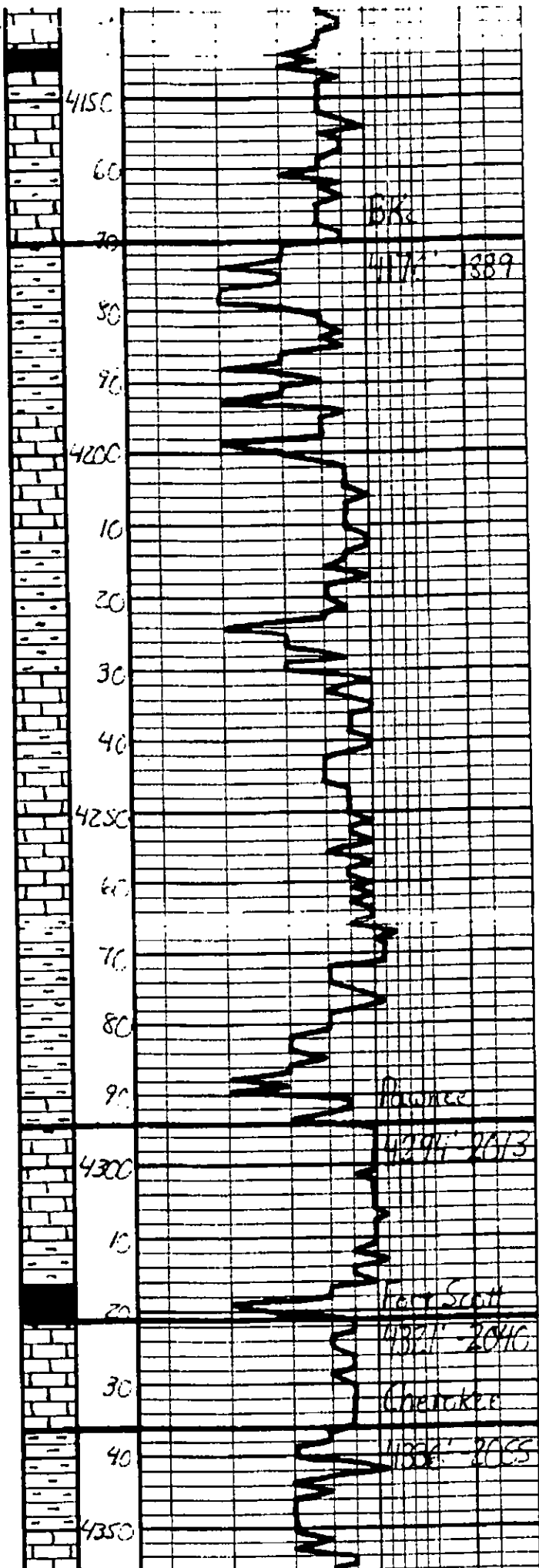




	Location 2:00 p.m. 8-8-2017
Ls. - light grey, massive Rim	
Ls. - g/l	
Ls. - Tan - grey, massive Pebb.	
Ls. - g/l	
Sh. - grey, calc.	
Sh. - grey - blue - calc.	
Ls. - light grey, massive Foss. - interstitial, dull	
Sh. - grey - blue - calc.	
Ls. - tan - grey, massive Dull, interstitial	
Sh. - grey - calc.	
Ls. - light grey, massive Foss. - interstitial, dull F. - barren	
Sh. - grey - blue	
Ls. - light grey, massive Foss. - interstitial, dull Dull, interstitial	
Ls. - g/l	
Sh. - light grey	

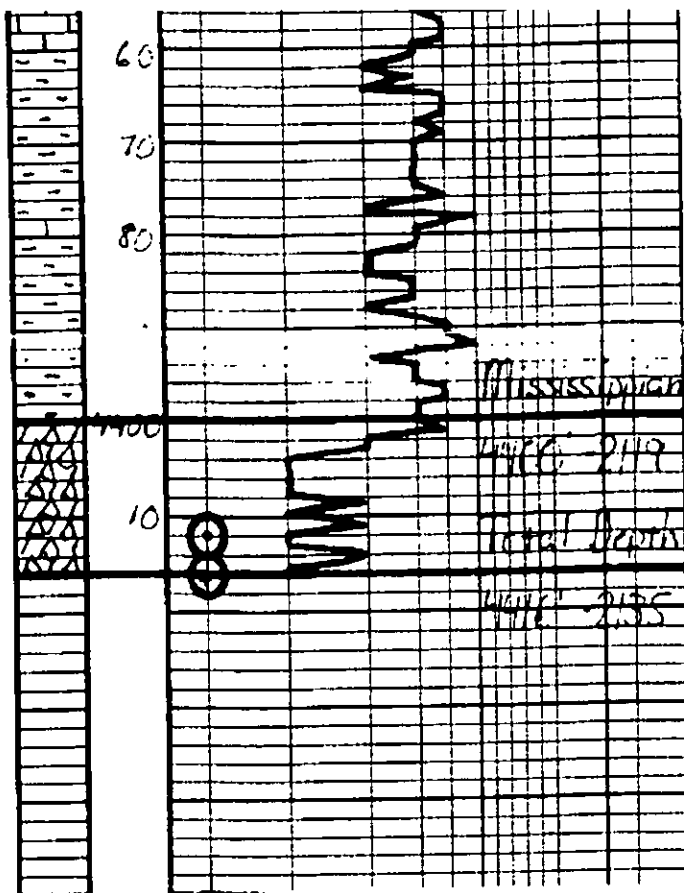


L.S. - Tan. sh. gray, Fossiliferous Sh. Fossiliferous, thin floor corals Bacteria, etc., etc.	
L.S. - sh. gray, etc.	
L.S. - Tan. sh. gray, Substr. etc.	
L.S. - sh. gray	
Sh. - gray, etc.	
L.S. - Tan. sh. gray, Substr. etc.	
Sh. - gray, etc.	
L.S. - Tan. sh. gray, Fossiliferous Fossiliferous, thin floor corals Bacteria, etc., etc.	
L.S. - sh. gray, etc.	
Sh. - gray, etc.	
L.S. - Tan. sh. gray, Fossiliferous Fossiliferous, thin floor corals Bacteria, etc., etc.	
L.S. - sh. gray, etc.	
Sh. - gray, etc.	
L.S. - Tan. sh. gray, Fossiliferous Fossiliferous, thin floor corals Bacteria, etc., etc.	
L.S. - sh. gray, etc.	
Sh. - gray, etc.	
L.S. - Tan. sh. gray, Fossiliferous Fossiliferous, thin floor corals Bacteria, etc., etc.	



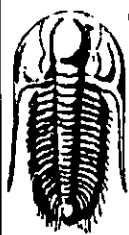
Sh. Blue - red	
Ls. Tan - grey, subblue, DNS	
Ls. a/a	
Sh. Blue - grey - red	
Sh. a/a	
Ls. Tan - grey, subblue, DNS	
Sh. Blue - grey - blue	
Ls. Tan - blue - grey, subblue, DNS	
Ls. a/a	
Ls. a/a, cherty	
Sh. Blue - grey - blue	
Sh. grey - blue - green	
Ls. grey - subblue, DNS	
Sh. Blue, Carb	
Ls. Tan - grey, subblue, DNS	
Sh. Blue	
Sh. Tan - Blue - grey, subblue, DNS, cherty	
Ls. Tan - grey, subblue, DNS	

<b>DST#1</b>	
Mississippi	
4404' - 4412'	
45" - 45" - 45" - 45"	
IH	2265#
IF	27-92# BCB 40 min.
ISL	1225# D.W.S.B.
FF	97-131# BOB 43 min.
FSI	1178# D.W.S.B.
FH	2160#
BHT	117°F



Sh. grey, blue-green, Kimbenton	186' GIP
etc. etc.	206' GIP
	62' GIP
	65% GIP
Sh. grey	62' GIP
	30% GIP
Sh. blue, green, etc. Kimbenton	
Sh. grey	
Sh. blue-green, etc. Kimbenton	
Sh. grey	
Blue, etc. Kimbenton	
etc. etc. Kimbenton	
etc. etc. Kimbenton	
etc. etc. Kimbenton	
	Respectfully,
	1000-1-5
	8-13-2010





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior  
PO Box 399  
Garden City Ks. 67846  
ATTN: Jason Alm

Schlegel#1-31  
31-19s-20w Rush  
Job Ticket: 039981      DST#: 1  
Test Start: 2010.08.10 @ 12:17:05

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	OCGM g=10% o=30% m=60%	0.305
62.00	MCGO g=10% m=30% o=60%	0.345
206.00	GO g=10% o=90%	2.890
0.00	GIP=186ft	0.000

Total Length: 330.00 ft      Total Volume: 3.540 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: Pulled Tight on short trip, Reamed 90 ft back to bottom, Sample full box.  
 Were to be on bank @ 6:45, Started out 10:45 !!