



KANSAS CORPORATION COMMISSION 1053575  
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 # 31548  
Name: Discovery Drilling  
Wellsite Geologist: Jason Alm  
Purchaser: NCRA

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SIOW  
 Gas     D&A     ENHR     SIGW  
 OG     GSW     Temp. Abd.  
 CM (Coal Bed Methane)  
 Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_  
06/29/2010    07/05/2010    07/23/2010  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 15-135-25070-00-00

Spot Description: \_\_\_\_\_  
SE NE NE SE Sec. 26 Twp. 18 S. R. 22  East  West  
2,187 Feet from  North /  South Line of Section  
36 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE     NW     SE     SW

County: Ness

Lease Name: Witthuhn Unit Well #: 1-26

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

Producing Formation: Mississippian

Elevation: Ground: 2144 Kelly Bushing: 2152

Total Depth: 4239 Plug Back Total Depth: 4238

Amount of Surface Pipe Set and Cemented at: 1420 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 27000 ppm Fluid volume: 200 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: 04/08/2011



1053575

Operator Name: American Warrior, Inc. Lease Name: Witthuhn Unit Well #: 1-26  
 Sec. 26 Twp. 18 S. R. 22  East  West County: Ness

**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 checked="" type="checkbox"/> Log Formation (Top), Depth and Datum	<input 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 Induction, Compensated Neutron Density 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	1420	SMD	450	1/4# flocele
Production	7.875	5.5	15.5	4238	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	0-2200	SMD	150	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
9	4228-4238		

TUBING RECORD:	Size: <u>2.375</u>	Set At: <u>4231</u>	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>07/28/2010</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 Bbls. <u>30</u>	Gas Mcf	Water Bbls. <u>2</u>	Gas-Oil Ratio <u>41</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. (Submit ACO-5) <input type="checkbox"/> Commingled (Submit ACO-4) <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>4228-4238</u>
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Witthuhn Unit 1-26
Doc ID	1053575

Tops

Anhydrite	1409	743
Heebner	3602	1450
Lansing	3648	-1496
BKC	3965	-1813
Pawnee	4054	-1902
Ft. Scott	4129	-1977
Cherokee	4151	-1999
Mississippian	4220	-2068
TD	4239	-2087



CHARGE TO: Am. ...  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

TICKET  
10907

PAGE 1 OF 1

1. SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
2.	TICKET TYPE <input type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

LINE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE 110	21				5.00	105.00
571 D		1			PUMP CHARGE	1		1126	ft	11.00	1126.00
409		1			TURBOCHARGER 8 5/8	4				90.00	360.00
410		1			TAP PLUG	1				10.00	10.00
412		1			BURRIF PLUG	1				1.00	1.00
221		1			ADJUST KAL	2				25.00	50.00
281		1			ROAD FLARE	500				1.00	500.00
270		1			PROCEL	113				1.00	113.00
290		1			DEAIR	4				35.00	140.00
330		1			SOME ...	450				15.00	6750.00
5731		1			SOME ...	450				1.00	450.00
533		1			DEAIR	44		0.31	ft	1.00	44.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

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

X  
 DATE SIGNED: 30 June 10 TIME SIGNED: 12:45  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	53
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				10,491	
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	

# SWIFT Services, Inc.

DATE 30 Jun 10 PAGE NO. 1

WELL NO. ANJ 11A 2R DR LEASE W. MITTAMUNN 1-26 JOB TYPE CEMENT 8 5/8 TICKET NO. 18607

TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
			T	C	TUBING	CASING	
22130							CALL LOCATION
2230							STAB. PIPE 8 5/8-23" RTD @ 1420 SET @ 1420 SHO @ 15.41' CEMENTIZERS 1, 3, 8, 29
2340							CIRCULATE.
2010	6	12		✓		200	Pump 500 gal 11.45 ppg
2013	6	20		✓		2000	Pump 20 BBL KCL FLUSH
2019							MIX. CEMENT.
	6	46		✓		200	100 SAS @ 11.8 ppg
	6	57		✓		200	150 SAS @ 12.5 ppg
	6	34		✓		200	100 SAS @ 13.0 ppg
	6	26		✓		200	100 SAS @ 14.5 ppg.
2051							RELEASE PLUG
2055							DISPLACE PLUG.
2110	6	90 1/2		✓		400	PLUG DOWN. SHU. W/FLU LAM. CIRCULATE 30 SAS CEMENT TO PILL
2115							WASH TRUCK W/2.
2145							JOB COMPLETE
							TRUCKS 2-110
							JASON ROGER LANE



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

TICKET  
18708

PAGE 1	OF
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SERVICE LOCATIONS 1. Ness City KS	WELL/PROJECT NO. 1-26	LEASE Wittbach Unit	COUNTY/PARISH Ness	STATE KS	CITY Ness City	DATE 7-5-10	OWNER
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> PARTS	CONTRACTOR Discover Drilling Co.	RIG NAME/NO. 3	SHIPPED VIA	DELIVERED TO Kazina	ORDER NO.	
3.	WELL TYPE Oil	WELL CATEGORY Development	JOB PURPOSE Cement 5 1/2" Casing	WELL PERMIT NO.	WELL LOCATION Barrow W. 10 to		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT	DF		QTY.	UM	QTY.	UM	
575		1			MILEAGE Trk #114	20	mi	5	00	100.00
578		1			Pump Charge Long-tring	1	ea	1400	00	1400.00
221		1			Liquid KCL	2	gal	25	00	50.00
281		1			Mud flush	500	gal	1	00	500.00
402		1			Controlizer	5	ea	55	00	275.00
403		1			Cement Bucket	1	ea	200	00	200.00
406		1			Latch Down Plug + Baffle	1	ea	275	00	275.00
407		1			Insert Float Shoe w/ A. fill	1	ea	275	00	275.00
419		1			Rotating Head Rental	1	ea	150	00	150.00

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

*[Signature]*  
 DATE SIGNED 7-5-10 TIME SIGNED 0430  
 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	3175.00
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				Page #2	3930.00
WE UNDERSTOOD AND MET YOUR NEEDS?				TAX	
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				TOTAL	
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?					
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					

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

SWIFT OPERATOR *[Signature]* APPROVAL

Thank You!



**JOB LOG**

**SWIFT Services, Inc.**

DATE 7-5-10 PAGE NO. 1

CUSTOMER American Well WELL NO. 1-26 LEASE Wittkuhn JOB TYPE Cement 5 1/2" casing TICKET NO. 18708

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0430							On Location TD-4239' Cont 1, 2, 3, 4, 80 7P-4241' Bucket 5 PS-4238' SS-42'
	0440				✓			Start 5 1/2" casing
	0615							Break Circulation
	0645	6 3/4	32		✓		200	Pump Mud Flush + KCl Flush
	0650	3	7		✓			Plug Rat Hole 30 sks
	0655	3	5		✓			Plug Mouse Hole 20 sks
	0700	4 1/2			✓		200	Start Cement 125 sks @ 15.5 spm
			30				-	Shut Down Release Plug Wash Pump
	0715	6 3/4			✓		200	Start Displacement
		6 3/4	80		✓		300	Lift Cement
							750	Max Lift
	0730		99.8				1500	Land Plug Release - Held
								Wash Truck
	0800							Job Complete Thank you Eric, Dave + Rob





CHARGE TO: AMERICAN WARRIOR

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP CODE \_\_\_\_\_

TICKET  
18621

PAGE 1 OF 1

1. SERVICE LOCATIONS <u>NESS CITY</u>	WELL/PROJECT NO. <u>WITTHUHN 1-26</u>	LEASE <u>NESS</u>	COUNTY/PARISH <u>NESS</u>	STATE <u>KS</u>	CITY <u>BAZINE, KS</u>	DATE <u>15 July 10</u>	OWNER
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO <u>LOCATION</u>	ORDER NO.	
3.	WELL TYPE <u>OIL</u>	WELL CATEGORY <u>DEVELOPMENT</u>	JOB PURPOSE <u>CEMENT BETWEEN 85'-5'</u>	WELL PERMIT NO.	WELL LOCATION <u>10. 1/2 N</u>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT	DF		QTY.	UM	QTY.	UM	
575		1			MILEAGE #110	20	MIL	5	00	100 00
577		1			PUMP CHARGE	1	JOB	850	00	850 00
590		1			D-AIR	1	KGAL	35	00	35 00
596		1			FLOCCUL	38	LBs	1	50	57 00
330		1			SWIFT MULTI DENSITY STANDARDS	150	00	15	00	2250 00
581		1			SERVICE CHARGE CEMENT	150	SAS	1	50	225 00
582		1			MINIMUM DRAFFAGE	14978	1bs	14978	TM	250 00

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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 15 July 10 TIME SIGNED 1530  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	3767 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?					
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO			TAX 6.3%	147 55
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	3914 55

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

SWIFT OPERATOR [Signature] APPROVAL \_\_\_\_\_

Thank You!

**JOB LOG**

**SWIFT Services, Inc.**

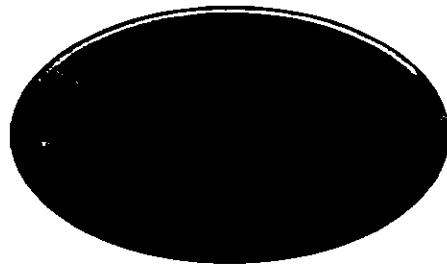
DATE 15 July 10 PAGE NO. 1

CUSTOMER: BIRCHKIN WARRICK WELL NO.: LEASE: LOT 111-111-1-210 JOB TYPE: Cement Bitumen Grout TICKET NO.: 181021

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1345							ON LOCATION
	1350				✓		500	PRESSURE 110 CASING SHUT IN
	1400	2 1/2			✓		400	TAKE TWT RATE
	1410							max MOMENT
		3	6.2		✓		400	1512 SRS SMID @ 12.2 ppg
	1435						200	SHUT W/ 16 IN
	1439							WASH TRUCK
	1530							JOB COMPLETE
								THANKS \$110
								JASON JEFF BRIAN

# **Geological Report**

American Warrior, Inc.  
**Witthuhn Unit #1-26**  
2200' FSL & 40' FEL  
Sec. 26 T18s R22w  
Ness County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Witthuhn Unit #1-26  
2200' FSL & 40' FEL  
Sec. 26 T18s R22w  
Ness County, Kansas  
API # 15-135-25070-0000

Drilling Contractor: Discovery Drilling Co, Inc. Rig #3

Geologist: Jason Alm

Spud Date: June 29, 2010

Completion Date: July 5, 2010

Elevation: 2144' Ground Level  
2152' Kelly Bushing

Directions: Bazine KS, 1 mi. West on Hwy 96, North into location.

Casing: 1420' 8 5/8" surface casing  
4238' 5 1/2" production casing

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

Drilling Time: 3500' to RTD

Electric Logs: Log Tech, Inc. "Chris Desaire"  
CNL/CDL, DIL

Drillstem Tests: Two, Trilobite Testing, Inc. "Brian Fairbank, Paul Simpson"

Problems: None

Remarks: None

## Formation Tops

Formation	American Warrior, Inc. Witthuhn Unit #1-26 Sec. 26 T18s R22w 2200' FSL & 40' FEL
Anhydrite	1409', +743
Base	1442', +710
Heebner	3602', -1450
Lansing	3648', -1496
BKc	3965', -1813
Pawnee	4054', -1902
Fort Scott	4129', -1977
Cherokee	4151', -1999
Mississippian	4220', -2068
LTD	4239', -2087
RTD	4239', -2087

## Sample Zone Descriptions

**Fort Scott (4129', -1977): Covered in DST #1**  
 Ls – Fine to medium crystalline with poor to fair inter-crystalline porosity, light oil stain in porosity, no show of free oil, bright yellow fluorescents, light odor, 56 units hotwire.

**Mississippian Osage (4220', -2068): Covered in DST #2**  
 Dolo – Δ – Fine sucrosic crystalline with fair vuggy porosity, heavy chert, triptolitic, weathered with good vuggy porosity, good oil stain and saturation, good show of free oil, good odor, good yellow cut fluorescents, 110 units hotwire.

**Drill Stem Tests**  
 Trilobite Testing, Inc.  
 "Brian Fairbank, Paul Simpson"

**DST #1**

**Fort Scott**

Interval (4105' - 4177') Anchor Length 72'

IHP	- 2122 #	
IFP	- 30" - Built to 2.5 in.	61-63 #
ISI	- 45" - Dead	128 #
FFP	- 30" - Built to 1 in.	65-68 #
FSI	- 45" - Dead	100 #
FHP	- 2035 #	
BHT	- 115°F	

Recovery: 15' SOCM 2% Oil

**DST #2**

**Mississippian Osage**

Interval (4225' - 4237') Anchor Length 12'

IHP	- 2124 #	
IFP	- 15" - B.O.B. 3 min.	58-116 #
ISI	- 30" - Built to 6 in.	1204 #
FFP	- 10" - B.O.B. 1 min.	152-215 #
FSI	- 30" - Built to 3 in.	1148 #
FHP	- 2073 #	
BHT	- 117°F	

Recovery: 330' GIP  
 540' GCO  
 30' MCO 85% Oil

**Structural Comparison**

<b>Formation</b>	<b>American Warrior, Inc. Witthuhn Unit #1-26 Sec. 26 T18s R22w 2200' FSL &amp; 40' FEL</b>	<b>American Warrior, Inc. Witthuhn Heirs #1-35 Sec. 35 T18s R22w 1060' FNL &amp; 950' FEL</b>	<b>American Warrior, Inc. Witthuhn Heirs #1-25 Sec. 25 T18s R22w 775' FSL &amp; 1950' FWL</b>
Anhydrite	1409', +743	1422', +745	(-2) 1410', +741
Base	1442', +710	NA	NA 1441', +710
Heebner	3602', -1450	3630', -1463	(+13) 3613', -1462
Lansing	3648', -1496	3976', -1509	(+13) 3660', -1509
BKc	3965', -1813	NA	NA 3980', -1829
Pawnee	4054', -1902	4084', -1917	(+15) 4067', -1916
Fort Scott	4129', -1977	4160', -1993	(+16) 4144', -1993
Cherokee	4151', -1999	4180', -2013	(+14) 4163', -2012
Mississippian	4220', -2068	4250', -2083	(+15) 4220', -2069

## **Summary**

The location for the Witthuhn Unit #1-26 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two drill stem tests were conducted one of which recovered commercial amounts of oil from the Mississippian Osage Formation. After all gathered data had examined the decision was made to run 5 ½ inch production casing to further evaluate the Witthuhn Unit #1-26 well.

## **Recommended Perforations**

<b>Mississippian Osage:</b>	<b>(4222' – 4235')</b>	<b>DST #2</b>
-----------------------------	------------------------	---------------

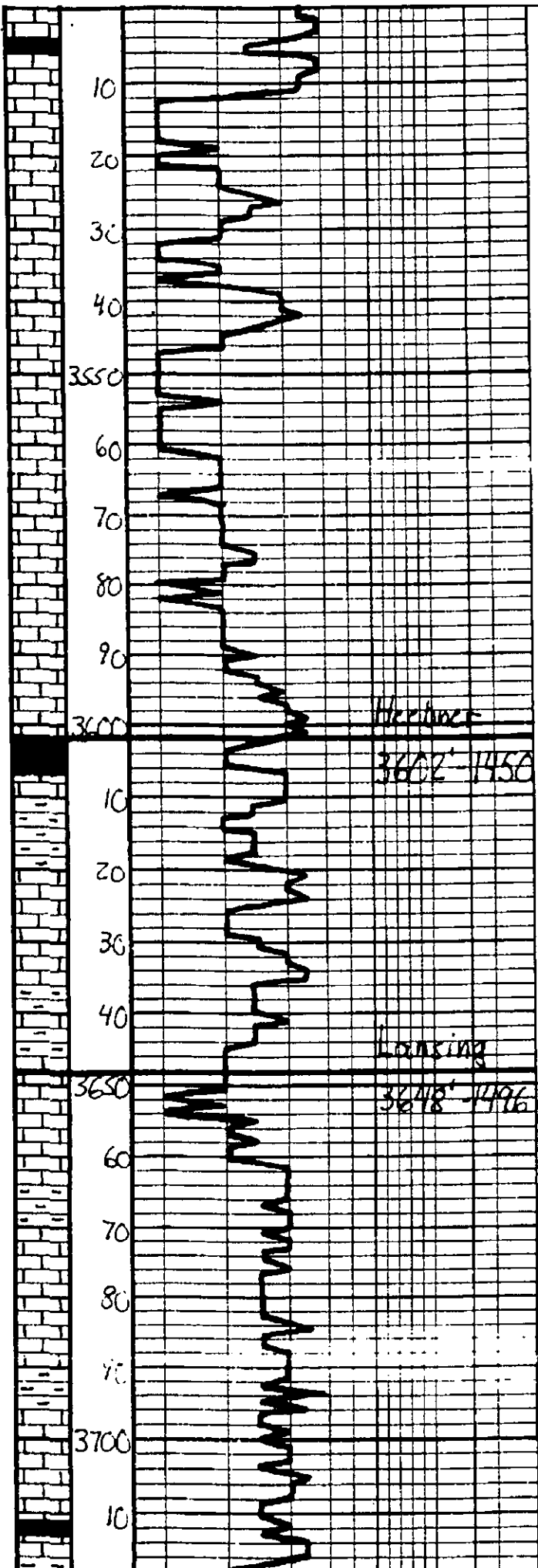
Respectfully Submitted,

Jason Alm  
Hard Rock Consulting, Inc.

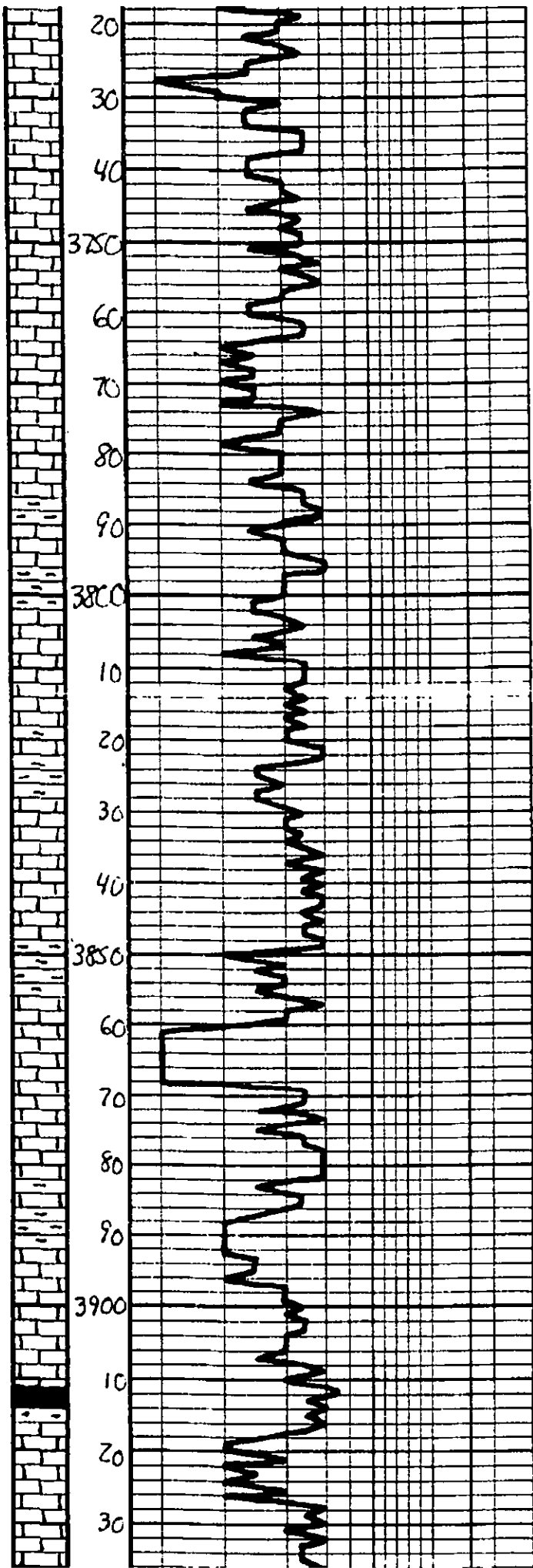








Sh - Dk grey	Gen on location @ 10:00 p.m. 7-2-2010
Ls - Tan. grey. Fossilifer. Mottled	
Ls - ala	
Ls - Tan. grey. Mottled, Fossilifer	
Sh - grey	
Ls - ala	
Ls - Tan. grey. Mottled, Subw. Mottled, DMS	
Sh - Blk, Carb. Fossilifer	
Sh - grey. Ben. Gen	
Ls - Tan. Lt. grey. Fossilifer. Fairly interbedded. Barren	
Sh - grey. Ben	
Sh - alc. Gen	
Ls - Tan. Lt. grey. Fossilifer. Fossiliferous. Fairly coarse. Barren	
Sh - grey. Ben	
Ls - Tan. Lt. grey. Fossilifer. Fairly coarse. Barren	
Sh - grey. Ben	
Ls - Dk. Lt. grey. Fossilifer. Fairly coarse. Barren. Sub. wht. Lt. grey	
Sh - Dk grey. Blk	



Ls. Top - Lt. Grey, Fa. sh. Sl.  
 Fossiliferous, w/ poor con. f.  
 Barren.

Ls. - a/c

Ls. - a/c

Ls. - Diff. Lt. Grey, Fa. sh. Sl.  
 Fossiliferous, w/ poor con. f.  
 Barren.

Ls. - a/c, Sl. Mottled

Ls. - a/c

Sh. - Grey - Ben

Ls. - Top - Lt. Grey, Fa. sh. Sl.  
 Fossiliferous, w/ poor con. f.

Sh. - Grey - Ben

Ls. - Top - Lt. Grey, Subalg.  
 Fossiliferous

Sh. - Grey - Ben

Ls. - Diff. Lt. Grey, Fa. sh. Sl., Fossiliferous  
 w/ poor con. f. Barren.

Ls. - Diff. Lt. Grey, Fa. sh. Sl., Fossiliferous  
 w/ poor con. f. Barren.

Sh. - Grey - Ben

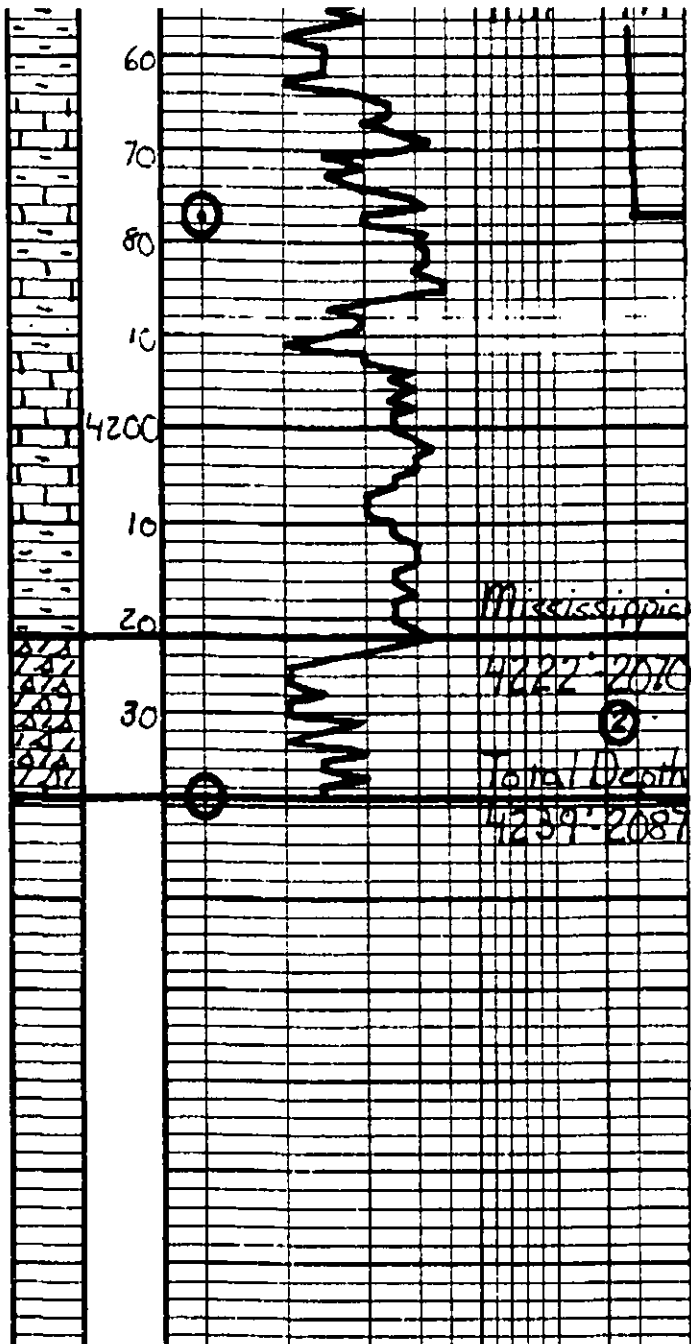
Ls. - Top - Lt. Grey, Fa. sh. Sl., Fossiliferous  
 w/ poor con. f. Barren.

Ls. - a/c

Sh. - Dark Grey

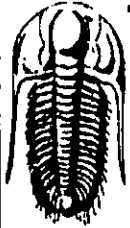
Ls. - Top - Lt. Grey, Fa. sh. Sl., Fossiliferous  
 w/ poor con. f. Barren.





Sh. Gray. Ben. Linn  
 LS - Tan. Gray. Subalio. DNS  
 LS - s.l.c.  
 Sh. Ben. Linn  
 LS - Gray. Subalio. DNS  
 Sp. - Mottled. Green. s. - Yel. - Whit.  
 Sp. - Whit. - Tan. - Red. - Blue. - Green. - Yellow. - Gray. - Black. - Whit. ch.

Recovery:	15' 20.11 2% 0.1
<b>DST#2</b>	Mississippi
	4225'-4237'
	15°-30'-15°-30°
IH	2129#
IF	58.116# min.
ISI	1204# Bu: H to 6 in.
FF	152-215# 308 l min.
FSI	1148# Bu: H to 3 in.
FH	2073#
BHT	117PF
Recovery:	330' GIP 540' LGO 30' MGO 85% 0.1
	Respectfully, Nixon Sh 78-2010



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Am Warrior  
 PO Box 399  
 Garden City, Ks  
 67846  
 ATTN: Jason Alm

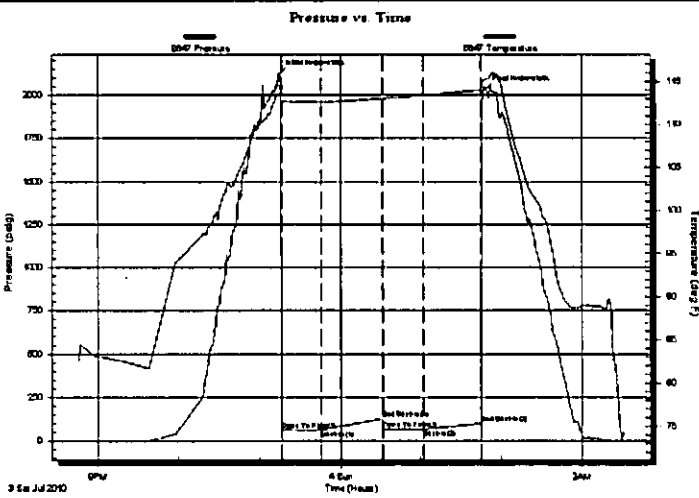
**Witthuhn Unit 1-26**  
**26-18s-22w/Ness**  
 Job Ticket: 38960      DST#: 1  
 Test Start: 2010.07.03 @ 20:45:49

## GENERAL INFORMATION:

Formation: **Ft. Scott**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 23:16:44  
 Time Test Ended: 03:31:13  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Brian Fairbank**  
 Unit No: **41**  
 Interval: **4105.00 ft (KB) To 4177.00 ft (KB) (TVD)**  
 Reference Elevations: **2152.00 ft (KB)**  
**4177.00 ft (KB) (TVD)**  
**2144.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **KB to GR/CF: 8.00 ft**

**Serial #: 8647**      **Inside**  
 Press@RunDepth: **67.76 psig @ 4108.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2010.07.03**      End Date: **2010.07.04**      Last Calib.: **2010.07.04**  
 Start Time: **20:45:49**      End Time: **03:31:13**      Time On Btm: **2010.07.03 @ 23:15:14**  
 Time Off Btm: **2010.07.04 @ 01:48:13**

**TEST COMMENT:** IFP - weak blow throughout 1/4" - 2 1/2"  
 ISI - no blow back  
 FFP - weak blow throughout sur - 1"  
 FSI - no blow back



## PRESSURE SUMMARY

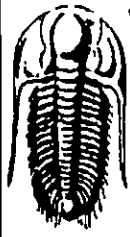
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2121.63	113.57	Initial Hydro-static
2	61.92	112.06	Open To Flow (1)
31	63.99	112.68	Shut-in(1)
76	128.35	113.05	End Shut-in(1)
77	65.48	113.03	Open To Flow (2)
107	67.76	113.42	Shut-in(2)
150	100.70	114.05	End Shut-in(2)
153	2035.04	115.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	VSOCM 2%O, 98%M	0.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Am Warrior  
PO Box 399  
Garden City, Ks  
67846  
ATTN: Jason Alm

Witthuhn Unit 1-26  
**26-18s-22w/Ness**  
Job Ticket: 38960      **DST#: 1**  
Test Start: 2010.07.03 @ 20:45:49

## Mud and Cushion Information

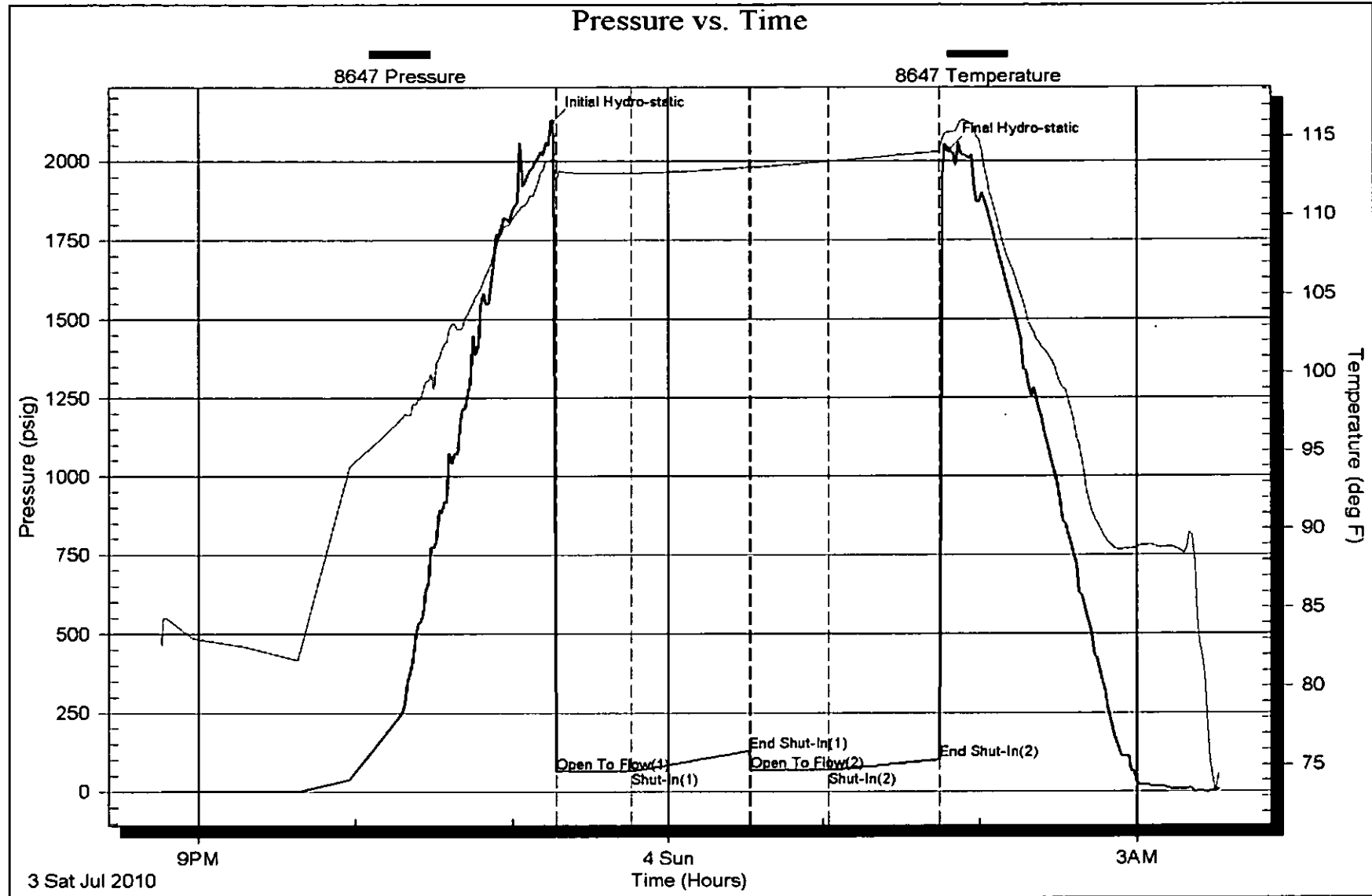
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.36 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

## Recovery Information

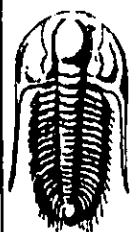
Recovery Table

Length ft	Description	Volume bbl
15.00	VSOCM 2%O, 98%M	0.074

Total Length: 15.00 ft      Total Volume: 0.074 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Am Warrior  
PO Box 399  
Garden City, Ks  
67846  
ATTN: Jason Alm

Withuhn Unit 1-26  
**26-18s-22w/Ness**  
Job Ticket: 38961      **DST#: 2**  
Test Start: 2010.07.04 @ 12:00:26

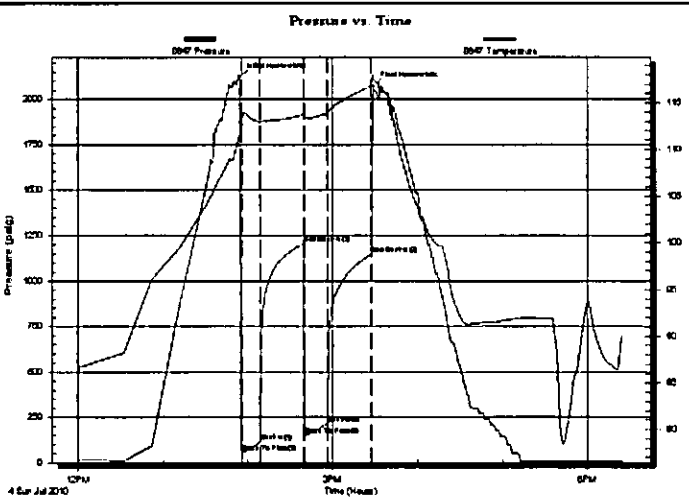
## GENERAL INFORMATION:

Formation: **Miss**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 13:55:56  
Time Test Ended: 18:25:26  
Interval: **4225.00 ft (KB) To 4237.00 ft (KB) (TVD)**  
Total Depth: **4237.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**  
Tester: **Paul Simpson**  
Unit No: **41**  
Reference Elevations: **2152.00 ft (KB)**  
**2144.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

**Serial #: 8647**      **Inside**  
Press@RunDepth: **214.83 psig @ 4227.00 ft (KB)**      Capacity: **8000.00 psig**  
Start Date: **2010.07.04**      End Date: **2010.07.04**      Last Calib.: **2010.07.04**  
Start Time: **12:00:31**      End Time: **18:25:25**      Time On Btm: **2010.07.04 @ 13:54:56**  
Time Off Btm: **2010.07.04 @ 15:28:56**

**TEST COMMENT:** IF- 1" blow building to bottom of bucket in 3 minutes  
IS- weak surface blow built to 6"  
FF- strong -bottom of bucket in 1 minute  
FSI- weak surface built to 3"



## PRESSURE SUMMARY

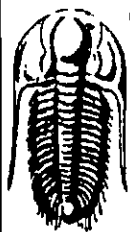
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2124.49	111.74	Initial Hydro-static
1	58.29	113.13	Open To Flow (1)
14	116.04	112.94	Shut-In(1)
45	1203.65	113.73	End Shut-In(1)
46	152.80	113.43	Open To Flow (2)
62	214.83	113.86	Shut-In(2)
93	1148.24	116.78	End Shut-In(2)
94	2072.55	117.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
540.00	gassy oil 20% gas 80% oil	6.56
30.00	muddy oil 85% oil 15% mud	0.38
0.00	330' gas in pipe	0.00

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Am Warrior  
PO Box 399  
Garden City, Ks  
67846  
ATTN: Jason Alm

Witthuhn Unit 1-26  
26-18s-22w/Ness  
Job Ticket: 38961      DST#: 2  
Test Start: 2010.07.04 @ 12:00:26

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	40 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.35 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
540.00	gassy oil 20% gas 80% oil	6.561
30.00	muddy oil 85% oil 15% mud	0.378
0.00	330' gas in pipe	0.000

Total Length: 570.00 ft      Total Volume: 6.939 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

