



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

OPERATOR: License # \_\_\_\_\_

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

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

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

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

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 #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

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

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

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: \_\_\_\_\_

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

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

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: \_\_\_\_\_ Date: \_\_\_\_\_



1053575

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	American Warrior, Inc.
Well Name	Witthuhn Unit 1-26
Doc ID	1053575

Tops

Name	Top	Datum
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



Services, Inc.

CHARGE TO: Academy  
 ADDRESS: Academy  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

TICKET  
 10007

PAGE 1 OF 1

1. SERVICE LOCATIONS: WELL/PROJECT NO. Well 101 LEASE Well 101 COUNTY/PARISH Ness STATE KS CITY Pratt DATE 2/5/06 OWNER \_\_\_\_\_  
 2. TICKET TYPE:  SERVICE CONTRACTOR Academy RIG NAME NO. RL 13 SHIPPED VIA \_\_\_\_\_ DELIVERED TO \_\_\_\_\_ ORDER NO. \_\_\_\_\_  
 3. WELL TYPE: Oil WELL CATEGORY: Development JOB PURPOSE: General 4 5/8 WELL PERMIT NO. \_\_\_\_\_ WELL LOCATION: 101/101/100  
 4. REFERRAL LOCATION: \_\_\_\_\_ INVOICE INSTRUCTIONS: \_\_\_\_\_

JOB REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE 110	2.0	mi	1.00	mi	2.00	2.00
571 D					PUMP SERVICE	1	hr	1136	hr	1136.00	1136.00
409					TRUCKER 8 5/8	4	EA			900.00	3600.00
410					TOP PLUG	1	EA			100.00	100.00
412					BARGE TRAIL	1	EA			110.00	110.00
421					ADDS KAL	2	EA			25.00	50.00
381					ROAD FLARE	500	EA			1.00	500.00
370					FROG	113	EA			1.00	113.00
390					D.AIR	4	EA			25.00	100.00
330					SOME ALUM DUSTING STAINERS	450	EA			1.00	450.00
571					SOME ALUM DUSTING STAINERS	450	EA			1.00	450.00
533					DRAINAGE	49	EA			1.00	49.00

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

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

DATE SIGNED: 2/5/06 TIME SIGNED: 4:45  A.M.  P.M.

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

SURVEY: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?  YES  NO  
 WE UNDERSTOOD AND MET YOUR NEEDS?  YES  NO  
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?  YES  NO  
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?  YES  NO  
 ARE YOU SATISFIED WITH OUR SERVICE?  YES  NO

TAX: \_\_\_\_\_ TOTAL: 10,497.00 53

# SWIFT Services, Inc.

DATE 3/5/10 PAGE NO. 1

WELL NO. AN UNBORN LEASE WITTANN 1-26 JOB TYPE A 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	
2130							ON LOCATION
2230							STAR. PIPE. 8 5/8 - 23# RTD @ 1420 SET @ 1420 SHOEST 15.49' CENTRALIZERS 1, 3, 8, 29
2340							CIRCULATE.
2010	6	12		✓		200	Pump 500 SEC MUD FLUSH
2013	6	20		✓		200	Pump 20 BBL KCL FLUSH
2019							MIX CEMENT.
	6	46		✓		200	100 SKS @ 11.8 PPG
	6	57		✓		200	150 SKS @ 12.5 PPG
	6	34		✓		200	100 SKS @ 13.0 PPG
	6	26		✓		200	100 SKS @ 14.5 PPG
2051							RELEASE PLUG
2055							DISPLACE PLUG.
2110	6	90 1/2		✓		400	PLUG DOWN. SHUT WELL IN. CIRCULATE 30 SKS @ 10 PPG
2115							WASH TRUCK UP.
2145							JOB COMPLETE
							THANKS B/110
							JASON ROGER LANE



Services, Inc.

CHARGE TO: American Well Services Inc.  
 ADDRESS: American Well Services Inc.  
 CITY, STATE, ZIP CODE: Ness, KS 67560

TICKET 18708

PAGE 1 OF 1

SERVICE LOCATIONS: 1. Ness City, KS  
 WELL PROJECT NO: W-26  
 LEASE: Withthahunt Ness  
 COUNTY/PARISH: Ness  
 RIG NAME/NO: 3  
 STATE: KS  
 CITY: Ness City  
 DATE: 7-5-10  
 OWNER:   
 ORDER NO:   
 TICKET TYPE: SERVICE  
 CONTRACTOR: Discovera Drilling Co.  
 WELL CATEGORY: Development  
 JOB PURPOSE: Cement 5 1/2" casing  
 WELL PERMIT NO:   
 WELL LOCATION: Barrow Wellsite

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC.	ACCT.	DE							
575					MILEAGE TRK #114	20	mi			5.00	100.00
578					Pump Charge Longstring	1	hr			1400.00	1400.00
221					liquid KCL	25	gal			20.00	500.00
281					Mud flush	500	gal			1.00	500.00
402					Centralizer	5	sec			55.00	275.00
403					Cement Backset	1	hr			200.00	200.00
406					Fetch Down Plug + Buffer	1	hr			225.00	225.00
407					Insert Floet Sloss w/AMM	1	hr			275.00	275.00
419					Rotating Head Rental	1	hr			150.00	150.00

**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  
 DATE SIGNED: 7-5-10  
 TIME SIGNED: 0430  
 SIGNATURE: [Signature]

**REMIT PAYMENT TO:**  
 SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UN-DECIDED	DIS-AGREE
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	

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL: 3175.00  
 TAX: 3930.00  
 TOTAL: 7105.00

SWIFT OPERATOR: [Signature]  
 CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: [Signature]  
 APPROVAL: [Signature]  
 The customer hereby acknowledges receipt of the materials and services listed on this ticket.  
 Thank You!



Switzer, Inc.

PO Box 466  
Ness City, KS 67560  
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 18208

CUSTOMER American Wellbuck Inc.

WELL Wellbuck Unit #12

DATE 7-5-10

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE PART NUMBER	ACCOUNTING	LINE	DESCRIPTION	WEIGHT	DATE	AMOUNT	
325			1	Standard Cement	175 sks	12 <sup>00</sup>	2100 <sup>00</sup>	
276			1	Flocele	95 lbs	1 <sup>50</sup>	67 <sup>50</sup>	
283			1	S-1+	900 lbs	01 <sup>15</sup>	135 <sup>00</sup>	
284			1	Cel Seal	85 lbs	30 <sup>00</sup>	240 <sup>00</sup>	
290			1	O-Air	29.1	35 <sup>00</sup>	70 <sup>00</sup>	
292			1	Halad 322	125 lbs	7 <sup>00</sup>	875 <sup>00</sup>	
581			1	SERVICE CHARGE		1 <sup>50</sup>	262 <sup>50</sup>	
582			1	TOTAL WEIGHT 18320	LOADED MILES 20	TOTAL WEIGHT 18320	TOTAL MILES 20	250 <sup>00</sup>
							3930 <sup>00</sup>	

CONTINUATION OF 3930.00

**JOB LOG**

**SWIFT Services, Inc.**

DATE 7-5-10 PAGE NO.

CUSTOMER American Warrior WELL NO. 1-26 LEASE Witthuhn 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' Coil 1,2,3,4,80 TP-4241' Bucket 5 PS-4238' ST-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 Kat Hole 30 sks
	0655	3	5	✓				Plug Mouse Hole 20 sks
	0700	4 1/2		✓			200	Start Cement 12 sks coil 5, 5 sks
			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 Coat 1, Dave + Rob





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

TICKET 18621

PAGE 1 OF 1

SERVICE LOCATIONS  
 1. Wessley  
 2.  
 3.  
 4. REFERRAL LOCATION

WELL/PROJECT NO. LEASE COUNTY/PARISH STATE CITY DATE  
WITTHAMM 1-26 Ness KS BAZINE, KS 15 Jul 10

TICKET TYPE CONTRACTOR RIG NAME/NO. SHIPPED DELIVERED TO ORDER NO.  
 SERVICE  SALES  
 SALES  
Oil DEVELOPMENT CENTRI BETWEEN 85g-52 ADDITION 15 Jul 10

WELL TYPE WELL CATEGORY JOB PURPOSE WELL PERMIT NO. WELL LOCATION  
 SALES  
OIL DEVELOPMENT CENTRI BETWEEN 85g-52 100' x 100'

INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE @ 110	20	mi			5.00	100.00
577					PUMP CHANGE	1	JOB			850.00	850.00
240					D-AIR	1	kg			35.00	35.00
242					fluid	38	lbs			1.50	57.00
330					SOUTH DUT DENSITY STANDARD	150	oz			15.00	2250.00
521					SEWEL CHANGE CENTRI	150	lbs			1.50	225.00
532					Minimum Drayage	14978	lbs	14978	lbm	250.00	250.00

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

DATE SIGNED 15 Jul 10 TIME SIGNED 1530  A.M.  P.M.

DATE SIGNED 15 Jul 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  
 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?

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 3767

TOTAL 3914.55

TAX 147.55

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.

CUSTOMER AMERICAN OILFIELD WELL NO. LEASE WILKINSON 1-26 JOB TYPE CEMENT BONDING 8 5/8" TICKET NO. 18621

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 UP CASING SHUT IN.
	1400	2 1/2			✓		400	TAKE TOT RATE
	1410							MAX PERMIT
		3	62		✓		400	150 SRS SMDC @ 12.2 ppm
	1435						200	SHUT OFF IN
	1439							WASH TRUCK
	1530							JOB COMPLETE
								THANKS B110
								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

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

## 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	<b>1409', +743</b>	1422', +745	1410', +741
Base	<b>1442', +710</b>	NA	1441', +710
Heebner	<b>3602', -1450</b>	3630', -1463	3613', -1462
Lansing	<b>3648', -1496</b>	3976', -1509	3660', -1509
BKc	<b>3965', -1813</b>	NA	3980', -1829
Pawnee	<b>4054', -1902</b>	4084', -1917	4067', -1916
Fort Scott	<b>4129', -1977</b>	4160', -1993	4144', -1993
Cherokee	<b>4151', -1999</b>	4180', -2013	4163', -2012
Mississippian	<b>4220', -2068</b>	4250', -2083	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>
-----------------------------	------------------------	---------------

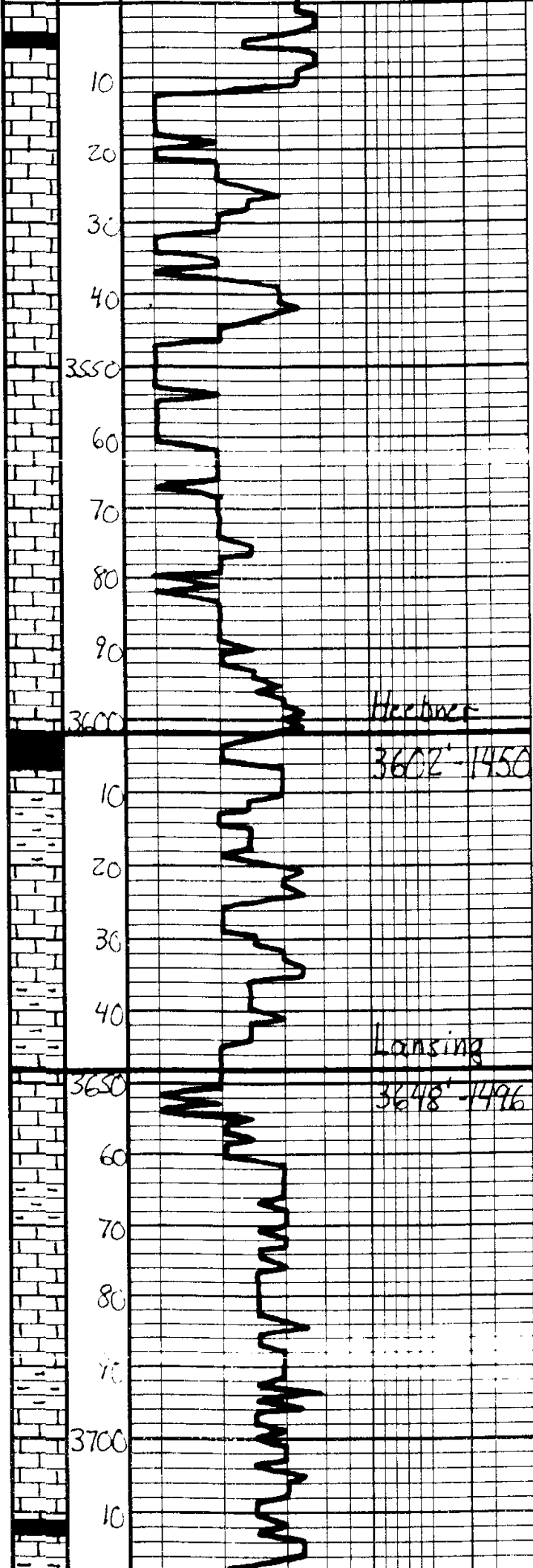
Respectfully Submitted,

Jason Alm  
Hard Rock Consulting, Inc.









Gen on Location @ 10:00 p.m. 7-2-2010

Sh - Dk grey	
Ls - Tan - grey - Fossiliferous - Mottled	
Ls - ala	
Ls - Tan - grey - Mottled, Fossiliferous	
Sh - Dk grey	
Ls - ala	
Ls - Tan - grey - Mottled, Subw'd Mottled, DMS	
Sh - Blk, Carb. Fossiliferous	
Sh - grey - Ben - Gen	
Ls - Tan - Lt. grey - Fossiliferous Fossiliferous with Fossiliferous - Barren	
Sh - grey - Ben	
Sh - alc - Gen	
Ls - Tan - Lt. grey - Fossiliferous Fossiliferous with Fossiliferous - Barren	
Sh - grey - Ben	
Ls - Tan - Lt. grey - Fossiliferous Fossiliferous with Fossiliferous - Barren	
Sh - grey - Ben	
Ls - Dk grey - Lt. grey - Fossiliferous Fossiliferous with Fossiliferous - Barren, w/ Wht. Lt. grey	
Sh - Dk grey - Blk	

20  
30  
40  
3750  
60  
70  
80  
90  
3800  
10  
20  
30  
40  
3850  
60  
70  
80  
90  
3900  
10  
20  
30

Ls. Tan-lt grey, Fa xln, Sh  
Fossil out. w/ poor com of  
Barren

Ls. a/a

Ls. a/a

Ls. Offwh-lt grey, Fa xln,  
Sh. Fossil out. w/ poor com  
of Barren

Ls. a/a, Sl. Mottled

Ls. a/a

Sh. grey-Ben

Ls. Tan-lt grey, Fa xln, Subalg,  
Sh. Fossil out, Shaly, Ben

Sh. grey-Ben

Ls. Tan-lt grey, Subalg,  
DWS

Sh. grey-Ben

Ls. Offwh-lt grey, Fa xln, Fossil  
out. Fossil out. w/ poor com of Barren

Ls. Offwh-lt grey, Fa xln, Subalg,  
Sh. Fossil out. w/ poor com of  
Barren

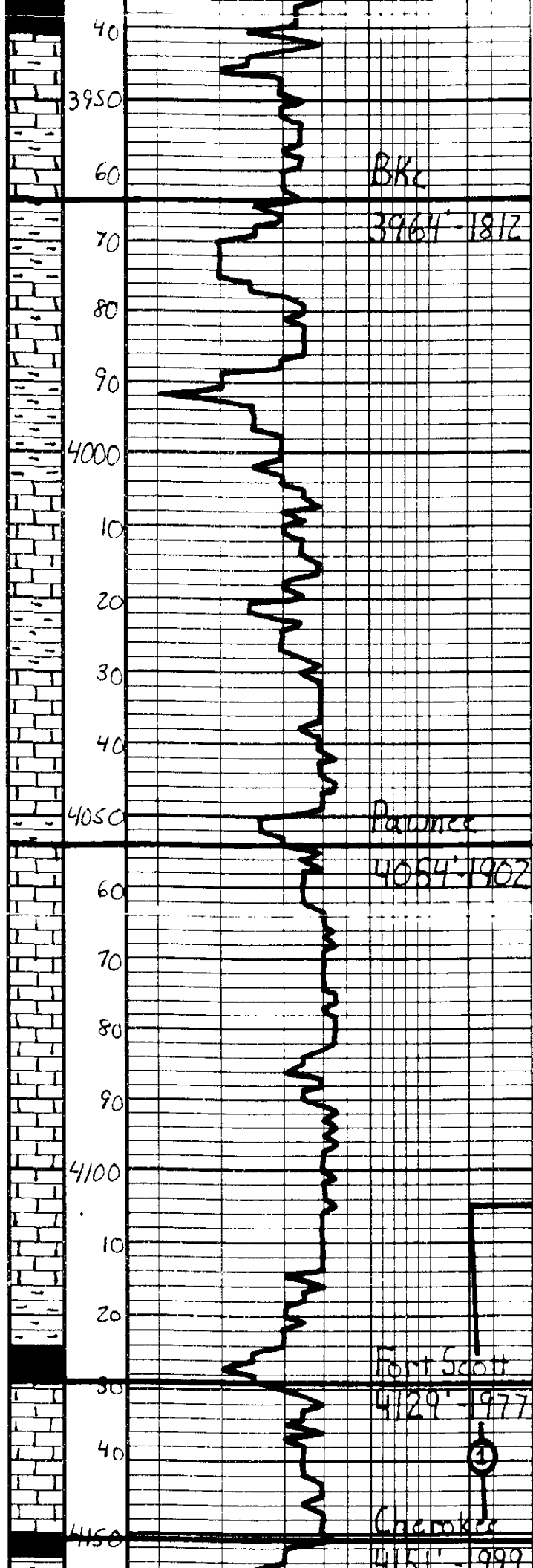
Sh. grey-Ben

Ls. Tan-lt grey, Fa xln, Fossil  
out. w/ poor com of Barren

Ls. a/a

Sh. Dark grey

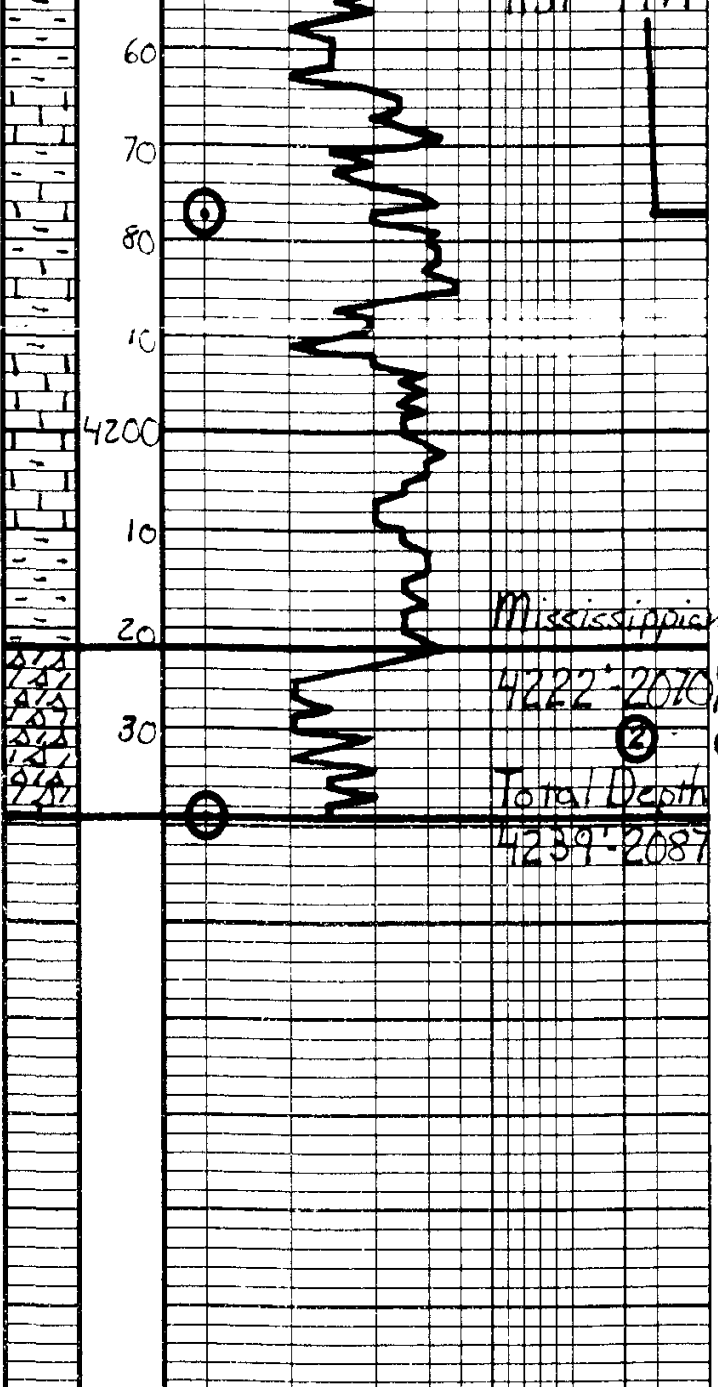
Ls. Tan-lt grey, Fa xln, Fossil  
out. w/ poor com of Fossiliferous  
of Barren



Sh. Gray: Ben  
 Ls. Tan: Gray, Subala, DNS  
 Ls. ala  
 Sh. Gray: Ben: Gen  
 Ls. Tan: Gray, Subala, DNS  
 Sh. Gray: Ben: Gen, "Sixty"  
 Ls. Tan: Lt. Gray, Subala, DNS  
 Ls. ala  
 Sh. Gray: Ben  
 Ls. Tan: Lt. Gray, Subala, DNS  
 Chert, Sl. & Whit: Gray  
 Ls. ala  
 Sh. Gray: Ben  
 Ls. Tan: Gray, Subala, DNS  
 Ls. ala  
 Ls. Gray: Subala, DNS  
 Ls. ala  
 Ls. ala, Sh. Mattent  
 Sh. Dk Gray  
 Sh. Blk, Carb  
 Ls. Tan: Lt. Ben, Fr. Med. algal  
 Poor: Fair: laterals in Lt. oil sh  
 (N. Fr. Blk. Whit. Lt. Carb  
 & Whit. Lt. Gray - dog  
 Ls. Tan: Lt. Gray, Subala, DNS  
 Sl. S. Mattent  
 Sh. Dk Gray

<b>DST #1</b>	
Fort Scott	
4105' - 4177'	
30" 45" - 20" 45"	
IH	2122#
IF	61-63# Built to 2 1/2 in
ISC	128# Dead
FF	65-68# Built to line
FST	100# Dead
FH	2035#
BHT	115°F

23  
56



Sh - Gray - Ben - Green  
 Ls - Tan - Gray, Subula, DNS  
 Ls - s/c  
 Sh - Tan - Green  
 Ls - Gray, Subula, DNS  
 Sp - Multicolored, A - Yellow -  
 Whit.  
 ΔO - Whit - Tan, w/ Fair  
 waxy & thin clay lam. Ben  
 to sup. sh w/ Gassy SFS  
 Good cut phase, excellent  
 Whit sh

Recovery:	15' 30" 111 2% 0.1
<b>DST#2</b>	
Mississippian	4225'-4237'
	15' 30" 15' 30"
IH	2124#
IF	58-116# 308 8 min.
IS1	1204# 80# to 6in.
FF	152-215# 308 1 min.
FSI	1148# 80# to 3in.
FH	2073#
BHT	117PF
Recovery:	
	330' GIP
	540' LGO
	30' MGO 85% 0.1
	Respectfully, Jason 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

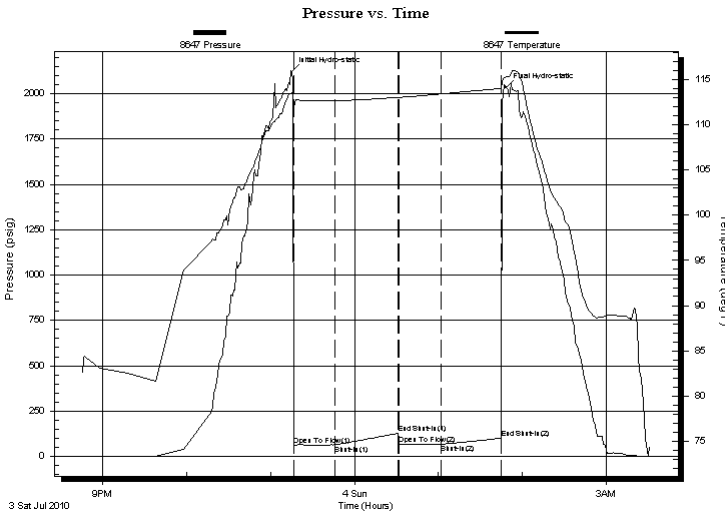
## GENERAL INFORMATION:

Formation: **Ft. Scott**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:16:44  
 Time Test Ended: 03:31:13  
 Interval: **4105.00 ft (KB) To 4177.00 ft (KB) (TVD)**  
 Total Depth: 4177.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition:  
 Test Type: Conventional Bottom Hole  
 Tester: Brian Fairbank  
 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: 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	V/SOCM 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

**Witthuhn Unit 1-26**

PO Box 399  
Garden City, Ks  
67846

**26-18s-22w/Ness**

Job Ticket: 38960

**DST#: 1**

ATTN: Jason Alm

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

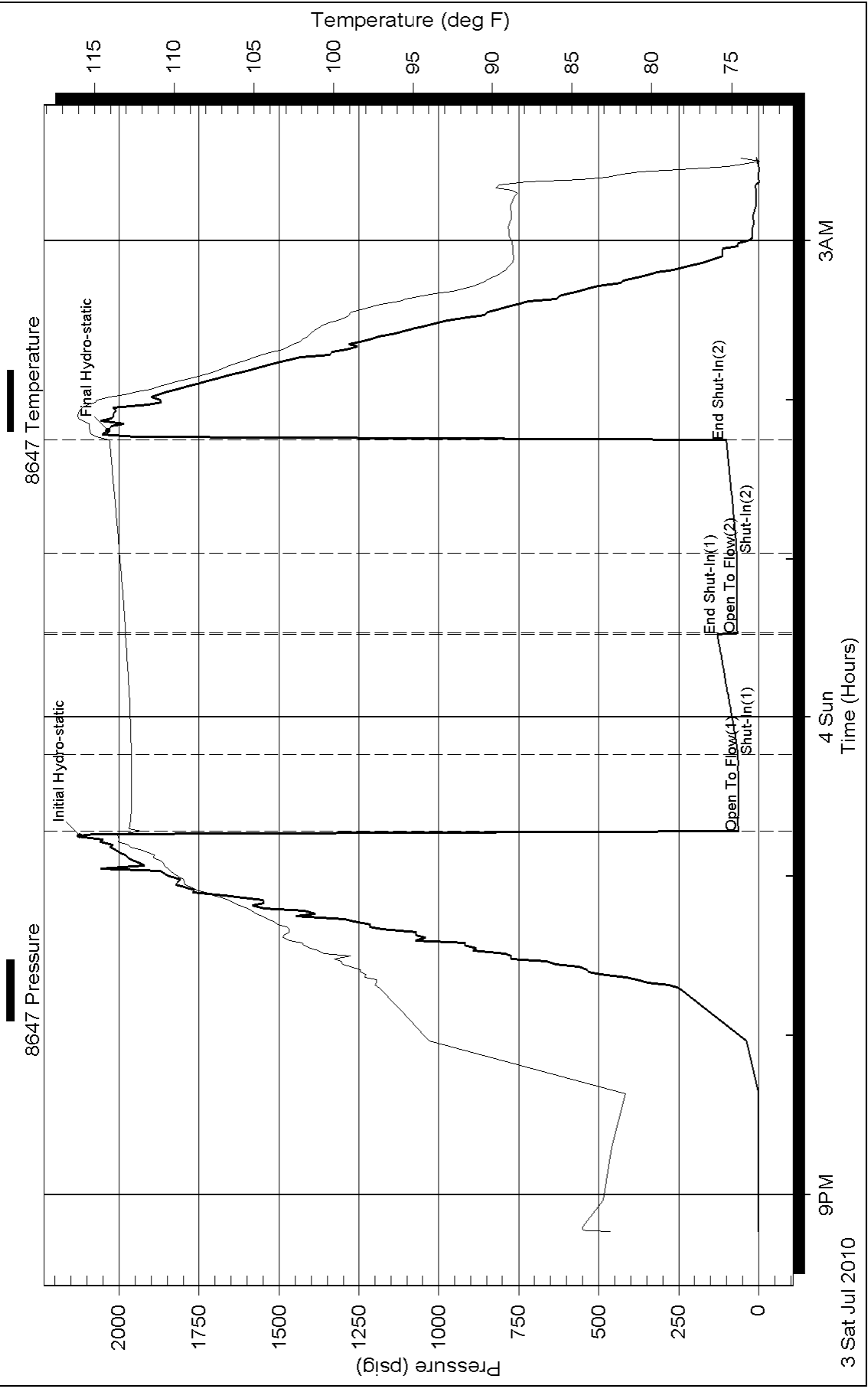
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







**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: 38961      **DST#: 2**  
Test Start: 2010.07.04 @ 12:00:26

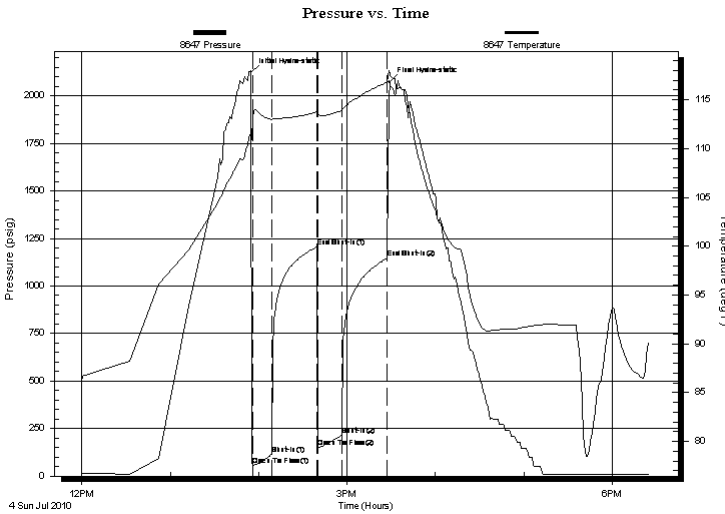
## GENERAL INFORMATION:

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 @ Run Depth: 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  
FS- weak surface blow 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

**Witthuhn Unit 1-26**

PO Box 399  
Garden City, Ks  
67846

**26-18s-22w/Ness**

Job Ticket: 38961

**DST#: 2**

ATTN: Jason Alm

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:

bbbl

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:

