



# Geologic Report

Drilling Time and Sample Log

Drilling Contractor	Petromark Drilling, LLC. Rig #1		
Commenced	7-19-2013	Completed	7-26-2013
Samples Saved From	4000'	To	RTD
Drilling Time Kept From	3700'	To	RTD
Samples Examined From	4000'	To	RTD
Geological Supervision From	4000'	To	RTD

Displacement 3600' Mud Type Chemical

## Summary and Recommendations

The location for the Felder #2-13 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 1/2 inch production casing to further evaluate the Felder #2-13 well.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.

Operator <b>American Warrior, Inc.</b>		Elevation 2235'	
Lease <b>Felder</b>	No. <b>2-13</b>	DF 2229'	GL
API # <b>15-135-25638-0000</b>		Casing Record Surface	
Field <b>Bernice</b>		8 5/8" @ 222'	
Location <b>335' FSL &amp; 2310' FEL</b>		Production 5 1/2" @ 4396'	
Sec. <b>13</b>   Twp. <b>20s</b>   Rge. <b>21w</b>		Electrical Surveys	
County <b>Ness</b>   State <b>Kansas</b>		None	
<b>Formation</b>	<b>Log Tops</b>	<b>Sample Tops</b>	<b>Struct Comp</b>
Anhydrite		1440' +795	-5
Base		1468' +767	-5
Heebner		3761' -1526	-3
Lansing		3811' -1576	-1
BKc		4155' -1920	
Pawnee		4284' -2049	-6
Fort Scott		4312' -2077	-8
Cherokee		4330' -2095	-7
Mississippian		4384' -2149	-3
Total Depth		4397' -2162	

Reference Well For Structural Comparison American Warrior, Inc. Felder #1-13  
1800' FSL & 560' FEL Sec. 13 T20s R21w Ness Co. Kansas

The geological log chart displays depth in feet on the vertical axis (10 to 90+) and drilling time in minutes on the horizontal axis (0 to 15). Key formations are marked with vertical lines and labels: Heebner (3761' -1526), Lansing (3811' -1576), BKc (4155' -1920), Pawnee (4284' -2049), Fort Scott (4312' -2077), Cherokee (4330' -2095), and Mississippian (4384' -2149). The chart includes a legend for lithology, a sample log table, and handwritten geological descriptions and remarks.

REMARKS	SAMPLE DESCRIPTIONS
Geo on Loc. 1:00 p.m. 7-24-2013	
	Ls. Tan. Lt. Gr. Subsh. Sl. Dol.
	Sh. Brn
	Ls. Tan. Lt. Gr. Subsh. Dol. w/ Tan. ool. Brn
	Sh. Brn-Gr
	Ls. Tan. Lt. Gr. Subsh. Dol. w/ Tan. ool. Brn
	Ls. a/a. Mostly DNS
	Sh. Gr
	Ls. Tan. Lt. Gr. Subsh. Dol. w/ Tan. ool. Brn
	Ls. a/a. Mostly DNS
	Sh. Dk Gr - Blk
	Ls. Tan. Gr. Sl. M. Hk. L. Subsh.
	Sh. Blk
	Ls. Tan. Gr. Subsh. DNS
	Ls. a/a
	Sh. Brn - Gr. Gr
	Ls. Lt. Gr. Subsh. DNS
	Sh. Brn - Gr
	Ls. Tan. Lt. Gr. Subsh. Sl. Dol. w/ Tan. ool. Brn
	Ls. a/a
	Sh. Gr. Gr - Brn. Sl. Silty
	Ls. Tan. Lt. Gr. Subsh. DNS
	Sh. Gr - Brn
	Ls. Lt. Gr. Subsh. DNS
	Ls. a/a
	Sh. Dk Gr
	Sh. Gr. Gr - Brn
	Ls. Gr. Subsh. DNS
	Sh. Blk Carb.
	Ls. Dk Gr - Tan. Subsh. DNS
	Sh. Dk Gr
	Sh. Gr - Gr - Brn
	Ls. Tan. Subsh. DNS
	Sh. Gr. Gr - Brn
	Ls. Gr. Gr - Brn
	Sh. a/a. Sl. Lt. Tan

**DST #1**  
Mississippian  
4387' - 4351'  
10' 30" - 10' 30"  
IH 2087 #  
IF 135' - 260' #  
ISI 135' #  
FF 337' - 408' #  
FSI 135' #  
FH 2076 #  
BHT 128' F  
RECOVERY: 300' GTP  
690' GLO  
496' HOS  
186' GLO  
38.8' GLO

Respectfully,  
Jason T Alm  
7-27-2013