

Geological Report

HCH #1-22
1160' FNL & 2015' FEL
Sec. 22 T20s R22w
Ness County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
HCH #1-22
1160' FNL & 2015' FEL
Sec. 22 T20s R22w
Ness County, Kansas
API # 15-135-25988-0000

Drilling Contractor: Discovery Drilling Rig #4

Geologist: Jason T Alm

Spud Date: February 15, 2018

Completion Date: February 22, 2018

Elevation: 2243' Ground Level
2251' Kelly Bushing

Directions: Bazine KS, West on Hwy 96 2 mi to BB Rd. South
10 mi to 30 Rd. West and South into location.

Casing: 209' 8 5/8" surface casing

Samples: 10' wet and dry, 4000' to RTD

Drilling Time: 3700' to RTD

Electric Logs: None

Drillstem Tests: Two, Trilobite Testing, Inc. "Brandon Turley"

Problems: None

Remarks: None

Formation Tops

Formation	American Warrior, Inc.
	HCH #1-22
	Sec. 22 T20s R22w
	1160' FNL & 2015' FEL
Anhydrite	1474' +777
Base	1511' +740
Heebner	3724' -1473
Lansing	3773' -1522
BKC	4093' -1842
Pawnee	4212' -1961
Fort Scott	4285' -2034
Cherokee	4310' -2059
Mississippian	4386' -2135
Osage	4411' -2160
RTD	4427' -2176

Sample Zone Descriptions

Mississippian Osage (4411', -2160): **Covered in DST #1,2**

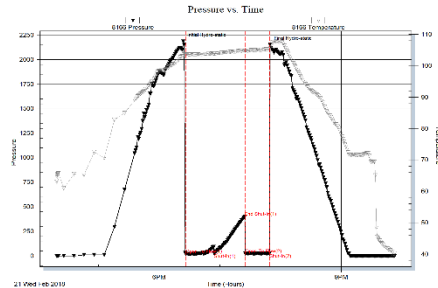
Δ – White, slightly triptolic with fair vuggy porosity, light oil stain in porosity, show of free oil on cup, light odor, 38 units hotwire.

Drill Stem Tests

Trilobite Testing, Inc.
"Brandon Turley"

DST #1 Mississippian Osage

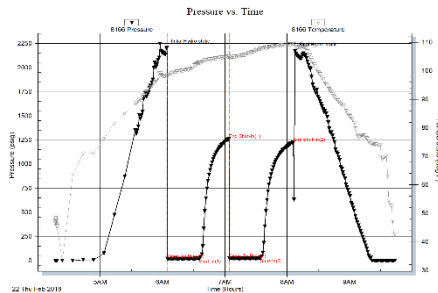
Interval (4331' – 4417') Anchor Length 86'
 IHP – 2184 #
 IFP – 30" – Built to 1 ¼ in. 20-24 #
 ISI – 30" – Dead 400 #
 FFP – 20" – Dead 23-25 #
 FHP – 2150 #
 BHT – 105°F



Recovery: 10' Mud

DST #2 Mississippian Osage

Interval (4417' – 4427') Anchor Length 10'
 IHP – 2205 #
 IFP – 30" – Built to 1 in. 18-21 #
 ISI – 30" – Dead 1264 #
 FFP – 30" – Built to ¼ in. 21-23 #
 FSI – 30" – Dead 1230 #
 FHP – 2170 #
 BHT – 109°F



Recovery: 15' WCM 5% Water

Structural Comparison

	American Warrior, Inc. HCH #1-22 Sec. 22 T20s R22w 1160' FNL & 2015' FEL	Mack Oil Co. Cox #1 Sec. 22 T20s R22w C NW NE		American Warrior, Inc. Brad #1-23 Sec. 23 T20s R22w 2200' FSL & 1525' FWL	
Formation					
Anhydrite	1474' +777	1477' +776	(+1)	1462' +779	(-2)
Base	1511' +740	NA	NA	1499' +742	(-2)
Heebner	3724' -1473	3728' -1475	(+2)	3725' -1484	(+11)
Lansing	3773' -1522	3776' -1523	(+1)	3773' -1532	(+10)
BKC	4093' -1842	4095' -1842	FL	4094' -1853	(+11)
Pawnee	4212' -1961	4214' -1961	FL	4206' -1965	(+4)
Fort Scott	4285' -2034	4290' -2037	(+3)	4284' -2043	(+9)
Cherokee	4310' -2059	4316' -2063	(+4)	4308' -2067	(+8)
Mississippian	4386' -2135	4393' -2140	(+5)	4377' -2136	(+1)
Osage	4411' -2160	4425' -2172	(+12)	4389' -2148	(-12)

Summary

The location for the HCH #1-22 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two Drill Stem Tests were conducted, both were negative. After all gathered data had been examined the decision was made to plug and abandon the HCH #1-22 well.

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.