

JAMES C. MUSGROVE

Petroleum Geologist, LLC
212 Main Street
P.O. Box 215
Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

American Warrior Inc.
Jean #1-2
NE-SW-SE-SW (338' FSL & 1765' FWL)
Section 2-18s-8w
Rice County, Kansas

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5 1/2" Production Casing Set

Contractor: Duke Drilling Co. (rig #8)
Commenced: August 22, 2014
Completed: August 29, 2014
Elevation: 1784' K.B., 1782' D.F., 1776' G.L.
Casing program: Surface; 8 5/8" @ 413'
Production, 5 1/2" @ 3365'
Sample: Samples saved and examined 2600' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2600 ft. to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tests: There were four (4) Drill Stem Tests ran by Trilobite Testing Co.
Electric Log: By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity, Micro and Sonic.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	385	+1399
Heebner	2695	-911
Toronto	2718	-934
Douglas	2733	-949
Brown Lime	2821	-1037
Lansing	2848	-1064
Base Kansas City	3166	-1382
Conglomerate Sand	3221	-1437
Simpson Sand	3260	-1476
Arbuckle	3287	-1503
Rotary Total Depth	3365	-1581
Log Total Depth	3366	-1582

(All tops and zones corrected to Electric Log Measurement)

American Well Inc.
 Lease #1-2
 NE-SW-8-GW (338 FSL & 1785 FWL)
 Section 3-18-8W
 Rice County, Kansas

5 1/2" Production Gaining Set

Contractor: Duke Drilling Co. (fig #8)
Comment: August 29, 2014
Completed: August 29, 2014
Elevation: 1784' K.B., 1782' D.F., 1778' G.L.
Gaining program: Production, 5 1/2" @ 3365'
 Surface, 8 5/8" @ 413'
Samples: Samples saved and examined 2800' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2800 ft. to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tester: There were four (4) Drill Stem Tests run by Tillotite Testing Co.
Electric Log: By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity, Micro and Sonic.

<u>Sub-Sea Datum</u>	<u>Log Depth</u>	<u>Formation</u>
+1389	385	Anhydrite
-911	2095	Hebner
-934	2718	Toronto
-949	2733	Douglas
-1087	2821	Brown Lime
-1089	2843	Lansing
-1382	3166	Base Kansas City
-1457	3221	Compensated Sand
-1470	3200	Simpson Sand
-1503	3287	Arbuckle
-1581	3365	Rotary Total Depth
-1582	3366	Log Total Depth

(All tops and zones corrected to Electric Log Measurement)

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SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

TOPEKA SECTION

2600-2695' No shows of oil and/or gas was noted in the drilling of the Topeka Section.

TORONTO SECTION

2718-2730' Limestone, cream, tan, finely crystalline, slightly cherty, dense.

LANSING SECTION

2854-2860' Limestone, cream, finely crystalline, few fossiliferous, poor scattered porosity, no shows.

2870-2879' Limestone, tan, finely crystalline, slightly chalky, scattered porosity, good vuggy type porosity, brown spotty stain, show of free oil and questionable odor in fresh samples.

Drill Stem Test #1 2833-2872

--Misrun—Slid tool
30' to bottom (plugged tool and anchor)

Drill Stem Test #2 2833-2872

Times: 30-30-45-45

Blow: Strong

Recovery: 80' mud

**Pressures: ISIP 210 psi
FSIP 318 psi
IFP 135-68* psi
FFP 94-149* psi
HSH 1381-1332 psi**

(*plugging on both flow periods)

2898-2910' Limestone gray, cream, tan, finely crystalline, few fossiliferous, poorly developed porosity; no shows.

2918-2926' Limestone, gray cream, finely crystalline, oolitic, poor porosity, no shows.

SAMPLE ANALYSIS SHOWS OF OIL TESTING DATA, ETC.

TORONTO SECTION

2800-2880
 No shows of oil and/or gas was noted in the drilling of the Toroka Section.

TORONTO SECTION

2718-2780
 Limestone, cream, tan, finely crystalline, slightly cherty, dense.

LANSING SECTION

2884-2880
 Limestone, cream, finely crystalline, few fossiliferous, poor scattered porosity, no shows.

2870-2878
 Limestone, tan, finely crystalline, slightly cherty, scattered porosity, good vuggy type porosity, brown spotty stain, show of free oil and questionable odor in fresh samples.

Drill Stem Test #1 2883-2875

--Main-- 2 1/2" tool
 30' to bottom (plugged tool and anchor)

Drill Stem Test #2 2883-2875

Pressure:	1819	210	psi
Flow:	Strong		
Recovery:	80' mud		
Time:	30-30-48-48		
Pressure:	1819	318	psi
Flow:	150-58		psi
Recovery:	84-100		psi
Time:	1081-1335		psi

(*plugging on both flow periods)

2888-2910
 Limestone gray, cream, tan, finely crystalline, few fossiliferous, poorly developed porosity, no shows.

2918-2888
 Limestone, gray, cream, finely crystalline, oil rich, poor porosity, no shows.

- 2932-2940' Limestone, cream, white, chalky, few fossiliferous, scattered porosity, brown stain and black stain, show of free oil and no odor in fresh samples.
- 2950-2974' Limestone, tan, finely crystalline, oomoldic, good oomoldic and vuggy type porosity, no shows. Plus white/gray opaque chert.
- 3010-3020' Limestone, tan, finely crystalline, few oomoldic, trace spotty stain, no free oil and no odor in fresh samples.
- 3026-3032' Limestone, tan, finely crystalline, dense, few cherty.
- 3026-3032' Limestone, tan, finely crystalline, few oomoldic, trace spotty stain, no free oil and no odor in fresh samples.
- 3036-3050' Limestone, cream, white, fine and medium crystalline, few fossiliferous, chalky, poor visible porosity, no shows.
- 3050-3062' Limestone, as above.
- 3077-3090' Limestone, gray, white, fossiliferous, sub-oomoldic, chalky, scattered porosity, brown stain, trace of free oil and no odor in fresh samples.
- 3118-3140' Limestone, gray, white, cherty dense, plus white/gray chert.
- 3147-3152' Limestone, gray, cream, sub-oomoldic; chalky poor stain, trace of free oil and no odor.

CONGLOMERATE SECTION

- 3208-3216' Sand, white, red, green very fine grained, calcareous, few shaley, friable, no shows.
- 3224-3238' Sand, clean, white, fine and medium grained sub-oomoldic, friable, fair inter-granular porosity, trace of brown stain, weak show of free oil and no odor in fresh samples. Plus abundant loose unconsolidated quartz grains.

3025-3040	Limestone, cream, white, chalky, few fossiliferous, scattered porosity, brown stain and black stain, show of free oil and no odor in fresh samples.
3050-3074	Limestone, tan, finely crystalline, conchoidal, good conchoidal and vuggy type porosity, no show. Plus whitish gray cherty chert.
3010-3020	Limestone, tan, finely crystalline, few conchoidal, trace spotty stain, no free oil and no odor in fresh samples.
3028-3032	Limestone, tan, finely crystalline, dense, few cherty.
3028-3032	Limestone, tan, finely crystalline, few conchoidal, trace spotty stain, no free oil and no odor in fresh samples.
3038-3030	Limestone, cream, white, fine and medium crystalline, few fossiliferous, chalky, poor visible porosity, no show.
3020-3022	Limestone, as above.
3077-3090	Limestone, gray, white, fossiliferous, sub-conchoidal, chalky, scattered porosity, brown stain, trace of free oil and no odor in fresh samples.
3118-3140	Limestone, gray, white, cherty dense, plus whitish gray chert.
3147-3152	Limestone, gray, cream, sub-conchoidal; chalky poor stain, trace of free oil and no odor.

CONGLOMERATE SECTION

3208-3218	Sand, white, red, green very fine grained, calcareous, few shaly, friable, no show.
3224-3238	Sand, clean, white, fine and medium grained sub-conchoidal, friable, fair inter-granular porosity, trace of brown stain, weak show of free oil and no odor in fresh samples. Plus abundant loose unconsolidated quartz grains.

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Drill Stem Test #3 **3151-3245**

Times: 30-20-45-60

Blow: No blow; flushed tool
Final blow, strong blow

Recovery: 300' oil and gas cut mud
(5% gas; 10% oil; 85% mud)
240' oil and gas cut watery mud
(15% gas; 15% oil; 20% water; 50% mud)
120' very slightly oil cut muddy water
(5% oil; 85% water; 10% mud)

Pressures: ISIP invalid plugged psi
FSIP 530 psi
IFP invalid (plugged) psi
FFP 207-300 psi
HSH 1551-1470 psi

Remarks: Slid tool 42' to bottom, ISIP & IFP-plugged, all pressures invalid

3244-3250' Sand as above.

SIMPSON SECTION

3260-3268' Sand, white, clean, rounded, friable, fair inter-granular porosity, brown stain, show of free oil and faint odor in fresh samples.

ARBUCKLE SECTION

3286-3295' Dolomite, gray, medium crystalline, fair inter-crystalline porosity, light brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #3 **3287-3295**

Times: 15-20-20-60

Blow: Strong

Recovery: 60' very slightly oil cut muddy water
(1% oil; 5% mud; 94% water)
2280' muddy water

Pressures: ISIP 1136 psi
FSIP 1113 psi
IFP 362-841 psi
FFP 884-1113 psi
HSH 1638-1549 psi

Drill Stem Test #3 3151-3248

Time: 30-20-45-60

Blow: Final blow, strong blow
 No blow; flushed tool

Recovery: 120' very slightly oil cut muddy water (8% oil; 88% water; 10% mud)
 130' very slightly oil cut muddy water (12% gas; 48% oil; 20% water; 50% mud)
 240' oil and gas cut watery mud (5% gas; 10% oil; 85% mud)
 300' oil and gas cut mud

Pressure: HSH 1551-1470 psi
 FFP 207-200 psi
 IFP invalid (plugged) psi
 FSIP 530 psi
 ISIP invalid plugged psi

Remarks: 210' tool 42' to bottom, ISIP & IFP-plugged, all pressures invalid

Sand as above. 3244-3250'

SIMPSON SECTION

3260-3268' Sand, white, clean, rounded, friable, fair inter-granular porosity, brown stain, show of free oil and faint odor in fresh samples.

ARBuckle SECTION

3268-3269' Dolomite, gray, medium crystalline, fair inter-crystalline porosity, light brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #3 3287-3298

Time: 15-30-30-60

Blow: Strong

Recovery: 2280' muddy water (1% oil; 5% mud; 94% water)
 60' very slightly oil cut muddy water

Pressure: HSH 1038-1249 psi
 FFP 884-1113 psi
 IFP 362-841 psi
 FSIP 1113 psi
 ISIP 1136 psi

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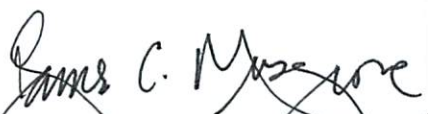
- 3300-3312' Dolomite, gray, tan, finely crystalline, few medium crystalline, fair inter-crystalline and vuggy porosity, poor stain, no free oil and faint to fair odor in fresh samples.
- 3312-3330' Dolomite, white, gray, tan, finely crystalline, fair inter-crystalline porosity, few with scattered vuggy porosity, trace poor stain, weak show of free oil and faint to fair odor in fresh samples.
- 3330-3340' Dolomite as above, plus white chert.
- 3340-3365' Dolomite, white, tan, pink, fine and medium crystalline, fair to good inter-crystalline porosity, trace stain, trace of free oil and faint to fair.

Rotary Total Depth: 3365
Log Total Depth: 3366

Recommendations:

5 ½ production casing was set and cemented on the American Warrior Inc., Jean #1-2.

Respectfully Submitted,


James C. Musgrove
Petroleum Geologist



- 3340-3365 Dolomite, white, tan, pink, fine and medium crystalline, fair to good inter-crystalline porosity, trace stain, trace of free oil and faint to fair.
- 3330-3340 Dolomite as above, plus white clert.
- 3313-3330 Dolomite, white, gray, tan, finely crystalline, fair inter-crystalline porosity, few with scattered vuggy porosity, trace poor stain, weak show of free oil and faint to fair odor in fresh samples.
- 3300-3313 Dolomite, gray, tan, finely crystalline, few medium crystalline, fair inter-crystalline and vuggy porosity, poor stain, no free oil and faint to fair odor in fresh samples.

Log Total Depth: 3365
 Rotary Total Depth: 3365

Recommendations:
 A production casing was set and cemented on the American Warrior Inc. Leas #1-S.

Respectfully Submitted,

James C. Musgrove
 Petroleum Geologist

