



Joshua R. Austin

Petroleum Geologist

report for
RAMA Operating CO., Inc



COMPANY: RAMA Operating Company, Inc.

LEASE: Austin # 1-5

FIELD: Wildcat

LOCATION: SW-NW-NE-NE (536' FNL & 1018' FEL)

SEC: 5 **TWSP:** 25s **RGE:** 12w

COUNTY: Stafford **STATE:** Kansas

KB: 1902 **GL:** 1891

API # 15-185-23974-00-00

CONTRACTOR: Sterling Drilling (rig #4)

Spud: 11/29/2016 **Comp:** 12/05/2016

RTD: 4250' **LTD:** 4246'

Mud Up: 2900' **Type Mud:** Chemical was displaced

Samples Saved From: 2900' to RTD
Drilling Time Kept From: 2900' to RTD
Samples Examined From: 2900' to RTD
Geological Supervision From: 3000' to RTD
Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 294'
Production Casing: 5 1/2" @ 4245'

Electronic Surveys: By Pioneer Energy Services

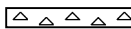








NOTES

On the basis of the positive structural position, good sample shows and after evaluating the electric logs it was recommended by all parties involved in the Austin #1-5 to set 5 1/2" production casing to further test the Arbuckle and Lansing zones.

RAMA Operating Company Inc.
well comparison sheet





DRILLING WELL					COMPARISON WELL			
Austin #1-5					Dudrey #1			
1902 KB					1900 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Sample	Sub-Sea	Sample	Log
Heebner	3390	-1488	3390	-1488	3388	-1488	0	0
Toronto	3404	-1502	3404	-1502	3402	-1502	0	0
Douglas	3432	-1530	3430	-1528	3429	-1529	-1	1
Brown Lime	3540	-1638	3539	-1637	3540	-1640	2	3
Lansing	3564	-1662	3565	-1663	3564	-1664	2	1
Base KC	3844	-1942	3843	-1941	3844	-1944	2	3
Viola	3970	-2068	3974	-2072	3970	-2070	2	-2
Simpson Shale	4088	-2186	4086	-2184	4082	-2182	-4	-2
Simpson Sand	4092	-2190	4092	-2190	4086	-2186	-4	-4
Arbuckle	4168	-2266	4166	-2264	4167	-2267	1	3
Total Depth	4250	-2348	4246	-2344	4251	-2351		

ROCK TYPES

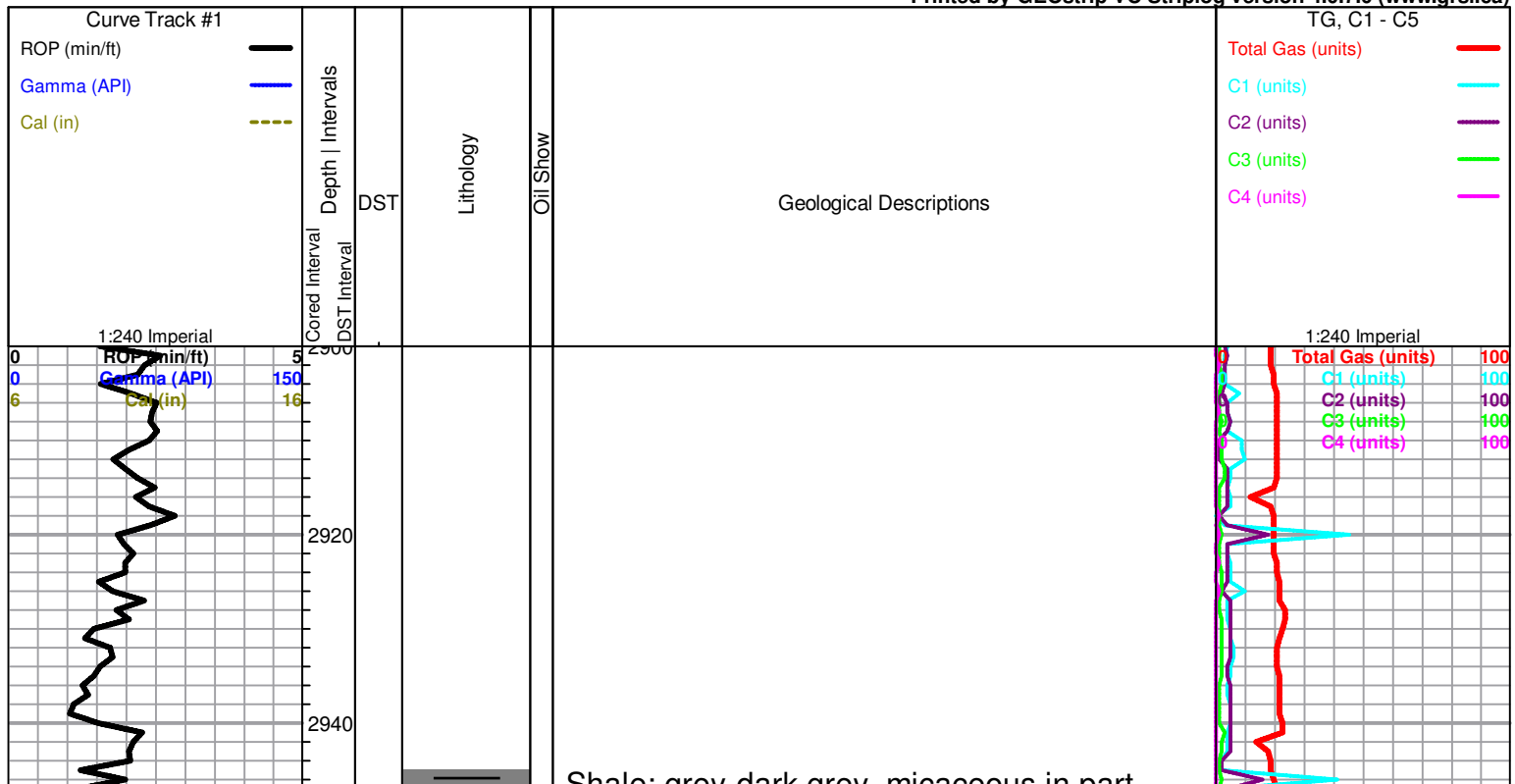
 Cht	 Dolsec	 shale, grn	 Carbon Sh	 Ss
 Chtcongl	 Lmst fw7>	 shale, gry	 shale, red	

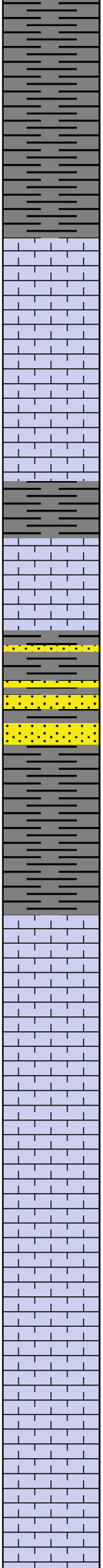
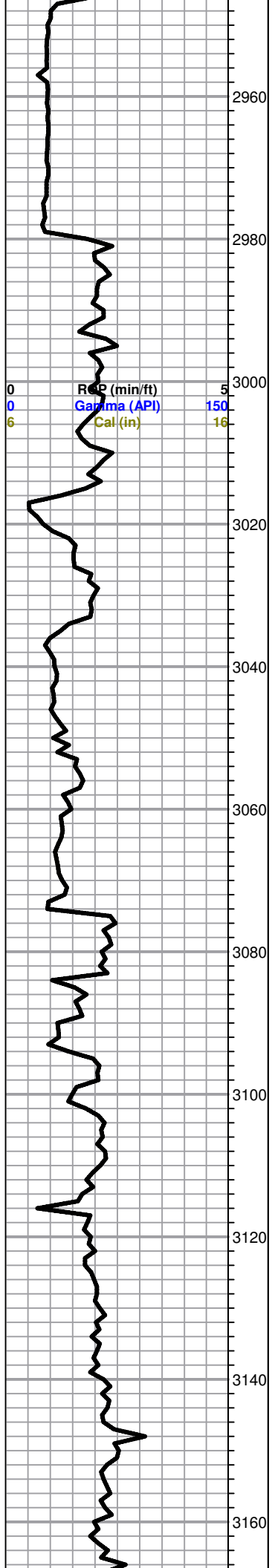
OTHER SYMBOLS

DST

-  DST Int
-  DST alt
-  Core
-  tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Shale; grey-dark grey, micaceous in part, soft, silty

Sand; lt. grey, very fine grained, micaceous, sub angular, friable, no shows

Shale; as above

HOWARD 2979 (-1077)

Limestone; cream, fine xln, chalky, dense, fossiliferous in part, poor visible porosity, no shows

Limestone; cream-grey, fine xln, fossiliferous in part, dense, slightly chalky

Shale; grey-greyish green, micaceous, silty in part

Sand; grey-lt. grey, very fine grained, micaceous, sub angular, friable, questionable trace gas bubbles, very faint odor, NSFO

Shale and Sand as above

TOPEKA 3074 (-1172)

Limestone; cream-tan-buff, fine xln, dense, cherty, fossiliferous, poor visible porosity, no shows

Limestone; cream, fine xln, chalky in part, dense, few cherty pieces, fossiliferous, poor porosity, no shows

Limestone; cream-grey, fine-medium xln, fossiliferous in part, few nodules, no shows

Limestone; white-cream, fine xln, chalky, slightly oolitic in part, fossiliferous, few cherty pieces, plus white chalk

Limestone; as above, plus white-cream, honey, fossiliferous Chert

Total Gas (units) 100
 C1 (units) 100
 C2 (units) 100
 C3 (units) 100
 C4 (units) 100

