

TD Notice

July 25, 2013

Savolts 2033 1-27 27-20S-33W, Scott County, Kansas

API#: 15171209610000

SL: 990' FNL & 660' FEL of NE/4 of 27-20S-33W

SPUD: 7/18/2013

TD: 7/23/2013; TMD Driller @ 5,075' MD

Logs run by Halliburton; received 5/24/2013. TD Logger 5,068'.

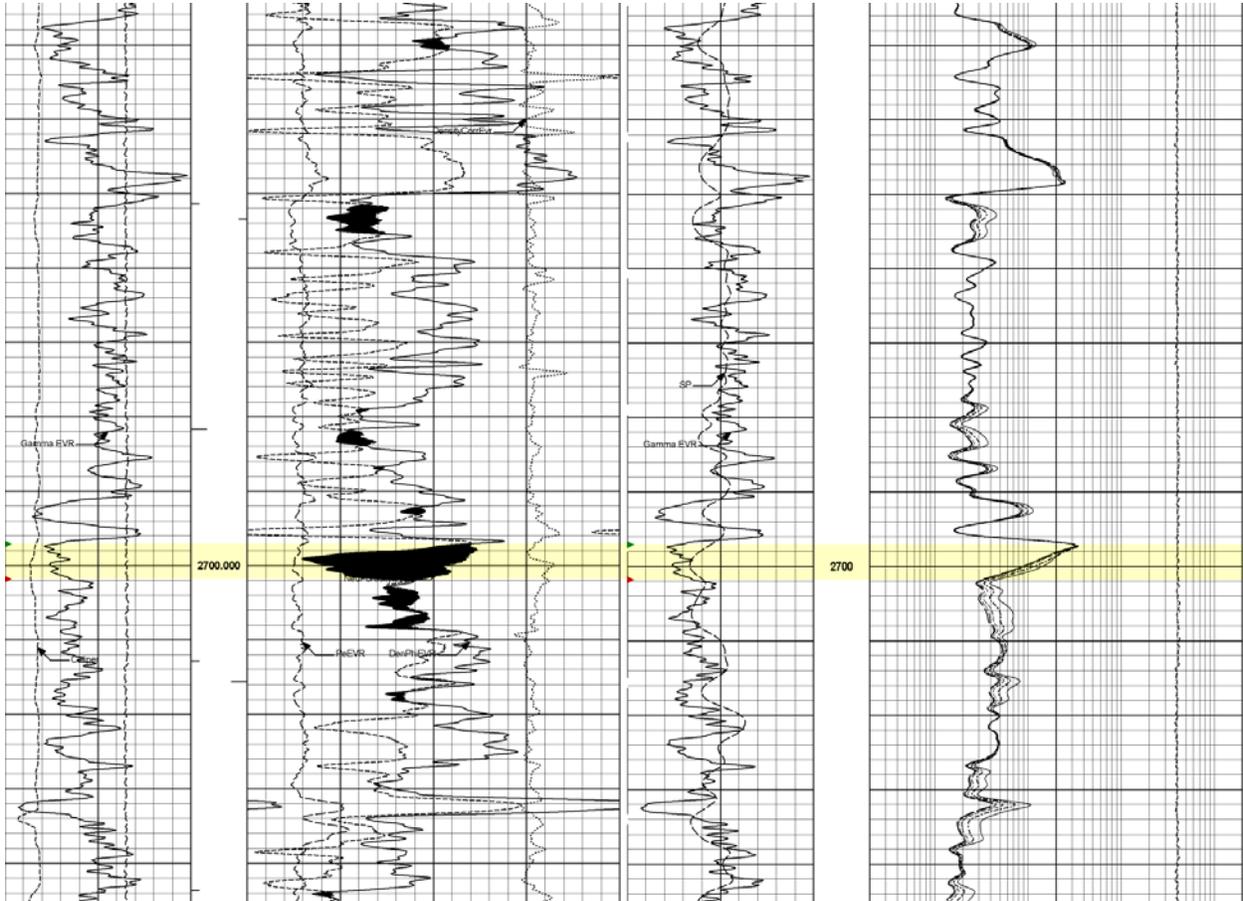
Casing to be set from surface to TMD @ 5,075' for potential completion in the Chase, Lansing, Marmaton, Cherokee, and Miss.

Datum 2,950' KB	E-LOG TOPS	
	Halliburton	
FORMATION	MD	SUBSEA
Heebner	3804'	-854'
Lansing	3850'	-900'
Marmaton	4325'	-1375'
Pawnee	4400'	-1450'
Cherokee	4442'	-1492'
Morrow	4610'	-1660'
Mississippian	4662'	-1712'

This well is a grass-root vertical well designed to test multiple zones from the Chase to the Miss. The well was drilled to 5,075', approximately 175' into the Spergen, so the entire St. Louis section could be logged evaluated. Based on the log data, there are multiple zones in the well that appear productive, including the Miss, Cherokee, Marmaton, Lansing, and Chase. Below you will find log segments and brief description for each zone of interest.

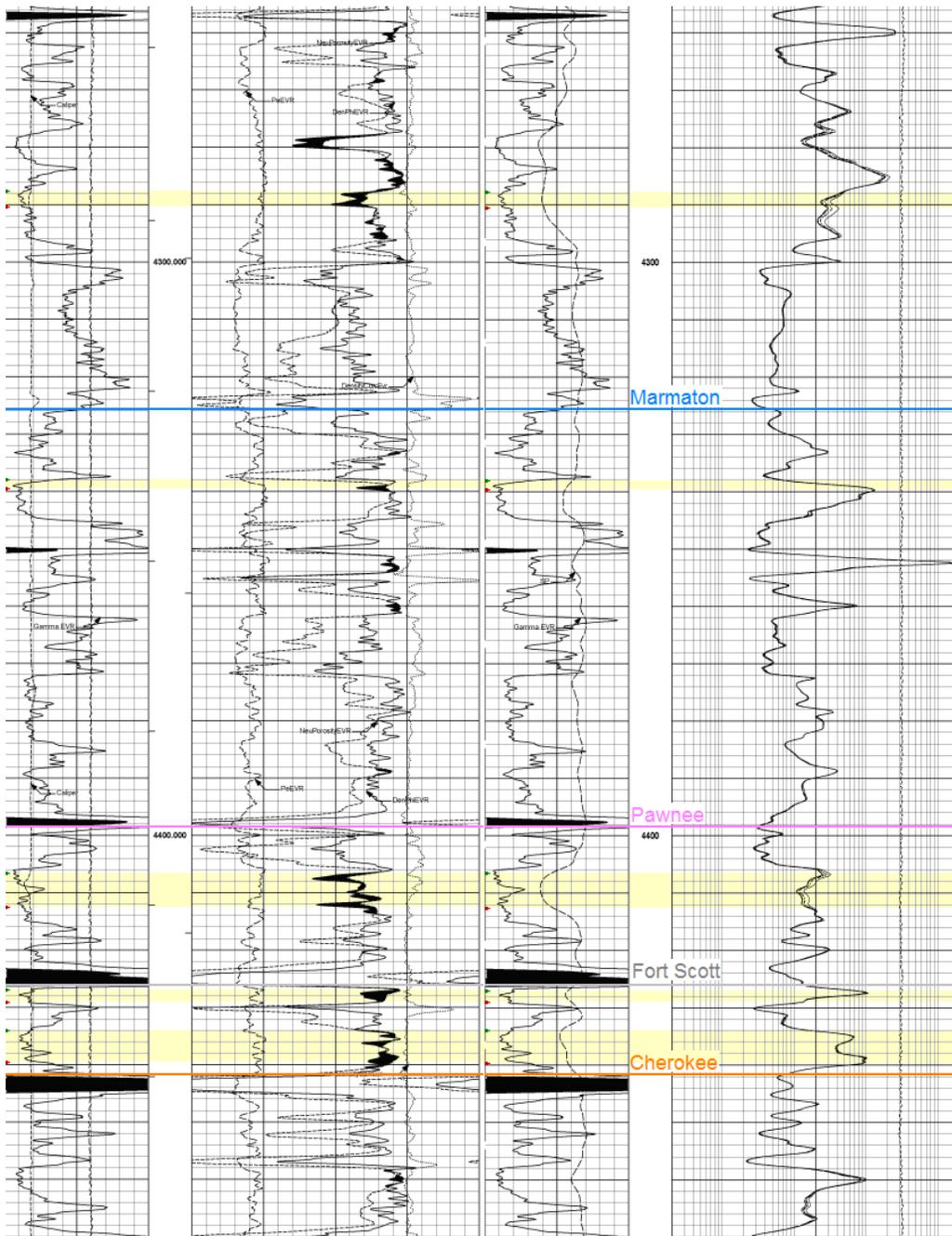
Chase

The E. J. Baker #1, located 1 mile southwest, produced .3 BCF from the Chase, which is also present in this well.



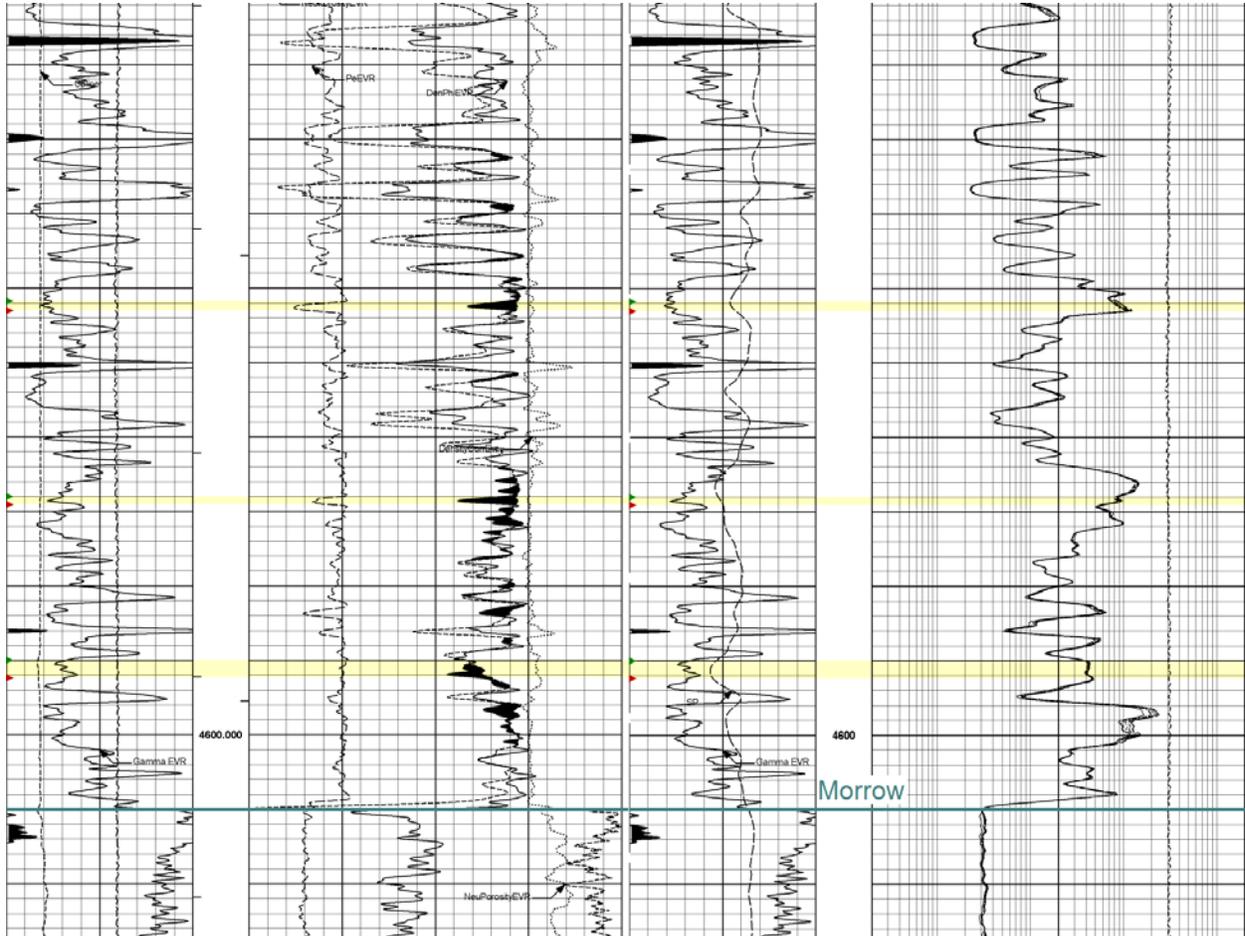
Lansing/Mamaton/Pawnee/Fort Scott

The Savolt #1, located approximately 3,800' southwest and less than 5' high to this well, produced 43 MBO from Fort Scott, Mamaton, and Lansing. The Savolts 2033 1-27 has the same correlative zones in the Fort Scott and Mamaton, but they appear to be thin and tight, with an average porosity of 4% - 6%. These zones would require more stimulation than performed in the Savolt #1. The Lansing in the Savolts 2033 1-27 has very similar porosity, but has a slightly lower resistivity at 20 – 30 ohms. In addition, the Pawnee appears productive in both wells, but is untested in the area.



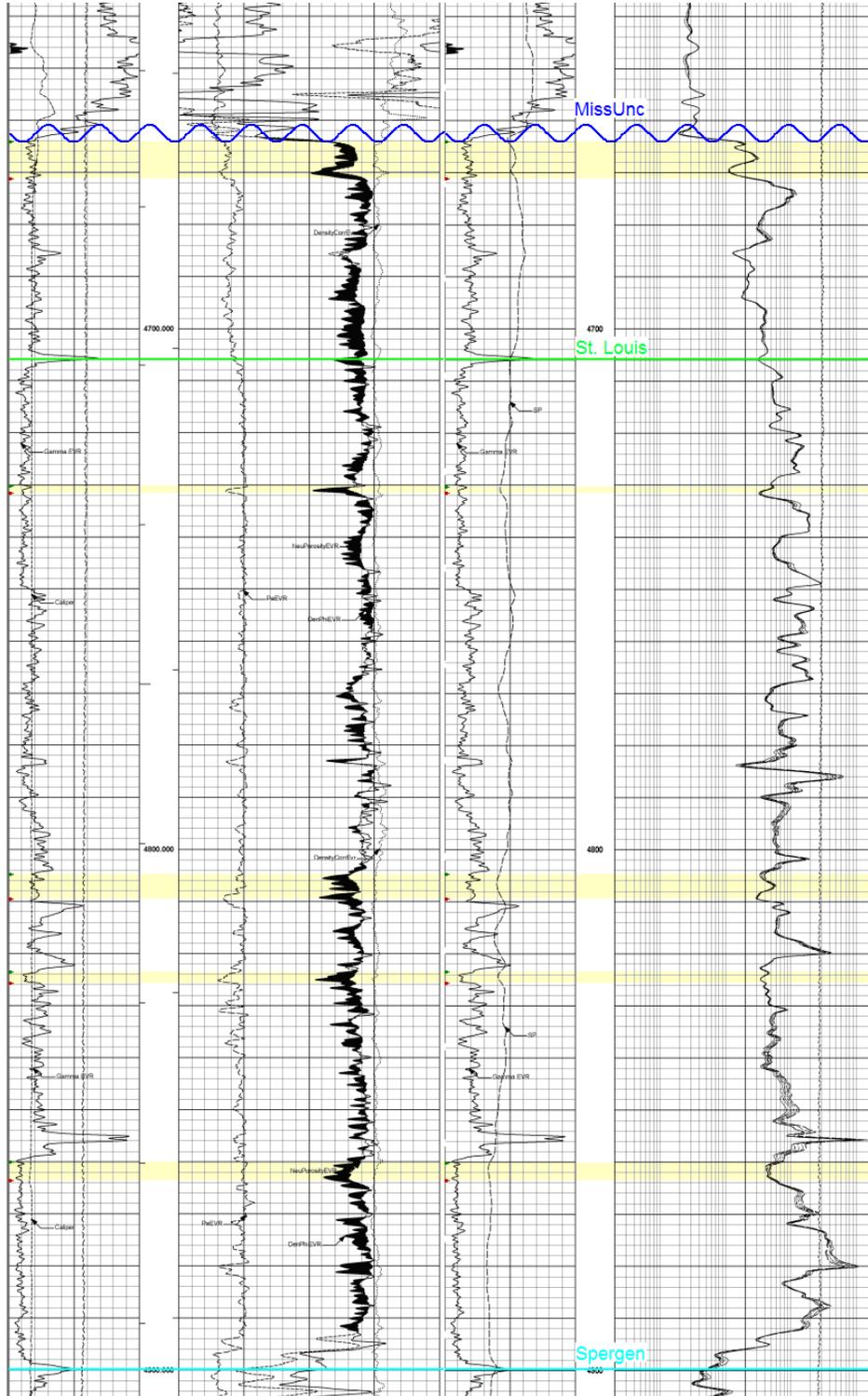
Cherokee

The Savolts 2033 1-27 also contains several very thin zones in the Cherokee that appear productive on logs.



St. Genevieve/St. Louis

The St. Louis and St. Genevieve contain 14' of potential pay with porosities of 6% - 8% and range of resistivity of 10 – 40 ohms.



Warsaw

The Warsaw formation in the Miss does not produce in the area, but the zone is 11' thick with an average porosity of over 7% and is 20 – 40 ohms.

