

Technical Memo

	MC252 #2 USIT / MSIP (Cement Scanner) 13 5/8" Casing Cement Evaluation			
	Version: 1	DDII Relief Wells Team	Author: Ray Wydrinski (BP, GOMX)	Date: 7/12/2010

Overview:

On July 6, 2010, Schlumberger logged the USIT / MSIP (Cement Scanner) in the 13 5/8" casing from 5,194' to 13,401' for the purpose of 1) obtain a base log of the casing thickness and radius and 2) the cement evaluation in the 13 5/8" casing annulus. The total depth of the well is 13,522'.

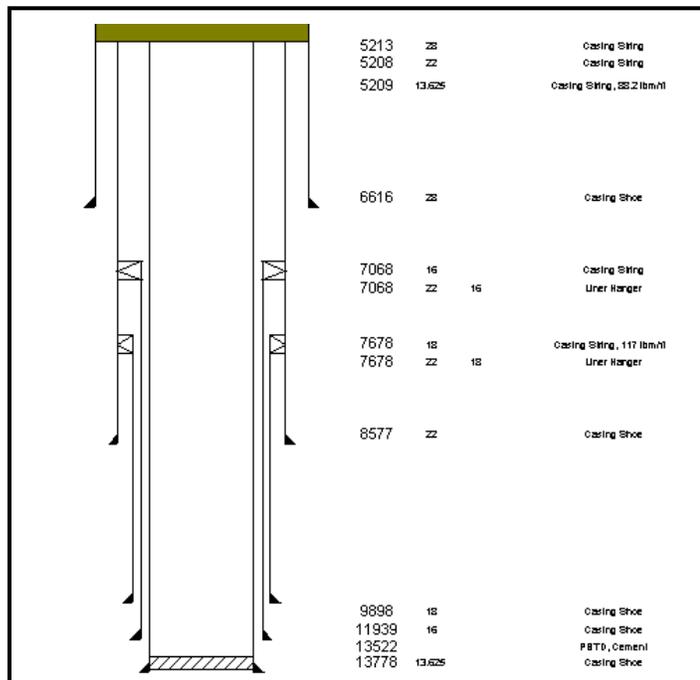
The well was cemented on July 4, 2010. The 24 hour un-contaminated cement compressive strength was 2,349 psi.

All depths are tied to the LWD and are measured depths from the RKB. The LWD depths are (-24) from the wireline measured depths.

Interpretation

- 1) 13 5/8" casing cement evaluation
 - a. The top of cement with some compressive strength is at 13,060'.
 - b. Top of casing centralizers appear to be at 12,930'
 - c. Estimated cement for zonal isolation is between 12,250' to 12,760'.

Well bore Schematic



Top of Cement with Compressive Strength

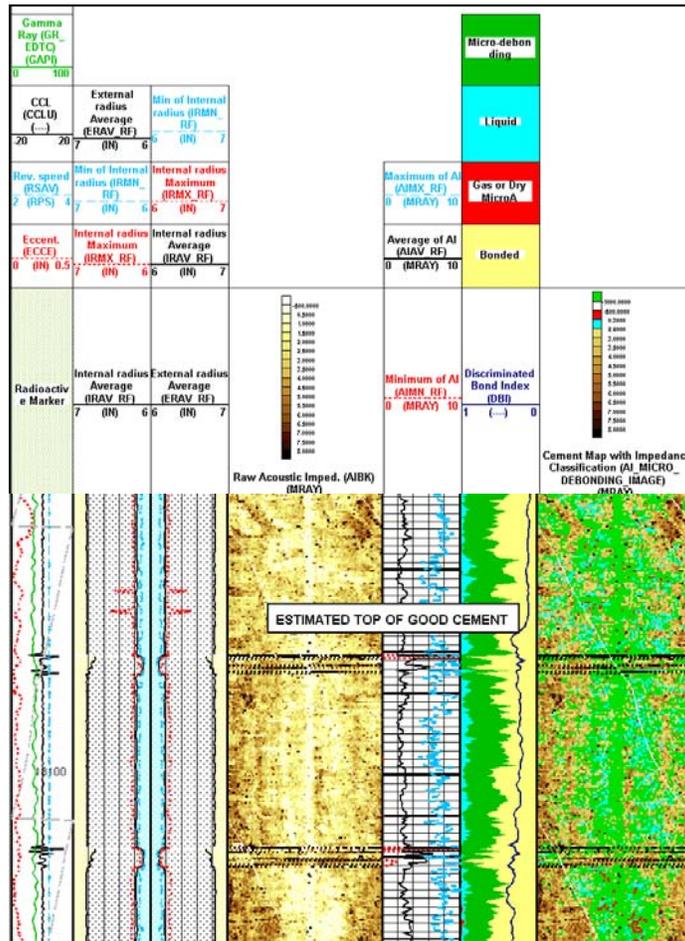


Figure #1: Top of cement with compressive strength is at 13,060'. There is contaminated cement on the low side of the casing (mid-track of the cement map on the right side of the plot) that is not fully cured (green shading).

Estimated Top of Cement for Zonal Isolation 12,760'

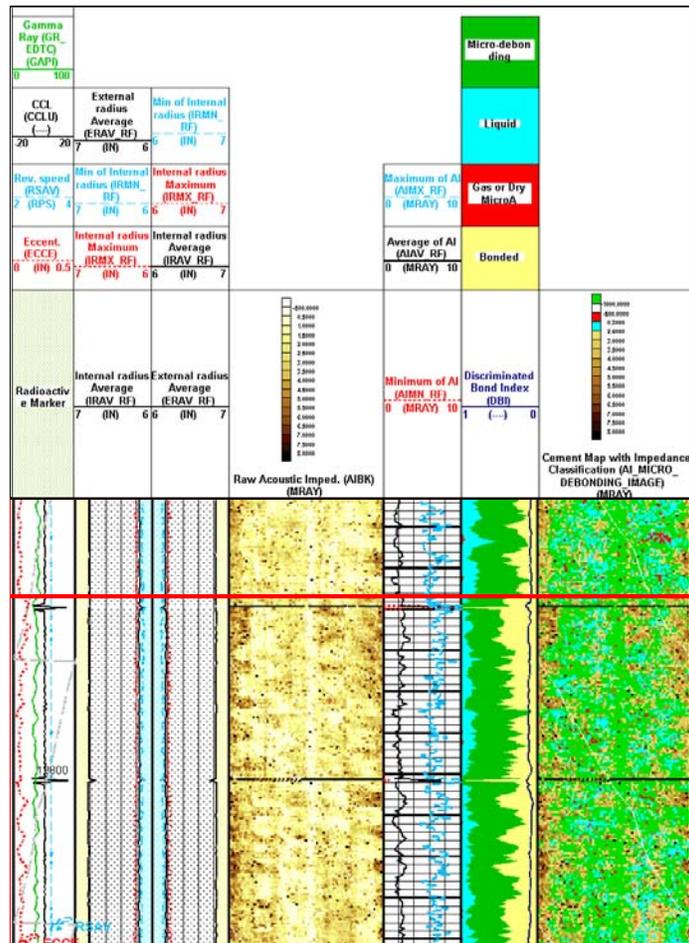


Figure #2: The cement above 13,060' gets very contaminated and is still in the curing phase. Based on the character of the acoustic impedance (the green shading), there is a change in the amount of contamination comparing the "Micro-debonding" above 12,760' (red line) to below and no channels are observed below this depth. Looking shallower up the well bore, no channels were observed until about 12,250'. This indicates that with additional time for the cement to cure the top could be as high as 12,250'.