

Table 2. *Analytical Methods at USM.* Procedural blank, limit of detection, and the results of the reference material solutions are reported in the table below. The limit of detection (LOD) is the smallest quantity of each isotope in samples that can reliably be detected or that can be statistically distinguished from a procedural blank. The LOD was considered to be 2 standard deviations above the average of the procedural blanks and we have scaled the limit of detection into the equivalent concentration in a 5 liter sample. In some cases our sample analyses approach or go below these limits of detection and in these cases we have flagged those data as below detection. Our results for SWS 2010-1 are within the consensus range from the intercalibration exercise (Anderson et al., 2012).

USM	Th-232 (pg)	Th-230 (fg)	Pa-231 (fg)
Blanks (n = 12, mean ± 2 sigma)	32 ± 26	1.4 ± 0.8	0.8 ± 0.9
	Th-232 (pg/kg)	Th-230 (fg/kg)	Pa-231 (fg/kg)
Limit of Detection	5.1	0.16	0.19
Standard reference material	Th-232 (pg/g)	Th-230 (fg/g)	Pa-231 (fg/g)
SWS2010-1 (n = 7)	1058 ± 111	262 ± 26	33.1 ± 6.1
SWS2015-1 (n = 5)	178 ± 2	205 ± 1	41.5 ± 2.4