

Table 5a
²³⁵U/²³⁸U Isotope Ratio Measurements (DA)

Method	Material	Uncertainty Component (% rel., k=1)		ITV (% rel., k=1)	Notes
		u(r)	u(s)		
GSMS	DUF ₆ & NUF ₆	0.1	0.1	0.14	<u>1/</u>
	LEUF ₆	0.05	0.05	0.07	
TIMS, MC-ICPMS ^{2/}	DU (0.3 % ²³⁵ U)	0.5	0.5	0.7	
	U (0.3 % < ²³⁵ U < 1 %)	0.2	0.2	0.28	
	LEU (1 % < ²³⁵ U < 20 %) ^{3/}	0.1	0.1	0.14	
	HEU (20 % ²³⁵ U)	0.05	0.05	0.07	

1/ Sampling uncertainty may be dominating if cylinder contents are not homogenized.

2/ For single collector instruments (SF ICPMS and Q ICPMS), recent publication on uncertainties obtained using CRM indicates that corresponding ITV's should be higher than ITVs for TIMS/MC-ICPMS.

3/ Recent studies of measurement data on pellets (LEU) indicate that uncertainty changes with enrichment. A follow-up study to establish enrichment ranges and associated measurement uncertainties is on-going.