

APPENDIX E
Duplicate Sample Quality Control

R-14 Range
Original and Duplicate Sample Comparison

Sample ID	Initial Sample U-238 Value (pCi/g) ¹		Two σ Error of Sample	Duplicate Sample U-238 Value (pCi/g) ¹		Two σ Error of Duplicate	Z-Score	Fail if Z-score > 1.96 ²
SS-01-04	5.40	+/-	1.70	1.70	+/-	2.90	2.20	Fail
SB-01-04	4.50	+/-	1.90	3.30	+/-	4.10	0.53	Pass
SS-01-08	6.00	+/-	4.00	5.00	+/-	4.20	0.34	Pass
SB-01-08	3.00	+/-	3.00	2.60	+/-	4.40	0.15	Pass
SS-02-06	0.45	+/-	0.53	0.76	+/-	0.65	0.74	Pass
SS-02-12	0.53	+/-	0.90	0.30	+/-	3.20	0.14	Pass
SB-02-12	1.45	+/-	0.77	0.94	+/-	0.83	0.90	Pass
SS-03-07	8.40	+/-	4.70	5.00	+/-	4.20	1.08	Pass
SB-03-07	6.10	+/-	4.90	3.00	+/-	3.50	1.03	Pass
SS-03-11	4.80	+/-	4.60	0.90	+/-	4.00	1.28	Pass
SS-03-15	109.00	+/-	17.00	100.00	+/-	15.00	0.79	Pass
SS-04-06	0.70	+/-	1.20	0.60	+/-	1.00	0.13	Pass
SS-04-14	1.80	+/-	1.30	2.30	+/-	1.60	0.49	Pass
SS-05-13	0.90	+/-	1.10	1.30	+/-	1.70	0.40	Pass
SS-06-01	2.00	+/-	1.30	2.10	+/-	3.20	0.06	Pass

- Notes:** **1** U-238 results inferred directly from surrogate Th-234 results
2 The critical value of 1.96 qualifies two values as falling within the 95% confidence interval of the mean of a normal population