

TRIP Intercomparison Results: December 16, 2019

Second Semester QC Sample Results Reference time: 16:00 UTC, August 26, 2019

¹²⁵ I	Sample activity in Bq	Uncertainty in Bq
Certified value	1.59E+04	6.90E+02

I-125 Results

¹²⁵ I	Lowest value – 25%	Highest value +50%	Root Mean Squared Error of relative bias and relative precision
ANSI 13.30 acceptance criteria	1.19E+04	2.38E+04	<0.25

Facility code	Facility average result in Bq	Facility average uncertainty in Bq	ANSI 13.30 1996 calculated bias	ANSI N13.30 2011 RMSE*	Meets ANSI 13.30 1996 acceptance criteria –25% to +50%	Meets ANSI 13.30 2011 acceptance criteria RMSE <0.25*
5	1.53E+04	9.17E+01	-0.04	0.04	yes	yes
10	1.28E+04	3.19E+03	-0.19	0.22	yes	yes
15	1.42E+04	1.18E+02	-0.10	0.10	yes	yes
25	1.62E+04	2.21E+02	0.02	0.02	yes	yes
30	NR	NR	NR	NR	NR	NR
35	1.53E+04	1.26E+03	-0.03	0.03	yes	yes
39	NR	NR	NR	NR	NR	NR
45	NR	NR	NR	NR	NR	NR
50	1.57E+04	2.10E+02	-0.01	0.02	yes	yes
55	1.73E+04	2.62E+02	0.09	0.10	yes	yes
65	1.76E+04	6.63E+02	0.11	0.11	yes	yes
75	NR	NR	NR	NR	NR	NR
95	1.51E+04	4.99E+02	-0.05	0.06	yes	yes
97	1.67E+04	3.88E+02	0.05	0.05	yes	yes
99	1.63E+04	1.19E+03	0.03	0.04	yes	yes

*Five replicates required for RMSE NR = Not reported

¹³¹ I	Sample activity (Bq)	Uncertainty (Bq)
Certified value	4.02E+04	5.95E+02

I-131 Results

¹³¹ I	Lowest value (Bq) – 25%	Highest value (Bq) +50%	Root Mean Squared Error of relative bias and relative precision
ANSI 13.30 acceptance criteria	3.02E+04	6.03E+04	<0.25

Facility code	Facility average result in Bq	Facility average uncertainty in Bq	ANSI 13.30 1996 calculated bias	ANSI N13.30 2011 RMSE*	Meets ANSI 13.30 1996 acceptance criteria –25% to +50%	Meets ANSI 13.30 2011 acceptance criteria RMSE <0.25*
5	3.90E+04	2.93E+02	-0.03	0.03	yes	yes
10-RIIDEye	4.20E+04	3.75E+03	0.04	0.05	yes	yes
10-NaI 200 mm	4.25E+04	7.65E+03	0.06	0.06	yes	yes
10-NaI 50 mm	3.91E+04	2.88E+03	-0.03	0.05	yes	yes
15	3.93E+04	6.58E+02	-0.02	0.02	yes	yes
25	4.24E+04	3.31E+03	0.05	0.06	yes	yes
30	N.R.	N.R.	N.R.	N.R.	NR	NR
35	4.29E+04	1.91E+03	0.07	0.07	yes	yes
39	N.R.	N.R.	N.R.	N.R.	NR	NR
45	N.R.	N.R.	N.R.	N.R.	NR	NR
50	N.R.	N.R.	N.R.	N.R.	NR	NR
65	4.41E+04	1.65E+03	0.10	0.10	yes	yes
75	N.R.	N.R.	N.R.	N.R.	NR	NR
95	4.70E+04	3.33E+03	0.17	0.17	yes	yes
97	4.25E+04	6.18E+02	0.06	0.06	yes	yes
99	4.14E+04	5.93E+02	0.03	0.03	yes	yes

*Five replicates required for RMSE NR = Not reported