

TRIP Intercomparison Results: May 21, 2018

First Semester QC Sample Results Reference time: 17:00 UTC, February 28, 2018

¹²⁵ I	Sample activity in Bq	Uncertainty in Bq
Certified value	1.27E+04	5.52E+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	9.53E+03	1.91E+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	1.29E+04	7.70E+01	0.02	0.02	Yes	Yes
10	1.07E+04	4.84E+03	-0.16	0.16	Yes	Yes
15	1.23E+04	1.02E+02	-0.03	0.03	Yes	Yes
20	NR	NR	NR	NR	NR	NR
25	1.20E+04	1.65E+02	-0.06	0.06	Yes	Yes
30	1.20E+04	1.15E+03	-0.05	0.11	Yes	Yes
35	1.27E+04	1.11E+03	0.00	0.04	Yes	Yes
39	1.16E+04	2.38E+03	-0.09	0.09	Yes	Yes
40	1.40E+04	2.23E+03	0.10	0.10	Yes	Yes
45	1.27E+04	1.39E+02	0.00	0.01	Yes	Yes
50	1.28E+04	3.78E+02	0.01	0.01	Yes	Yes
55	1.23E+04	2.58E+02	-0.03	0.09	Yes	Yes
65	1.37E+04	5.86E+02	0.08	0.08	Yes	Yes
75	1.28E+04	1.86E+03	0.01	0.01	Yes	Yes
95	1.25E+04	3.86E+02	-0.02	0.02	Yes	Yes
97	1.26E+04	7.10E+02	-0.01	0.02	Yes	Yes
99	1.23E+04	9.63E+02	-0.03	0.03	Yes	Yes

*Five replicates required for RMSE NR = Not reported

¹³¹ I	Sample activity (Bq)	Uncertainty (Bq)
Certified value	3.31E+04	5.03E+02

I-131 Results

¹³¹ I	Lowest value (Bq) – 25%	Highest value (Bq) +50%	Root Mean Squared Error of relative bias and relative precision
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ANSI 13.30 acceptance criteria	2.48E+04	4.97E+04	<0.25
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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	3.27E+04	3.83E+02	-0.01	0.01	Yes	Yes
10-802	3.36E+04	3.16E+03	0.02	0.03	Yes	Yes
10-falcon	3.18E+04	5.64E+03	-0.04	0.05	Yes	Yes
10-thermo	3.39E+04	3.09E+03	0.02	0.03	Yes	Yes
15	3.27E+04	5.52E+02	-0.01	0.01	Yes	Yes
20	NR	NR	NR	NR	NR	NR
25	2.17E+04	8.03E+02	-0.34	0.34	No	No
30	3.35E+04	1.27E+03	0.01	0.13	Yes	Yes
35	3.40E+04	1.50E+03	0.03	0.03	Yes	Yes
39	3.18E+04	6.10E+03	-0.04	0.04	Yes	Yes
40	3.38E+04	5.13E+03	0.02	0.03	Yes	Yes
45	2.82E+04	3.34E+02	-0.15	0.15	Yes	Yes
50	3.03E+04	2.17E+03	-0.08	0.09	Yes	Yes
55	NR	NR	NR	NR	NR	NR
65	3.67E+04	9.59E+02	0.11	0.11	Yes	Yes
75	3.20E+04	2.42E+03	-0.03	0.04	Yes	Yes
95	3.58E+04	2.24E+03	0.08	0.08	Yes	Yes
97	3.02E+04	1.75E+03	-0.09	0.09	Yes	Yes
99	3.34E+04	3.02E+02	0.01	0.01	Yes	Yes

*Five replicates required for RMSE NR = Not reported