

添付資料

【線源情報】

線源証明書

NOMINAL SOURCE CERTIFICATE

Customer: Daiichi Clarity Company Limited	Certificate Date: 04-Oct-10
Purchase Order No.: CA619	Quantity: 1
Model No.: N-252	SS&DR No.: CA406S102S
Catalog No.: CF230140100U	ISO Classification: ISO/99/C66535
Capsule Type: A3014	Special Form No.: USA/0351/S Rev 6
Active Diameter/Mass: 1.6 mm (0.062 ")	Nuclide Half Life: 2.645 ± 0.008 years
Cover: Stainless steel	Recommended Working Life: 15 years
Backing: Stainless steel	

Nuclide	Source No.	Activity	Neutron Output [neutrons/second]	Reference Date
Cf-252	H4-694	100 µCi/3.7 MBq	4.24E+05	15-Oct-10

Impurities: See Technical Data sheet.

Leak Test Information is on Reverse Side:

Remarks:

- This document uses the numerical convention where 1.000 = 1 and 1,000 = 10³.
- Nuclear data was taken from "Table of Radioactive Isotopes", edited by Virginia Shirley, 1986.





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ISO 9001 CERTIFIED

Medical Imaging Laboratory
24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory
1800 North Keystone Street Burbank, California 91504

Cf-252 Technical data

The Cf-252 used to prepare your order was taken from Eckert & Ziegler Isotope Products Laboratories Lot #5343201 and it had the following composition as of 20 Sep 10.

<u>Nuclide</u>	<u>Mass %</u>	<u>Activity %</u>
Cf-249	9.013	0.0886
Cf-250	11.904	3.1129
Cf-251	3.956	0.0151
Cf-252	75.126	96.7830
Cf-254	0.00002	0.00044

The Cm-248 decay product was last separated on 17 Sep 09

Isotopic composition provided by Oak Ridge National Laboratory

If you have any questions, please contact Eckert & Ziegler
Isotope Products Technical Service: 661-309-1010

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Medical Imaging Laboratory

24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory

1800 North Keystone Street Burbank, California 91504



Eckert & Ziegler

Isotope Products

24937 Avenue Tibbitts
Valencia, California 91355

Tel 661•309•1010
Fax 661•257•8303

NOMINAL SOURCE CERTIFICATE

Customer: Daiichi Clarity Company Ltd.

Purchase Order No.: CHN17

Model No.: N-252

Catalog No.: CF230140100U

Capsule Type: A3014

Active Diameter: 0.062" (1.57 mm)

Cover: Stainless Steel

Backing: Stainless Steel

Certificate Date: 02-Dec-11

Quantity: 1

SS&DR No.: CA0406S102S

ISO/ANSI Classification: ANSI 77C66535

Special Form No.: USA/0351/S-96 Rev 7

Nuclide Half Life: 2.645 ± 0.008 years

Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cf-252	I7-106	100 µCi (3.7 MBq)	3.97 E+5 n/s	15-Jan-12

Impurities: See Technical Data sheet.

Leak Test Information is on Reverse Side:

- Remarks:**
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 - Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia Shirley, 1986.
 - ANSI classification is equivalent to ISO2919.




Name **Signature** **Date**

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Medical Imaging Laboratory

24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory

1800 North Keystone Street Burbank, California 91504

Cf-252 Technical data

The Cf-252 used to prepare your order was taken from Eckert & Ziegler Isotope Products Laboratories Lot #5688701 and it had the following composition as of 10 Nov 11.

<u>Nuclide</u>	<u>Mass %</u>	<u>Activity %</u>
Cf-249	11.256	0.103
Cf-250	14.028	3.513
Cf-251	4.94	0.0210
Cf-252	69.769	95.946
Cf-254	0.000002	0.00001

The Cm-248 decay product was last separated on 24 Jun 10

Isotopic composition provided by Oak Ridge National Laboratory

If you have any questions, please contact Eckert & Ziegler
Isotope Products Technical Service: 661-309-1010

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Medical Imaging Laboratory

24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory

1800 North Keystone Street Burbank, California 91504



Eckert & Ziegler

Isotope Products

24937 Avenue Tibbitts
Valencia, California 91355

Tel 661•309•1010

Fax 661•257•8303

Cf-252 Technical data

The Cf-252 used to prepare your order of source with serial number K7-436 was taken from Eckert & Ziegler Isotope Products Laboratories Lot #5769305 and it had the following composition as of 22 Aug 13.

<u>Nuclide</u>	<u>Mass %</u>	<u>Activity %</u>
Cf-249	15.438	0.1844
Cf-250	17.567	5.5805
Cf-251	6.801	0.0315
Cf-252	60.194	94.2036

The Cm-248 decay product was last separated on 26 Sep 11

Isotopic composition provided by Oak Ridge National Laboratory

If you have any questions, please contact Eckert & Ziegler Isotope Products Technical Service: 661-309-1010

[Redacted signature area]

4 Sep 13
date

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Medical Imaging Laboratory

24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory

1800 North Keystone Street Burbank, California 91504

NOMINAL SOURCE CERTIFICATE

Customer: Daiichi Clarity Company Ltd.
Purchase Order No.: DC420
Model No.: N-252
Catalog No.: CF230140090U
Capsule Type: A3014-01
Active Diameter: 0.062" (1.57 mm)
Cover: Stainless Steel
Backing: Stainless Steel

Certificate Date: 2017-12-13
Quantity: 1
SS&DR No.: CA0406S102S
ISO/ANSI Classification: ANSI 77C66535
Special Form No.: USA/0351/S-96 Rev 9
Nuclide Half Life: 2.645 ± 0.008 years
Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cf-252	Q2-334	90 µCi (3.33 MBq)	3.82 E+05 n/s	2018-02-01

Impurities: See Technical Data sheet.

Leak Test Information is on Reverse Side:

- Remarks:**
- This document uses the numerical convention where 1.000 = 1 and 1,000 = 10³.
 - This document uses the date convention YYYY-MM-DD in accordance with ISO 8601.
 - Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia Shirley, 1986.
 - ANSI classification is equivalent to ISO2919.



2017-12-13
Name **Signature** **Date**

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Medical Imaging Laboratory
24937 Avenue Tibbitts Valencia, California 91355

Industrial Gauging Laboratory
1800 North Keystone Street Burbank, California 91504



Cf-252 Technical data

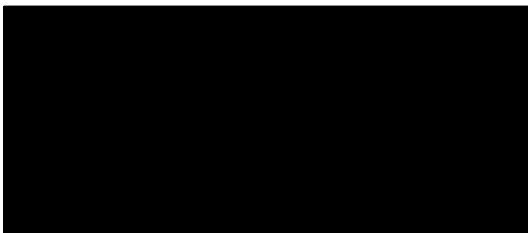
The Cf-252 used to prepare your order of source Q2-334 was taken from Eckert & Ziegler Isotope Products Laboratories Lot #5873415 and it had the following composition as of 2017-10-04.

<u>Nuclide</u>	<u>Mass %</u>	<u>Activity %</u>
Cf-249	20.977	0.3514
Cf-250	28.384	12.645
Cf-251	10.981	0.0712
Cf-252	39.658	86.932

The Cm-248 decay product was last separated on 2014-08-22

Isotopic composition provided by Oak Ridge National Laboratory

If you have any questions, please contact Eckert & Ziegler Isotope Products Technical Service: 661-309-1010



2017-12-13
date

【AFAS 性能確認試験】

- (1) 2.1 Fork 検出器のデッドタイムパラメータの取得

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR TOP
 Detector id: AFASB-Top
 Electronics id: AMSR
 Measurement date: 18.10.26 10:19:46
 Results file name: 8AQK1946.RTS
 Inspection number:
 Item id: K7-436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Comment: K7-436 2source dummy(BWR-Top)
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 1.103 +- 0.051
 Passive doubles bkgnd: 0.000 +- 0.000
 Passive triples bkgnd: 0.000 +- 0.000
 Passive scaler1 bkgnd: 0.000
 Passive scaler2 bkgnd: 0.000

2	1168.030	9.033	0.589	Pass
3	1173.397	13.833	0.220	Pass
4	1176.263	12.800	-0.100	Pass
5	1174.530	12.667	-0.455	Pass
6	1178.497	13.633	0.202	Pass
7	1189.697	16.367	-0.181	Pass
8	1187.830	11.833	-0.203	Pass
9	1175.430	13.800	0.257	Pass
10	1176.297	11.933	0.165	Pass
11	1175.197	12.000	-0.239	Pass
12	1180.330	12.800	-0.137	Pass
13	1183.363	12.533	0.850	Pass
14	1188.763	11.367	-0.599	Pass
15	1182.830	11.167	0.352	Pass
16	1184.197	10.733	-0.712	Pass
17	1173.230	11.200	-0.144	Pass
18	1178.963	10.700	0.687	Pass
19	1181.430	12.300	0.134	Pass
20	1187.630	11.300	0.205	Pass
21	1182.330	11.133	-0.443	Pass
22	1175.463	13.400	0.391	Pass
23	1176.563	17.567	0.341	Pass
24	1182.497	11.400	-0.793	Pass
25	1168.363	13.900	0.526	Pass
26	1179.630	11.600	-0.014	Pass
27	1175.830	14.867	0.611	Pass
28	1179.397	12.967	0.485	Pass
29	1162.930	14.333	0.299	Pass
30	1192.530	11.833	0.060	Pass
31	1179.363	12.733	-0.398	Pass
32	1176.830	16.267	0.142	Pass
33	1175.463	11.033	-0.764	Pass
34	1177.063	14.200	0.131	Pass
35	1182.730	12.500	0.015	Pass
36	1180.463	10.033	-0.397	Pass
37	1180.363	11.767	-0.194	Pass
38	1170.997	16.000	-0.567	Pass
39	1170.930	12.800	-0.031	Pass
40	1170.763	15.267	-0.412	Pass
41	1170.197	13.400	0.062	Pass
42	1177.697	16.200	0.376	Pass
43	1175.997	12.667	-0.254	Pass
44	1171.063	11.233	0.157	Pass
45	1188.097	15.233	0.039	Pass
46	1176.930	13.100	0.008	Pass
47	1171.363	12.367	0.641	Pass
48	1178.830	12.867	0.331	Pass
49	1173.663	13.100	-0.056	Pass
50	1190.330	13.300	0.322	Pass
51	1171.130	16.367	0.235	Pass
52	1170.897	11.667	0.787	Pass
53	1176.763	11.567	-0.070	Pass
54	1179.230	14.900	-0.157	Pass
55	1181.063	16.067	-0.078	Pass
56	1174.697	16.467	-0.308	Pass
57	1176.763	10.700	-0.804	Pass

(2)

Results

Singles:	1178.061 +- 0.543
Doubles:	12.949 +- 0.179
Triples:	0.080 +- 0.038
Quads:	-0.000 +- 0.007
Quads/Triples:	2.973 +- 2.965
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	1177.263	12.833	0.430	Pass

(1)

	AFAS_BWR_Top Fork (K7-436) (二線源法).txt		
58	1175.797	15.367	-0.120 Pass
59	1172.463	8.033	0.530 Pass
60	1179.197	16.200	0.009 Pass
61	1176.897	14.533	1.038 Pass
62	1181.663	14.800	-0.754 Pass
63	1186.797	9.433	-0.648 Pass
64	1178.963	13.533	0.307 Pass
65	1184.130	11.500	0.392 Pass
66	1181.330	12.867	-0.707 Pass
67	1182.330	12.533	-0.151 Pass
68	1167.730	11.967	-0.033 Pass
69	1177.963	13.133	-0.229 Pass
70	1176.230	13.033	-0.313 Pass
71	1181.430	15.167	0.154 Pass
72	1177.197	9.767	0.128 Pass
73	1181.297	10.533	0.403 Pass
74	1174.830	16.900	0.497 Pass
75	1173.163	13.300	0.403 Pass
76	1175.497	16.200	0.109 Pass
77	1182.463	11.167	1.081 Pass
78	1169.097	10.533	0.140 Pass
79	1170.663	8.400	-0.532 Pass
80	1182.330	14.533	0.335 Pass
81	1188.597	15.267	1.171 Pass
82	1185.630	14.233	-0.116 Pass
83	1177.363	10.900	0.413 Pass
84	1174.097	13.533	0.913 Pass
85	1176.097	14.400	-0.239 Pass
86	1173.363	12.500	-0.103 Pass
87	1165.130	12.133	0.291 Pass
88	1174.163	12.500	0.672 Pass
89	1179.763	14.933	0.155 Pass
90	1186.097	14.633	-0.313 Pass
91	1191.297	12.433	0.156 Pass
92	1181.097	12.033	0.523 Pass
93	1178.030	11.600	0.555 Pass
94	1183.497	15.133	0.151 Pass
95	1172.530	12.133	0.278 Pass
96	1176.463	10.933	-0.037 Pass
97	1182.497	11.433	0.230 Pass
98	1174.330	16.800	0.094 Pass
99	1182.330	11.933	0.102 Pass
100	1182.563	12.733	-0.093 Pass
101	1177.563	13.167	0.360 Pass
102	1171.863	10.267	-0.259 Pass
103	1174.697	15.900	0.639 Pass
104	1170.797	13.167	-0.552 Pass
105	1182.063	9.967	0.487 Pass
106	1167.697	11.733	-0.373 Pass
107	1182.997	14.133	0.354 Pass
108	1182.497	15.067	0.769 Pass
109	1177.697	13.633	0.196 Pass
110	1171.397	14.233	-0.326 Pass
111	1194.197	11.667	-0.363 Pass
112	1182.630	11.867	-0.076 Pass
113	1173.997	10.733	

(3)

	AFAS_BWR_Top Fork (K7-436) (二線源法).txt		
114	1179.097	10.800	0.049 Pass
115	1169.230	11.667	-0.338 Pass
116	1175.697	15.933	-0.000 Pass
117	1187.063	15.633	0.409 Pass
118	1177.863	12.333	0.205 Pass
119	1179.663	13.367	-0.281 Pass
120	1175.863	11.400	0.403 Pass

(4)

INCC 5.1.2 AFAS_BWR_Top Fork (K7-436+Q2-334) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR TOP
 Detector id: AFASB-Top
 Electronics id: AMSR
 Measurement date: 18.10.26 13:28:25
 Results file name: 8AQN2825.RTS
 Inspection number:
 Item id: Q2-334K7-436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: Q2-334+K7-436 2source dummy (BWR-Top)

Pre-delay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.103 +- 0.051
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 120
 Count time (sec): 30

Results
 Singles: 4699.904 +- 1.278
 Doubles: 51.678 +- 0.680
 Triples: 0.359 +- 0.258
 Quads: -0.026 +- 0.084
 Quads/Triples: 1.304 +- 0.865
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_BWR_Top Fork (K7-436+Q2-334) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	4711.530	47.933	2.647	Pass
2	4689.697	55.067	-0.008	Pass
3	4726.763	58.867	2.792	Pass
4	4702.930	61.767	0.909	Pass
5	4711.097	61.933	-1.045	Pass
6	4703.463	40.600	-4.681	Pass
7	4679.863	55.733	0.180	Pass
8	4689.063	61.133	-3.088	Pass
9	4699.363	53.067	1.874	Pass
10	4689.730	56.267	0.013	Pass
11	4706.897	47.400	-0.572	Pass
12	4699.830	48.333	1.015	Pass
13	4712.230	44.400	6.259	Pass
14	4709.830	45.333	-0.225	Pass
15	4677.930	58.933	-1.562	Pass
16	4720.863	60.400	-3.253	Pass
17	4702.663	61.200	-3.557	Pass
18	4714.397	49.900	4.198	Pass
19	4717.997	50.500	4.019	Pass
20	4716.863	49.567	-1.567	Pass
21	4695.063	43.533	-4.137	Pass
22	4712.030	60.233	2.641	Pass
23	4722.830	61.133	-3.635	Pass
24	4685.397	62.333	-3.339	Pass
25	4711.463	59.400	-1.115	Pass
26	4687.897	47.300	-5.194	Pass
27	4681.497	35.200	5.708	Pass
28	4683.430	56.833	-3.672	Pass
29	4703.063	46.700	1.603	Pass
30	4690.397	46.800	-1.919	Pass
31	4719.530	46.633	1.149	Pass
32	4727.697	39.067	1.514	Pass
33	4683.497	39.467	-0.562	Pass
34	4689.963	44.233	-6.308	Pass
35	4697.597	60.900	4.329	Pass
36	4691.430	50.967	0.288	Pass
37	4698.297	45.367	2.389	Pass
38	4697.130	39.733	-3.481	Pass
39	4692.497	52.433	0.393	Pass
40	4675.230	65.900	0.805	Pass
41	4722.997	56.233	2.922	Pass
42	4670.097	39.200	3.524	Pass
43	4686.897	54.100	3.382	Pass
44	4702.097	54.233	0.323	Pass
45	4718.263	55.333	3.201	Pass
46	4725.130	59.267	1.144	Pass
47	4690.463	57.633	0.362	Pass
48	4712.997	54.667	3.660	Pass
49	4687.663	43.300	-0.027	Pass
50	4712.363	44.233	0.480	Pass
51	4696.897	46.400	0.845	Pass
52	4716.663	36.233	-4.221	Pass
53	4699.963	59.267	-0.370	Pass
54	4711.663	54.500	-3.034	Pass
55	4674.397	45.700	0.258	Pass

(2)

AFAS_BWR_Top Fork (K7-436+02-334) (二線源法). txt

56	4712.463	4.841	Pass
57	4679.363	-6.887	Pass
58	4696.597	2.548	Pass
59	4689.597	0.876	Pass
60	4709.063	2.928	Pass
61	4687.563	-0.416	Pass
62	4701.530	-2.654	Pass
63	4724.997	-2.262	Pass
64	4683.330	2.929	Pass
65	4673.330	-2.242	Pass
66	4710.697	5.734	Pass
67	4683.497	1.848	Pass
68	4709.463	0.808	Pass
69	4721.230	1.999	Pass
70	4700.330	0.956	Pass
71	4696.763	62.033	Pass
72	4684.097	4.895	Pass
73	4715.063	2.531	Pass
74	4693.263	1.296	Pass
75	4684.063	-2.301	Pass
76	4704.830	4.500	Pass
77	4680.697	0.968	Pass
78	4707.697	-0.480	Pass
79	4727.763	-3.128	Pass
80	4702.397	1.069	Pass
81	4711.330	-2.239	Pass
82	4711.663	-1.440	Pass
83	4699.197	2.546	Pass
84	4677.863	-2.260	Pass
85	4700.397	-3.043	Pass
86	4690.430	-3.929	Pass
87	4701.330	3.219	Pass
88	4700.897	-0.104	Pass
89	4690.897	1.266	Pass
90	4715.897	0.806	Pass
91	4704.963	2.522	Pass
92	4692.730	-2.366	Pass
93	4685.963	1.883	Pass
94	4704.263	2.807	Pass
95	4694.197	-0.711	Pass
96	4691.897	-1.130	Pass
97	4691.363	3.897	Pass
98	4685.963	6.085	Pass
99	4722.197	0.883	Pass
100	4694.463	-1.037	Pass
101	4701.630	5.139	Pass
102	4687.530	-2.640	Pass
103	4694.997	0.527	Pass
104	4709.763	-5.078	Pass
105	4721.197	2.797	Pass
106	4713.097	2.982	Pass
107	4699.930	1.753	Pass
108	4690.530	-1.167	Pass
109	4721.397	-2.048	Pass
110	4706.563	3.326	Pass
111	4687.297	2.857	Pass

(3)

AFAS_BWR_Top Fork (K7-436+02-334) (二線源法). txt

112	4703.130	4.152	Pass
113	4674.497	0.079	Pass
114	4706.197	0.303	Pass
115	4685.930	-2.895	Pass
116	4690.097	1.683	Pass
117	4715.997	-3.149	Pass
118	4686.697	-0.708	Pass
119	4687.030	-1.976	Pass
120	4699.897	2.746	Pass

(4)

INCC 5.1.2 AFAS_BWR_Top Fork (Q2-334) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR TOP
 Detector id: AFASB-Top
 Electronics id: AMSR
 Measurement date: 18.10.26 11:29:28
 Results file name: 8AQL2928_RTS
 Inspection number:
 Item id: Q2-334
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: Q2-334 2source dummy (BWR-Top)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000

Passive singles bkgrnd: 1.103 +- 0.051
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 119
 Count time (sec): 30

Results

Singles: 3533.978 +- 0.978
 Doubles: 38.387 +- 0.463
 Triples: 0.189 +- 0.188
 Quads: 0.060 +- 0.051
 Quads/Triples: -0.024 +- 0.062
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_BWR_Top Fork (Q2-334) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	3546.197	26.300	-0.393	Pass
2	3530.997	33.033	1.133	Pass
3	3546.463	36.967	-1.967	Pass
4	3543.830	36.833	-2.135	Pass
5	3533.963	42.433	4.300	Pass
6	3539.597	46.033	-1.872	Pass
7	3544.363	45.133	-1.989	Pass
8	3529.963	35.900	-1.868	Pass
9	3546.630	28.633	-0.872	Pass
10	3526.663	34.867	-0.398	Pass
11	3530.397	31.000	0.549	Pass
12	3549.830	28.633	0.152	Pass
13	3528.330	39.200	-1.169	Pass
14	3543.830	37.967	1.112	Pass
15	3520.497	43.033	2.727	Pass
16	3535.730	40.967	-2.254	Pass
17	3528.130	37.833	-0.115	Pass
18	3531.097	33.600	1.745	Pass
19	3532.597	42.733	4.031	Pass
20	3529.163	37.400	-1.538	Pass
21	3544.097	45.267	-0.756	Pass
22	3535.163	43.633	0.280	Pass
23	3511.063	33.633	2.540	Pass
24	3528.430	37.567	-1.112	Pass
25	3529.130	35.367	-1.136	Pass
26	3554.830	45.300	-0.609	Pass
27	3537.397	31.133	1.871	Pass
28	3532.163	33.833	-1.177	Pass
29	3532.363	41.700	-0.418	Pass
30	3524.663	43.400	-1.722	Pass
31	3553.463	34.000	-5.716	Pass
32	3539.363	35.667	0.644	Pass
33	3530.563	35.833	-0.985	Pass
34	3515.297	35.300	2.049	Pass
35	3525.830	36.333	-0.982	Pass
36	3535.863	35.600	-0.999	Pass
37	3533.730	41.967	2.480	Pass
38	3534.430	39.300	1.767	Pass
39	3541.663	33.300	0.557	Pass
40	3538.530	36.967	-0.208	Pass
41	3535.463	40.633	-1.402	Pass
42	3539.697	47.333	-2.474	Pass
43	3521.030	45.833	0.314	Pass
44	3543.130	44.467	3.750	Pass
45	3527.197	36.900	-4.554	Pass
46	3523.363	37.800	-0.467	Pass
47	3526.130	40.300	0.869	Pass
48	3547.797	36.300	1.703	Pass
49	3526.897	41.333	1.939	Pass
50	3531.197	40.233	3.597	Pass
51	3523.897	43.333	0.824	Pass
52	3526.030	41.433	2.187	Pass
53	3545.497	41.900	2.294	Pass
54	3535.863	35.167	2.947	Pass
55	3525.197	40.100	1.691	Pass

(2)

	AFAS_BWR_Top Fork (Q2-334) (二線源法).txt		AFAS_BWR_Top Fork (Q2-334) (二線源法).txt	
56	3518.463	1.359	Pass	Pass
57	3532.663	-1.067	Pass	Pass
58	3518.663	-1.069	Pass	Pass
59	3521.230	-0.372	Pass	Pass
60	3540.997	1.650	Pass	Pass
61	3544.297	3.407	Pass	Pass
62	3529.463	-4.258	Pass	Pass
63	3528.197	-0.143	Pass	Pass
64	3536.863	2.934	Pass	Pass
65	3523.863	31.200	Pass	Pass
66	3532.330	28.567	Pass	Pass
67	3522.263	-2.555	Pass	Pass
68	3529.163	4.059	Pass	Pass
69	3521.297	-0.209	Pass	Pass
70	3522.830	1.362	Pass	Pass
71	3544.963	-4.734	Pass	Pass
72	3545.030	-0.859	Pass	Pass
73	3532.330	1.023	Pass	Pass
74	3526.397	1.728	Pass	Pass
75	3522.830	1.102	Pass	Pass
76	3530.930	-1.141	Pass	Pass
77	3533.097	-1.813	Pass	Pass
78	3518.297	4.499	Pass	Pass
79	3537.230	1.810	Pass	Pass
80	3540.163	0.054	Pass	Pass
81	3532.463	-0.547	Pass	Pass
82	3533.397	-3.150	Pass	Pass
83	3532.330	0.870	Pass	Pass
84	3547.063	53.267	Pass	Pass
85	3511.430	2.197	Pass	Pass
86	3527.297	0.635	Pass	Pass
87	3527.130	-0.862	Pass	Pass
88	3547.030	-1.928	Pass	Pass
89	3538.230	1.508	Pass	Pass
90	3550.597	2.118	Pass	Pass
91	3551.230	1.290	Pass	Pass
92	3542.697	-1.705	Pass	Pass
93	3546.263	-3.174	Pass	Pass
94	3530.263	2.038	Pass	Pass
95	3539.730	-0.090	Pass	Pass
96	3553.697	0.644	Pass	Pass
97	3536.530	0.629	Pass	Pass
98	3560.030	0.260	Pass	Pass
99	3535.597	-0.692	Pass	Pass
100	3544.597	-7.443	Fail	outlier test
101	3541.997	3.205	Pass	Pass
102	3551.797	2.956	Pass	Pass
103	3519.297	-1.973	Pass	Pass
104	3524.330	0.652	Pass	Pass
105	3547.763	0.630	Pass	Pass
106	3527.963	-1.146	Pass	Pass
107	3530.597	-4.399	Pass	Pass
108	3551.030	2.061	Pass	Pass
109	3520.297	0.460	Pass	Pass
110	3528.963	-2.115	Pass	Pass
111	3524.030	2.728	Pass	Pass

(3)

	AFAS_BWR_Top Fork (Q2-334) (二線源法).txt		AFAS_BWR_Top Fork (Q2-334) (二線源法).txt	
112	3507.930	32.333	1.553	Pass
113	3554.630	45.533	1.900	Pass
114	3520.530	29.600	-1.093	Pass
115	3549.330	42.000	2.435	Pass
116	3545.763	34.533	-0.980	Pass
117	3541.730	34.100	1.105	Pass
118	3522.630	37.633	0.587	Pass
119	3521.197	42.400	0.589	Pass
120	3531.030	30.500	-2.709	Pass

(4)

INCC 5.1.2 AFAS_BWR_Bottom Fork (K7-436) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR BOTTOM
 Detector id: AFASB-Bot
 Electronics id: AMSR
 Measurement date: 18.10.04 10:41:43
 Results file name: 8A4K4143.RTS
 Inspection number:
 Item id: K7-436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436 2source dummy (BWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.202 +- 0.052
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 119
 Count time (sec): 30

Results
 Singles: 1196.846 +- 0.528
 Doubles: 13.441 +- 0.165
 Triples: 0.101 +- 0.042
 Quads: 0.022 +- 0.010
 Quads/Triples: 0.012 +- 0.071
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_BWR_Bottom Fork (K7-436) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	1201.198	13.200	0.080	Pass
2	1196.698	14.467	0.395	Pass
3	1208.198	15.633	-0.310	Pass
4	1199.965	16.267	-0.715	Pass
5	1188.032	11.933	0.265	Pass
6	1192.265	11.433	-0.278	Pass
7	1197.132	12.033	-0.096	Pass
8	1198.365	16.867	-0.130	Pass
9	1197.598	15.967	0.277	Pass
10	1191.298	13.633	0.028	Pass
11	1197.465	13.767	-0.625	Pass
12	1194.132	11.067	0.220	Pass
13	1194.032	13.733	0.320	Pass
14	1197.898	10.333	-0.662	Pass
15	1206.332	12.633	-0.210	Pass
16	1208.932	14.633	0.402	Pass
17	1192.165	13.167	0.195	Pass
18	1194.065	11.833	0.064	Pass
19	1185.965	15.633	0.212	Pass
20	1194.265	11.900	-0.244	Pass
21	1186.165	10.700	0.254	Pass
22	1203.532	12.200	-0.147	Pass
23	1203.198	13.233	-0.284	Pass
24	1197.632	13.800	0.173	Pass
25	1190.332	14.933	0.759	Pass
26	1197.765	13.900	-0.602	Pass
27	1193.798	13.200	-0.110	Pass
28	1203.265	11.733	-0.304	Pass
29	1188.298	12.600	-0.359	Pass
30	1186.032	9.900	-0.152	Pass
31	1192.632	15.367	-0.436	Pass
32	1190.132	11.800	-1.000	Pass
33	1197.998	12.200	0.397	Pass
34	1205.765	13.700	0.940	Pass
35	1193.832	13.667	0.588	Pass
36	1204.132	13.200	0.115	Pass
37	1203.498	12.833	0.111	Pass
38	1206.698	16.133	-0.247	Pass
39	1195.432	12.167	1.266	Pass
40	1196.165	15.167	0.038	Pass
41	1215.398	13.167	0.206	Pass
42	1206.065	18.233	0.193	Pass
43	1199.198	13.533	-0.275	Pass
44	1192.398	14.667	0.015	Pass
45	1200.798	11.733	0.633	Pass
46	1196.632	14.067	0.157	Pass
47	1203.032	10.667	0.578	Pass
48	1195.298	13.233	0.984	Pass
49	1192.698	13.433	-0.462	Pass
50	1193.498	15.167	0.909	Pass
51	1198.598	14.767	-0.167	Pass
52	1192.698	13.667	-0.280	Pass
53	1195.832	16.367	0.180	Pass
54	1191.165	10.733	-0.290	Pass
55	1190.432	15.600	0.044	Pass

(2)

AFAS_BWR_Bottom Fork (K7-436) (二線源法).txt

56	1197.598	16.433	-0.394	Pass
57	1196.498	9.500	0.165	Pass
58	1192.665	12.600	0.499	Pass
59	1187.198	13.533	-0.063	Pass
60	1195.365	13.167	-0.744	Pass
61	1192.265	14.367	0.363	Pass
62	1192.198	18.067	0.087	Pass
63	1206.165	18.067	0.502	Pass
64	1193.832	11.733	0.469	Pass
65	1204.032	10.267	-0.592	Pass
66	1211.832	12.233	0.777	Pass
67	1188.465	16.533	-0.261	Pass
68	1195.865	12.900	0.141	Pass
69	1196.432	11.833	-0.069	Pass
70	1190.932	14.633	-0.188	Pass
71	1194.432	12.867	-0.718	Pass
72	1198.665	13.600	0.222	Pass
73	1186.632	14.533	0.128	Pass
74	1203.432	12.767	-0.018	Pass
75	1198.232	10.933	0.459	Pass
76	1194.332	14.367	-0.595	Pass
77	1196.765	13.467	0.472	Pass
78	1192.632	11.867	0.065	Pass
79	1192.732	16.633	0.564	Pass
80	1199.598	11.633	1.075	Pass
81	1198.865	14.233	-0.233	Pass
82	1201.298	14.400	0.325	Pass
83	1192.065	12.533	-0.391	Pass
84	1198.498	12.833	0.148	Pass
85	1195.765	11.867	0.084	Pass
86	1188.665	14.800	0.309	Pass
87	1196.432	10.333	0.303	Pass
88	1198.265	11.533	-0.088	Pass
89	1193.165	14.733	-0.260	Pass
90	1195.898	12.367	-0.850	Pass
91	1196.598	10.700	-0.323	Pass
92	1202.498	12.700	0.086	Pass
93	1192.832	16.367	1.081	Pass
94	1202.132	11.100	0.645	Pass
95	1202.865	12.633	0.424	Pass
96	1207.332	13.200	-0.454	Pass
97	1199.965	12.167	0.329	Pass
98	1197.532	19.200	-0.673	Fail outlier test
99	1192.432	14.833	0.365	Pass
100	1199.665	15.967	0.237	Pass
101	1200.265	12.567	0.231	Pass
102	1200.832	13.300	0.572	Pass
103	1186.698	11.467	-0.172	Pass
104	1193.265	15.767	0.595	Pass
105	1192.632	13.233	0.818	Pass
106	1201.165	16.200	-0.051	Pass
107	1197.198	12.833	-0.482	Pass
108	1191.365	12.933	0.244	Pass
109	1192.798	13.433	1.042	Pass
110	1187.598	12.333	0.264	Pass
111	1195.165	12.133	-0.427	Pass

(3)

AFAS_BWR_Bottom Fork (K7-436) (二線源法).txt

112	1199.632	13.300	0.480	Pass
113	1199.365	14.700	0.208	Pass
114	1201.798	13.600	0.515	Pass
115	1192.132	13.400	0.774	Pass
116	1197.865	12.567	-0.233	Pass
117	1205.565	14.533	-0.156	Pass
118	1200.698	13.800	-0.533	Pass
119	1197.865	14.433	0.628	Pass
120	1200.698	13.467	0.995	Pass

(4)

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR BOTTOM
 Detector id: AFASB-Bot
 Electronics id: AMSR
 Measurement date: 18.10.04 13:51:24
 Results file name: 8A4N5124.RTS
 Inspection number:
 Item id: Q2334+K7436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436+Q2-334 2source (BWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.202 +- 0.052
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 119
 Count time (sec): 30

Results

Singles:	4775.850 +- 1.219
Doubles:	53.703 +- 0.712
Triples:	-0.328 +- 0.287
Quads:	0.126 +- 0.090
Quads/Triples:	0.048 +- 0.210
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	4779.065	51.067	-5.553	Pass
2	4793.432	45.667	4.254	Pass
3	4770.665	35.233	1.153	Pass
4	4809.465	54.833	-2.755	Pass
5	4768.365	60.433	1.429	Pass
6	4775.198	65.067	1.857	Pass
7	4778.765	60.800	-0.543	Pass
8	4775.298	46.533	3.502	Pass
9	4778.865	65.267	-0.224	Pass
10	4753.565	50.200	-3.276	Pass
11	4764.598	50.000	0.330	Pass
12	4764.332	60.000	-0.396	Pass
13	4759.332	57.733	-3.486	Pass
14	4771.865	63.267	2.497	Pass
15	4785.332	53.567	4.781	Pass
16	4758.565	46.800	1.657	Pass
17	4793.232	44.333	1.297	Pass
18	4750.298	44.267	-4.285	Pass
19	4755.898	49.567	0.862	Pass
20	4766.698	47.633	-0.759	Pass
21	4770.132	39.167	-4.370	Pass
22	4773.898	48.500	2.095	Pass
23	4774.832	41.800	1.093	Pass
24	4795.665	43.800	-0.603	Pass
25	4782.798	65.233	-7.467	Pass
26	4785.432	45.933	-1.178	Pass
27	4799.132	54.633	-1.875	Pass
28	4762.265	51.700	4.956	Pass
29	4797.832	40.533	0.387	Pass
30	4790.298	53.967	-2.402	Pass
31	4776.098	60.733	-6.522	Pass
32	4746.465	38.833	-3.786	Pass
33	4769.665	66.633	3.735	Pass
34	4790.632	71.733	-4.642	Pass
35	4776.298	47.300	-0.472	Pass
36	4755.698	48.400	0.712	Pass
37	4771.565	58.033	-6.399	Pass
38	4763.398	49.267	0.057	Pass
39	4765.032	70.600	-0.675	Pass
40	4778.098	62.633	-3.748	Pass
41	4757.565	54.533	0.144	Pass
42	4759.365	66.633	-2.601	Pass
43	4791.032	50.033	3.445	Pass
44	4777.165	49.700	-2.070	Pass
45	4764.098	65.833	-1.287	Pass
46	4750.498	29.267	0.166	Fail
47	4786.798	55.833	1.467	Pass
48	4773.498	58.167	-4.308	Pass
49	4766.798	53.900	1.623	Pass
50	4788.932	52.067	-7.195	Pass
51	4778.698	70.100	-0.874	Pass
52	4779.765	60.467	-6.369	Pass
53	4790.032	49.267	4.823	Pass
54	4779.632	60.033	-0.539	Pass
55	4765.965	63.600	-2.391	Pass

AFAS_BWR_Bottom Fork (K7-436+Q2-334) (二線源法). txt

56	4772.465	48.533	5.906	Pass
57	4770.798	55.067	-1.975	Pass
58	4775.765	57.133	-5.947	Pass
59	4771.965	50.433	-5.716	Pass
60	4777.265	48.100	0.137	Pass
61	4782.032	53.867	-2.557	Pass
62	4801.432	50.433	-1.858	Pass
63	4762.465	65.067	1.514	Pass
64	4772.632	48.567	-1.248	Pass
65	4757.065	48.633	-1.063	Pass
66	4766.265	57.900	3.871	Pass
67	4760.065	43.533	0.674	Pass
68	4744.065	46.400	0.726	Pass
69	4773.298	54.867	0.964	Pass
70	4784.032	59.433	-0.112	Pass
71	4765.265	52.833	0.679	Pass
72	4784.265	55.133	-2.196	Pass
73	4770.465	68.067	0.156	Pass
74	4762.565	50.833	-1.008	Pass
75	4768.998	47.067	-2.739	Pass
76	4773.598	56.600	1.294	Pass
77	4804.498	57.900	-0.151	Pass
78	4781.765	62.367	2.883	Pass
79	4773.398	44.233	2.637	Pass
80	4782.732	45.900	6.607	Pass
81	4781.965	58.333	3.633	Pass
82	4781.532	62.433	-7.040	Pass
83	4779.932	48.000	-2.970	Pass
84	4785.232	47.767	2.077	Pass
85	4779.198	41.800	1.612	Pass
86	4766.565	64.067	3.180	Pass
87	4769.198	63.267	4.998	Pass
88	4793.932	53.867	0.816	Pass
89	4761.498	57.067	-1.034	Pass
90	4788.198	47.933	3.435	Pass
91	4757.665	41.000	-1.744	Pass
92	4808.765	60.567	-4.474	Pass
93	4767.665	55.133	1.783	Pass
94	4796.065	42.733	-1.030	Pass
95	4786.698	50.500	3.159	Pass
96	4769.465	48.067	-0.380	Pass
97	4758.665	54.833	-0.094	Pass
98	4789.432	49.000	-2.277	Pass
99	4798.132	59.533	3.537	Pass
100	4785.332	56.333	-3.634	Pass
101	4792.132	54.167	-2.454	Pass
102	4768.965	51.433	-1.292	Pass
103	4777.432	51.000	0.859	Pass
104	4786.765	69.600	-3.133	Pass
105	4762.498	52.433	0.352	Pass
106	4780.165	57.500	-1.462	Pass
107	4759.465	44.500	-5.588	Pass
108	4781.165	62.933	6.167	Pass
109	4784.632	39.567	-5.519	Pass
110	4753.398	57.567	1.493	Pass
111	4780.298	59.867	1.123	Pass

(3)

AFAS_BWR_Bottom Fork (K7-436+Q2-334) (二線源法). txt

112	4780.865	55.467	-0.075	Pass
113	4787.032	54.933	-0.604	Pass
114	4767.932	46.767	2.196	Pass
115	4766.832	50.033	0.112	Pass
116	4791.098	59.200	1.580	Pass
117	4798.465	52.800	-0.396	Pass
118	4782.132	60.400	-1.571	Pass
119	4772.565	53.400	4.155	Pass
120	4764.598	44.067	4.763	Pass

(4)

Facility: JMOX
 Material balance area: XXXX
 Detector type: BWR BOTTOM
 Detector id: AFASB-Bot
 Electronics id: AMSR
 Measurement date: 18.10.04 11:51:39
 Results file name: 8A4L5139.RTS
 Inspection number:
 Item id: Q2-334
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: Q2-334 2source dummy (BWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.202 +- 0.052
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 119
 Count time (sec): 30

Results
 Singles: 3592.100 +- 1.073
 Doubles: 39.983 +- 0.464
 Triples: -0.300 +- 0.152
 Quads: -0.036 +- 0.053
 Quads/Triples: -0.239 +- 0.488
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

Cycle	Singles	Doubles	Triples	QC Tests
1	3585.032	42.467	-0.547	Pass
2	3595.898	34.433	-0.782	Pass
3	3590.898	41.467	-1.381	Pass
4	3607.365	41.167	-2.193	Pass
5	3590.498	40.800	1.640	Pass
6	3576.932	38.067	0.338	Pass
7	3576.998	37.200	2.007	Pass
8	3588.832	45.567	-0.248	Pass
9	3610.165	50.867	1.743	Pass
10	3593.965	32.833	-0.962	Pass
11	3601.065	35.200	1.037	Pass
12	3602.165	35.267	1.782	Pass
13	3592.532	42.867	0.170	Pass
14	3603.398	35.567	0.410	Pass
15	3593.265	36.033	2.081	Pass
16	3581.665	35.767	1.184	Pass
17	3590.465	34.267	-2.484	Pass
18	3596.365	33.733	0.140	Pass
19	3604.698	47.400	-0.858	Pass
20	3574.965	43.233	-0.102	Pass
21	3585.598	36.667	2.583	Pass
22	3601.432	32.167	-3.461	Pass
23	3579.598	40.933	1.374	Pass
24	3584.332	41.433	-1.677	Pass
25	3595.932	40.700	0.056	Pass
26	3605.865	45.100	-2.797	Pass
27	3588.032	33.467	0.301	Pass
28	3584.032	40.733	-1.372	Pass
29	3587.532	47.767	3.255	Pass
30	3591.365	32.667	-2.822	Pass
31	3608.698	36.000	5.124	Fail outlier test
32	3583.432	45.333	0.348	Pass
33	3597.565	42.800	0.694	Pass
34	3586.965	46.033	-2.338	Pass
35	3593.032	37.367	-1.377	Pass
36	3574.132	45.067	-0.426	Pass
37	3616.698	48.200	-3.405	Pass
38	3579.865	32.967	0.048	Pass
39	3589.632	48.800	0.830	Pass
40	3597.898	39.067	0.468	Pass
41	3578.365	37.100	-2.706	Pass
42	3611.432	35.500	0.025	Pass
43	3602.665	40.300	-1.095	Pass
44	3570.665	42.567	-2.397	Pass
45	3586.965	38.667	0.573	Pass
46	3581.065	40.633	0.313	Pass
47	3599.565	38.067	1.361	Pass
48	3604.432	36.833	-1.129	Pass
49	3590.265	39.000	0.369	Pass
50	3603.365	45.267	-0.543	Pass
51	3589.265	46.533	2.547	Pass
52	3570.665	39.933	-1.925	Pass
53	3593.032	36.133	0.851	Pass
54	3593.165	43.967	2.097	Pass
55	3585.032	39.833	0.479	Pass

(2)

AFAS_BWR_Bottom Fork (Q2-334) (二線源法).txt

56	3585.165	43.367	-0.254	Pass
57	3578.032	41.667	2.144	Pass
58	3580.532	34.167	-1.332	Pass
59	3588.965	36.667	-2.347	Pass
60	3598.365	40.733	-1.210	Pass
61	3594.598	38.533	-3.120	Pass
62	3576.465	36.800	-0.345	Pass
63	3592.165	37.733	0.203	Pass
64	3615.665	39.600	-1.678	Pass
65	3586.598	49.567	1.852	Pass
66	3579.632	53.567	-1.262	Pass
67	3603.765	34.633	-0.761	Pass
68	3585.398	48.967	0.467	Pass
69	3569.032	35.200	-1.851	Pass
70	3587.765	37.033	-1.588	Pass
71	3602.832	39.267	-1.183	Pass
72	3591.932	45.367	-2.206	Pass
73	3589.098	46.467	-0.865	Pass
74	3577.365	39.033	0.034	Pass
75	3583.698	39.900	0.453	Pass
76	3591.032	42.233	-1.780	Pass
77	3588.598	40.300	-0.781	Pass
78	3606.498	45.033	-2.868	Pass
79	3638.698	45.300	-1.338	Pass
80	3606.632	46.767	-0.006	Pass
81	3598.632	36.567	-0.206	Pass
82	3594.265	36.667	-3.238	Pass
83	3588.432	40.000	1.118	Pass
84	3599.965	28.933	-0.413	Pass
85	3597.865	35.467	0.612	Pass
86	3598.165	40.633	-0.201	Pass
87	3585.465	39.667	-0.598	Pass
88	3597.632	49.000	0.818	Pass
89	3589.498	28.633	0.479	Pass
90	3571.298	35.400	1.599	Pass
91	3608.898	31.733	-0.191	Pass
92	3584.765	43.533	-2.310	Pass
93	3614.498	42.167	-1.391	Pass
94	3593.765	35.267	-2.151	Pass
95	3605.132	35.633	-1.102	Pass
96	3580.798	35.300	0.226	Pass
97	3590.465	36.400	-1.604	Pass
98	3583.398	30.567	-0.775	Pass
99	3594.465	42.833	1.517	Pass
100	3584.598	43.033	1.506	Pass
101	3589.932	33.900	3.579	Pass
102	3568.132	36.533	-3.124	Pass
103	3600.465	35.167	0.901	Pass
104	3575.698	40.867	-0.393	Pass
105	3596.732	37.200	-0.844	Pass
106	3588.198	34.900	-0.613	Pass
107	3597.565	42.133	-0.789	Pass
108	3594.598	39.167	0.068	Pass
109	3591.665	45.967	1.142	Pass
110	3601.632	48.167	3.094	Pass
111	3619.665	40.167	1.581	Pass

(3)

AFAS_BWR_Bottom Fork (Q2-334) (二線源法).txt

112	3596.765	39.100	-5.033	Pass
113	3586.365	32.500	2.738	Pass
114	3585.932	44.333	-0.059	Pass
115	3582.065	35.167	-1.961	Pass
116	3585.998	42.300	-0.538	Pass
117	3611.998	43.967	0.800	Pass
118	3590.365	48.200	3.028	Pass
119	3577.665	47.067	0.146	Pass
120	3607.865	45.233	-3.648	Pass

(4)

INCC 5.1.2 AFAS_PWR_Top Fork (K7-436) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR TOP
 Detector id: AFASP-Top
 Electronics id: AMSR
 Measurement date: 18.10.01 12:03:22
 Results file name: 8A1M0322_RTS
 Inspection number:
 Item id: K7-436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436 2source dummy (PWR-TOP)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 2.017 +- 0.071
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 118
 Count time (sec): 30

Results
 Singles: 1067.138 +- 0.513
 Doubles: 10.731 +- 0.166
 Triples: 0.013 +- 0.031
 Quads: 0.010 +- 0.006
 Quads/Triples: 0.123 +- 0.444
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_PWR_Top Fork (K7-436) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	1073.850	11.900	0.547	Pass
2	1067.083	9.567	0.012	Pass
3	1072.150	10.000	-0.089	Pass
4	1074.083	9.500	0.348	Pass
5	1061.017	11.467	0.388	Pass
6	1066.117	12.333	0.186	Pass
7	1068.317	12.867	-0.385	Pass
8	1067.783	13.067	0.102	Pass
9	1068.150	12.533	0.473	Pass
10	1066.850	10.600	-0.329	Pass
11	1064.350	11.900	0.257	Pass
12	1074.050	6.967	-1.111	Fail outlier test
13	1061.150	10.967	0.587	Pass
14	1075.550	13.933	0.874	Pass
15	1065.917	8.833	0.196	Pass
16	1069.283	11.200	0.228	Pass
17	1074.150	10.433	0.211	Pass
18	1065.250	10.367	0.196	Pass
19	1057.617	6.733	-0.225	Pass
20	1059.450	12.333	-0.504	Pass
21	1078.617	10.400	0.112	Pass
22	1069.650	12.033	0.108	Pass
23	1062.383	9.067	0.180	Pass
24	1066.083	11.167	-0.098	Pass
25	1070.283	9.100	-0.558	Pass
26	1067.517	8.767	0.333	Pass
27	1071.950	10.033	-0.523	Pass
28	1066.983	9.767	-0.001	Pass
29	1063.117	10.733	-0.032	Pass
30	1064.050	8.600	-0.318	Pass
31	1062.817	9.733	-0.132	Pass
32	1063.950	8.167	-0.126	Pass
33	1069.783	7.667	-0.393	Pass
34	1063.917	7.900	0.526	Pass
35	1060.950	11.167	0.505	Pass
36	1071.317	8.367	-0.306	Pass
37	1058.550	10.433	0.058	Pass
38	1069.883	9.600	-0.227	Pass
39	1068.417	10.167	-0.198	Pass
40	1075.483	9.667	0.265	Pass
41	1073.817	12.633	0.130	Pass
42	1069.917	10.667	0.164	Pass
43	1063.350	11.367	0.323	Pass
44	1070.150	9.233	0.533	Pass
45	1061.617	10.867	0.227	Pass
46	1069.283	11.833	-0.211	Pass
47	1070.283	13.400	-0.090	Pass
48	1067.983	14.233	0.324	Pass
49	1065.383	9.433	-0.280	Pass
50	1067.983	12.533	-0.358	Pass
51	1067.283	10.367	-0.376	Pass
52	1059.483	8.200	-0.522	Pass
53	1067.450	11.967	0.279	Pass
54	1062.050	8.933	0.125	Pass
55	1069.150	12.533	-0.557	Pass

(2)

	AFAS_PWR_Top Fork (K7-436) (二線源法).txt	AFAS_PWR_Top Fork (K7-436) (二線源法).txt
56	1069.083	0.114 Pass
57	1057.383	0.111 Pass
58	1070.283	0.355 Pass
59	1082.283	0.060 Pass
60	1067.083	-0.389 Pass
61	1057.950	0.514 Pass
62	1068.983	0.275 Pass
63	1073.417	-0.017 Pass
64	1069.283	0.039 Pass
65	1061.917	-0.238 Pass
66	1067.317	9.100 Pass
67	1073.017	9.467 Pass
68	1060.483	8.633 Pass
69	1062.350	10.733 Pass
70	1067.883	7.400 Pass
71	1066.750	9.033 Pass
72	1058.917	11.800 Pass
73	1070.383	10.933 Pass
74	1072.350	9.267 Pass
75	1064.083	12.733 Pass
76	1070.317	15.267 Pass
77	1059.483	11.833 Pass
78	1071.950	10.133 Pass
79	1057.283	8.233 Pass
80	1067.983	12.600 Pass
81	1063.250	11.167 Pass
82	1067.650	8.033 Pass
83	1069.383	8.133 Pass
84	1067.017	10.567 Pass
85	1075.083	13.033 Pass
86	1078.917	11.300 Pass
87	1072.283	10.133 Pass
88	1076.050	12.467 Pass
89	1053.617	9.033 Pass
90	1061.350	10.767 Pass
91	1054.350	10.133 Pass
92	1062.483	14.633 Pass
93	1066.883	15.767 Pass
94	1076.217	11.233 Pass
95	1070.050	12.133 Pass
96	1062.217	9.533 Pass
97	1061.883	13.067 Pass
98	1064.050	8.467 Pass
99	1055.717	11.667 Pass
100	1064.950	11.133 Pass
101	1073.183	13.667 Pass
102	1072.250	7.667 Pass
103	1072.850	11.667 Pass
104	1061.683	8.933 Pass
105	1068.583	10.533 Pass
106	1064.217	8.267 Pass
107	1070.483	12.000 Pass
108	1068.450	8.167 Pass
109	1062.783	11.567 Pass
110	1070.983	10.733 Pass
111	1073.283	-0.098 Pass

(3)

outlier test

	AFAS_PWR_Top Fork (K7-436) (二線源法).txt	AFAS_PWR_Top Fork (K7-436) (二線源法).txt
112	1067.850	0.380 Pass
113	1075.283	-0.060 Pass
114	1069.450	0.105 Pass
115	1076.117	0.877 Pass
116	1061.950	0.542 Pass
117	1075.150	-0.274 Pass
118	1058.717	-0.025 Pass
119	1069.483	-0.436 Pass
120	1064.917	-0.721 Pass

(4)

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR TOP
 Detector id: AFASP-Top
 Electronics id: AMSR
 Measurement date: 18.10.01 13:56:08
 Results file name: 8A1N5608_RTS
 Inspection number:
 Item id: K7436+Q2334
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436+Q2-334 2source (PWR-TOP)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 2.017 +- 0.071
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 120
 Count time (sec): 30

Results
 Singles: 4266.100 +- 1.147
 Doubles: 40.695 +- 0.599
 Triples: -0.279 +- 0.202
 Quads: 0.141 +- 0.069
 Quads/Triples: 0.138 +- 0.214
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	4261.350	45.667	1.448	Pass
2	4267.350	36.833	-1.791	Pass
3	4271.417	47.033	3.687	Pass
4	4266.450	30.633	-0.237	Pass
5	4252.283	34.500	-3.742	Pass
6	4268.150	46.767	5.119	Pass
7	4272.783	32.933	-1.395	Pass
8	4280.817	31.767	-4.741	Pass
9	4255.983	35.967	-0.417	Pass
10	4258.550	41.767	-0.020	Pass
11	4263.517	48.033	3.780	Pass
12	4263.950	41.733	2.330	Pass
13	4270.617	37.233	-1.623	Pass
14	4248.917	51.133	-0.327	Pass
15	4264.250	45.967	1.039	Pass
16	4273.483	37.100	-4.654	Pass
17	4271.383	49.333	-1.177	Pass
18	4261.350	33.500	2.400	Pass
19	4275.883	48.600	-0.382	Pass
20	4267.550	38.367	-0.933	Pass
21	4263.183	32.300	-1.384	Pass
22	4258.350	44.767	-0.957	Pass
23	4262.750	39.167	0.927	Pass
24	4271.650	33.667	0.798	Pass
25	4252.517	40.133	1.981	Pass
26	4277.083	36.467	4.162	Pass
27	4273.117	43.467	-1.568	Pass
28	4278.650	50.133	-4.810	Pass
29	4244.217	33.433	2.756	Pass
30	4259.683	40.500	-2.046	Pass
31	4264.850	45.067	1.709	Pass
32	4260.717	39.733	1.051	Pass
33	4254.383	43.667	2.440	Pass
34	4271.417	37.267	-1.999	Pass
35	4267.817	48.067	-0.035	Pass
36	4257.250	45.367	1.442	Pass
37	4266.550	39.467	0.943	Pass
38	4268.483	33.633	1.150	Pass
39	4244.883	46.567	-0.599	Pass
40	4265.317	42.633	-3.928	Pass
41	4248.850	52.233	-0.484	Pass
42	4278.117	42.933	3.215	Pass
43	4247.950	30.367	-2.102	Pass
44	4279.950	31.567	-0.844	Pass
45	4273.750	34.867	2.865	Pass
46	4250.217	43.633	-1.150	Pass
47	4274.983	36.667	-3.539	Pass
48	4275.083	49.533	-4.417	Pass
49	4281.717	33.200	-3.818	Pass
50	4242.317	43.200	-1.461	Pass
51	4271.917	32.300	2.272	Pass
52	4265.483	32.533	-0.377	Pass
53	4274.717	42.633	-4.105	Pass
54	4235.983	59.133	-0.905	Pass
55	4251.083	40.367	-2.188	Pass

AFAS_PWR_Top Fork (K7-436+02-334) (二線源法).txt

56	4255.683	45.333	0.647	Pass
57	4261.150	42.167	1.493	Pass
58	4261.750	39.767	-1.245	Pass
59	4249.650	50.800	-2.423	Pass
60	4264.117	50.600	1.218	Pass
61	4248.917	46.767	-0.149	Pass
62	4278.817	55.433	1.881	Pass
63	4271.883	29.933	-0.265	Pass
64	4260.583	48.400	1.363	Pass
65	4271.683	37.533	0.607	Pass
66	4265.517	34.167	-0.965	Pass
67	4269.017	37.867	-4.717	Pass
68	4250.017	48.633	-0.317	Pass
69	4257.417	41.967	-1.716	Pass
70	4238.017	39.000	1.408	Pass
71	4264.950	37.000	-2.553	Pass
72	4241.183	48.233	0.136	Pass
73	4272.750	47.333	3.742	Pass
74	4276.283	45.467	-2.282	Pass
75	4241.250	36.300	0.351	Pass
76	4269.650	42.933	-1.330	Pass
77	4271.117	48.400	0.104	Pass
78	4264.983	38.233	1.410	Pass
79	4260.250	36.267	1.840	Pass
80	4266.783	41.167	-5.571	Pass
81	4249.817	45.433	-0.823	Pass
82	4263.883	38.633	-0.407	Pass
83	4273.950	38.533	-0.754	Pass
84	4268.617	51.000	-1.697	Pass
85	4257.717	32.000	1.778	Pass
86	4259.350	38.100	-0.682	Pass
87	4292.883	40.367	4.673	Pass
88	4269.483	43.133	-0.985	Pass
89	4283.217	46.933	1.253	Pass
90	4256.750	45.967	-2.695	Pass
91	4268.517	29.533	-2.790	Pass
92	4256.317	52.400	1.545	Pass
93	4295.550	46.967	-3.543	Pass
94	4271.317	34.633	0.761	Pass
95	4273.783	21.867	-2.157	Pass
96	4274.983	37.567	-0.716	Pass
97	4273.183	32.967	0.571	Pass
98	4255.217	45.900	-1.955	Pass
99	4270.583	44.767	3.808	Pass
100	4267.350	41.300	0.615	Pass
101	4293.317	39.033	1.961	Pass
102	4265.950	34.033	-1.279	Pass
103	4257.650	39.867	-2.119	Pass
104	4275.050	37.267	1.923	Pass
105	4293.583	36.233	-0.303	Pass
106	4251.817	34.000	-2.872	Pass
107	4286.517	36.567	-0.527	Pass
108	4271.417	42.500	-3.288	Pass
109	4268.617	51.167	-0.629	Pass
110	4260.350	44.300	-0.643	Pass
111	4304.617	40.400	2.387	Pass

(3)

AFAS_PWR_Top Fork (K7-436+02-334) (二線源法).txt

112	4251.883	50.233	2.341	Pass
113	4265.583	34.133	-1.298	Pass
114	4288.350	36.833	-1.507	Pass
115	4254.717	31.367	0.262	Pass
116	4279.550	37.800	1.215	Pass
117	4275.550	31.667	-1.220	Pass
118	4290.117	41.700	0.930	Pass
119	4272.083	36.667	-1.806	Pass
120	4278.350	34.400	1.316	Pass

(4)

INCC 5.1.2 AFAS_PWR_Top Fork (Q2-334) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR TOP
 Detector id: AFASP-Top
 Electronics id: AMSR
 Measurement date: 18.10.01 10:52:28
 Results file name: 8A1K5228_RTS
 Inspection number:
 Item id: Q2-334
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: Q2-334 2source dummy (PWR-TOP)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 2.017 +- 0.071
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 120
 Count time (sec): 30

Results
 Singles: 3219.315 +- 1.014
 Doubles: 30.546 +- 0.421
 Triples: 0.048 +- 0.142
 Quads: 0.034 +- 0.041
 Quads/Triples: -0.020 +- 0.125
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_PWR_Top Fork (Q2-334) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	3206.250	24.733	-0.098	Pass
2	3199.483	33.800	0.568	Pass
3	3210.417	25.033	-0.993	Pass
4	3230.183	31.867	2.068	Pass
5	3233.150	25.200	-2.444	Pass
6	3192.883	25.867	-1.796	Pass
7	3209.417	32.133	1.609	Pass
8	3221.650	25.100	-0.505	Pass
9	3217.850	27.633	0.305	Pass
10	3226.683	28.133	-1.153	Pass
11	3238.117	33.033	-2.010	Pass
12	3197.283	36.867	0.699	Pass
13	3209.883	24.667	-1.231	Pass
14	3193.217	30.967	-0.506	Pass
15	3211.717	25.933	1.066	Pass
16	3231.850	31.033	1.204	Pass
17	3209.850	34.100	-2.256	Pass
18	3208.617	36.567	1.240	Pass
19	3205.883	31.733	-1.001	Pass
20	3216.817	24.567	1.632	Pass
21	3221.583	34.133	-0.169	Pass
22	3232.083	31.333	-3.165	Pass
23	3216.150	39.100	1.948	Pass
24	3212.350	27.067	1.092	Pass
25	3214.050	28.633	0.460	Pass
26	3221.417	24.800	-0.296	Pass
27	3232.917	23.600	-0.846	Pass
28	3241.883	38.567	-0.180	Pass
29	3220.283	31.667	1.523	Pass
30	3212.617	27.600	-2.805	Pass
31	3226.883	24.067	-0.173	Pass
32	3215.650	32.533	-1.233	Pass
33	3209.183	31.633	-1.274	Pass
34	3215.450	34.367	0.390	Pass
35	3238.283	32.333	-0.418	Pass
36	3221.317	21.600	0.524	Pass
37	3223.983	24.567	1.974	Pass
38	3222.350	24.467	0.504	Pass
39	3221.550	33.333	1.963	Pass
40	3218.483	32.033	0.391	Pass
41	3208.117	31.700	3.434	Pass
42	3212.583	31.467	-0.601	Pass
43	3209.983	30.667	-2.398	Pass
44	3212.283	33.667	-1.392	Pass
45	3216.917	36.867	-1.575	Pass
46	3218.217	34.500	3.004	Pass
47	3204.117	22.700	0.576	Pass
48	3219.150	32.100	0.456	Pass
49	3220.283	28.133	2.165	Pass
50	3223.917	30.067	0.119	Pass
51	3205.783	19.733	-0.698	Pass
52	3221.217	31.467	0.262	Pass
53	3232.550	25.600	0.200	Pass
54	3241.650	34.333	-0.261	Pass
55	3228.083	25.033	1.445	Pass

(2)

	AFAS_PWR_Top Fork (Q2-334) (二線源法).txt	AFAS_PWR_Top Fork (Q2-334) (二線源法).txt
56	3208.750	0.478 Pass
57	3216.050	0.292 Pass
58	3245.150	2.068 Pass
59	3211.283	0.892 Pass
60	3239.383	-0.957 Pass
61	3195.417	-0.054 Pass
62	3226.383	-2.932 Pass
63	3221.617	2.640 Pass
64	3215.317	0.740 Pass
65	3207.117	0.368 Pass
66	3199.183	-1.431 Pass
67	3223.150	-1.508 Pass
68	3241.350	-0.355 Pass
69	3233.350	2.153 Pass
70	3225.050	-0.314 Pass
71	3214.117	1.557 Pass
72	3209.683	0.076 Pass
73	3209.383	0.937 Pass
74	3219.717	-1.350 Pass
75	3216.550	-0.545 Pass
76	3229.517	0.670 Pass
77	3219.950	-2.953 Pass
78	3228.650	-1.322 Pass
79	3220.150	-3.275 Pass
80	3231.317	-3.529 Pass
81	3209.950	31.367 Pass
82	3225.517	4.709 Pass
83	3222.883	1.330 Pass
84	3213.850	2.282 Pass
85	3208.750	-0.881 Pass
86	3212.450	-1.502 Pass
87	3215.617	-1.396 Pass
88	3231.650	0.231 Pass
89	3231.217	35.233 Pass
90	3225.617	-0.386 Pass
91	3220.283	-1.729 Pass
92	3235.617	0.645 Pass
93	3220.750	2.504 Pass
94	3225.750	0.627 Pass
95	3223.283	-3.420 Pass
96	3241.083	1.563 Pass
97	3241.717	1.939 Pass
98	3202.883	-1.397 Pass
99	3215.050	1.081 Pass
100	3215.217	0.204 Pass
101	3229.017	0.114 Pass
102	3224.250	23.667 Pass
103	3217.483	2.602 Pass
104	3226.250	-1.918 Pass
105	3216.383	32.667 Pass
106	3211.050	-0.748 Pass
107	3236.050	0.002 Pass
108	3228.717	0.309 Pass
109	3219.117	2.057 Pass
110	3201.283	-0.409 Pass
111	3234.450	0.326 Pass

(3)

	AFAS_PWR_Top Fork (Q2-334) (二線源法).txt
112	3207.950
113	3213.850
114	3219.883
115	3218.983
116	3212.750
117	3218.050
118	3215.517
119	3212.150
120	3223.350

(4)

INCC 5.1.2 AFAS_PWR_Bottom Fork (K7-436) (二線源法).txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR BOTTOM
 Detector id: AFASP-Bot
 Electronics id: AMSR
 Measurement date: 18.10.02 11:50:43
 Results file name: 8A2L5043.RTS
 Inspection number:
 Item id: K7-436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436 2source dummy (PWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.990 +- 0.057
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 120
 Count time (sec): 30

Results
 Singles: 1078.686 +- 0.523
 Doubles: 10.722 +- 0.146
 Triples: -0.007 +- 0.034
 Quads: 0.005 +- 0.007
 Quads/Triples: 0.228 +- 0.265
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

AFAS_PWR_Bottom Fork (K7-436) (二線源法).txt

Cycle	Singles	Doubles	Triples	QC Tests
1	1085.243	9.867	-0.355	Pass
2	1087.243	10.000	-0.395	Pass
3	1077.310	11.900	0.609	Pass
4	1073.377	9.733	0.064	Pass
5	1077.077	9.600	0.406	Pass
6	1088.277	8.833	-0.250	Pass
7	1074.877	14.233	0.180	Pass
8	1074.043	9.400	-0.281	Pass
9	1071.977	10.367	-0.113	Pass
10	1077.743	12.367	0.012	Pass
11	1087.243	11.333	0.373	Pass
12	1084.343	12.933	0.097	Pass
13	1083.610	10.700	0.121	Pass
14	1072.710	10.000	0.312	Pass
15	1075.543	11.367	0.281	Pass
16	1081.910	10.000	0.138	Pass
17	1082.177	11.767	0.450	Pass
18	1076.777	13.167	0.487	Pass
19	1082.643	10.533	-0.200	Pass
20	1077.210	11.967	0.640	Pass
21	1072.577	12.267	0.053	Pass
22	1081.843	11.300	0.983	Pass
23	1078.843	9.533	-0.193	Pass
24	1070.710	7.300	0.099	Pass
25	1079.610	8.533	-0.455	Pass
26	1075.110	8.067	-0.289	Pass
27	1072.543	12.733	0.120	Pass
28	1069.410	9.667	-0.696	Pass
29	1075.910	10.567	0.002	Pass
30	1070.743	10.833	-0.110	Pass
31	1081.843	8.267	0.466	Pass
32	1079.910	9.100	-0.497	Pass
33	1082.943	10.467	-0.156	Pass
34	1073.177	9.433	-0.118	Pass
35	1092.910	11.533	0.654	Pass
36	1090.243	10.600	-0.010	Pass
37	1082.410	12.600	-0.277	Pass
38	1080.277	10.800	-0.150	Pass
39	1080.577	11.267	-0.116	Pass
40	1077.110	10.033	0.070	Pass
41	1084.677	12.000	-0.103	Pass
42	1066.643	7.200	-0.026	Pass
43	1074.410	10.133	-0.236	Pass
44	1076.910	11.700	0.961	Pass
45	1078.410	6.700	-0.161	Pass
46	1077.777	10.933	-0.322	Pass
47	1080.243	10.300	-0.149	Pass
48	1081.577	10.167	-0.307	Pass
49	1071.910	13.767	0.921	Pass
50	1071.743	11.133	-0.899	Pass
51	1083.743	11.467	-0.065	Pass
52	1085.343	11.767	-0.052	Pass
53	1085.277	12.733	-0.184	Pass
54	1087.243	10.700	-0.383	Pass
55	1074.177	13.200	-0.011	Pass

(2)

AFAS_PWR_Bottom Fork (K7-436) (二線源法).txt

56	1075.310	8.200	-0.267	Pass
57	1083.310	9.700	-0.111	Pass
58	1087.077	9.733	-0.178	Pass
59	1083.510	8.200	-0.134	Pass
60	1075.010	11.233	0.055	Pass
61	1086.877	9.967	0.070	Pass
62	1065.843	11.367	0.723	Pass
63	1081.210	8.867	0.183	Pass
64	1074.477	7.867	-0.409	Pass
65	1076.877	11.433	-0.225	Pass
66	1083.910	12.100	0.622	Pass
67	1076.143	13.933	-0.199	Pass
68	1075.577	10.300	0.025	Pass
69	1068.110	7.600	-0.154	Pass
70	1069.610	12.433	-0.090	Pass
71	1080.677	11.333	-0.389	Pass
72	1074.210	10.167	0.066	Pass
73	1074.410	12.533	0.336	Pass
74	1073.343	12.567	-0.028	Pass
75	1076.743	14.033	0.333	Pass
76	1085.743	12.600	-0.046	Pass
77	1080.877	9.767	-0.243	Pass
78	1072.143	10.833	-0.478	Pass
79	1081.210	11.367	0.577	Pass
80	1077.377	7.900	-0.577	Pass
81	1069.810	10.500	-0.658	Pass
82	1080.177	8.567	0.038	Pass
83	1070.277	13.467	0.807	Pass
84	1077.610	8.400	0.020	Pass
85	1074.443	9.900	-0.549	Pass
86	1081.510	10.833	-0.153	Pass
87	1083.310	9.867	0.281	Pass
88	1081.510	12.800	0.042	Pass
89	1072.643	11.900	0.184	Pass
90	1078.577	12.667	-0.241	Pass
91	1079.643	10.233	-0.673	Pass
92	1083.677	13.633	-0.014	Pass
93	1081.243	12.567	0.162	Pass
94	1078.543	10.933	0.175	Pass
95	1073.310	11.600	-0.034	Pass
96	1085.477	9.967	-0.496	Pass
97	1086.277	10.433	-0.027	Pass
98	1082.977	9.967	0.606	Pass
99	1076.110	10.033	0.239	Pass
100	1083.177	11.933	-0.066	Pass
101	1076.677	11.733	0.357	Pass
102	1079.777	12.900	0.242	Pass
103	1074.077	9.833	0.525	Pass
104	1087.077	11.400	-0.328	Pass
105	1070.277	8.200	0.402	Pass
106	1074.710	10.833	-0.780	Pass
107	1076.177	9.767	-0.074	Pass
108	1084.377	10.300	-0.112	Pass
109	1093.243	11.533	-0.206	Pass
110	1086.510	11.167	-0.478	Pass
111	1073.043	9.233	0.163	Pass

(3)

AFAS_PWR_Bottom Fork (K7-436) (二線源法).txt

112	1085.177	10.067	0.331	Pass
113	1069.043	9.433	-0.446	Pass
114	1084.777	11.567	-0.305	Pass
115	1074.110	11.733	-0.210	Pass
116	1084.543	9.000	0.503	Pass
117	1080.310	11.700	-0.279	Pass
118	1078.077	8.900	0.016	Pass
119	1077.410	12.567	0.130	Pass
120	1072.943	9.633	-0.398	Pass

(4)

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR BOTTOM
 Detector id: AFASP-Bot
 Electronics id: AMSR
 Measurement date: 18.10.02 13:51:46
 Results file name: 8A2N5146.RTS
 Inspection number:
 Item id: Q2334+K7436
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: K7-436+Q2-334 2source (PWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.990 +- 0.057
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 118
 Count time (sec): 30

Results

Singles:	4303.443 +- 1.125
Doubles:	42.802 +- 0.549
Triples:	-0.087 +- 0.198
Quads:	0.067 +- 0.066
Quads/Triples:	-0.550 +- 0.378
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	4295.277	44.433	7.737	Fail outlier test
2	4317.043	43.300	4.549	Pass
3	4295.843	51.067	-0.078	Pass
4	4292.610	39.300	-1.242	Pass
5	4306.177	43.300	-0.030	Pass
6	4303.410	32.033	1.167	Pass
7	4325.443	51.800	-2.213	Pass
8	4316.477	54.100	-2.652	Pass
9	4284.943	45.700	-0.614	Pass
10	4308.777	40.433	2.436	Pass
11	4320.943	40.300	0.559	Pass
12	4284.843	44.633	-2.748	Pass
13	4313.777	34.533	0.028	Pass
14	4305.477	39.767	-0.172	Pass
15	4301.977	41.233	1.484	Pass
16	4292.777	47.900	0.976	Pass
17	4316.810	30.567	-2.324	Pass
18	4315.410	43.033	-1.524	Pass
19	4301.210	49.000	1.163	Pass
20	4315.443	45.433	1.786	Pass
21	4295.943	41.600	-1.170	Pass
22	4291.943	46.267	-2.448	Pass
23	4299.277	45.467	-0.052	Pass
24	4305.043	44.333	-3.023	Pass
25	4294.277	46.633	-0.207	Pass
26	4294.343	45.100	-0.570	Pass
27	4301.143	50.967	0.439	Pass
28	4305.343	59.567	-2.679	Pass
29	4286.877	41.133	-0.031	Pass
30	4306.743	41.667	-1.999	Pass
31	4295.543	45.600	-2.766	Pass
32	4311.877	49.167	-0.801	Pass
33	4323.477	38.333	-3.994	Pass
34	4307.610	40.100	1.707	Pass
35	4278.977	28.833	0.451	Pass
36	4296.710	50.400	2.161	Pass
37	4305.843	38.500	-0.223	Pass
38	4303.877	43.067	2.523	Pass
39	4316.443	45.467	-0.493	Pass
40	4314.643	45.667	2.791	Pass
41	4312.543	47.367	6.476	Pass
42	4276.977	44.300	-1.296	Pass
43	4294.943	52.000	-2.900	Pass
44	4312.443	46.433	0.538	Pass
45	4314.310	41.400	0.279	Pass
46	4313.210	40.433	1.464	Pass
47	4296.243	40.400	0.189	Pass
48	4308.743	30.867	3.002	Pass
49	4297.243	36.700	-0.380	Pass
50	4317.543	37.900	-4.186	Pass
51	4320.210	45.733	0.967	Pass
52	4298.377	37.100	3.305	Pass
53	4306.110	46.867	1.253	Pass
54	4317.843	40.800	0.529	Pass
55	4296.810	48.233	-0.103	Pass

AFAS_PWR_Bottom Fork (K7-436+Q2-334) (二線源法). txt

56	4305.310	42.700	-0.847	Pass
57	4305.010	41.000	-4.035	Pass
58	4307.943	54.700	3.085	Pass
59	4315.810	37.067	0.308	Pass
60	4307.477	44.033	2.238	Pass
61	4305.577	39.900	0.367	Pass
62	4294.943	34.267	-0.717	Pass
63	4292.643	46.500	-0.634	Pass
64	4319.543	47.400	0.634	Pass
65	4294.010	47.533	3.162	Pass
66	4289.010	36.833	-1.640	Pass
67	4318.943	31.967	1.000	Pass
68	4287.610	32.033	-1.721	Pass
69	4305.077	44.333	-2.472	Pass
70	4310.943	44.267	-2.474	Pass
71	4301.210	42.600	-3.532	Pass
72	4283.210	47.067	1.885	Pass
73	4290.910	49.400	1.187	Pass
74	4299.443	49.833	1.564	Pass
75	4317.777	42.467	3.026	Pass
76	4297.143	47.100	-2.177	Pass
77	4284.777	39.933	-1.547	Pass
78	4309.743	36.900	1.291	Pass
79	4327.743	34.567	-1.836	Pass
80	4315.710	33.633	-1.025	Pass
81	4341.943	48.667	-0.079	Pass
82	4305.077	42.900	0.623	Pass
83	4292.343	34.800	-1.695	Pass
84	4292.143	53.033	2.232	Pass
85	4280.710	41.433	-1.541	Pass
86	4302.777	33.233	1.611	Pass
87	4306.743	43.600	-2.256	Pass
88	4292.377	43.167	-1.388	Pass
89	4310.910	41.667	1.063	Pass
90	4305.943	40.833	-0.649	Pass
91	4319.277	44.467	-0.949	Pass
92	4305.677	43.100	-4.358	Pass
93	4287.277	37.600	-3.397	Pass
94	4285.343	44.200	0.514	Pass
95	4315.677	44.367	1.372	Pass
96	4298.177	40.200	-4.539	Pass
97	4276.977	49.767	-7.669	Fail
98	4301.810	40.167	-2.248	Pass
99	4311.310	40.733	-0.253	Pass
100	4272.643	42.533	-1.752	Pass
101	4302.577	55.900	-1.811	Pass
102	4319.810	47.533	-1.165	Pass
103	4282.943	45.567	-2.903	Pass
104	4302.177	41.133	0.842	Pass
105	4312.610	41.067	-1.640	Pass
106	4301.210	47.900	-0.099	Pass
107	4306.677	49.033	4.530	Pass
108	4290.510	49.767	-0.396	Pass
109	4317.277	34.467	2.657	Pass
110	4301.110	50.867	1.960	Pass
111	4302.077	30.867	2.880	Pass

(3)

AFAS_PWR_Bottom Fork (K7-436+Q2-334) (二線源法). txt

112	4301.877	41.400	2.112	Pass
113	4311.810	36.933	1.794	Pass
114	4305.377	36.400	-0.543	Pass
115	4281.143	30.200	-2.045	Pass
116	4300.943	44.433	3.099	Pass
117	4312.177	38.100	-1.593	Pass
118	4320.177	49.600	-0.478	Pass
119	4283.043	50.233	4.506	Pass
120	4296.177	38.700	3.712	Pass

(4)

Facility: JMOX
 Material balance area: XXXX
 Detector type: PWR BOTTOM
 Detector id: AFASP-Bot
 Electronics id: AMSR
 Measurement date: 18.10.02 10:39:02
 Results file name: 8A2K3902.RTS
 Inspection number:
 Item id: Q2-334
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: Q2-334 2source dummy (PWR-BOTTOM)

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0001
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1.990 +- 0.057
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 120
 Count time (sec): 30

Results

Singles:	3246.213 +- 0.927
Doubles:	32.499 +- 0.463
Triples:	0.002 +- 0.160
Quads:	0.088 +- 0.047
Quads/Triples:	-0.182 +- 0.213
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	3239.043	27.733	-0.926	Pass
2	3257.410	30.667	1.883	Pass
3	3243.010	24.100	0.675	Pass
4	3223.377	26.633	0.929	Pass
5	3251.610	32.500	4.073	Pass
6	3243.210	28.867	-1.749	Pass
7	3245.677	40.000	-0.054	Pass
8	3245.443	28.800	-0.626	Pass
9	3245.743	25.067	-3.717	Pass
10	3230.843	30.667	1.195	Pass
11	3250.777	28.567	0.833	Pass
12	3260.577	40.033	1.688	Pass
13	3244.043	31.700	2.368	Pass
14	3245.743	32.500	-2.235	Pass
15	3237.210	22.433	0.189	Pass
16	3267.177	36.300	2.652	Pass
17	3243.643	39.467	0.962	Pass
18	3258.843	33.533	-1.738	Pass
19	3260.977	33.567	2.590	Pass
20	3236.377	36.133	2.551	Pass
21	3235.877	27.933	0.158	Pass
22	3264.310	31.300	0.464	Pass
23	3259.277	24.133	4.556	Pass
24	3246.943	35.200	0.974	Pass
25	3241.443	32.900	0.744	Pass
26	3233.743	30.000	-2.319	Pass
27	3231.277	35.700	-0.234	Pass
28	3248.010	30.300	1.518	Pass
29	3234.243	40.100	1.795	Pass
30	3260.177	27.500	-0.188	Pass
31	3251.443	36.000	-1.729	Pass
32	3251.510	31.800	0.052	Pass
33	3247.777	33.067	0.076	Pass
34	3254.210	35.433	-1.637	Pass
35	3245.710	35.300	2.583	Pass
36	3253.943	36.700	1.239	Pass
37	3228.510	35.000	-3.656	Pass
38	3251.210	39.000	-0.167	Pass
39	3242.177	29.633	-0.599	Pass
40	3240.243	33.933	-2.268	Pass
41	3256.577	31.667	0.716	Pass
42	3232.110	30.833	-0.402	Pass
43	3248.343	31.867	-3.215	Pass
44	3262.443	39.833	-2.062	Pass
45	3246.177	29.267	-2.697	Pass
46	3260.543	38.367	0.095	Pass
47	3253.010	33.967	-1.429	Pass
48	3233.343	25.133	-1.169	Pass
49	3239.577	22.100	0.179	Pass
50	3234.810	35.567	-0.421	Pass
51	3245.977	34.500	0.222	Pass
52	3252.677	31.733	-0.283	Pass
53	3232.310	37.167	2.593	Pass
54	3250.277	35.333	-0.861	Pass
55	3235.543	27.400	0.983	Pass

AFAS_PWR_Bottom Fork (Q2-334) (二線源法).txt

56	3247.143	29.467	-1.367	Pass
57	3251.510	34.867	-1.894	Pass
58	3262.443	27.767	1.939	Pass
59	3231.210	31.800	-1.047	Pass
60	3241.243	26.100	-2.631	Pass
61	3266.043	19.333	-0.510	Pass
62	3245.043	35.467	1.003	Pass
63	3235.977	30.933	1.737	Pass
64	3235.343	26.300	-2.822	Pass
65	3249.143	34.067	4.258	Pass
66	3248.910	34.967	-1.175	Pass
67	3265.043	30.233	-1.248	Pass
68	3254.577	29.833	1.242	Pass
69	3247.043	30.867	2.748	Pass
70	3240.710	37.700	1.830	Pass
71	3243.143	35.167	0.943	Pass
72	3231.343	36.333	-3.565	Pass
73	3242.777	32.167	-0.140	Pass
74	3242.810	37.267	-0.499	Pass
75	3265.510	23.633	-0.762	Pass
76	3247.910	22.900	-0.457	Pass
77	3228.177	40.933	0.231	Pass
78	3241.810	28.500	0.563	Pass
79	3256.010	23.267	-1.998	Pass
80	3243.343	26.567	-4.191	Pass
81	3224.743	32.967	0.245	Pass
82	3251.843	36.367	-1.613	Pass
83	3237.110	34.867	-0.441	Pass
84	3255.910	39.833	1.481	Pass
85	3254.210	32.867	3.004	Pass
86	3250.110	36.800	1.428	Pass
87	3251.377	26.933	3.385	Pass
88	3263.910	38.967	-2.911	Pass
89	3254.210	34.133	-1.480	Pass
90	3244.077	29.233	0.874	Pass
91	3250.543	39.767	1.776	Pass
92	3254.410	29.833	0.596	Pass
93	3247.710	39.600	-0.322	Pass
94	3237.843	36.933	0.256	Pass
95	3241.910	33.367	1.626	Pass
96	3244.743	36.700	0.521	Pass
97	3224.943	21.967	0.337	Pass
98	3253.110	39.300	-0.961	Pass
99	3237.377	36.567	-0.221	Pass
100	3249.143	38.467	2.116	Pass
101	3258.443	41.033	-1.409	Pass
102	3236.043	28.067	-0.276	Pass
103	3223.710	22.500	-0.352	Pass
104	3264.143	30.400	-2.408	Pass
105	3231.777	31.800	-1.435	Pass
106	3258.210	27.167	0.700	Pass
107	3250.543	32.000	1.272	Pass
108	3245.643	29.767	-0.160	Pass
109	3248.277	37.100	0.243	Pass
110	3242.677	36.933	0.291	Pass
111	3235.777	30.467	0.427	Pass

(3)

AFAS_PWR_Bottom Fork (Q2-334) (二線源法).txt

112	3240.377	36.200	0.868	Pass
113	3256.010	26.867	0.931	Pass
114	3259.543	36.267	-1.124	Pass
115	3251.843	30.100	0.058	Pass
116	3240.877	29.533	-0.276	Pass
117	3251.710	40.900	-2.944	Pass
118	3245.510	43.733	0.870	Pass
119	3250.643	36.033	0.892	Pass
120	3243.910	36.133	-2.973	Pass

(4)

【AFAS 性能確認試験】

(2) 2.2 長期管理限界の妥当性確認

INCC 5.1.2 201806_AFAS-B Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.06.11 10:30:15
 Results file name: 86BK3015.VER
 Inspection number:
 Item id: 1806 B BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 619.462 +- 1.051
 Doubles: 7.365 +- 0.145
 (1)

201806_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 14.240 +- 0.119
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	616.650	7.283	0.000	0.000	Pass
2	624.533	6.583	0.000	0.000	Pass
3	617.517	6.950	0.000	0.000	Pass
4	616.533	7.283	0.000	0.000	Pass
5	623.833	7.333	0.000	0.000	Pass
6	619.317	7.533	0.000	0.000	Pass
7	615.600	7.783	0.000	0.000	Pass
8	617.300	7.900	0.000	0.000	Pass
9	623.250	6.967	0.000	0.000	Pass
10	620.083	8.033	0.000	0.000	Pass

(2)

201806_AFAS-B Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.06.11 10:16:21
 Results file name: 86BK1621.VER
 Inspection number:
 Item id: 1806 B C
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No analysis methods selected

Results

Singles: 11336.108 +- 7.485
 Doubles: 2441.443 +- 6.432
 (1)

201806_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 37.860 +- 0.312
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	11296.694	2442.229	0.000	0.000	Pass
2	11338.228	2422.316	0.000	0.000	Pass
3	11337.324	2446.322	0.000	0.000	Pass
4	11368.421	2457.938	0.000	0.000	Pass
5	11333.276	2424.574	0.000	0.000	Pass
6	11363.252	2459.575	0.000	0.000	Pass
7	11341.172	2407.798	0.000	0.000	Pass
8	11347.010	2455.453	0.000	0.000	Pass
9	11296.844	2426.734	0.000	0.000	Pass
10	11338.863	2471.490	0.000	0.000	Pass

201806_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: JM2G
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.06.11 10:01:17
 Results file name: 86BK0117.VER
 Inspection number:
 Item id: 1806 B TF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 329.305 +- 0.730
 Doubles: 1.933 +- 0.137

(1)

201806_AFAS-B Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 590.390 +- 0.788
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	331.350	1.883	0.000	0.000	Pass
2	327.467	2.033	0.000	0.000	Pass
3	329.500	2.033	0.000	0.000	Pass
4	329.717	1.783	0.000	0.000	Pass
5	328.900	2.850	0.000	0.000	Pass
6	332.550	2.200	0.000	0.000	Pass
7	328.667	1.783	0.000	0.000	Pass
8	324.783	1.383	0.000	0.000	Pass
9	328.117	2.067	0.000	0.000	Pass
10	332.000	1.317	0.000	0.000	Pass

(2)

INCC 5.1.2 201806_AFAS-P Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.06.11 11:16:37
 Results file name: 86BL1637.VER
 Inspection number:
 Item id: 1806 P BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 757.118 +- 1.194
 Doubles: 10.342 +- 0.278
 (1)

201806_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 569.592 +- 1.263
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	763.400	10.050	0.000	0.000	Pass
2	759.900	10.550	0.000	0.000	Pass
3	758.117	10.683	0.000	0.000	Pass
4	757.533	10.300	0.000	0.000	Pass
5	757.450	10.650	0.000	0.000	Pass
6	753.967	10.700	0.000	0.000	Pass
7	760.483	11.450	0.000	0.000	Pass
8	754.100	10.350	0.000	0.000	Pass
9	756.067	8.067	0.000	0.000	Pass
10	750.167	10.617	0.000	0.000	Pass

(2)

201806_AFAS-P Collar.txt

INCC 5.1.2

Facility: JMOX
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR 03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 18.06.11 11:02:33
Results file name: 86BL0233_VER
Inspection number:

Item id: 1806 P C
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Database
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name: JAEA
Passive comment:

Predelay: 1.50
Gate length: 64.00
2nd gate length: 64.00
High voltage: 1720
Die away time: 50.0000
Efficiency: 0.1620
Multiplicity deadtime: 86.5000
Coefficient A deadtime: 0.3458
Coefficient B deadtime: 0.0299
Coefficient C deadtime: 0.0000
Doubles gate fraction: 0.0001
Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
Passive singles bkgrnd: 0.000 +-
Passive doubles bkgrnd: 0.000 +-
Passive triples bkgrnd: 0.000 +-
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
Count time (sec): 60

Passive messages

Known alpha: passed stratum rejection limits

Results

Singles: 9257.244 +- 3.962
Doubles: 1596.847 +- 4.952

(1)

201806_AFAS-P Collar.txt
Triples: 0.000 +-
Scaler 1: 76.160 +-
Scaler 2: 0.000 +-

Known alpha results

Alpha: 0.138
Multiplication: 1.270
Multiplication corrected doubles: 594.248 +-
Pu240e mass (g): 0.690 +-
Pu240e (%): 100.000
Pu mass (g): 0.690 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9280.059	1596.599	0.000	0.693	Pass
2	9256.721	1592.289	0.000	0.691	Pass
3	9233.701	1582.311	0.000	0.690	Pass
4	9250.278	1595.796	0.000	0.690	Pass
5	9249.577	1617.933	0.000	0.686	Pass
6	9266.938	1600.220	0.000	0.691	Pass
7	9261.796	1589.984	0.000	0.692	Pass
8	9255.085	1627.952	0.000	0.685	Pass
9	9266.353	1589.836	0.000	0.692	Pass
10	9251.930	1575.549	0.000	0.693	Pass

201806_AFAS-P Top Fork. txt

INCC 5. 1. 2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.06.11 10:46:29
 Results file name: 86BK4629. VER
 Inspection number:
 Item id: 1806 P TF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 9.382 +- 0.150
 Doubles: 0.003 +- 0.005

(1)

201806_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 531.937 +- 1.103
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9.217	0.000	0.000	0.000	Pass
2	9.300	0.000	0.000	0.000	Pass
3	9.483	0.000	0.000	0.000	Pass
4	10.183	-0.033	0.000	0.000	Pass
5	9.633	0.033	0.000	0.000	Pass
6	8.750	0.017	0.000	0.000	Pass
7	8.750	0.017	0.000	0.000	Pass
8	9.133	0.000	0.000	0.000	Pass
9	9.350	0.000	0.000	0.000	Pass
10	10.017	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2 201807_AFAS-B Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.07.27 10:47:17
 Results file name: 87RRK4717.VER
 Inspection number:
 Item id: 1807 B BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 599.502 +- 1.184
 Doubles: 7.117 +- 0.463
 (1)

201807_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 11.408 +- 0.191
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	594.850	6.800	0.000	0.000	Pass
2	604.050	7.233	0.000	0.000	Pass
3	602.567	9.967	0.000	0.000	Pass
4	599.133	4.817	0.000	0.000	Pass
5	599.333	8.567	0.000	0.000	Pass
6	599.733	6.433	0.000	0.000	Pass
7	592.017	5.683	0.000	0.000	Pass
8	600.650	7.917	0.000	0.000	Pass
9	599.100	7.333	0.000	0.000	Pass
10	603.583	6.417	0.000	0.000	Pass

(2)

201807_AFAS-B Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.07.27 10:32:40
 Results file name: 87RRK3240.VER
 Inspection number:
 Item id: 1807 B C
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 10948.002 +- 3.574
 Doubles: 2345.171 +- 9.154
 (1)

201807_AFAS-B Collar.txt
 Triples: 0.000 +-
 Scaler 1: 35.120 +-
 Scaler 2: 0.000 +-
 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	10974.477	2345.851	0.000	0.000	Pass
2	10947.700	2328.304	0.000	0.000	Pass
3	10948.787	2318.689	0.000	0.000	Pass
4	10948.703	2395.308	0.000	0.000	Pass
5	10955.527	2326.100	0.000	0.000	Pass
6	10936.460	2374.544	0.000	0.000	Pass
7	10948.787	2377.467	0.000	0.000	Pass
8	10945.943	2346.496	0.000	0.000	Pass
9	10935.607	2304.486	0.000	0.000	Pass
10	10938.032	2334.466	0.000	0.000	Pass

(2)

201807_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.07.27 10:16:36
 Results file name: 87RK1636. VER
 Inspection number:
 Item id: 1807 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 311.090 +- 0.802
 Doubles: 1.700 +- 0.180

(1)

201807_AFAS-B Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 573.485 +- 0.859
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	315.667	1.750	0.000	0.000	Pass
2	307.967	1.567	0.000	0.000	Pass
3	309.567	2.717	0.000	0.000	Pass
4	312.500	1.800	0.000	0.000	Pass
5	313.217	1.150	0.000	0.000	Pass
6	313.200	2.033	0.000	0.000	Pass
7	309.800	1.733	0.000	0.000	Pass
8	308.067	1.400	0.000	0.000	Pass
9	311.517	2.200	0.000	0.000	Pass
10	309.400	0.650	0.000	0.000	Pass

(2)

201807_AFAS-P Bottom Fork.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.07.27 13:27:21
 Results file name: 87RNR2721.VER
 Inspection number:
 Item id: 1807 P BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 721.108 +- 0.996
 Doubles: 10.167 +- 0.160
 (1)

201807_AFAS-P Bottom Fork.txt

Triples: 0.000 +- 0.000
 Scaler 1: 550.352 +- 0.572
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	717.067	10.700	0.000	0.000	Pass
2	719.483	10.383	0.000	0.000	Pass
3	718.050	10.783	0.000	0.000	Pass
4	719.867	10.867	0.000	0.000	Pass
5	728.100	9.917	0.000	0.000	Pass
6	721.983	9.967	0.000	0.000	Pass
7	720.567	10.133	0.000	0.000	Pass
8	722.967	9.633	0.000	0.000	Pass
9	723.200	9.933	0.000	0.000	Pass
10	719.800	9.350	0.000	0.000	Pass

(2)

201807_AFAS-P Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: I/O code:
 Measurement date: 18.07.27 11:19:48
 Results file name: 87RL1948_VER
 Inspection number:
 Item id: 1807 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8942.637 +- 4.207
 Doubles: 1538.838 +- 4.211

(1)

201807_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 73.095 +- 0.369
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8942.544	1529.088	0.000	0.000	Pass
2	8965.696	1534.851	0.000	0.000	Pass
3	8949.605	1548.769	0.000	0.000	Pass
4	8924.984	1531.486	0.000	0.000	Pass
5	8943.729	1540.892	0.000	0.000	Pass
6	8952.843	1565.405	0.000	0.000	Pass
7	8924.666	1546.181	0.000	0.000	Pass
8	8928.372	1531.421	0.000	0.000	Pass
9	8943.011	1516.683	0.000	0.000	Pass
10	8950.924	1543.604	0.000	0.000	Pass

(2)

201807_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.07.27 11:05:22
 Results file name: 87RL0522.VER
 Inspection number:
 Item id: 1807 P TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 8.592 +- 0.104
 Doubles: -0.002 +- 0.004

(1)

201807_AFAS-P Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 513.163 +- 0.807
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.533	0.000	0.000	0.000	Pass
2	8.750	0.000	0.000	0.000	Pass
3	8.817	0.000	0.000	0.000	Pass
4	8.667	-0.017	0.000	0.000	Pass
5	9.017	-0.017	0.000	0.000	Pass
6	8.467	0.000	0.000	0.000	Pass
7	8.867	0.017	0.000	0.000	Pass
8	8.617	0.017	0.000	0.000	Pass
9	8.333	-0.017	0.000	0.000	Pass
10	7.850	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2 201808_AFAS-B Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.08.29 10:42:05
 Results file name: 881K4205.VER
 Inspection number:
 Item id: 1808 B BF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 585.980 +- 1.029
 Doubles: 7.103 +- 0.236
 (1)

201808_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 11.327 +- 0.120
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	585.717	7.450	0.000	0.000	Pass
2	590.917	7.017	0.000	0.000	Pass
3	584.467	8.067	0.000	0.000	Pass
4	585.317	7.883	0.000	0.000	Pass
5	585.383	7.183	0.000	0.000	Pass
6	589.267	5.817	0.000	0.000	Pass
7	578.733	6.133	0.000	0.000	Pass
8	587.567	6.833	0.000	0.000	Pass
9	585.267	7.867	0.000	0.000	Pass
10	587.167	6.783	0.000	0.000	Pass

(2)

201808_AFAS-B Collar.txt

INCC 5.1.2

Facility: JM2G
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: I/O code:
 Measurement date: 18.08.29 10:27:43
 Results file name: 881K2743.VER
 Inspection number:
 Item id: 1808 B C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 10699.273 +- 4.218
 Doubles: 2300.688 +- 9.174
 (1)

201808_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 34.462 +- 0.274
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	10696.762	2281.210	0.000	0.000	Pass
2	10695.625	2249.357	0.000	0.000	Pass
3	10688.886	2330.334	0.000	0.000	Pass
4	10703.235	2346.953	0.000	0.000	Pass
5	10708.202	2284.281	0.000	0.000	Pass
6	10669.569	2297.565	0.000	0.000	Pass
7	10705.743	2292.936	0.000	0.000	Pass
8	10719.858	2321.033	0.000	0.000	Pass
9	10704.690	2321.430	0.000	0.000	Pass
10	10700.157	2281.785	0.000	0.000	Pass

201808_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: JMXX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: /O code:
 Measurement date: 18.08.29 10:10:39
 Results file name: 88TK1039.VER
 Inspection number:
 Item id: 1808 B TF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 303.442 +- 0.702
 Doubles: 1.740 +- 0.148
 (1)

201808_AFAS-B Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 559.008 +- 0.899
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	301.717	1.800	0.000	0.000	Pass
2	302.050	1.883	0.000	0.000	Pass
3	306.533	1.983	0.000	0.000	Pass
4	304.067	2.367	0.000	0.000	Pass
5	304.550	1.783	0.000	0.000	Pass
6	300.050	1.500	0.000	0.000	Pass
7	301.233	1.083	0.000	0.000	Pass
8	303.467	2.367	0.000	0.000	Pass
9	306.850	0.967	0.000	0.000	Pass
10	303.900	1.667	0.000	0.000	Pass

(2)

INCC 5.1.2 201808_AFAS-P Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.08.29 14:10:56
 Results file name: 88101056.VER
 Inspection number:
 Item id: 1808 P BF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 703.855 +- 1.105
 Doubles: 9.753 +- 0.441
 (1)

201808_AFAS-P Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 536.453 +- 0.640
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	702.333	10.667	0.000	0.000	Pass
2	707.783	11.833	0.000	0.000	Pass
3	704.783	9.000	0.000	0.000	Pass
4	703.383	10.800	0.000	0.000	Pass
5	700.767	7.883	0.000	0.000	Pass
6	704.117	10.767	0.000	0.000	Pass
7	707.883	7.833	0.000	0.000	Pass
8	708.717	9.633	0.000	0.000	Pass
9	700.333	10.650	0.000	0.000	Pass
10	698.450	8.467	0.000	0.000	Pass

(2)

201808_AFAS-P Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.08.29 11:15:10
 Results file name: 881L1510.VER
 Inspection number:
 Item id: 1808 P C
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8753.174 +- 3.382
 Doubles: 1510.437 +- 4.891

(1)

201808_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 71.317 +- 0.344
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8747.129	1505.146	0.000	0.000	Pass
2	8773.802	1492.170	0.000	0.000	Pass
3	8735.745	1511.342	0.000	0.000	Pass
4	8764.605	1523.678	0.000	0.000	Pass
5	8756.393	1489.704	0.000	0.000	Pass
6	8758.679	1522.254	0.000	0.000	Pass
7	8750.717	1515.496	0.000	0.000	Pass
8	8746.795	1517.215	0.000	0.000	Pass
9	8746.711	1491.855	0.000	0.000	Pass
10	8751.168	1535.506	0.000	0.000	Pass

201808_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.08.29 10:59:10
 Results file name: 88TK5910.VER
 Inspection number:
 Item id: 1808 P TF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 8.440 +- 0.096
 Doubles: 0.005 +- 0.003

(1)

201808_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 502.155 +- 0.583
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.017	0.017	0.000	0.000	Pass
2	8.133	0.000	0.000	0.000	Pass
3	8.583	0.000	0.000	0.000	Pass
4	8.300	0.017	0.000	0.000	Pass
5	8.200	0.000	0.000	0.000	Pass
6	8.850	0.017	0.000	0.000	Pass
7	8.417	0.000	0.000	0.000	Pass
8	8.817	0.000	0.000	0.000	Pass
9	8.800	0.000	0.000	0.000	Pass
10	8.283	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2 201809_AFAS-B Bottom Fork.txt

Facility: JMXX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.09.21 10:01:49
 Results file name: 89LK0149.VER
 Inspection number:
 Item id: 1809 B BF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 576.392 +- 0.921
 Doubles: 6.302 +- 0.277
 (1)

201809_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 12.428 +- 0.156
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	579.300	5.967	0.000	0.000	Pass
2	577.550	5.667	0.000	0.000	Pass
3	572.750	5.933	0.000	0.000	Pass
4	574.233	6.383	0.000	0.000	Pass
5	574.900	6.283	0.000	0.000	Pass
6	580.367	4.950	0.000	0.000	Pass
7	574.167	7.267	0.000	0.000	Pass
8	580.700	7.683	0.000	0.000	Pass
9	576.217	5.567	0.000	0.000	Pass
10	573.733	7.317	0.000	0.000	Pass

(2)

201809_AFAS-B Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.09.21 09:45:44
 Results file name: 89LJ4544.VER
 Inspection number:
 Item id: 1809 B C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No analysis methods selected

Results

Singles: 10531.437 +- 4.519
 Doubles: 2259.130 +- 5.774
 (1)

201809_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 34.982 +- 0.284
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	10519.309	2229.504	0.000	0.000	Pass
2	10533.975	2279.730	0.000	0.000	Pass
3	10520.781	2251.655	0.000	0.000	Pass
4	10532.119	2271.119	0.000	0.000	Pass
5	10532.303	2249.356	0.000	0.000	Pass
6	10534.962	2281.191	0.000	0.000	Pass
7	10506.917	2267.860	0.000	0.000	Pass
8	10533.440	2260.868	0.000	0.000	Pass
9	10561.268	2268.326	0.000	0.000	Pass
10	10539.293	2231.697	0.000	0.000	Pass

201809_AFAS-B Top Fork.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.09.21 09:30:40
 Results file name: 89LJ3040.VER
 Inspection number:
 Item id: 1809 B TF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 303.127 +- 0.705
 Doubles: 1.642 +- 0.124
 (1)

201809_AFAS-B Top Fork.txt

Triples: 0.000 +- 0.000
 Scaler 1: 549.703 +- 0.639
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	304.500	2.200	0.000	0.000	Pass
2	299.467	1.600	0.000	0.000	Pass
3	302.783	2.200	0.000	0.000	Pass
4	305.500	1.767	0.000	0.000	Pass
5	303.167	1.250	0.000	0.000	Pass
6	305.833	1.033	0.000	0.000	Pass
7	305.833	1.633	0.000	0.000	Pass
8	301.233	1.933	0.000	0.000	Pass
9	301.633	1.517	0.000	0.000	Pass
10	301.317	1.283	0.000	0.000	Pass

(2)

INCC 5.1.2 201809_AFAS-P Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.09.21 10:48:15
 Results file name: 89LK4815.VER
 Inspection number:
 Item id: 1809 P BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 699.875 +- 0.815
 Doubles: 8.995 +- 0.272
 (1)

201809_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 530.932 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	696.100	9.417	0.000	0.000	Pass
2	703.967	9.067	0.000	0.000	Pass
3	699.317	9.550	0.000	0.000	Pass
4	700.050	10.800	0.000	0.000	Pass
5	702.283	9.367	0.000	0.000	Pass
6	699.417	8.567	0.000	0.000	Pass
7	695.617	8.833	0.000	0.000	Pass
8	700.450	8.500	0.000	0.000	Pass
9	699.683	8.033	0.000	0.000	Pass
10	701.867	7.817	0.000	0.000	Pass

(2)

201809_AFAS-P Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.09.21 10:33:11
 Results file name: 89LK3311.VER
 Inspection number:
 Item id: 1809 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8610.469 +- 4.564
 Doubles: 1487.952 +- 4.023

(1)

201809_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 71.097 +- 0.372
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8600.409	1460.403	0.000	0.000	Pass
2	8601.510	1489.791	0.000	0.000	Pass
3	8599.774	1494.855	0.000	0.000	Pass
4	8635.110	1490.260	0.000	0.000	Pass
5	8614.747	1493.058	0.000	0.000	Pass
6	8591.579	1483.116	0.000	0.000	Pass
7	8604.865	1499.606	0.000	0.000	Pass
8	8617.618	1483.531	0.000	0.000	Pass
9	8632.757	1478.373	0.000	0.000	Pass
10	8606.318	1506.527	0.000	0.000	Pass

(2)

201809_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: JM2G
 Material balance area: AFAS
 Detector type: JSR-02
 Detector id: JSR-12
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.09.21 10:17:54
 Results file name: 89LK1754.VER
 Inspection number:
 Item id: 1809 P TF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 8.820 +- 0.126
 Doubles: 0.002 +- 0.002

(1)

201809_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 495.745 +- 1.120
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.267	0.000	0.000	0.000	Pass
2	9.183	0.000	0.000	0.000	Pass
3	8.167	0.000	0.000	0.000	Pass
4	8.683	0.000	0.000	0.000	Pass
5	9.517	0.000	0.000	0.000	Pass
6	9.067	0.000	0.000	0.000	Pass
7	8.767	0.000	0.000	0.000	Pass
8	8.833	0.000	0.000	0.000	Pass
9	8.867	0.000	0.000	0.000	Pass
10	8.850	0.017	0.000	0.000	Pass

(2)

INCC 5.1.2 201810_AFAS-B Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.10.18 09:54:26
 Results file name: 8A1J5426.VER
 Inspection number:
 Item id: 1810 B BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 565.500 +- 1.144
 Doubles: 6.267 +- 0.262
 (1)

201810_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 13.767 +- 0.171
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	563.750	6.317	0.000	0.000	Pass
2	569.783	5.300	0.000	0.000	Pass
3	564.100	5.550	0.000	0.000	Pass
4	570.583	5.817	0.000	0.000	Pass
5	561.500	5.200	0.000	0.000	Pass
6	568.633	5.917	0.000	0.000	Pass
7	563.550	6.817	0.000	0.000	Pass
8	559.667	7.333	0.000	0.000	Pass
9	565.700	7.383	0.000	0.000	Pass
10	567.733	7.033	0.000	0.000	Pass

(2)

201810_AFAS-B Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.10.18 09:39:23
 Results file name: 8A1J3923_VER
 Inspection number:
 Item id: 1810 B C
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 10329.134 +- 4.593
 Doubles: 2214.195 +- 6.702
 (1)

201810_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 34.208 +- 0.260
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	10309.325	2192.259	0.000	0.000	Pass
2	10331.097	2198.145	0.000	0.000	Pass
3	10331.816	2235.124	0.000	0.000	Pass
4	10326.482	2238.841	0.000	0.000	Pass
5	10321.013	2230.797	0.000	0.000	Pass
6	10345.110	2191.991	0.000	0.000	Pass
7	10310.880	2236.805	0.000	0.000	Pass
8	10334.408	2212.763	0.000	0.000	Pass
9	10357.083	2221.436	0.000	0.000	Pass
10	10324.124	2183.791	0.000	0.000	Pass

(2)

201810_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.10.18 09:24:19
 Results file name: 8A1J2419.VER
 Inspection number:
 Item id: 1810 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000

Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 295.272 +- 0.781
 Doubles: 1.802 +- 0.117
 (1)

201810_AFAS-B Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 542.222 +- 0.870
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	298.233	1.850	0.000	0.000	Pass
2	294.600	1.900	0.000	0.000	Pass
3	296.283	1.283	0.000	0.000	Pass
4	293.367	2.033	0.000	0.000	Pass
5	296.467	1.483	0.000	0.000	Pass
6	290.617	1.500	0.000	0.000	Pass
7	292.717	1.633	0.000	0.000	Pass
8	295.267	1.667	0.000	0.000	Pass
9	298.167	2.117	0.000	0.000	Pass
10	297.000	2.550	0.000	0.000	Pass

INCC 5.1.2 201810_AFAS-P Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.10.18 10:39:39
 Results file name: 8AIK3939.VER
 Inspection number:
 Item id: 1810 P BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 701.945 +- 0.736
 Doubles: 10.028 +- 0.299
 (1)

201810_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 518.792 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	700.433	11.050	0.000	0.000	Pass
2	701.567	9.483	0.000	0.000	Pass
3	703.117	9.300	0.000	0.000	Pass
4	701.367	9.733	0.000	0.000	Pass
5	702.217	9.267	0.000	0.000	Pass
6	702.567	9.383	0.000	0.000	Pass
7	699.400	8.817	0.000	0.000	Pass
8	698.850	11.117	0.000	0.000	Pass
9	702.750	10.683	0.000	0.000	Pass
10	707.183	11.450	0.000	0.000	Pass

(2)

201810_AFAS-P Collar.txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: I/O code:
 18.10.18 10:24:36
 Measurement date: 8A1K2436.VER
 Results file name:
 Inspection number:
 Item id: 1810 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8451.688 +- 4.254
 Doubles: 1444.210 +- 4.896

(1)

201810_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 70.588 +- 0.380
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8438.153	1450.693	0.000	0.000	Pass
2	8465.360	1448.935	0.000	0.000	Pass
3	8423.315	1438.668	0.000	0.000	Pass
4	8461.938	1433.522	0.000	0.000	Pass
5	8448.418	1425.458	0.000	0.000	Pass
6	8460.603	1441.729	0.000	0.000	Pass
7	8455.445	1422.169	0.000	0.000	Pass
8	8466.428	1474.711	0.000	0.000	Pass
9	8450.638	1455.915	0.000	0.000	Pass
10	8446.582	1450.297	0.000	0.000	Pass

(2)

201810_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.10.18 10:09:31
 Results file name: 8A1K0931.VER
 Inspection number:
 Item id: 1810 P TF
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 8.697 +- 0.130
 Doubles: 0.002 +- 0.005

(1)

201810_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 485.263 +- 0.870
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.450	0.017	0.000	0.000	Pass
2	9.017	0.000	0.000	0.000	Pass
3	9.017	0.000	0.000	0.000	Pass
4	8.600	0.017	0.000	0.000	Pass
5	8.883	0.000	0.000	0.000	Pass
6	7.717	0.017	0.000	0.000	Pass
7	9.150	0.000	0.000	0.000	Pass
8	8.533	0.000	0.000	0.000	Pass
9	8.783	0.000	0.000	0.000	Pass
10	8.817	-0.033	0.000	0.000	Pass

(2)

INCC 5.1.2 201811_AFAS-B Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.11.08 10:00:13
 Results file name: 8B8K0013_VER
 Inspection number: 1811 B BF
 Item id: XXXX
 Stratium id: PU
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 556.347 +- 0.747
 Doubles: 5.568 +- 0.347
 (1)

201811_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 12.563 +- 0.158
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	553.150	6.067	0.000	0.000	Pass
2	560.150	5.250	0.000	0.000	Pass
3	556.117	6.333	0.000	0.000	Pass
4	557.200	2.883	0.000	0.000	Pass
5	557.533	6.017	0.000	0.000	Pass
6	553.250	5.033	0.000	0.000	Pass
7	554.833	5.100	0.000	0.000	Pass
8	557.733	5.950	0.000	0.000	Pass
9	558.900	6.567	0.000	0.000	Pass
10	554.600	6.483	0.000	0.000	Pass

(2)

201811_AFAS-B Collar.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 09:54:23
 Results file name: 8CAJ5423.VER
 Inspection number:
 Item id: 1812 B C
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 9989.379 +- 5.269
 Doubles: 2137.303 +- 8.923
 (1)

201811_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 32.603 +- 0.160
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9983.749	2152.098	0.000	0.000	Pass
2	9975.289	2157.101	0.000	0.000	Pass
3	9991.240	2175.407	0.000	0.000	Pass
4	9998.329	2156.378	0.000	0.000	Pass
5	9972.212	2157.064	0.000	0.000	Pass
6	10008.696	2104.947	0.000	0.000	Pass
7	9980.205	2088.856	0.000	0.000	Pass
8	9962.113	2090.827	0.000	0.000	Pass
9	9984.000	2156.241	0.000	0.000	Pass
10	10017.859	2132.301	0.000	0.000	Pass
11	10009.482	2139.117	0.000	0.000	Pass

201811_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: JM2G
 Material balance area: AFAS
 Detector type: JSR-01
 Detector id: JSR-12
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.08 09:29:12
 Results file name: 888J2912.VER
 Inspection number:
 Item id: 1811 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 290.535 +- 0.698
 Doubles: 1.548 +- 0.166
 (1)

201811_AFAS-B Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 532.043 +- 0.942
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	291.400	1.133	0.000	0.000	Pass
2	289.100	0.967	0.000	0.000	Pass
3	291.583	1.783	0.000	0.000	Pass
4	290.100	1.750	0.000	0.000	Pass
5	287.533	1.450	0.000	0.000	Pass
6	291.783	1.500	0.000	0.000	Pass
7	287.083	1.550	0.000	0.000	Pass
8	289.900	1.533	0.000	0.000	Pass
9	293.567	2.800	0.000	0.000	Pass
10	293.300	1.017	0.000	0.000	Pass

(2)

INCC 5.1.2 201811_AFAS-P Bottom Fork.txt

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.11.08 10:47:52
 Results file name: 888K4752.VER
 Inspection number:
 Item id: 1811 P BF
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 348.292 +- 0.567
 Doubles: 2.153 +- 0.128
 (1)

201811_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 513.064 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	346.883	1.567	0.000	0.000	Pass
2	349.783	1.850	0.000	0.000	Pass
3	347.883	2.433	0.000	0.000	Pass
4	352.533	2.383	0.000	0.000	Pass
5	347.633	2.850	0.000	0.000	Pass
6	349.433	2.783	0.000	0.000	Pass
7	346.783	2.267	0.000	0.000	Pass
8	345.950	2.033	0.000	0.000	Pass
9	347.533	1.683	0.000	0.000	Pass
10	349.617	1.950	0.000	0.000	Pass
11	347.183	1.883	0.000	0.000	Pass

(2)

201811_AFAS-P Collar.txt

INCC 5.1.2

Facility: JM2G
 Material balance area: AFAS
 Detector type: JSR-03
 Detector id: JSR-12
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.08 15:33:11
 Results file name: 888P3311.VER
 Inspection number:
 Item id: 1811 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 13
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8323.874 +- 8.798
 Doubles: 1434.210 +- 5.249
 (1)

201811_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 68.715 +- 0.726
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8421.395	1455.984	0.000	0.000	Pass
2	8332.183	1441.263	0.000	0.000	Pass
3	8330.531	1395.197	0.000	0.000	Pass
4	8313.840	1439.315	0.000	0.000	Pass
5	8299.620	1424.399	0.000	0.000	Pass
6	8330.347	1464.713	0.000	0.000	Pass
7	8305.344	1449.741	0.000	0.000	Pass
8	8321.918	1420.031	0.000	0.000	Pass
9	8300.037	1438.372	0.000	0.000	Pass
10	8311.086	1441.102	0.000	0.000	Pass
11	8330.764	1441.781	0.000	0.000	Pass
12	8306.363	1417.265	0.000	0.000	Pass
13	8306.930	1415.560	0.000	0.000	Pass

(2)

201811_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: JMOX
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.11.08 10:15:17
 Results file name: 8B8K1517.VER
 Inspection number: 1811 P TF
 Item id: XXXX
 Stratium id: Pu
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 8.270 +- 0.102
 Doubles: -0.002 +- 0.003
 (1)

201811_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 477.902 +- 1.093
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.300	0.000	0.000	0.000	Pass
2	8.867	0.000	0.000	0.000	Pass
3	8.600	0.017	0.000	0.000	Pass
4	8.183	0.000	0.000	0.000	Pass
5	8.150	0.000	0.000	0.000	Pass
6	7.683	-0.017	0.000	0.000	Pass
7	8.167	0.000	0.000	0.000	Pass
8	8.283	0.000	0.000	0.000	Pass
9	8.400	-0.017	0.000	0.000	Pass
10	7.800	0.000	0.000	0.000	Pass
11	8.533	0.000	0.000	0.000	Pass

(2)

201812_AFAS-B Bottom Fork.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 10:11:10
 Results file name: 8C4K1110.VER
 Inspection number:
 Item id: 1812 B BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 547.120 +- 1.439
 Doubles: 6.198 +- 0.267

(1)

201812_AFAS-B Bottom Fork.txt

Triples: 0.000 +- 0.000
 Scaler 1: 12.427 +- 0.164
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	546.967	5.750	0.000	0.000	Pass
2	545.800	6.550	0.000	0.000	Pass
3	536.717	6.333	0.000	0.000	Pass
4	547.133	4.250	0.000	0.000	Pass
5	551.300	6.117	0.000	0.000	Pass
6	545.983	5.533	0.000	0.000	Pass
7	546.483	6.983	0.000	0.000	Pass
8	551.483	6.650	0.000	0.000	Pass
9	546.117	6.983	0.000	0.000	Pass
10	553.217	6.833	0.000	0.000	Pass

(2)

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 09:54:23
 Results file name: 8CAJ5423.VER
 Inspection number: 1812 B C
 Item id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +-
 Passive singles bkgnd: 0.000 +-
 Passive doubles bkgnd: 0.000 +-
 Passive triples bkgnd: 0.000 +-
 Passive scaler1 bkgnd: 0.000
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Passive results

Singles: 9989.379 +-
 Doubles: 2137.303 +-
 Triples: 0.000 +-
 Scaler 1: 32.603 +-

(1)

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9983.749	2152.098	0.000	0.000	Pass
2	9975.289	2157.101	0.000	0.000	Pass
3	9991.240	2175.407	0.000	0.000	Pass
4	9998.329	2156.378	0.000	0.000	Pass
5	9972.212	2157.064	0.000	0.000	Pass
6	10008.696	2104.947	0.000	0.000	Pass
7	9980.205	2088.856	0.000	0.000	Pass
8	9962.113	2090.827	0.000	0.000	Pass
9	9984.000	2156.241	0.000	0.000	Pass
10	10017.859	2132.301	0.000	0.000	Pass
11	10009.482	2139.117	0.000	0.000	Pass

(2)

201812_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: /0 code:
 Measurement date: 18.12.04 09:35:18
 Results file name: 8CAJ3518.VER
 Inspection number:
 Item id: 1812 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 286.797 +- 0.798
 Doubles: 1.621 +- 0.114
 (1)

201812_AFAS-B Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 523.915 +- 0.741
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	285.333	1.750	0.000	0.000	Pass
2	283.600	1.600	0.000	0.000	Pass
3	288.467	1.733	0.000	0.000	Pass
4	292.333	2.283	0.000	0.000	Pass
5	283.633	1.383	0.000	0.000	Pass
6	284.317	1.050	0.000	0.000	Pass
7	287.467	1.567	0.000	0.000	Pass
8	286.383	2.083	0.000	0.000	Pass
9	286.983	1.483	0.000	0.000	Pass
10	286.717	1.833	0.000	0.000	Pass
11	289.533	1.067	0.000	0.000	Pass

(2)

INCC 5.1.2 201812_AFAS-P Bottom Fork.txt

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 10:57:54
 Results file name: 8C4K5754.VER
 Inspection number:
 Item id: 1812 P BF
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 665.673 +- 1.236
 Doubles: 8.924 +- 0.280
 (1)

201812_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 502.456 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	663.250	8.850	0.000	0.000	Pass
2	666.417	9.567	0.000	0.000	Pass
3	674.200	10.033	0.000	0.000	Pass
4	666.850	9.283	0.000	0.000	Pass
5	667.367	8.750	0.000	0.000	Pass
6	663.317	10.017	0.000	0.000	Pass
7	666.133	9.067	0.000	0.000	Pass
8	668.400	6.983	0.000	0.000	Pass
9	666.533	9.233	0.000	0.000	Pass
10	658.300	8.767	0.000	0.000	Pass
11	661.633	7.617	0.000	0.000	Pass

(2)

201812_AFAS-P Collar.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 10:41:50
 Results file name: 8C4K4150.VER
 Inspection number:
 Item id: 1812 P C
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 8164.551 +- 4.429
 Doubles: 1399.228 +- 4.917

(1)

201812_AFAS-P Collar.txt

Triples: 0.000 +- 0.000
 Scaler 1: 67.482 +- 0.268
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8165.345	1380.058	0.000	0.000	Pass
2	8155.498	1415.135	0.000	0.000	Pass
3	8171.137	1402.925	0.000	0.000	Pass
4	8161.723	1424.882	0.000	0.000	Pass
5	8182.169	1394.925	0.000	0.000	Pass
6	8173.657	1408.308	0.000	0.000	Pass
7	8133.567	1385.658	0.000	0.000	Pass
8	8155.264	1375.323	0.000	0.000	Pass
9	8169.735	1404.078	0.000	0.000	Pass
10	8177.412	1400.989	0.000	0.000	Pass

(2)

201812_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 18.12.04 10:27:14
 Results file name: 8C4K2714.VER
 Inspection number:
 Item id: 1812 P TF
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 7.992 +- 0.078
 Doubles: -0.002 +- 0.004

(1)

201812_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 470.522 +- 0.821
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7.850	0.017	0.000	0.000	Pass
2	8.000	0.000	0.000	0.000	Pass
3	8.133	0.000	0.000	0.000	Pass
4	8.233	0.000	0.000	0.000	Pass
5	8.117	0.000	0.000	0.000	Pass
6	7.983	-0.033	0.000	0.000	Pass
7	7.733	0.000	0.000	0.000	Pass
8	7.883	0.000	0.000	0.000	Pass
9	8.417	0.000	0.000	0.000	Pass
10	7.567	0.000	0.000	0.000	Pass

(2)

201901_AFAS-B Bottom Fork.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 10:24:13
 Results file name: 91FK2413.VER
 Inspection number: 1901 B BF
 Item id: XXXX
 Stratum id: PU
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 529.303 +- 0.773
 Doubles: 6.330 +- 0.345
 (1)

201901_AFAS-B Bottom Fork.txt

Triples: 0.000 +- 0.000
 Scaler 1: 11.240 +- 0.136
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	531.667	5.783	0.000	0.000	Pass
2	530.850	7.017	0.000	0.000	Pass
3	528.433	6.983	0.000	0.000	Pass
4	528.133	4.967	0.000	0.000	Pass
5	530.800	5.983	0.000	0.000	Pass
6	528.033	4.717	0.000	0.000	Pass
7	533.783	8.000	0.000	0.000	Pass
8	526.517	7.633	0.000	0.000	Pass
9	528.950	5.683	0.000	0.000	Pass
10	525.867	6.533	0.000	0.000	Pass

(2)

201901_AFAS-B Collar.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 10:07:19
 Results file name: 91FK0719.VER
 Inspection number:
 Item id: 1901 B C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 9676.971 +- 5.623
 Doubles: 2071.531 +- 6.762
 (1)

201901_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 31.220 +- 0.313
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9654.245	2078.189	0.000	0.000	Pass
2	9683.787	2079.754	0.000	0.000	Pass
3	9678.704	2076.276	0.000	0.000	Pass
4	9670.094	2067.376	0.000	0.000	Pass
5	9673.037	2019.098	0.000	0.000	Pass
6	9699.369	2082.106	0.000	0.000	Pass
7	9682.098	2097.411	0.000	0.000	Pass
8	9709.350	2085.273	0.000	0.000	Pass
9	9655.583	2073.746	0.000	0.000	Pass
10	9663.440	2056.081	0.000	0.000	Pass

201901_AFAS-B Top Fork. txt

INCC 5.1.2
 Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 09:52:13
 Results file name: 91FJ5213.VER
 Inspection number:
 Item id: 1901 B TF
 Stratium id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 265.593 +- 0.855
 Doubles: 1.452 +- 0.130
 (1)

201901_AFAS-B Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 506.100 +- 0.671
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	262.283	0.850	0.000	0.000	Pass
2	267.450	1.317	0.000	0.000	Pass
3	266.500	1.717	0.000	0.000	Pass
4	263.800	1.717	0.000	0.000	Pass
5	267.567	2.017	0.000	0.000	Pass
6	266.883	1.350	0.000	0.000	Pass
7	263.200	1.050	0.000	0.000	Pass
8	269.417	1.433	0.000	0.000	Pass
9	261.367	2.033	0.000	0.000	Pass
10	267.467	1.033	0.000	0.000	Pass

(2)

INCC 5.1.2 201901_AFAS-P Bottom Fork.txt

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 11:11:11
 Results file name: 91FL1111.VER
 Inspection number:
 Item id: 1901 P BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 641.110 +- 0.988
 Doubles: 8.508 +- 0.493
 (1)

201901_AFAS-P Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 486.913 +- 1.122
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	636.400	7.200	0.000	0.000	Pass
2	641.467	8.250	0.000	0.000	Pass
3	644.883	9.983	0.000	0.000	Pass
4	640.383	6.433	0.000	0.000	Pass
5	639.283	11.150	0.000	0.000	Pass
6	636.117	6.483	0.000	0.000	Pass
7	643.883	8.517	0.000	0.000	Pass
8	641.217	7.950	0.000	0.000	Pass
9	644.483	9.700	0.000	0.000	Pass
10	642.983	9.417	0.000	0.000	Pass

(2)

201901_AFAS-P Collar.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 10:54:08
 Results file name: 91FK5408_VER
 Inspection number:
 Item id: 1901 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 7913.392 +- 2.702
 Doubles: 1361.068 +- 4.201
 (1)

201901_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 65.063 +- 0.412
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7918.135	1371.333	0.000	0.000	Pass
2	7908.705	1364.627	0.000	0.000	Pass
3	7908.472	1372.565	0.000	0.000	Pass
4	7911.259	1332.524	0.000	0.000	Pass
5	7901.713	1355.833	0.000	0.000	Pass
6	7919.287	1376.030	0.000	0.000	Pass
7	7909.406	1356.940	0.000	0.000	Pass
8	7925.996	1356.530	0.000	0.000	Pass
9	7904.767	1351.372	0.000	0.000	Pass
10	7926.179	1372.925	0.000	0.000	Pass

(2)

201901_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.01.15 10:38:19
 Results file name: 91FK3819.VER
 Inspection number:
 Item id: 1901 P TF
 Stratum id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 7.844 +- 0.077
 Doubles: -0.003 +- 0.006

(1)

201901_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 455.277 +- 0.992
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	8.150	0.017	0.000	0.000	Pass
2	7.950	-0.017	0.000	0.000	Pass
3	7.750	0.017	0.000	0.000	Pass
4	7.783	0.017	0.000	0.000	Pass
5	7.500	0.000	0.000	0.000	Pass
6	7.900	0.000	0.000	0.000	Pass
7	8.200	0.000	0.000	0.000	Pass
8	7.733	0.000	0.000	0.000	Pass
9	7.417	-0.050	0.000	0.000	Pass
10	7.767	0.000	0.000	0.000	Pass
11	8.133	-0.017	0.000	0.000	Pass

(2)

201902_AFAS-B Bottom Fork.txt

INCC 5.1.2

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.02.21 10:37:55
 Results file name: 92LK3755.VER
 Inspection number:
 Item id: 1902 B BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 514.962 +- 0.848
 Doubles: 5.539 +- 0.260

(1)

201902_AFAS-B Bottom Fork.txt

Triples: 0.000 +- 0.000
 Scaler 1: 11.705 +- 0.190
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	517.883	6.733	0.000	0.000	Pass
2	511.950	6.067	0.000	0.000	Pass
3	513.267	5.233	0.000	0.000	Pass
4	509.467	5.433	0.000	0.000	Pass
5	515.067	5.250	0.000	0.000	Pass
6	514.467	4.783	0.000	0.000	Pass
7	519.633	6.717	0.000	0.000	Pass
8	516.183	4.417	0.000	0.000	Pass
9	514.000	4.233	0.000	0.000	Pass
10	516.683	5.750	0.000	0.000	Pass
11	515.983	6.317	0.000	0.000	Pass

(2)

201902_AFAS-B Collar.txt

INCC 5.1.2

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.02.21 10:22:17
 Results file name: 92LK2217.VER
 Inspection number:
 Item id: 1902 B C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 9441.381 +- 6.651
 Doubles: 2024.675 +- 4.955
 (1)

201902_AFAS-B Collar.txt
 Triples: 0.000 +-
 Scaler 1: 31.190 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9434.573	2020.046	0.000	0.000	Pass
2	9431.096	2025.123	0.000	0.000	Pass
3	9473.441	2033.394	0.000	0.000	Pass
4	9402.209	1992.824	0.000	0.000	Pass
5	9434.456	2016.056	0.000	0.000	Pass
6	9425.412	2026.172	0.000	0.000	Pass
7	9470.198	2051.885	0.000	0.000	Pass
8	9444.219	2024.067	0.000	0.000	Pass
9	9450.822	2039.753	0.000	0.000	Pass
10	9447.379	2017.431	0.000	0.000	Pass

(2)

201902_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.02.21 10:07:12
 Results file name: 92LK0712.VER
 Inspection number:
 Item id: 1902 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 261.160 +- 0.577
 Doubles: 1.483 +- 0.153
 (1)

201902_AFAS-B Top Fork. txt

Triples: 0.000 +-
 Scaler 1: 491.922 +-
 Scaler 2: 0.000 +-
 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	259.083	1.050	0.000	0.000	Pass
2	263.817	1.867	0.000	0.000	Pass
3	259.883	0.700	0.000	0.000	Pass
4	261.300	1.967	0.000	0.000	Pass
5	261.833	1.533	0.000	0.000	Pass
6	260.467	2.067	0.000	0.000	Pass
7	264.050	0.917	0.000	0.000	Pass
8	260.100	1.417	0.000	0.000	Pass
9	258.833	1.350	0.000	0.000	Pass
10	262.233	1.967	0.000	0.000	Pass

(2)

INCC 5.1.2 201902_AFAS-P Bottom Fork.txt

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code:
 I/O code:
 Measurement date: 19.02.21 11:25:04
 Results file name: 92LL2504.VER
 Inspection number:
 Item id: 1902 P BF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 10
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 628.070 +- 0.937
 Doubles: 8.645 +- 0.456
 (1)

201902_AFAS-P Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 474.913 +- 1.094
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	628.133	8.417	0.000	0.000	Pass
2	632.333	9.600	0.000	0.000	Pass
3	631.017	10.267	0.000	0.000	Pass
4	628.417	9.617	0.000	0.000	Pass
5	625.850	9.050	0.000	0.000	Pass
6	622.550	5.383	0.000	0.000	Pass
7	624.617	7.267	0.000	0.000	Pass
8	629.300	8.733	0.000	0.000	Pass
9	629.733	8.317	0.000	0.000	Pass
10	628.750	9.800	0.000	0.000	Pass

(2)

201902_AFAS-P Collar.txt

INCC 5.1.2

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.02.21 11:08:00
 Results file name: 92LL0800.VER
 Inspection number:
 Item id: 1902 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 12
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 7718.464 +- 3.215
 Doubles: 1320.737 +- 4.981
 (1)

201902_AFAS-P Collar.txt

Triples: 0.000 +- 0.000
 Scaler 1: 63.611 +- 0.275
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7719.633	1316.192	0.000	0.000	Pass
2	7709.971	1301.850	0.000	0.000	Pass
3	7731.800	1339.293	0.000	0.000	Pass
4	7717.130	1316.692	0.000	0.000	Pass
5	7720.334	1346.289	0.000	0.000	Pass
6	7704.513	1301.931	0.000	0.000	Pass
7	7702.477	1293.825	0.000	0.000	Pass
8	7723.322	1332.738	0.000	0.000	Pass
9	7709.904	1340.018	0.000	0.000	Pass
10	7723.489	1333.039	0.000	0.000	Pass
11	7717.414	1309.406	0.000	0.000	Pass
12	7741.579	1317.572	0.000	0.000	Pass

201902_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: PFPF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.02.21 10:53:00
 Results file name: 92LK5300.VER
 Inspection number:
 Item id: 1902 P TF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 11
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 7.805 +- 0.109
 Doubles: 0.003 +- 0.004

(1)

201902_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 442.848 +- 0.525
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7.883	0.000	0.000	0.000	Pass
2	8.017	0.033	0.000	0.000	Pass
3	7.767	-0.017	0.000	0.000	Pass
4	7.917	0.000	0.000	0.000	Pass
5	7.433	0.000	0.000	0.000	Pass
6	7.650	0.000	0.000	0.000	Pass
7	7.283	0.017	0.000	0.000	Pass
8	7.300	0.000	0.000	0.000	Pass
9	8.350	0.017	0.000	0.000	Pass
10	7.967	0.000	0.000	0.000	Pass
11	8.283	-0.017	0.000	0.000	Pass

(2)

INCC 5.1.2 201903_AFAS-B Bottom Fork.txt

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 02
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.03.04 09:42:53
 Results file name: 934J4253.VER
 Inspection number:
 Item id: 1903 B BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0060
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 13
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 510.391 +- 0.818
 Doubles: 6.008 +- 0.143
 (1)

201903_AFAS-B Bottom Fork.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 11.255 +- 0.128
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	516.483	5.833	0.000	0.000	Pass
2	513.650	6.250	0.000	0.000	Pass
3	511.733	6.550	0.000	0.000	Pass
4	508.017	6.167	0.000	0.000	Pass
5	512.717	5.900	0.000	0.000	Pass
6	507.717	6.017	0.000	0.000	Pass
7	509.650	5.817	0.000	0.000	Pass
8	512.083	5.900	0.000	0.000	Pass
9	508.800	5.833	0.000	0.000	Pass
10	507.400	5.533	0.000	0.000	Pass
11	507.750	4.833	0.000	0.000	Pass
12	512.117	6.583	0.000	0.000	Pass
13	506.967	6.883	0.000	0.000	Pass

(2)

201903_AFAS-B Collar.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.03.04 09:27:23
 Results file name: 934J2723.VER
 Inspection number:
 Item id: 1903 B C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Database
 Data source: On
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1970
 Multiplicity deadtime: 160.0000
 Coefficient A deadtime: 0.6419
 Coefficient B deadtime: 0.1030
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 14
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 9363.619 +- 4.464
 Doubles: 2012.418 +- 5.670
 (1)

201903_AFAS-B Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 30.625 +- 0.205
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	9388.350	2027.549	0.000	0.000	Pass
2	9368.507	2006.212	0.000	0.000	Pass
3	9357.107	2003.732	0.000	0.000	Pass
4	9359.113	1983.665	0.000	0.000	Pass
5	9347.210	2025.936	0.000	0.000	Pass
6	9362.957	2005.433	0.000	0.000	Pass
7	9366.852	2053.376	0.000	0.000	Pass
8	9365.298	1993.968	0.000	0.000	Pass
9	9360.951	2022.969	0.000	0.000	Pass
10	9398.447	2032.961	0.000	0.000	Pass
11	9339.855	1971.233	0.000	0.000	Pass
12	9339.788	2022.808	0.000	0.000	Pass
13	9379.340	2018.851	0.000	0.000	Pass
14	9356.889	2005.157	0.000	0.000	Pass

(2)

201903_AFAS-B Top Fork. txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 01
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.03.04 09:11:17
 Results file name: 934J1117.VER
 Inspection number:
 Item id: 1903 B TF
 Stratium id: XXXX
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Database
 Data source: On
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0080
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 14
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 258.658 +- 0.576
 Doubles: 1.388 +- 0.127
 (1)

201903_AFAS-B Top Fork. txt
 Triples: 0.000 +- 0.000
 Scaler 1: 489.342 +- 0.884
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	258.500	1.350	0.000	0.000	Pass
2	259.100	1.233	0.000	0.000	Pass
3	259.183	0.717	0.000	0.000	Pass
4	257.617	2.033	0.000	0.000	Pass
5	259.683	1.950	0.000	0.000	Pass
6	255.400	0.933	0.000	0.000	Pass
7	261.333	2.067	0.000	0.000	Pass
8	256.017	0.600	0.000	0.000	Pass
9	261.333	1.683	0.000	0.000	Pass
10	261.967	1.350	0.000	0.000	Pass
11	258.217	1.250	0.000	0.000	Pass
12	254.933	1.400	0.000	0.000	Pass
13	259.517	1.017	0.000	0.000	Pass
14	258.417	1.850	0.000	0.000	Pass

(2)

INCC 5.1.2 201903_AFAS-P Bottom Fork.txt

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR 03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.03.04 10:40:06
 Results file name: 934K4006.VER
 Inspection number:
 Item id: 1903 P BF
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0127
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +-
 Passive doubles bkgrnd: 0.000 +-
 Passive triples bkgrnd: 0.000 +-
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000
 Number passive cycles: 12
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 625.249 +- 0.695
 Doubles: 8.633 +- 0.511
 (1)

201903_AFAS-P Bottom Fork.txt
 Triples: 0.000 +-
 Scaler 1: 471.894 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	627.533	10.067	0.000	0.000	Pass
2	625.583	6.417	0.000	0.000	Pass
3	623.050	9.850	0.000	0.000	Pass
4	627.983	9.917	0.000	0.000	Pass
5	624.600	7.917	0.000	0.000	Pass
6	619.850	6.633	0.000	0.000	Pass
7	627.933	9.700	0.000	0.000	Pass
8	625.200	9.167	0.000	0.000	Pass
9	625.833	10.483	0.000	0.000	Pass
10	623.733	6.100	0.000	0.000	Pass
11	624.117	10.750	0.000	0.000	Pass
12	627.567	6.600	0.000	0.000	Pass

(2)

201903_AFAS-P Collar.txt

INCC 5.1.2

Facility: PFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-03
 Electronics id: JSR-12
 Inventory change code: 1/0 code:
 Measurement date: 19.03.04 10:19:01
 Results file name: 934K1901.VER
 Inspection number:
 Item id: 1903 P C
 Stratum id: XXXX
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 12
 Count time (sec): 60

Passive error messages

Known alpha analysis error

Results

Singles: 7653.163 +- 4.233
 Doubles: 1306.101 +- 4.315
 (1)

201903_AFAS-P Collar.txt
 Triples: 0.000 +- 0.000
 Scaler 1: 62.910 +- 0.403
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7668.499	1307.045	0.000	0.000	Pass
2	7672.554	1335.572	0.000	0.000	Pass
3	7647.888	1312.951	0.000	0.000	Pass
4	7659.670	1302.546	0.000	0.000	Pass
5	7641.780	1296.588	0.000	0.000	Pass
6	7661.740	1325.858	0.000	0.000	Pass
7	7665.328	1312.959	0.000	0.000	Pass
8	7650.041	1285.663	0.000	0.000	Pass
9	7632.451	1286.825	0.000	0.000	Pass
10	7653.379	1311.817	0.000	0.000	Pass
11	7660.455	1293.338	0.000	0.000	Pass
12	7624.174	1302.045	0.000	0.000	Pass

201903_AFAS-P Top Fork. txt

INCC 5.1.2

Facility: PFFF
 Material balance area: JM2G
 Detector type: AFAS
 Detector id: JSR-02
 Electronics id: JSR-12
 Inventory change code: /O code:
 Measurement date: 19.03.04 09:59:58
 Results file name: 934J5958.VER
 Inspection number: 1903 P TF
 Item id: XXXX
 Stratium id: PU
 Material type: PU
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0001
 Triples gate fraction: 0.0001

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 0.000 +- 0.000
 Passive doubles bkgrnd: 0.000 +- 0.000
 Passive triples bkgrnd: 0.000 +- 0.000
 Passive scaler1 bkgrnd: 0.000
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 13
 Count time (sec): 60

Passive error messages

No known alpha calibration

Results

Singles: 7.654 +- 0.099
 Doubles: -0.004 +- 0.005

(1)

201903_AFAS-P Top Fork. txt

Triples: 0.000 +- 0.000
 Scaler 1: 439.191 +- 0.763
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	7.667	-0.050	0.000	0.000	Pass
2	8.633	0.000	0.000	0.000	Pass
3	7.667	0.000	0.000	0.000	Pass
4	7.483	0.017	0.000	0.000	Pass
5	7.283	-0.017	0.000	0.000	Pass
6	7.567	0.000	0.000	0.000	Pass
7	7.283	0.000	0.000	0.000	Pass
8	7.900	0.000	0.000	0.000	Pass
9	7.750	0.017	0.000	0.000	Pass
10	7.533	-0.017	0.000	0.000	Pass
11	7.883	0.000	0.000	0.000	Pass
12	7.483	0.000	0.000	0.000	Pass
13	7.367	0.000	0.000	0.000	Pass

(2)

【AFAS 性能確認試験】

(3) 2.4 計数装置の性能確認試験

INCC 5.1.2 集体A测定_Collar_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 10:51:33
 Results file name: 8AAK5133.RTS
 Inspection number: P1
 Item id: Rates Only
 Measurement option: Passive
 Detector configuration: Shift register
 Data source: On
 QC tests: Sample method
 Error calculation: Measured
 Accidentals method: JAEA
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +- 1.681
 Passive doubles bkgnd: 1.821 +- 1.657
 Passive triples bkgnd: -0.318 +- 1.093
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 71991.342 +- 15.021
 Doubles: 3525.358 +- 43.510
 Triples: 200.937 +- 106.712
 Quads: -201.076 +- 101.095
 Quads/Triples: -0.247 +- 0.488
 Scaler 1: 3502.589 +- 2.789
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体A测定_Collar_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	71943.736	3785.019	401.504	Pass
2	72054.191	3433.966	196.268	Pass
3	71984.107	3558.240	493.376	Pass
4	71984.344	3613.033	645.253	Pass
5	71946.815	3575.439	512.010	Pass
6	72065.087	3342.803	-150.601	Pass
7	72037.575	3644.224	-77.955	Pass
8	71933.618	3436.502	-427.210	Pass
9	72000.249	3360.180	143.044	Pass
10	71963.702	3504.178	275.301	Pass

(2)

INCC 5.1.2 集体A测定_Collar_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 10:58:12
 Results file name: 8AAK5812.RTS
 Inspection number:
 Item id: P1
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 72017.616 +-
 Doubles: 3484.281 +-
 Triples: 279.733 +-
 Quads: -2.995 +-
 Quads/Triples: 1.317 +-
 Scaler 1: 3499.189 +-
 Scaler 2: 0.000 +-
 13.137
 20.112
 51.682
 94.938
 1.717
 3.148
 0.000

Passive cycle rate data

(1)

集体A测定_Collar_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	71941.300	3590.856	760.041	Pass
2	72087.084	3456.472	254.075	Pass
3	72085.121	3443.347	413.369	Pass
4	71936.900	3556.224	36.748	Pass
5	71961.502	3530.730	355.557	Pass
6	72029.081	3475.435	123.127	Pass
7	71997.880	3469.351	-44.592	Pass
8	71951.147	3503.682	505.753	Pass
9	71946.511	3338.716	-93.281	Pass
10	72095.510	3460.742	550.143	Pass
11	71996.865	3419.504	294.834	Pass
12	72024.343	3459.695	11.283	Pass
13	72002.076	3337.200	205.586	Pass
14	72081.466	3661.628	466.097	Pass
15	72086.779	3561.802	456.755	Pass
16	72114.360	3424.006	126.516	Pass
17	71982.483	3531.855	281.112	Pass
18	71992.940	3649.252	19.504	Pass
19	72056.796	3420.262	544.457	Pass
20	71982.178	3394.855	328.020	Pass

(2)

INCC 5.1.2 集体A测定_Collar_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 11:10:16
 Results file name: 8AAL1016.RTS
 Inspection number:
 Item id: P1
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +-
 Passive doubles bkgrnd: 1.821 +-
 Passive triples bkgrnd: -0.318 +-
 Passive scaler1 bkgrnd: 1141.521
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 72022.877 +- 13.673
 Doubles: 3552.840 +- 25.994
 Triples: 306.175 +- 45.042
 Quads: -52.305 +- 56.532
 Quads/Triples: -1.952 +- 1.189
 Scaler 1: 3499.492 +- 1.999
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体A测定_Collar_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	72028.100	3858.131	574.796	Pass
2	71873.079	3576.241	609.279	Pass
3	72086.779	3572.623	33.146	Pass
4	72057.575	3277.488	582.594	Pass
5	72030.062	3214.796	87.254	Pass
6	71975.072	3336.275	82.062	Pass
7	71989.522	3505.274	274.176	Pass
8	72010.909	3545.528	489.507	Pass
9	71985.461	3516.915	180.455	Pass
10	71886.378	3562.173	102.755	Pass
11	71990.199	3833.037	439.456	Pass
12	71870.981	3661.602	389.822	Pass
13	71976.561	3706.807	149.040	Pass
14	72069.724	3677.931	649.896	Pass
15	72005.562	3558.163	-84.858	Pass
16	72080.383	3707.318	336.579	Pass
17	71925.699	3677.095	383.693	Pass
18	71996.459	3546.781	786.064	Pass
19	72129.520	3580.681	125.459	Pass
20	72166.509	3428.946	-18.924	Pass
21	72051.111	3398.268	24.425	Pass
22	72043.836	3608.023	157.502	Pass
23	72129.148	3566.286	702.627	Pass
24	72100.180	3482.254	374.414	Pass
25	72022.719	3553.890	551.764	Pass
26	71994.902	3505.487	33.605	Pass
27	72058.353	3539.986	56.495	Pass
28	72106.813	3391.223	375.873	Pass
29	71963.228	3617.060	158.792	Pass
30	72081.500	3578.903	582.127	Pass

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.10 10:48:27
 Results file name: 8AAK4827_02.RTS
 Inspection number:

Item id: P1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:

Passive comment: 5 min. Original file name JMG-JM3G_AFAS-P
 COLLAR_20181010-104827.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 71966.861 +- 12.008
 Doubles: 3507.349 +- 68.766
 Triples: 341.622 +- 74.358
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2592326	14437124	14336975	0	0	Off
2	2592907	14442615	14347244	0	0	Off
3	2592694	14434066	14338045	0	0	Off
4	2594892	14469184	14359323	0	0	Off
5	2595043	14472897	14365765	0	0	Off
6	2594234	14460965	14364689	0	0	Off
7	2594786	14468009	14367243	0	0	Off
8	2593809	14462436	14348574	0	0	Off
9	2595473	14473350	14374814	0	0	Off
10	2593170	14451182	14347644	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	71912.467	3438.503	58.917	0.000	Off
2	71932.128	3274.391	415.825	0.000	Off
3	71924.920	3296.712	159.352	0.000	Off
4	71999.300	3772.244	118.090	0.000	Off
5	72004.410	3678.501	557.036	0.000	Off
6	71977.034	3305.532	411.879	0.000	Off
7	71995.713	3459.798	347.302	0.000	Off
8	71962.652	3909.641	534.590	0.000	Off
9	72018.962	3383.218	66.567	0.000	Off
10	71941.028	3554.958	747.365	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.10 10:58:24
 Results file name: 8AAK5824_02.RTS
 Inspection number:

Item id: P1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:

Passive comment: 10 min.Original file name JMG-JM3G_AFAS-P
 COLLAR_20181010-105824.seq.data2
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +-
 Passive doubles bkgrnd: 1.821 +- 1.681
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +-
 Active doubles bkgrnd: 0.000 +-
 Active triples bkgrnd: 0.000 +-

Number Passive cycles: 20
 Count time (sec): 30.000

Passive results

Singles: 72016.864 +- 14.938
 Doubles: 3564.979 +- 33.667
 Triples: 175.703 +- 75.392
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2593535	14455282	14349346	0	0	Off
2	2594129	14464920	14356190	0	0	Off
3	2596490	14484332	14386509	0	0	Off
4	2597484	14492476	14395013	0	0	Off
5	2592697	14444208	14339603	0	0	Off
6	2594282	14461077	14355888	0	0	Off
7	2596270	14485659	14381289	0	0	Off
8	2595355	14474444	14366705	0	0	Off
9	2594746	14461185	14357821	0	0	Off
10	2592218	14438131	14338113	0	0	Off
11	2597292	14492420	14382969	0	0	Off
12	2597366	14492438	14392957	0	0	Off
13	2594574	14459955	14365046	0	0	Off
14	2595777	14475339	14370668	0	0	Off
15	2593598	14449752	14345552	0	0	Off
16	2596978	14493008	14393910	0	0	Off
17	2599351	14518177	14407911	0	0	Off
18	2596000	14477306	14373668	0	0	Off
19	2597527	14498765	14391079	0	0	Off
20	2592551	14443163	14335260	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	71953.379	3637.350	248.266	0.000	Off
2	71973.480	3733.357	566.685	0.000	Off
3	72053.378	3358.764	896.902	0.000	Off
4	72087.015	3346.436	137.270	0.000	Off
5	71925.022	3591.592	2.273	0.000	Off
6	71978.658	3611.720	263.852	0.000	Off
7	72045.933	3583.669	-538.072	0.000	Off
8	72014.969	3699.367	-327.730	0.000	Off
9	71994.360	3549.046	503.624	0.000	Off
10	71908.812	3433.999	-171.106	0.000	Off
11	72080.518	3758.265	460.317	0.000	Off
12	72083.022	3415.758	315.368	0.000	Off
13	71988.539	3258.584	332.719	0.000	Off
14	72029.249	3593.989	-155.782	0.000	Off
15	71955.511	3577.717	160.391	0.000	Off
16	72069.892	3402.585	364.142	0.000	Off
17	72150.196	3786.354	-20.285	0.000	Off
18	72036.796	3558.511	462.324	0.000	Off
19	72088.470	3697.640	-34.331	0.000	Off
20	71920.081	3704.879	50.485	0.000	Off

(2)

INCC 6. 18. 440. 18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18. 10. 10 11:10:52
 Results file name: 8AAL1052_02.RTS
 Inspection number:

Item id: P1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:

Passive comment: 15 min. Original file name JMG_JM3G_AFAS-P
 COLLAR_20181010-111052.seq.datat
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +-
 Passive doubles bkgrnd: 1.821 +-
 Passive triples bkgrnd: -0.318 +-
 Active singles bkgrnd: 0.000 +-
 Active doubles bkgrnd: 0.000 +-
 Active triples bkgrnd: 0.000 +-
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results

Singles: 72023.085 +-
 Doubles: 3604.114 +-
 Triples: 223.484 +-
 Scaler 1: 0.000 +-
 Scaler 2: 0.000 +-

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2596292	14492080	14389181	0	0	Off
2	2592212	14439837	14335539	0	0	Off
3	2598032	14504752	14399011	0	0	Off
4	2595700	14470559	14379475	0	0	Off
5	2597729	14493316	14398764	0	0	Off
6	2593701	14447459	14349080	0	0	Off
7	2594464	14463263	14356276	0	0	Off
8	2593222	14448616	14348902	0	0	Off
9	2596453	14485434	14387230	0	0	Off
10	2595057	14473468	14366425	0	0	Off
11	2591404	14431274	14323913	0	0	Off
12	2594875	14477899	14363898	0	0	Off
13	2592174	14442225	14333993	0	0	Off
14	2594620	14474277	14362009	0	0	Off
15	2592764	14448598	14340474	0	0	Off
16	2596626	14486206	14386909	0	0	Off
17	2595665	14478052	14366948	0	0	Off
18	2597348	14500931	14392080	0	0	Off
19	2593103	14452803	14343859	0	0	Off
20	2595250	14471668	14373321	0	0	Off
21	2597682	14504221	14388298	0	0	Off
22	2599335	14515609	14405208	0	0	Off
23	2597132	14488549	14393904	0	0	Off
24	2597799	14501545	14393337	0	0	Off
25	2594714	14470863	14356849	0	0	Off
26	2599555	14518479	14410815	0	0	Off
27	2596064	14480222	14376663	0	0	Off
28	2595903	14480180	14375091	0	0	Off
29	2595665	14476561	14379453	0	0	Off
30	2597305	14498373	14391435	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	72046.677	3533.136	463.629	0.000	Off
2	71908.609	3581.025	589.249	0.000	Off
3	72105.560	3630.843	-530.530	0.000	Off
4	72026.643	3127.225	397.702	0.000	Off
5	72095.306	3246.440	280.864	0.000	Off
6	71958.997	3377.755	82.088	0.000	Off
7	71984.817	3673.495	57.940	0.000	Off
8	71942.787	3423.596	-15.963	0.000	Off
9	72052.125	3371.851	163.056	0.000	Off
10	72004.884	3675.444	45.552	0.000	Off
11	71881.267	3686.211	96.927	0.000	Off
12	71998.725	3914.465	638.751	0.000	Off
13	71907.323	3716.164	-44.498	0.000	Off
14	71990.096	3854.919	313.994	0.000	Off
15	71927.289	3712.480	42.784	0.000	Off
16	72057.980	3409.407	343.288	0.000	Off
17	72025.459	3814.979	-142.788	0.000	Off
18	72082.413	3737.655	728.747	0.000	Off
19	71938.761	3740.664	489.627	0.000	Off

(2)

	集合体A測定_Collar_MCSR_15分.txt	
20	72011.415	0.000
21	72093.716	0.000
22	72149.655	0.000
23	72075.103	0.000
24	72097.675	0.000
25	71993.277	0.000
26	72157.100	0.000
27	72038.961	0.000
28	72033.513	0.000
29	72025.459	0.000
30	72080.958	0.000
	3376.717	0.000
	3980.622	0.000
	3790.992	0.000
	3249.612	0.000
	3715.585	0.000
	3914.904	0.000
	3696.972	0.000
	3555.799	0.000
	3608.354	0.000
	3334.169	0.000
	3671.933	0.000
	1344.065	0.000
	-141.711	0.000
	-78.995	0.000
	-156.695	0.000
	-153.268	0.000
	223.788	0.000
	803.846	0.000
	205.178	0.000
	561.910	0.000
	144.970	0.000
	-39.769	0.000

INCC 5.1.2 集合体A測定_Fork_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 13:24:53
 Results file name: 8AAN2453.RTS
 Inspection number:
 Item id: A
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 72059.298 +-
 Doubles: 3598.774 +-
 Triples: 419.897 +-
 Quads: 115.377 +-
 Quads/Triples: -14.885 +-
 Scaler 1: 3498.212 +-
 Scaler 2: 0.000 +-
 15.978
 60.940
 91.484
 128.153
 16.512
 4.448
 0.000

Passive cycle rate data

(1)

集合体A測定_Fork_AMSR_5分.txt
 Doubles 3834.602
 Triples 418.150
 QC Tests Pass
 3697.566
 583.023
 Pass
 3774.121
 485.320
 Pass
 3382.551
 477.957
 Pass
 3550.572
 279.401
 Pass
 3433.169
 1.520
 Pass
 3240.832
 897.734
 Pass
 3660.467
 349.502
 Pass
 3761.899
 728.542
 Pass
 3651.961
 -22.308
 Pass

Cycle
 1 72030.333
 2 72003.464
 3 72095.273
 4 72094.427
 5 72118.184
 6 71961.570
 7 72057.067
 8 72113.751
 9 72048.269
 10 72070.637
 Singles

(2)

INCC 5.1.2 集体A测定_Fork_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 13:31:45
 Results file name: 8AAN3145.RTS
 Inspection number:
 Item id:
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Passive scaler1 bkgrnd: 1141.521
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 72081.181 +- 14.079
 Doubles: 3563.205 +- 30.077
 Triples: 294.965 +- 42.147
 Quads: 47.470 +- 72.241
 Quads/Triples: -0.172 +- 0.440
 Scaler 1: 3494.904 +- 3.033
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体A测定_Fork_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	72014.022	3602.283	458.689	Pass
2	72101.703	3647.465	387.451	Pass
3	72089.690	3551.877	480.864	Pass
4	72070.062	3673.947	326.747	Pass
5	72091.077	3755.461	463.051	Pass
6	72106.576	3493.083	188.371	Pass
7	72120.823	3594.034	171.045	Pass
8	72241.434	3526.399	615.596	Pass
9	72066.610	3405.123	290.157	Pass
10	72078.861	3596.593	71.638	Pass
11	72015.579	3560.409	317.480	Pass
12	72128.167	3334.666	-133.168	Pass
13	72064.072	3742.681	337.512	Pass
14	71944.379	3581.001	-49.848	Pass
15	72036.086	3395.640	279.587	Pass
16	72105.426	3734.833	390.608	Pass
17	71992.770	3519.981	539.594	Pass
18	72096.898	3459.851	362.171	Pass
19	72130.197	3325.461	209.543	Pass
20	72129.182	3763.309	192.932	Pass

(2)

INCC 5.1.2 集体A測定_Fork_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.10 13:44:14
 Results file name: 8AAN4414.RTS
 Inspection number:

Item id: A
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Pre-delay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Passive scaler1 bkgrnd: 1141.521
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 72082.442 +- 12.255
 Doubles: 3529.895 +- 23.545
 Triples: 263.416 +- 46.652
 Quads: 94.400 +- 52.840
 Quads/Triples: 1.417 +- 0.830
 Scaler 1: 3499.879 +- 2.258
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体A測定_Fork_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	72039.199	3583.523	245.610	Pass
2	72207.355	3250.895	148.151	Pass
3	72065.967	3416.528	165.902	Pass
4	72091.889	3546.005	82.839	Pass
5	72114.969	3418.475	564.506	Pass
6	72052.972	3407.580	180.598	Pass
7	72142.617	3409.988	464.402	Pass
8	72056.154	3742.293	780.845	Pass
9	72037.778	3842.444	5.557	Pass
10	71937.949	3493.395	398.556	Pass
11	72086.204	3554.930	16.182	Pass
12	71980.723	3381.662	543.917	Pass
13	71988.236	3475.351	478.038	Pass
14	72027.254	3487.765	225.452	Pass
15	72161.839	3431.998	32.796	Pass
16	72141.974	3465.848	432.737	Pass
17	72104.410	3548.253	663.871	Pass
18	72120.011	3486.057	50.661	Pass
19	72053.243	3746.068	348.954	Pass
20	72157.507	3619.468	-203.130	Pass
21	72176.763	3538.276	159.300	Pass
22	72058.387	3615.290	-373.006	Pass
23	71928.813	3748.243	378.737	Pass
24	72121.365	3609.700	435.901	Pass
25	72106.576	3450.174	258.792	Pass
26	72146.509	3660.852	307.089	Pass
27	72064.343	3498.769	379.438	Pass
28	72109.419	3457.839	394.728	Pass
29	72099.707	3574.529	-92.197	Pass
30	72093.141	3434.665	432.206	Pass

(2)

集合体A測定_Fork_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.10 13:24:31
 Results file name: 8AAN2431_02.RTS
 Inspection number:

Item id: A
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JMG3G_AFAS-P
 FORK_20181010-132431.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.042
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 3493.842 +- 3.318
 Doubles: 8.543 +- 3.390
 Triples: -0.594 +- 1.400
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

集合体A測定_Fork_MCSR_5分.txt

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	139389	41925	41291	0	0	Off
2	139000	41418	41598	0	0	Off
3	139203	41695	41245	0	0	Off
4	138855	41427	41420	0	0	Off
5	139064	41449	41590	0	0	Off
6	139340	41892	41287	0	0	Off
7	138468	40857	40930	0	0	Off
8	139471	41691	41385	0	0	Off
9	139083	41769	41222	0	0	Off
10	138736	41186	40778	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3504.779	21.133	-3.678	0.000	Off
2	3491.812	-6.000	-1.981	0.000	Off
3	3498.579	15.000	0.751	0.000	Off
4	3486.979	0.233	-6.450	0.000	Off
5	3493.946	-4.700	-2.921	0.000	Off
6	3503.146	20.167	-3.403	0.000	Off
7	3474.079	-2.433	6.896	0.000	Off
8	3507.512	10.200	4.269	0.000	Off
9	3494.579	18.233	4.463	0.000	Off
10	3483.012	13.600	-3.782	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.10 13:32:17
 Results file name: 8AAN3217_02.RTS
 Inspection number:
 Item id:
 Measurement option:
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JMG3G_AFAS-P
 FORK_20181010-133217.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.042
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive results
 Singles: 3497.284 +- 3.119
 Doubles: 7.972 +- 2.433
 Triples: 1.053 +- 0.818
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	139261	41765	41745	0	0	Off
2	139102	41667	41296	0	0	Off
3	139784	41925	41715	0	0	Off
4	139223	41559	41804	0	0	Off
5	140104	41953	41758	0	0	Off
6	138635	41201	41241	0	0	Off
7	139335	41999	41768	0	0	Off
8	138829	41076	41028	0	0	Off
9	139390	41481	41787	0	0	Off
10	138676	41290	40576	0	0	Off
11	138281	41205	40859	0	0	Off
12	138773	41549	40787	0	0	Off
13	139451	41692	41182	0	0	Off
14	139293	41824	41103	0	0	Off
15	139311	41932	41673	0	0	Off
16	139566	42136	41392	0	0	Off
17	139130	41599	41350	0	0	Off
18	139144	41434	41458	0	0	Off
19	138990	41553	41367	0	0	Off
20	139005	41235	41403	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3500.512	0.667	1.333	0.000	Off
2	3495.212	12.367	-0.622	0.000	Off
3	3517.946	7.000	6.274	0.000	Off
4	3499.246	-8.167	-1.964	0.000	Off
5	3528.612	6.500	3.746	0.000	Off
6	3479.646	-1.333	-1.260	0.000	Off
7	3502.979	7.700	0.532	0.000	Off
8	3486.112	1.600	-3.790	0.000	Off
9	3504.812	-10.200	4.098	0.000	Off
10	3481.012	23.800	-4.678	0.000	Off
11	3467.846	11.533	0.018	0.000	Off
12	3484.246	25.400	-3.383	0.000	Off
13	3506.846	17.000	6.942	0.000	Off
14	3501.579	24.033	1.167	0.000	Off
15	3502.179	8.633	4.167	0.000	Off
16	3510.679	24.800	2.854	0.000	Off
17	3496.146	8.300	-0.471	0.000	Off
18	3496.612	-0.800	-2.045	0.000	Off
19	3491.479	6.200	8.494	0.000	Off
20	3491.979	-5.600	-0.022	0.000	Off

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.10 13:44:24
 Results file name: 8AAM4424_02.RTS
 Inspection number:
 Item id:
 Measurement option:
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JM3G_AFAS-P
 FORK_20181010-134424.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.042
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results
 Singles: 3499.611 +- 2.230
 Doubles: 8.620 +- 1.987
 Triples: -0.146 +- 0.495
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	139276	41622	41507	0	0	Off
2	139823	41818	41959	0	0	Off
3	139691	41914	41383	0	0	Off
4	139856	41916	41639	0	0	Off
5	138953	42065	41235	0	0	Off
6	139038	41129	41171	0	0	Off
7	139974	42152	41763	0	0	Off
8	139146	41664	41324	0	0	Off
9	138588	41431	41240	0	0	Off
10	139484	41641	41434	0	0	Off
11	138766	41224	41046	0	0	Off
12	139142	41927	41039	0	0	Off
13	139161	41529	41256	0	0	Off
14	138832	41121	41323	0	0	Off
15	139309	41764	41337	0	0	Off
16	138958	41370	41425	0	0	Off
17	139221	41625	41142	0	0	Off
18	138849	41263	41187	0	0	Off
19	138902	41786	41277	0	0	Off
20	139184	41032	41263	0	0	Off
21	139331	41549	41243	0	0	Off
22	139886	41619	41690	0	0	Off
23	139459	41707	41524	0	0	Off
24	138731	41011	41407	0	0	Off
25	139530	41707	41656	0	0	Off
26	139391	41810	41264	0	0	Off
27	139179	41585	41283	0	0	Off
28	139261	42105	41113	0	0	Off
29	139051	41710	41243	0	0	Off
30	139047	41546	41211	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3501.012	3.833	4.324	0.000	Off
2	3519.246	-4.700	3.704	0.000	Off
3	3514.846	17.700	-0.747	0.000	Off
4	3520.346	9.233	-5.192	0.000	Off
5	3490.246	27.667	-0.142	0.000	Off
6	3493.079	-1.400	-0.936	0.000	Off
7	3524.279	12.967	0.774	0.000	Off
8	3496.679	11.333	-1.713	0.000	Off
9	3478.079	6.367	3.288	0.000	Off
10	3507.946	6.900	0.983	0.000	Off
11	3484.012	5.933	-1.092	0.000	Off
12	3496.546	29.600	1.079	0.000	Off
13	3497.179	9.100	2.745	0.000	Off
14	3486.212	-6.733	-5.286	0.000	Off
15	3502.112	14.233	-5.480	0.000	Off
16	3490.412	-1.833	-0.477	0.000	Off
17	3499.179	16.100	3.005	0.000	Off
18	3486.779	2.533	0.624	0.000	Off
19	3488.546	16.967	2.781	0.000	Off

(2)

20	3497.946	集合体A測定_Fork_MCSR_15分.txt	0.000	Off
21	3502.846	-7.700	-2.264	Off
22	3521.346	10.200	-2.680	Off
23	3507.112	-2.367	-0.341	Off
24	3482.846	6.100	-0.620	Off
25	3509.479	-13.200	3.707	Off
26	3504.846	1.700	1.869	Off
27	3497.779	18.200	-4.186	Off
28	3500.512	10.067	-0.296	Off
29	3493.512	33.067	1.048	Off
30	3493.379	15.567	-1.508	Off
		11.167	-1.117	Off

INCC 5.1.2 集体B测定_Collar_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 10:41:13
 Results file name: 8ABK4113.RTS
 Inspection number:
 Item id: B 5min
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidental method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 62540.862 +-
 Doubles: 2981.075 +-
 Triples: 173.007 +-
 Quads: 24.134 +-
 Quads/Triples: 4.432 +-
 Scaler 1: 3046.905 +-
 Scaler 2: 0.000 +-
 17.726
 31.678
 45.241
 64.465
 3.629
 4.040
 0.000

Passive cycle rate data

(1)

集体B测定_Collar_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62526.324	2945.385	175.727	Pass
2	62582.272	2944.894	-3.857	Pass
3	62533.689	2755.390	248.738	Pass
4	62522.067	3037.796	163.768	Pass
5	62536.966	2965.872	420.791	Pass
6	62477.404	2940.884	229.990	Pass
7	62624.402	3065.468	78.543	Pass
8	62514.398	3090.416	99.297	Pass
9	62462.099	3092.140	342.491	Pass
10	62628.996	2972.506	-25.142	Pass

(2)

INCC 5.1.2 集体B测定_Collar_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 10:48:47
 Results file name: 8ABK4847_RTS
 Inspection number:
 Item id: B 10min
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 62574.841 +-
 Doubles: 2973.535 +-
 Triples: 178.988 +-
 Quads: 10.879 +-
 Quads/Triples: -0.431 +-
 Scaler 1: 3046.354 +-
 Scaler 2: 0.000 +-
 12.917
 34.236
 46.107
 63.634
 0.888
 3.238
 0.000

Passive cycle rate data

(1)

集体B测定_Collar_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62576.663	2887.054	111.682	Pass
2	62546.696	2916.061	224.638	Pass
3	62600.144	3004.150	403.785	Pass
4	62650.315	3199.657	234.999	Pass
5	62468.451	2847.022	413.166	Pass
6	62676.161	2968.480	-101.994	Pass
7	62614.232	3043.474	-30.069	Pass
8	62579.467	2822.615	415.813	Pass
9	62521.526	2851.492	-113.443	Pass
10	62554.365	2907.885	197.552	Pass
11	62522.911	3144.525	-36.889	Pass
12	62514.296	2812.998	355.487	Pass
13	62541.527	3116.673	132.703	Pass
14	62598.725	3041.403	78.209	Pass
15	62531.729	2899.233	13.591	Pass
16	62691.500	2977.775	180.907	Pass
17	62575.312	3185.877	571.482	Pass
18	62553.048	3080.664	86.776	Pass
19	62636.463	3164.304	-50.156	Pass
20	62543.284	2599.363	487.496	Pass

(2)

INCC 5.1.2 集体B测定_Collar_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 11:01:49
 Results file name: 8ABLO149.RTS
 Inspection number:
 Item id: B 15min
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 62577.454 +-
 Doubles: 3028.132 +-
 Triples: 288.985 +-
 Quads: 0.481 +-
 Quads/Triples: 3.283 +-
 Scaler 1: 3044.611 +-
 Scaler 2: 0.000 +-

Passive cycle rate data

(1)

集体B测定_Collar_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62639.842	3002.000	159.412	Pass
2	62545.209	3159.342	360.413	Pass
3	62598.353	3088.040	348.804	Pass
4	62610.516	3187.320	476.812	Pass
5	62524.432	3344.972	371.325	Pass
6	62597.813	2982.849	306.505	Pass
7	62561.460	2873.308	592.048	Pass
8	62642.781	3060.249	-216.151	Pass
9	62614.199	3147.672	544.750	Pass
10	62523.722	2789.313	274.538	Pass
11	62514.938	2806.493	395.582	Pass
12	62582.373	2907.468	3.642	Pass
13	62571.832	3123.828	502.054	Pass
14	62555.818	2712.815	261.530	Pass
15	62638.760	3126.024	686.022	Pass
16	62576.528	2995.188	122.522	Pass
17	62502.810	2868.799	58.022	Pass
18	62603.455	3162.829	43.744	Pass
19	62524.229	3228.930	199.538	Pass
20	62513.486	2871.788	329.240	Pass
21	62566.325	2945.014	355.928	Pass
22	62616.226	3000.092	17.818	Pass
23	62672.647	2995.185	-4.764	Pass
24	62550.176	2692.641	229.772	Pass
25	62501.188	2985.455	443.656	Pass
26	62543.757	3078.668	339.447	Pass
27	62559.771	3104.298	226.869	Pass
28	62574.535	3212.893	521.151	Pass
29	62685.655	3051.699	229.481	Pass
30	62610.786	3338.772	485.896	Pass

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.11 10:41:26
 Results file name: 8ABK4126_01.RTS
 Inspection number:

Item id: B 5min
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:

Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181011-104126.seq.data
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 62545.800 +- 17.016
 Doubles: 3054.438 +- 35.829
 Triples: 130.483 +- 88.744
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2316001	11527155	11438452	0	0	Off
2	2315704	11529153	11443374	0	0	Off
3	2314556	11511932	11424368	0	0	Off
4	2315700	11528141	11438222	0	0	Off
5	2316163	11532719	11441898	0	0	Off
6	2316684	11535024	11450356	0	0	Off
7	2313110	11500830	11414452	0	0	Off
8	2317328	11544290	11452422	0	0	Off
9	2315613	11534722	11439156	0	0	Off
10	2312206	11494641	11403334	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	62569.264	3035.483	436.089	0.000	Off
2	62559.230	2935.351	-397.486	0.000	Off
3	62520.445	2996.431	425.787	0.000	Off
4	62559.094	3077.109	160.374	0.000	Off
5	62574.737	3108.012	186.479	0.000	Off
6	62592.339	2897.342	488.573	0.000	Off
7	62471.592	2955.772	-69.708	0.000	Off
8	62614.097	3143.905	137.840	0.000	Off
9	62556.155	3270.466	-142.157	0.000	Off
10	62441.051	3124.509	79.303	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.11 10:48:44
 Results file name: 8ABK4844_01.RTS
 Inspection number:
 Item id: B 10min
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181011-104843.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive results

Singles: 62574.032 +- 12.628
 Doubles: 3083.847 +- 35.313
 Triples: 212.035 +- 61.164
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2316014	11536647	11446514	0	0	Off
2	2316428	11534080	11446187	0	0	Off
3	2316510	11532508	11444042	0	0	Off
4	2316758	11538734	11448725	0	0	Off
5	2316340	11534304	11443597	0	0	Off
6	2317820	11556843	11457955	0	0	Off
7	2313084	11497631	11408084	0	0	Off
8	2319499	11561045	11477294	0	0	Off
9	2316941	11546439	11444782	0	0	Off
10	2317082	11536104	11448544	0	0	Off
11	2316291	11531188	11445962	0	0	Off
12	2313832	11507674	11417405	0	0	Off
13	2315508	11526863	11439207	0	0	Off
14	2315054	11524012	11435279	0	0	Off
15	2314158	11506697	11424560	0	0	Off
16	2314947	11521402	11430541	0	0	Off
17	2315705	11528134	11434937	0	0	Off
18	2316120	11535453	11444279	0	0	Off
19	2319720	11565848	11476952	0	0	Off
20	2315032	11528138	11432592	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	62569.703	3084.448	93.069	0.000	Off
2	62583.690	3007.762	82.431	0.000	Off
3	62586.460	3027.386	674.214	0.000	Off
4	62594.839	3080.229	184.328	0.000	Off
5	62580.717	3104.115	727.409	0.000	Off
6	62630.719	3384.302	228.576	0.000	Off
7	62470.714	3064.278	651.042	0.000	Off
8	62687.445	2866.037	-145.261	0.000	Off
9	62601.022	3479.083	467.801	0.000	Off
10	62605.785	2996.383	46.194	0.000	Off
11	62579.061	2916.436	347.941	0.000	Off
12	62495.985	3089.026	24.589	0.000	Off
13	62552.608	2999.615	205.781	0.000	Off
14	62537.269	3036.477	130.337	0.000	Off
15	62506.998	2810.594	406.157	0.000	Off
16	62533.654	3109.337	28.635	0.000	Off
17	62559.263	3189.352	72.091	0.000	Off
18	62573.284	3120.097	-156.197	0.000	Off
19	62694.911	3042.224	-212.087	0.000	Off
20	62536.526	3269.759	385.078	0.000	Off

(2)

INCC 6. 18. 440. 18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18. 10. 11 11:02:16
 Results file name: 8ABLO216_01.RTS
 Inspection number:
 Item id: B 15min
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181011-110216.seq.data
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results
 Singles: 62571.273 +- 9.471
 Doubles: 3070.738 +- 32.357
 Triples: 274.604 +- 50.992
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2318050	11553111	11461454	0	0	Off
2	2315512	11531923	11435426	0	0	Off
3	2315615	11531219	11441020	0	0	Off
4	2317325	11543835	11455895	0	0	Off
5	2315186	11531683	11442326	0	0	Off
6	2317181	11549562	11456988	0	0	Off
7	2315978	11530550	11443957	0	0	Off
8	2316250	11528944	11449763	0	0	Off
9	2319054	11561928	11471821	0	0	Off
10	2314451	11520980	11423495	0	0	Off
11	2316668	11537349	11446291	0	0	Off
12	2315633	11522190	11440972	0	0	Off
13	2315999	11526491	11440036	0	0	Off
14	2315175	11519800	11436383	0	0	Off
15	2316041	11535310	11442914	0	0	Off
16	2314934	11513905	11427292	0	0	Off
17	2318168	11556660	11460183	0	0	Off
18	2314932	11521377	11423319	0	0	Off
19	2315522	11525775	11435344	0	0	Off
20	2316165	11535215	11446684	0	0	Off
21	2314621	11518751	11425786	0	0	Off
22	2315188	11525702	11438923	0	0	Off
23	2312861	11496496	11410778	0	0	Off
24	2318214	11553463	11460542	0	0	Off
25	2317650	11547750	11455895	0	0	Off
26	2318419	11554175	11460668	0	0	Off
27	2314179	11505348	11426374	0	0	Off
28	2313574	11503298	11416789	0	0	Off
29	2315702	11534851	11436185	0	0	Off
30	2317567	11545556	11457718	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	62638.490	3136.707	-79.319	0.000	Off
2	62552.743	3302.341	287.686	0.000	Off
3	62556.223	3086.694	-326.267	0.000	Off
4	62613.995	3009.403	166.184	0.000	Off
5	62541.729	3057.848	335.742	0.000	Off
6	62609.130	3168.075	316.534	0.000	Off
7	62568.487	2963.233	167.075	0.000	Off
8	62577.676	2709.445	330.225	0.000	Off
9	62672.410	3083.668	-324.651	0.000	Off
10	62516.897	3336.129	644.084	0.000	Off
11	62591.798	3116.145	615.650	0.000	Off
12	62556.831	2779.175	518.758	0.000	Off
13	62569.196	2958.508	614.947	0.000	Off
14	62541.357	2854.456	116.537	0.000	Off
15	62570.615	3161.937	551.950	0.000	Off
16	62533.215	2963.882	286.419	0.000	Off
17	62642.476	3301.758	860.636	0.000	Off
18	62533.148	3355.768	364.956	0.000	Off
19	62553.081	3094.634	172.517	0.000	Off

(2)

	集合体B測定_Collar_MCSR_15分.txt	
20	62574.804	0.000
21	62522.641	0.000
22	62541.797	0.000
23	62463.180	0.000
24	62644.030	0.000
25	62624.975	0.000
26	62650.956	0.000
27	62507.708	0.000
28	62487.268	0.000
29	62559.162	0.000
30	62622.171	0.000

INCC 5.1.2 集合体B測定_Fork_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 13:24:48
 Results file name: 8ABN2448_RTS
 Inspection number:
 Item id: B_5min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 62585.850 +-
 Doubles: 3039.707 +-
 Triples: 325.869 +-
 Quads: 29.843 +-
 Quads/Triples: 0.406 +-
 Scaler 1: 3041.775 +-
 Scaler 2: 0.000 +-
 15.269
 39.474
 65.497
 102.456
 0.547
 3.117
 0.000

Passive cycle rate data

(1)

集合体B測定_Fork_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62624.706	2901.861	54.892	Pass
2	62624.233	3004.038	469.199	Pass
3	62499.060	3251.364	398.944	Pass
4	62606.191	3144.958	570.353	Pass
5	62554.298	2935.757	398.985	Pass
6	62618.151	3062.620	363.228	Pass
7	62585.481	3134.869	384.871	Pass
8	62541.324	3085.377	402.248	Pass
9	62551.426	3039.916	350.838	Pass
10	62653.626	2836.316	-132.623	Pass

(2)

INCC 5.1.2 集体B测定_Fork_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 13:30:52
 Results file name: 8ABN3052.RTS
 Inspection number:
 Item id: B_10min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 62600.387 +-
 Doubles: 3018.039 +-
 Triples: 287.115 +-
 Quads: -62.459 +-
 Quads/Triples: -2.676 +-
 Scaler 1: 3034.589 +-
 Scaler 2: 0.000 +-
 13.522
 32.567
 53.077
 65.605
 2.715
 2.774
 0.000

Passive cycle rate data

(1)

集体B测定_Fork_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62543.993	3102.055	424.112	Pass
2	62607.847	3065.040	477.966	Pass
3	62571.528	3104.208	-200.357	Pass
4	62654.369	2835.769	242.578	Pass
5	62569.366	3029.594	805.892	Pass
6	62667.715	2993.947	558.811	Pass
7	62610.888	3019.056	280.609	Pass
8	62635.213	2796.645	616.023	Pass
9	62549.568	3235.704	7.532	Pass
10	62642.815	3022.822	276.025	Pass
11	62521.932	3283.884	438.902	Pass
12	62594.468	2922.409	-129.491	Pass
13	62512.877	3254.769	248.465	Pass
14	62759.342	3001.713	272.789	Pass
15	62635.551	2741.174	172.203	Pass
16	62598.725	2821.572	240.227	Pass
17	62516.594	3067.511	359.783	Pass
18	62562.305	2998.016	193.551	Pass
19	62631.361	3020.173	308.401	Pass
20	62621.293	3044.714	154.313	Pass

(2)

INC 5.1.2 集体B测定_Fork_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.11 13:43:09
 Results file name: 8ABN4309.RTS
 Inspection number:
 Item id: B_15min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 62590.857 +-
 Doubles: 3076.234 +-
 Triples: 202.521 +-
 Quads: -41.981 +-
 Quads/Triples: 1.183 +-
 Scaler 1: 3036.256 +-
 Scaler 2: 0.000 +-
 12.886
 15.895
 38.145
 39.232
 1.181
 2.558
 0.000

Passive cycle rate data

(1)

集体B测定_Fork_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	62582.711	3002.454	749.967	Pass
2	62628.557	3091.805	25.701	Pass
3	62685.722	3008.759	59.659	Pass
4	62550.446	3027.108	144.210	Pass
5	62614.908	3070.697	-181.944	Pass
6	62669.336	3076.165	519.991	Pass
7	62587.069	3229.171	363.185	Pass
8	62612.948	3192.253	313.379	Pass
9	62468.890	2984.497	156.201	Pass
10	62580.380	3048.951	273.165	Pass
11	62625.753	3075.366	51.434	Pass
12	62475.140	3275.305	449.438	Pass
13	62618.050	3243.519	253.290	Pass
14	62597.238	3111.700	235.241	Pass
15	62668.694	3037.676	117.830	Pass
16	62590.481	2929.733	266.123	Pass
17	62504.127	3055.788	-348.755	Pass
18	62421.220	3062.000	259.945	Pass
19	62753.970	2968.662	189.385	Pass
20	62527.202	3063.722	408.771	Pass
21	62535.243	3084.001	234.463	Pass
22	62580.244	2992.590	290.383	Pass
23	62643.186	3052.134	-11.713	Pass
24	62527.641	3091.663	312.026	Pass
25	62647.443	3189.313	193.673	Pass
26	62603.522	3024.185	180.200	Pass
27	62547.473	2967.046	-68.525	Pass
28	62626.800	3169.875	90.573	Pass
29	62612.104	3008.100	229.481	Pass
30	62639.200	3152.767	319.800	Pass

(2)

集合体B測定_Fork_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.11 13:24:40
 Results file name: 8ABN2440_04.RTS
 Inspection number:

Item id: B.FORK_5min

Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:

Passive comment: Original file name JMG-JMG3G_AFAS-P
 Fork_20181011-132440.seq.dta2
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.046
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 3040.572 +- 2.963
 Doubles: 4.713 +- 1.319
 Triples: 1.136 +- 1.309
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

集合体B測定_Fork_MCSR_5分.txt

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	124944	33445	33203	0	0	Off
2	125503	33717	33806	0	0	Off
3	125658	33654	33544	0	0	Off
4	125203	33619	33564	0	0	Off
5	125466	34083	33779	0	0	Off
6	125483	33796	33557	0	0	Off
7	125442	33720	33604	0	0	Off
8	125390	33656	33596	0	0	Off
9	125518	33636	33551	0	0	Off
10	126021	34262	33970	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3023.279	8.067	8.107	0.000	Off
2	3041.912	-2.967	4.359	0.000	Off
3	3047.079	3.667	-4.970	0.000	Off
4	3031.912	1.833	0.098	0.000	Off
5	3040.679	10.133	-0.493	0.000	Off
6	3041.246	7.967	2.960	0.000	Off
7	3039.879	3.867	1.573	0.000	Off
8	3038.146	2.000	5.440	0.000	Off
9	3042.412	2.833	-2.471	0.000	Off
10	3059.179	9.733	-3.242	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.11 13:30:10
 Results file name: 8ABN3010_01.RTS
 Inspection number:
 Item id: B.FORK_10min
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JMG3G_AFAS-P
 FORK_20181011-133009.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.046
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive results
 Singles: 3029.802 +- 2.120
 Doubles: 4.703 +- 2.254
 Triples: 1.156 +- 0.613
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	125432	33781	33047	0	0	Off
2	125443	33815	33850	0	0	Off
3	124699	33240	33208	0	0	Off
4	125600	33961	33695	0	0	Off
5	125407	33876	33710	0	0	Off
6	124932	33448	33438	0	0	Off
7	125038	33446	33398	0	0	Off
8	124967	33567	33240	0	0	Off
9	124511	33402	33314	0	0	Off
10	124982	33632	33316	0	0	Off
11	125045	33571	33515	0	0	Off
12	125318	33371	33820	0	0	Off
13	125283	33888	33308	0	0	Off
14	125438	33831	33471	0	0	Off
15	124929	33464	33123	0	0	Off
16	125410	33812	33786	0	0	Off
17	125173	33017	33630	0	0	Off
18	125008	33306	33049	0	0	Off
19	124972	33589	33420	0	0	Off
20	125207	33640	33497	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3039.546	24.467	4.297	0.000	Off
2	3039.912	-1.167	-1.236	0.000	Off
3	3015.112	1.067	4.443	0.000	Off
4	3045.146	8.867	-3.788	0.000	Off
5	3038.712	5.533	4.097	0.000	Off
6	3022.879	0.333	-1.498	0.000	Off
7	3026.412	1.600	-0.485	0.000	Off
8	3024.046	10.900	2.927	0.000	Off
9	3008.846	2.933	4.606	0.000	Off
10	3024.546	10.533	0.834	0.000	Off
11	3026.646	1.867	-1.356	0.000	Off
12	3035.746	-14.967	0.706	0.000	Off
13	3034.579	19.333	3.389	0.000	Off
14	3039.746	12.000	2.027	0.000	Off
15	3022.779	11.367	-1.038	0.000	Off
16	3038.812	0.867	2.182	0.000	Off
17	3030.912	-20.433	2.044	0.000	Off
18	3025.412	8.567	5.419	0.000	Off
19	3024.212	5.633	-2.313	0.000	Off
20	3032.046	4.767	-1.891	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.11 13:43:40
 Results file name: 8ABM4340_01.RTS
 Inspection number:
 Item id: B.FORK_15min
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JMG3G_AFAS-P
 FORK_20181011-134340.seq.dataz
 Ending comment:

Pre-delay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.046
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results
 Singles: 3036.498 +- 2.598
 Doubles: 6.280 +- 1.683
 Triples: -0.044 +- 0.552
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	125993	34287	33637	0	0	Off
2	124870	33441	33077	0	0	Off
3	126046	34144	33962	0	0	Off
4	125148	33947	33348	0	0	Off
5	125276	33355	33618	0	0	Off
6	126052	34017	33780	0	0	Off
7	125580	33940	33545	0	0	Off
8	125092	33519	33166	0	0	Off
9	125611	34013	33412	0	0	Off
10	126001	34026	33989	0	0	Off
11	125057	33637	33341	0	0	Off
12	124978	33322	33489	0	0	Off
13	125319	33862	33543	0	0	Off
14	124837	33385	33117	0	0	Off
15	125193	33787	33539	0	0	Off
16	125784	33857	33943	0	0	Off
17	124987	33258	33575	0	0	Off
18	125511	33866	33865	0	0	Off
19	125065	33524	33678	0	0	Off
20	125672	33849	33826	0	0	Off
21	125344	33803	33777	0	0	Off
22	124911	33594	33098	0	0	Off
23	125716	34143	33855	0	0	Off
24	124969	33547	33269	0	0	Off
25	124554	33025	33339	0	0	Off
26	125037	33515	33555	0	0	Off
27	124743	33358	33062	0	0	Off
28	125534	33917	33635	0	0	Off
29	125771	34158	33532	0	0	Off
30	125566	33659	33531	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3058.246	21.667	1.600	0.000	Off
2	3020.812	12.133	4.503	0.000	Off
3	3060.012	6.067	0.750	0.000	Off
4	3030.079	19.967	-3.345	0.000	Off
5	3034.346	-8.767	2.128	0.000	Off
6	3060.212	7.900	-3.517	0.000	Off
7	3044.479	13.167	5.700	0.000	Off
8	3028.212	11.767	1.198	0.000	Off
9	3045.512	20.033	0.059	0.000	Off
10	3058.512	1.233	5.019	0.000	Off
11	3027.046	9.867	1.118	0.000	Off
12	3024.412	-5.567	-2.799	0.000	Off
13	3035.779	10.633	0.438	0.000	Off
14	3019.712	8.933	-3.519	0.000	Off
15	3031.579	8.267	4.736	0.000	Off
16	3051.279	-2.867	1.592	0.000	Off
17	3024.712	-10.567	2.581	0.000	Off
18	3042.179	0.033	-1.355	0.000	Off
19	3027.312	-5.133	0.125	0.000	Off

(2)

			集合体B測定_Fork_MCSR_15分.txt		
20	3047.546	0.767	-3.731	0.000	Off
21	3036.612	0.867	-1.925	0.000	Off
22	3022.179	16.533	-1.856	0.000	Off
23	3049.012	9.600	-0.707	0.000	Off
24	3024.112	9.267	-1.058	0.000	Off
25	3010.279	-10.467	1.853	0.000	Off
26	3026.379	-1.333	1.100	0.000	Off
27	3016.579	9.867	-3.031	0.000	Off
28	3042.946	9.400	2.115	0.000	Off
29	3050.846	20.867	-5.237	0.000	Off
30	3044.012	4.267	-5.582	0.000	Off

INCC 5.1.2 集体C测定_Collar_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 10:29:24
 Results file name: 8ACK2924.RTS
 Inspection number:
 Item id: C_5min #1
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Pre-delay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Passive scaler1 bkgrnd: 1141.521
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 31684.131 +- 16.880
 Doubles: 1423.327 +- 26.444
 Triples: 21.890 +- 15.586
 Quads: 26.191 +- 14.285
 Quads/Triples: 0.767 +- 0.805
 Scaler 1: 1588.282 +- 2.187
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体C测定_Collar_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	31555.827	1339.028	5.565	Pass
2	31686.715	1416.600	67.588	Pass
3	31700.090	1470.032	-36.675	Pass
4	31665.141	1392.571	60.551	Pass
5	31704.627	1465.359	77.672	Pass
6	31677.676	1335.967	22.025	Pass
7	31754.631	1305.445	52.919	Pass
8	31665.880	1516.020	28.573	Pass
9	31732.519	1566.567	-79.855	Pass
10	31698.208	1425.685	19.905	Pass

(2)

INCC 5.1.2 集体C测定_Collar_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 10:39:08
 Results file name: 8ACK3908.RTS
 Inspection number:
 Item id: C_10min #1
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 31689.705 +-
 Doubles: 1443.478 +-
 Triples: 83.858 +-
 Quads: 7.482 +-
 Quads/Triples: 1.430 +-
 Scaler 1: 1582.369 +-
 Scaler 2: 0.000 +-
 6.452
 12.893
 16.077
 20.538
 1.002
 2.287
 0.000

Passive cycle rate data

(1)

集体C测定_Collar_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	31642.290	1429.282	113.516	Pass
2	31673.576	1376.652	153.492	Pass
3	31670.350	1460.429	114.737	Pass
4	31677.071	1529.848	128.366	Pass
5	31736.047	1374.954	125.597	Pass
6	31705.601	1413.560	173.228	Pass
7	31690.916	1502.482	152.428	Pass
8	31717.296	1477.324	44.049	Pass
9	31728.688	1404.154	89.352	Pass
10	31712.188	1332.121	36.686	Pass
11	31697.066	1512.716	216.066	Pass
12	31632.578	1505.162	105.432	Pass
13	31655.631	1504.395	35.404	Pass
14	31725.294	1409.843	70.737	Pass
15	31678.885	1486.858	-75.185	Pass
16	31694.747	1475.145	44.096	Pass
17	31690.244	1385.468	130.863	Pass
18	31668.233	1444.269	51.884	Pass
19	31700.359	1372.600	-6.848	Pass
20	31697.032	1472.300	-25.854	Pass

(2)

INCC 5.1.2 集体C测定_Collar_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 10:51:37
 Results file name: 8ACK5137.RTS
 Inspection number:
 Item id: C_15min #1
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 31706.112 +- 7.849
 Doubles: 1458.645 +- 15.184
 Triples: 97.562 +- 15.751
 Quads: 1.781 +- 19.360
 Quads/Triples: 0.096 +- 0.256
 Scaler 1: 1588.013 +- 2.084
 Scaler 2: 0.000 +- 0.000

Passive cycle rate data

(1)

集体C测定_Collar_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	31685.573	1404.505	78.300	Pass
2	31685.674	1430.422	87.644	Pass
3	31706.945	1514.957	47.999	Pass
4	31774.256	1452.893	221.964	Pass
5	31714.674	1465.872	93.106	Pass
6	31768.207	1573.328	-44.778	Pass
7	31739.340	1468.087	150.099	Pass
8	31640.408	1561.571	118.112	Pass
9	31694.646	1382.421	49.121	Pass
10	31685.640	1447.089	129.577	Pass
11	31749.960	1275.426	119.741	Pass
12	31770.996	1537.825	66.277	Pass
13	31734.703	1490.038	98.266	Pass
14	31801.107	1537.841	206.641	Pass
15	31687.421	1471.448	139.479	Pass
16	31667.359	1357.576	-67.434	Pass
17	31633.755	1591.278	90.471	Pass
18	31672.736	1504.878	91.466	Pass
19	31677.138	1505.050	85.856	Pass
20	31664.368	1610.300	151.890	Pass
21	31688.631	1437.097	-94.246	Pass
22	31686.883	1331.669	320.763	Pass
23	31636.813	1379.413	251.833	Pass
24	31748.414	1520.434	53.752	Pass
25	31695.621	1445.604	30.813	Pass
26	31695.822	1390.519	64.257	Pass
27	31723.748	1301.873	144.105	Pass
28	31730.805	1415.605	73.027	Pass
29	31694.276	1462.068	45.354	Pass
30	31727.444	1492.270	123.353	Pass

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 10:29:56
 Results file name: 8ACK2956_01.RTS
 Inspection number:
 Item id: C.COLLAR_5min. #1

Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181012-102956.seq.data
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 31686.544 +- 12.989
 Doubles: 1441.212 +- 25.416
 Triples: 45.797 +- 37.471
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	1396865	4205734	4164119	0	0	Off
2	1399595	4220961	4175315	0	0	Off
3	1398941	4219016	4175659	0	0	Off
4	1398631	4213501	4172384	0	0	Off
5	1399034	4220640	4173810	0	0	Off
6	1399560	4219451	4178289	0	0	Off
7	1400678	4226485	4187618	0	0	Off
8	1399564	4218342	4177407	0	0	Off
9	1400982	4232613	4189381	0	0	Off
10	1400689	4230930	4187736	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	31599.546	1407.953	-107.267	0.000	Off
2	31691.286	1544.558	135.721	0.000	Off
3	31669.308	1467.001	76.633	0.000	Off
4	31658.891	1391.111	172.471	0.000	Off
5	31672.434	1584.659	225.717	0.000	Off
6	31690.110	1392.650	34.414	0.000	Off
7	31727.680	1314.918	-42.882	0.000	Off
8	31690.244	1384.960	68.377	0.000	Off
9	31737.896	1462.801	-146.185	0.000	Off
10	31728.049	1461.509	41.632	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 10:39:08
 Results file name: 8ACK3908_01.RTS
 Inspection number:
 Item id: C.COLLAR_10min. #1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181012-103907.seq.data
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +- 1.681
 Passive doubles bkgrnd: 1.821 +- 1.657
 Passive triples bkgrnd: -0.318 +- 1.093
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive results

Singles: 31689.836 +- 10.242
 Doubles: 1456.068 +- 21.833
 Triples: 103.038 +- 23.033
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	1398704	4211139	4171538	0	0	Off
2	1398283	4211988	4171776	0	0	Off
3	1399524	4217812	4175885	0	0	Off
4	1399214	4220227	4176102	0	0	Off
5	1398181	4215322	4168517	0	0	Off
6	1401466	4230191	4188140	0	0	Off
7	1399616	4222906	4181263	0	0	Off
8	1400528	4227285	4186425	0	0	Off
9	1398031	4212493	4169488	0	0	Off
10	1400649	4227967	4183036	0	0	Off
11	1400863	4226229	4186236	0	0	Off
12	1399538	4219214	4180632	0	0	Off
13	1399716	4224951	4183713	0	0	Off
14	1399100	4218149	4174479	0	0	Off
15	1397204	4211325	4163269	0	0	Off
16	1399330	4218056	4172882	0	0	Off
17	1400648	4228568	4186843	0	0	Off
18	1398183	4214995	4170204	0	0	Off
19	1402907	4244082	4194572	0	0	Off
20	1399352	4218796	4176016	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	31661.344	1339.754	226.561	0.000	Off
2	31647.197	1360.446	175.876	0.000	Off
3	31688.900	1418.566	-6.403	0.000	Off
4	31678.482	1493.024	204.372	0.000	Off
5	31643.769	1583.797	32.744	0.000	Off
6	31754.160	1422.799	196.561	0.000	Off
7	31691.992	1408.946	171.172	0.000	Off
8	31722.639	1382.435	70.921	0.000	Off
9	31638.728	1455.061	-13.738	0.000	Off
10	31726.705	1520.355	113.480	0.000	Off
11	31733.897	1353.068	76.903	0.000	Off
12	31689.370	1305.246	175.297	0.000	Off
13	31695.352	1395.228	288.229	0.000	Off
14	31674.652	1477.608	-133.474	0.000	Off
15	31610.938	1626.158	142.962	0.000	Off
16	31682.381	1528.563	159.493	0.000	Off
17	31726.672	1411.741	20.826	0.000	Off
18	31643.836	1515.568	-11.175	0.000	Off
19	31802.586	1675.526	41.738	0.000	Off
20	31683.120	1447.461	130.223	0.000	Off

(2)

INCC 6. 18. 440. 18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: COLLAR
 Detector id: AFAS-P COLLAR
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 10:51:37
 Results file name: 8ACK5137_01.RTS
 Inspection number:
 Item id: C.COLLAR_15min. #1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-JM3G_AFAS-P
 COLLAR_20181012-105137.seq.data
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +-
 Passive doubles bkgrnd: 1.821 +-
 Passive triples bkgrnd: -0.318 +-
 Active singles bkgrnd: 0.000 +-
 Active doubles bkgrnd: 0.000 +-
 Active triples bkgrnd: 0.000 +-
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results

Singles: 31701.499 +-
 Doubles: 1469.037 +-
 Triples: 77.480 +-
 Scaler 1: 0.000 +-
 Scaler 2: 0.000 +-
 7.075
 19.460
 25.187
 0.000
 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	139396	4221891	4175467	0	0	Off
2	1399397	4219155	4177289	0	0	Off
3	1399175	4220484	4176528	0	0	Off
4	1399932	4226436	4182929	0	0	Off
5	1401593	4233775	4191734	0	0	Off
6	1401028	4226361	4184875	0	0	Off
7	1400965	4230464	4190742	0	0	Off
8	1399783	4222558	4177246	0	0	Off
9	1402881	4242430	4197769	0	0	Off
10	1400449	4229270	4181323	0	0	Off
11	1399436	4221327	4179461	0	0	Off
12	1398390	4215318	4171816	0	0	Off
13	1399552	4220173	4178908	0	0	Off
14	1399420	4221401	4180114	0	0	Off
15	1401257	4226691	4185699	0	0	Off
16	1400600	4231573	4186033	0	0	Off
17	1401173	4232345	4190097	0	0	Off
18	1400522	4227993	4181411	0	0	Off
19	1401229	4232785	4184630	0	0	Off
20	1398667	4215755	4177027	0	0	Off
21	1399889	4225487	4182886	0	0	Off
22	1398081	4215632	4173634	0	0	Off
23	1398738	4217031	4175917	0	0	Off
24	1399020	4219498	4175498	0	0	Off
25	1399819	4226399	4176027	0	0	Off
26	1398418	4216165	4171276	0	0	Off
27	1398580	4213206	4174661	0	0	Off
28	1399949	4218727	4180516	0	0	Off
29	1399103	4221587	4171800	0	0	Off
30	1400526	4227802	4183908	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	31684.599	1570.912	96.719	0.000	Off
2	31684.632	1416.498	37.330	0.000	Off
3	31677.172	1487.298	8.454	0.000	Off
4	31702.611	1472.100	24.129	0.000	Off
5	31758.428	1422.463	179.339	0.000	Off
6	31739.442	1403.651	260.429	0.000	Off
7	31737.324	1343.889	234.100	0.000	Off
8	31697.604	1533.247	8.674	0.000	Off
9	31801.712	1511.247	-103.128	0.000	Off
10	31719.984	1622.527	91.266	0.000	Off
11	31685.943	1416.498	222.443	0.000	Off
12	31650.792	1471.904	206.742	0.000	Off
13	31689.841	1396.140	-124.650	0.000	Off
14	31685.405	1396.883	-68.499	0.000	Off
15	31747.137	1386.919	126.297	0.000	Off
16	31725.059	1540.985	72.130	0.000	Off
17	31744.314	1429.468	41.552	0.000	Off
18	31722.437	1576.285	351.004	0.000	Off
19	31746.196	1629.588	-0.191	0.000	Off

(2)

20	31660.101	集合体C測定_Collar_MCSR_15分.txt	0.000	Off
21	31701.166	1310.179	-235.551	0.000
22	31640.409	1441.406	9.198	0.000
23	31662.487	1420.948	-3.125	0.000
24	31671.963	1391.011	155.964	0.000
25	31698.813	1488.786	-12.963	0.000
26	31651.733	1704.669	165.827	0.000
27	31657.177	1518.892	-83.139	0.000
28	31703.182	1303.978	63.331	0.000
29	31674.752	1292.683	163.902	0.000
30	31722.572	1684.836	370.853	0.000
		1485.221	68.833	0.000

INCC 5.1.2 集合体C測定_Fork_AMSR_5分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 13:26:07
 Results file name: 8AGN2607_RTS
 Inspection number:
 Item id: C_5min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 15151.183 +-
 Passive doubles bkgrnd: 1.821 +-
 Passive triples bkgrnd: -0.318 +-
 Passive scaler1 bkgrnd: 1141.521
 Passive scaler2 bkgrnd: 0.000

Number passive cycles: 10
 Count time (sec): 30

Results

Singles: 31733.224 +-
 Doubles: 1449.451 +-
 Triples: 120.675 +-
 Quads: -51.852 +-
 Quads/Triples: -0.069 +-
 Scaler 1: 1587.172 +-
 Scaler 2: 0.000 +-
 11.590
 18.475
 27.522
 17.921
 0.511
 2.811
 0.000

Passive cycle rate data

(1)

集合体C測定_Fork_AMSR_5分.txt
 Doubles 1532.859
 Triples 40.708
 QC Tests Pass
 1397.203
 28.138
 Pass
 1456.607
 -6.827
 Pass
 1434.948
 184.920
 Pass
 1507.765
 274.614
 Pass
 1478.837
 196.023
 Pass
 1448.764
 109.464
 Pass
 1469.258
 82.391
 Pass
 1323.580
 157.988
 Pass
 1444.686
 139.785
 Pass

Cycle
 1 31668.871
 2 31716.489
 3 31748.750
 4 31727.478
 5 31752.009
 6 31760.512
 7 31715.111
 8 31776.239
 9 31777.348
 10 31689.437
 Singles

(2)

INCC 5.1.2 集体C测定_Fork_AMSR_10分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 13:36:26
 Results file name: 8ACN3626.RTS
 Inspection number:
 Item id: C_10min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 20
 Count time (sec): 30

Results

Singles: 31719.166 +-
 Doubles: 1473.771 +-
 Triples: 92.737 +-
 Quads: -17.889 +-
 Quads/Triples: -0.139 +-
 Scaler 1: 1584.277 +-
 Scaler 2: 0.000 +-
 5.843
 10.974
 17.499
 19.557
 0.375
 2.293
 0.000

Passive cycle rate data

(1)

集体C测定_Fork_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	31698.880	1476.299	44.395	Pass
2	31690.714	1540.730	-1.615	Pass
3	31743.743	1460.433	72.092	Pass
4	31705.736	1574.616	110.987	Pass
5	31704.559	1478.809	34.653	Pass
6	31732.451	1543.191	37.452	Pass
7	31721.765	1472.889	199.519	Pass
8	31747.977	1379.906	237.358	Pass
9	31718.976	1457.439	-35.008	Pass
10	31708.861	1449.032	47.637	Pass
11	31675.424	1474.762	119.804	Pass
12	31700.796	1490.223	127.102	Pass
13	31726.503	1458.899	46.411	Pass
14	31765.283	1465.593	74.493	Pass
15	31737.425	1526.458	89.735	Pass
16	31671.425	1467.781	196.582	Pass
17	31712.087	1499.613	186.293	Pass
18	31731.208	1381.287	-18.215	Pass
19	31742.230	1426.520	195.451	Pass
20	31747.271	1450.949	90.127	Pass

(2)

INCC 5.1.2 集体C测定_Fork_AMSR_15分.txt

Facility: JMOX
 Material balance area: XXXX
 Detector type: COLLAR
 Detector id: AFASP
 Electronics id: AMSR
 Measurement date: 18.10.12 13:49:01
 Results file name: 8ACN4901.RTS
 Inspection number:
 Item id: C_15min #2
 Measurement option: Rates Only
 Detector configuration: Passive
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.1620
 Multiplicity deadtime: 86.5000
 Coefficient A deadtime: 0.3458
 Coefficient B deadtime: 0.0299
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.6599
 Triples gate fraction: 0.4260

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 15151.183 +-
 Passive doubles bkgnd: 1.821 +-
 Passive triples bkgnd: -0.318 +-
 Passive scaler1 bkgnd: 1141.521
 Passive scaler2 bkgnd: 0.000

Number passive cycles: 30
 Count time (sec): 30

Results

Singles: 31728.849 +-
 Doubles: 1426.397 +-
 Triples: 93.667 +-
 Quads: 24.246 +-
 Quads/Triples: 0.285 +-
 Scaler 1: 1587.040 +-
 Scaler 2: 0.000 +-
 7.708
 12.205
 15.914
 20.155
 0.485
 1.895
 0.000

Passive cycle rate data

(1)

集体C测定_Fork_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	QC Tests
1	31772.979	1442.018	59.264	Pass
2	31693.638	1498.757	58.874	Pass
3	31689.975	1351.624	68.828	Pass
4	31709.667	1344.214	104.658	Pass
5	31664.906	1568.834	263.618	Pass
6	31704.391	1482.230	74.085	Pass
7	31756.513	1353.824	122.769	Pass
8	31693.873	1486.697	296.233	Pass
9	31793.142	1356.043	139.274	Pass
10	31707.181	1472.407	27.087	Pass
11	31743.138	1472.087	39.627	Pass
12	31719.413	1407.537	53.937	Pass
13	31725.193	1465.166	159.997	Pass
14	31756.076	1357.279	167.011	Pass
15	31687.354	1421.140	-22.966	Pass
16	31813.574	1347.414	98.605	Pass
17	31686.614	1444.244	278.256	Pass
18	31746.229	1424.692	29.682	Pass
19	31759.503	1295.182	100.805	Pass
20	31687.656	1474.904	132.176	Pass
21	31669.980	1429.093	37.557	Pass
22	31754.362	1471.211	-17.314	Pass
23	31779.633	1483.116	108.260	Pass
24	31747.910	1396.337	115.260	Pass
25	31734.367	1308.484	-101.623	Pass
26	31761.184	1493.575	189.317	Pass
27	31750.934	1376.587	64.362	Pass
28	31796.604	1453.853	49.140	Pass
29	31689.336	1509.189	89.217	Pass
30	31670.148	1404.159	25.876	Pass

(2)

集合体C測定_Fork_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 13:28:59
 Results file name: 8ACN2859_01.RTS
 Inspection number:
 Item id: C.FORK_5min. #1

Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:

Passive comment: Original file name JMG-_JM3G_AFAS-P
 FORK_20181012-132859.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.056
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 10
 Count time (sec): 30.000

Passive results

Singles: 1584.749 +- 3.085
 Doubles: 4.393 +- 2.100
 Triples: 0.516 +- 0.439
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

集合体C測定_Fork_MCSR_5分.txt

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	81794	14267	14228	0	0	Off
2	81890	14471	14328	0	0	Off
3	82102	14383	14338	0	0	Off
4	82139	14474	14399	0	0	Off
5	81335	14400	13971	0	0	Off
6	82062	14427	14291	0	0	Off
7	81846	14163	14448	0	0	Off
8	81358	14179	14049	0	0	Off
9	81803	14491	14280	0	0	Off
10	81552	14386	13991	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1584.946	1.300	2.580	0.000	Off
2	1588.146	4.767	-0.201	0.000	Off
3	1595.212	1.500	-0.639	0.000	Off
4	1596.446	2.500	-0.372	0.000	Off
5	1569.646	14.300	1.127	0.000	Off
6	1593.879	4.533	2.205	0.000	Off
7	1586.679	-9.500	-0.284	0.000	Off
8	1570.412	4.333	0.796	0.000	Off
9	1585.246	7.033	1.750	0.000	Off
10	1576.879	13.167	-1.720	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 13:36:20
 Results file name: 8ACN3620_01.RTS
 Inspection number:
 Item id: C.FORK_10min. #1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JM3G_AFAS-P
 FORK_20181012-133620.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.056
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive results
 Singles: 1585.231 +- 1.873
 Doubles: 3.678 +- 1.293
 Triples: 0.235 +- 0.367
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	81828	14238	14111	0	0	Off
2	81841	14351	14052	0	0	Off
3	81814	14457	14363	0	0	Off
4	81986	14549	14131	0	0	Off
5	81282	14141	14080	0	0	Off
6	81551	14345	14274	0	0	Off
7	81568	14309	14219	0	0	Off
8	81814	14464	14010	0	0	Off
9	81739	14245	14121	0	0	Off
10	81779	14487	14309	0	0	Off
11	81999	14478	14440	0	0	Off
12	81851	14306	14556	0	0	Off
13	81553	14215	14128	0	0	Off
14	81691	14200	14261	0	0	Off
15	82104	14377	14450	0	0	Off
16	81656	14343	14390	0	0	Off
17	82458	14644	14293	0	0	Off
18	81677	14409	14198	0	0	Off
19	81977	14236	14265	0	0	Off
20	81883	14278	14214	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1586.079	4.233	-0.263	0.000	Off
2	1586.512	9.967	0.278	0.000	Off
3	1585.612	3.133	2.634	0.000	Off
4	1591.346	13.933	-2.340	0.000	Off
5	1567.879	2.033	1.520	0.000	Off
6	1576.846	2.367	-3.242	0.000	Off
7	1577.412	3.000	0.349	0.000	Off
8	1585.612	15.133	1.820	0.000	Off
9	1583.112	4.133	1.586	0.000	Off
10	1584.446	5.933	-0.416	0.000	Off
11	1591.779	1.267	0.144	0.000	Off
12	1586.846	-8.333	-1.697	0.000	Off
13	1576.912	2.900	0.998	0.000	Off
14	1581.512	-2.033	1.616	0.000	Off
15	1595.279	-2.433	-0.060	0.000	Off
16	1580.346	-1.567	0.476	0.000	Off
17	1607.079	11.700	-1.828	0.000	Off
18	1581.046	7.033	-0.150	0.000	Off
19	1591.046	-0.967	0.141	0.000	Off
20	1587.912	2.133	3.275	0.000	Off

(2)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JMG3G
 Detector type: FORK
 Detector id: AFAS-P FORK
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 18.10.12 13:48:57
 Results file name: 8ACN4857_01.RTS
 Inspection number:
 Item id: C.FORK_15min. #1
 Measurement option: Rates
 Detector configuration: Passive
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name JMG-_JMG3G_AFAS-P
 FORK_20181012-134857.seq.dataz
 Ending comment:

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1720
 Die away time: 50.0000
 Efficiency: 0.0126
 Multiplicity deadtime: 0.0000
 Coefficient A deadtime: 0.0000
 Coefficient B deadtime: 0.0000
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.0000
 Triples gate fraction: 0.0000

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 1141.521 +- 0.418
 Passive doubles bkgrnd: 0.000 +- 0.056
 Passive triples bkgrnd: 0.000 +- 0.002
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive results
 Singles: 1588.173 +- 1.910
 Doubles: 4.684 +- 0.910
 Triples: -0.450 +- 0.263
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	81678	14428	14186	0	0	Off
2	81509	14378	14194	0	0	Off
3	81691	14261	14313	0	0	Off
4	82045	14539	14335	0	0	Off
5	81327	14401	14150	0	0	Off
6	82320	14644	14266	0	0	Off
7	81824	14410	14146	0	0	Off
8	81921	14509	14347	0	0	Off
9	81806	14337	14112	0	0	Off
10	82475	14870	14455	0	0	Off
11	82035	14516	14332	0	0	Off
12	82059	14567	14583	0	0	Off
13	81860	14327	14199	0	0	Off
14	81697	14000	14110	0	0	Off
15	81720	14304	14302	0	0	Off
16	81977	14427	14281	0	0	Off
17	81583	14400	14239	0	0	Off
18	82025	14489	14340	0	0	Off
19	82220	14346	14354	0	0	Off
20	82043	14274	14421	0	0	Off
21	82597	14721	14434	0	0	Off
22	81996	14378	14202	0	0	Off
23	82034	14338	14271	0	0	Off
24	81807	14352	14255	0	0	Off
25	82280	14425	14568	0	0	Off
26	81996	14471	14167	0	0	Off
27	81473	14214	14270	0	0	Off
28	81366	14300	14004	0	0	Off
29	81639	14346	14110	0	0	Off
30	81722	14414	14224	0	0	Off

Passive cycle DIC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1581.079	8.067	-0.190	0.000	Off
2	1575.446	6.133	-2.790	0.000	Off
3	1581.512	-1.733	-1.690	0.000	Off
4	1593.312	6.800	-1.816	0.000	Off
5	1569.379	8.367	0.539	0.000	Off
6	1602.479	12.600	-0.250	0.000	Off
7	1585.946	8.800	-0.522	0.000	Off
8	1589.179	5.400	-0.868	0.000	Off
9	1585.346	7.500	-0.249	0.000	Off
10	1607.646	13.833	-2.024	0.000	Off
11	1592.979	6.133	0.273	0.000	Off
12	1593.779	-0.533	0.840	0.000	Off
13	1587.146	4.267	-1.479	0.000	Off
14	1581.712	-3.667	0.706	0.000	Off
15	1582.479	0.067	1.012	0.000	Off
16	1591.046	4.867	1.758	0.000	Off
17	1577.912	5.367	-2.431	0.000	Off
18	1592.646	4.967	-0.229	0.000	Off
19	1599.146	-0.267	-0.975	0.000	Off

(2)

	集合体C測定_Fork_MCSR_15分.txt	
20	1593.246	Off
21	1611.712	Off
22	1591.679	Off
23	1592.946	Off
24	1585.379	Off
25	1601.146	Off
26	1591.679	Off
27	1574.246	Off
28	1570.679	Off
29	1579.779	Off
30	1582.546	Off

集合体C測定_Fork_MCSR_15分.txt	
-4.900	0.000
9.567	0.000
5.867	0.000
2.233	0.000
3.233	0.000
-4.767	0.000
10.133	0.000
-1.867	0.000
9.867	0.000
7.867	0.000
6.333	0.000

【AVIS 性能確認試験】

- (1) 3.1 バックグラウンドの影響評価に係る検討

Facility: PFFF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id: 18.11.22 10:45:18
 Electronics id: 8BWK4518.BKG
 Measurement date: 18.11.22 10:45:18
 Results file name: 8BWK4518.BKG
 Inspection number:
 Measurement option:
 Detector configuration:
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment: A pellet

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 6155
 Shift register reals + accidentals sum: 22
 Shift register accidentals sum: 0
 Shift register 1st scaler sum: 551
 Shift register 2nd scaler sum: 2927

Passive summed multiplicity distributions

R+A sums	A sums	Singles:
0	6133	10.258 +- 0.116
1	22	0.037 +- 0.008
	6155	0.000 +- 0.000
	0	0.918 +- 0.037
		Scaler 1:

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	284	0	0	21	144	Pass
2	280	0	0	31	118	Pass
3	315	0	0	29	152	Pass
4	298	2	0	23	154	Pass
5	303	0	0	29	137	Pass
6	316	2	0	26	142	Pass
7	307	0	0	27	143	Pass
8	318	0	0	24	168	Pass
9	323	2	0	30	163	Pass
10	273	3	0	21	132	Pass
11	315	4	0	40	143	Fail
12	307	1	0	25	150	Pass
13	325	2	0	26	154	Pass
14	319	1	0	16	150	Pass
15	315	0	0	28	168	Pass
16	313	3	0	31	144	Pass
17	316	2	0	29	149	Pass
18	334	1	0	35	155	Pass
19	313	1	0	33	143	Pass
20	296	0	0	31	133	Pass
21	300	0	0	36	128	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	9.467	0.000	0.000	Pass
2	9.333	0.000	0.000	Pass
3	10.500	0.067	0.000	Pass
4	9.933	0.067	0.000	Pass
5	10.100	0.000	0.000	Pass
6	10.533	0.067	0.000	Pass
7	10.233	0.000	0.000	Pass
8	10.600	0.000	0.000	Pass
9	10.767	0.067	0.000	Pass
10	9.100	0.100	0.000	Pass
11	10.500	0.133	0.033	Fail
12	10.233	0.033	0.000	Pass
13	10.833	0.067	0.000	Pass
14	10.633	0.033	0.000	Pass
15	10.500	0.100	0.000	Pass
16	10.433	0.000	0.000	Pass
17	10.533	0.067	0.000	Pass
18	11.133	0.033	0.000	Pass
19	10.433	0.033	0.000	Pass
20	9.867	0.000	0.000	Pass
21	10.000	0.000	0.000	Pass

(2)

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id: 18.11.22 09:31:25
 Electronics id: 8BMJ3125.BKG
 Measurement date: 18.11.22 09:31:25
 Results file name: 8BMJ3125.BKG
 Inspection number: Background
 Measurement option: Passive
 Detector configuration: Shift register
 Data source: On
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 5365
 Shift register reals + accidentals sum: 54
 Shift register accidentals sum: 0
 Shift register 1st scaler sum: 503
 Shift register 2nd scaler sum: 2523

Passive summed multiplicity distributions

R+A sums	A sums
0	5321
1	34
2	10

Results

Singles:	8.942 +- 0.131
Doubles:	0.090 +- 0.017
Triples:	0.017 +- 0.005

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	279	3	0	29	129	Pass
2	268	1	0	27	137	Pass
3	275	8	0	20	139	Pass
4	306	1	0	27	135	Pass
5	261	0	0	20	134	Pass
6	247	4	0	20	127	Pass
7	265	0	0	25	126	Pass
8	268	2	0	25	117	Pass
9	302	0	0	24	140	Pass
10	278	3	0	30	123	Pass
11	264	2	0	22	134	Pass
12	247	7	0	31	112	Pass
13	301	7	0	20	143	Fail
14	237	3	0	25	111	Pass
15	275	1	0	27	110	Pass
16	272	4	0	27	135	Pass
17	280	7	0	31	120	Pass
18	268	2	0	22	123	Pass
19	259	2	0	26	136	Pass
20	274	1	0	24	129	Pass
21	240	3	0	21	106	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	9.300	0.100	0.033	Pass
2	8.933	0.033	0.000	Pass
3	9.167	0.267	0.067	Pass
4	10.200	0.033	0.000	Pass
5	8.700	0.000	0.000	Pass
6	8.233	0.133	0.033	Pass
7	8.833	0.000	0.000	Pass
8	8.933	0.067	0.000	Pass
9	10.067	0.000	0.000	Pass
10	9.267	0.100	0.033	Pass
11	8.800	0.067	0.000	Pass
12	8.233	0.233	0.033	Pass
13	10.033	0.233	0.134	Fail
14	7.900	0.100	0.033	Pass
15	9.167	0.033	0.000	Pass
16	9.067	0.133	0.000	Pass
17	9.333	0.233	0.067	Pass
18	8.933	0.067	0.000	Pass
19	8.633	0.067	0.000	Pass
20	9.133	0.033	0.000	Pass
21	8.000	0.100	0.033	Pass

(2)

Facility: PFFF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id: 18.11.19 10:51:40
 Electronics id: 8BJK5140.BKG
 Measurement date: Background
 Results file name: Passive
 Inspection number: Shift register
 Measurement option: On
 Detector configuration: Data source: Sample method
 Shift register Measured
 QC tests: JAEA
 Error calculation: Passive comment:
 Accidentals method: JAEA

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 7889
 Shift register reals + accidentals sum: 47
 Shift register accidentals sum: 0
 Shift register 1st scaler sum: 696
 Shift register 2nd scaler sum: 3781

Passive summed multiplicity distributions

R+A sums	A sums
0	7850
1	32
2	6
3	1

Results
 Singles: 13.148 +- 0.140
 Doubles: 0.078 +- 0.021

(1)

Triples: 0.015 +- 0.009
 Quads: 0.002 +- 0.002
 Quads/Triples: 0.012 +- 0.012
 Scaler 1: 1.160 +- 0.040
 Scaler 2: 6.302 +- 0.103

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	361	18	0	41	157	Fail outlier test
2	393	0	0	38	169	Pass
3	432	3	0	37	213	Pass
4	368	2	0	37	198	Pass
5	403	3	0	26	176	Pass
6	421	12	0	23	198	Pass
7	384	1	0	28	179	Pass
8	408	1	0	34	189	Pass
9	396	1	0	37	201	Pass
10	369	2	0	38	178	Pass
11	390	0	0	35	198	Pass
12	406	1	0	33	198	Pass
13	384	3	0	32	175	Pass
14	389	2	0	40	188	Pass
15	407	2	0	34	205	Pass
16	375	0	0	32	193	Pass
17	400	8	0	32	190	Pass
18	362	14	0	33	173	Fail outlier test
19	396	1	0	35	188	Pass
20	424	1	0	42	208	Pass
21	380	3	0	47	177	Pass
22	364	1	0	35	160	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	12.033	0.600	0.301	Fail outlier test
2	13.100	0.000	0.000	Pass
3	14.400	0.100	0.000	Pass
4	12.267	0.067	0.000	Pass
5	13.433	0.100	0.000	Pass
6	14.033	0.400	0.134	Pass
7	12.800	0.033	0.000	Pass
8	13.600	0.033	0.000	Pass
9	13.200	0.033	0.000	Pass
10	12.300	0.067	0.000	Pass
11	13.000	0.000	0.000	Pass
12	13.533	0.033	0.000	Pass
13	12.800	0.100	0.033	Pass
14	12.967	0.067	0.000	Pass
15	13.567	0.067	0.000	Pass
16	12.500	0.000	0.000	Pass
17	13.333	0.267	0.134	Pass
18	12.067	0.467	0.571	Fail outlier test
19	13.200	0.033	0.000	Pass
20	14.133	0.033	0.000	Pass
21	12.667	0.100	0.000	Pass

(2)

BG測定_サンプルあり.txt
0.033 0.000 Pass

12.133

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(3)

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id: 18.11.19 10:13:36
 Electronics id: 8BJK1336.BKG
 Measurement date: 18.11.19 10:13:36
 Results file name: 8BJK1336.BKG
 Inspection number:
 Measurement option:
 Detector configuration:
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 5396
 Shift register reals + accidentals sum: 18
 Shift register accidentals sum: 0
 Shift register 1st scaler sum: 493
 Shift register 2nd scaler sum: 2487

Passive summed multiplicity distributions

R+A sums	A sums	Singles:
0	5378	8.993 +-
1	18	0.030 +-
	5396	0.000 +-
	0	0.822 +-
		0.118
		0.005
		0.000
		0.039

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	262	1	0	26	130	Pass
2	281	1	0	19	126	Pass
3	240	1	0	27	110	Pass
4	253	1	0	15	115	Pass
5	268	2	0	26	114	Pass
6	256	2	0	25	123	Pass
7	271	4	0	16	123	Fail outlier test
8	282	0	0	29	128	Pass
9	288	0	0	28	128	Pass
10	255	1	0	24	115	Pass
11	277	0	0	28	125	Pass
12	279	1	0	21	135	Pass
13	278	1	0	34	126	Pass
14	278	0	0	32	133	Pass
15	265	1	0	23	133	Pass
16	262	0	0	13	123	Pass
17	271	2	0	24	128	Pass
18	281	0	0	29	133	Pass
19	291	1	0	20	129	Pass
20	273	7	0	24	127	Fail outlier test
21	292	1	0	27	133	Pass
22	237	2	0	23	100	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	8.733	0.033	0.000	Pass
2	9.367	0.033	0.000	Pass
3	8.000	0.033	0.000	Pass
4	8.433	0.033	0.000	Pass
5	8.933	0.067	0.000	Pass
6	8.533	0.067	0.000	Pass
7	9.033	0.133	0.000	Fail outlier test
8	9.400	0.000	0.000	Pass
9	9.600	0.000	0.000	Pass
10	8.500	0.033	0.000	Pass
11	9.233	0.000	0.000	Pass
12	9.300	0.033	0.000	Pass
13	9.267	0.033	0.000	Pass
14	9.267	0.000	0.000	Pass
15	8.833	0.033	0.000	Pass
16	8.733	0.000	0.000	Pass
17	9.033	0.067	0.000	Pass
18	9.367	0.000	0.000	Pass
19	9.700	0.033	0.000	Pass
20	9.100	0.233	0.100	Fail outlier test
21	9.733	0.033	0.000	Pass
22	7.900	0.067	0.000	Pass

(2)

Material Facility: PFFF
 Detector type: XXXX
 Detector id: AVIS R-123
 Electronics id: 18.11.15 14:22:53
 Measurement date: 8BF02253.BKG
 Results file name: Background
 Inspection number: Passive
 Measurement option: Shift register
 Detector configuration: Data source: On
 Detector configuration: QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data
 Shift register singles sum: 12636
 Shift register reals + accidentals sum: 37
 Shift register accidentals sum: 20
 Shift register 1st scaler sum: 1127
 Shift register 2nd scaler sum: 6141

Passive summed multiplicity distributions
 R+A sums A sums
 0 12599 12616
 1 37 20

Results
 Singles: 21.060 +- 0.206
 Doubles: 0.028 +- 0.011
 Triples: -0.000 +- 0.000
 Quads: 0.000 +- 0.000

(1)

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	608	4	1	45	290	Pass
2	563	2	1	42	289	Pass
3	662	2	1	58	344	Pass
4	608	5	1	46	296	Pass
5	598	1	1	53	279	Pass
6	632	2	1	56	305	Pass
7	615	0	1	49	310	Pass
8	617	0	1	58	287	Pass
9	640	1	1	69	314	Pass
10	647	3	1	50	315	Pass
11	673	3	1	68	320	Pass
12	642	0	1	59	310	Pass
13	633	1	1	55	292	Pass
14	616	4	1	51	296	Pass
15	619	20	1	53	308	Fail outlier test
16	644	3	1	53	307	Pass
17	646	0	1	65	320	Pass
18	624	4	1	58	299	Fail outlier test
19	624	3	1	63	307	Pass
20	639	0	1	65	315	Pass
21	689	2	1	60	344	Pass
22	640	1	1	62	301	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	20.267	0.100	-0.000	Pass
2	18.767	0.033	-0.000	Pass
3	22.067	0.033	-0.000	Pass
4	20.267	0.133	-0.000	Pass
5	19.933	0.000	0.000	Pass
6	21.067	0.033	-0.000	Pass
7	20.500	-0.033	0.000	Pass
8	20.567	-0.033	0.000	Pass
9	21.333	0.000	0.000	Pass
10	21.567	0.067	-0.000	Pass
11	22.433	0.067	-0.000	Pass
12	21.400	-0.033	0.000	Pass
13	21.100	0.000	0.000	Pass
14	20.533	0.100	-0.000	Pass
15	20.633	0.633	0.401	Fail outlier test
16	21.467	0.067	-0.000	Pass
17	21.533	-0.033	0.000	Pass
18	20.800	0.100	0.033	Fail outlier test
19	20.800	0.067	-0.000	Pass
20	21.300	-0.033	0.000	Pass
21	22.967	0.033	-0.000	Pass
22	21.333	0.000	0.000	Pass

(2)

Facility: PFFF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id: 18.11.15 09:54:37
 Electronics id: 8BFJ5437.BKG
 Measurement date: 18.11.15 09:54:37
 Results file name: 8BFJ5437.BKG

Inspection number:
 Detector configuration:
 Data source: On
 QC tests: Sample method
 Error calculation: Measured
 Accidentals method: JAEA
 Inspector name:
 Passive comment:

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register reals + accidentals sum: 5673
 Shift register accidentals sum: 55
 Shift register 1st scaler sum: 0
 Shift register 2nd scaler sum: 671
 Shift register sum: 2562

Passive summed multiplicity distributions

R+A sums	A sums	Singles:
0	5636	9.455 +- 0.135
1	27	
2	4	
3	4	
4	2	

Results

(1)

BG測定_サンプル0なし.txt
 Doubles: 0.092 +- 0.026
 Triples: 0.047 +- 0.025
 Quads: 0.020 +- 0.012
 Quads/Triples: 0.064 +- 0.036
 Scaler 1: 1.118 +- 0.041
 Scaler 2: 4.270 +- 0.087

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	303	1	0	36	119	Pass
2	289	0	0	37	118	Pass
3	298	0	0	31	139	Pass
4	278	2	0	29	136	Pass
5	319	11	0	24	146	Pass
6	271	1	0	32	134	Pass
7	306	3	0	29	142	Pass
8	298	2	0	47	136	Pass
9	297	2	0	37	140	Pass
10	259	0	0	24	105	Pass
11	298	89	0	34	139	Fail outlier test
12	276	0	0	33	138	Pass
13	254	1	0	35	118	Pass
14	261	9	0	38	112	Pass
15	277	5	0	32	121	Pass
16	303	11	0	42	130	Pass
17	257	1	0	32	123	Pass
18	274	1	0	29	141	Pass
19	287	3	0	35	113	Pass
20	280	0	0	37	124	Pass
21	286	2	0	32	127	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	10.100	0.033	0.000	Pass
2	9.633	0.000	0.000	Pass
3	9.933	0.000	0.000	Pass
4	9.267	0.067	0.000	Pass
5	10.633	0.367	0.335	Pass
6	9.033	0.033	0.000	Pass
7	10.200	0.100	0.000	Pass
8	9.933	0.067	0.000	Pass
9	9.900	0.067	0.000	Pass
10	8.633	0.000	0.000	Pass
11	9.933	2.967	12.282	Fail outlier test
12	9.200	0.000	0.000	Pass
13	8.467	0.033	0.000	Pass
14	8.700	0.300	0.335	Pass
15	9.233	0.167	0.033	Pass
16	10.100	0.367	0.234	Pass
17	8.567	0.033	0.000	Pass
18	9.133	0.033	0.000	Pass
19	9.567	0.100	0.000	Pass
20	9.333	0.000	0.000	Pass
21	9.533	0.067	0.000	Pass

(2)

サンプルA測定_サンプルありBG適用.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.22 11:21:37
 Results file name: 8BML2137.VER
 Inspection number:
 Item id: A P #1 S10
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.090
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9976 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1357 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7066 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7991 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3609 +- 0.0000
 Pu date: 07.09.07 18.11.22
 Am241: 5.2012 +- 7.2108 +-
 Am date: 07.09.07 18.11.22

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 10.258 +- 0.116
 Passive doubles bkgnd: 0.037 +- 0.008

(1)

サンプルA測定_サンプルありBG適用.txt

Passive triples bkgnd: 0.000 +- 0.000
 Passive scaler1 bkgnd: 0.918
 Passive scaler2 bkgnd: 4.878

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 493580
 Shift register reals + accidentals sum: 133464
 Shift register accidentals sum: 17325
 Shift register 1st scaler sum: 134784
 Shift register 2nd scaler sum: 79852

Passive summed multiplicity distributions

	R+A sums	A sums
0	392183	478827
1	75341	12740
2	21094	1556
3	4137	388
4	650	62
5	135	0
6	32	0
7	7	0
8	1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	538.186 +- 0.946
Doubles:	129.027 +- 0.687
Triples:	35.989 +- 0.463
Quads:	7.262 +- 0.311
Quads/Triples:	0.200 +- 0.006
Scaler 1:	148.842 +- 0.419
Scaler 2:	83.846 +- 0.365

PRIMARY RESULT

Known alpha results

Alpha:	1.072
Multiplication:	1.010
Multiplication corrected doubles:	121.087 +- 0.280
Pu240e mass (g):	0.374 +- 0.001
Pu240e (%):	35.547 +- 0.002
Pu mass (g):	1.051 +- 0.002
Declared Pu240e mass (g):	0.379
Declared Pu mass (g):	1.067

(2)

サンプリング測定_サンプルありBG適用.txt
 Declared - assay Pu mass (g): 0.016 +- 0.002
 Declared - assay Pu mass (%): 1.480 +- 0.228

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.013 +- 0.001
 Alpha: 1.103 +- 0.009
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.367 +- 0.002
 Pu240e (%): 35.547
 Pu mass (g): 1.033 +- 0.005
 Pu mass (g): 0.379
 Declared Pu240e mass (g): 1.067
 Declared Pu mass (g): 0.034 +- 0.005
 Declared - assay Pu mass (%): 3.225 +- 0.501

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	Scaler1	Scaler2	QC Tests
1	16336	4348	4397	2718	Pass
2	16327	4499	4427	2570	Pass
3	16651	4659	4496	2701	Pass
4	16502	4405	4529	2648	Pass
5	16630	4525	4492	2777	Pass
6	16732	4642	4518	2727	Pass
7	16316	4396	4369	2670	Pass
8	16324	4365	4469	2618	Pass

(3)

サンプリング測定_サンプルありBG適用.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
9	16412	125.950	35.113	0.358	Pass
10	16380	130.984	37.300	0.368	Pass
11	16335	135.585	36.794	0.393	Pass
12	16567	127.450	36.864	0.354	Pass
13	16399	131.151	38.307	0.362	Pass
14	16573	134.819	37.909	0.382	Pass
15	16276	127.583	35.701	0.362	Pass
16	16278	126.550	35.168	0.361	Pass
17	16621	127.150	34.363	0.369	Pass
18	16324	128.084	36.533	0.359	Pass
19	16498	122.983	32.809	0.359	Pass
20	16585	129.551	35.414	0.373	Pass
21	16343	127.684	32.969	0.381	Pass
22	16336	129.951	38.533	0.355	Pass
23	16709	128.617	36.166	0.364	Pass
24	16595	131.151	36.773	0.372	Pass
25	16246	138.086	43.349	0.364	Pass
26	16233	129.584	36.326	0.368	Pass
27	16648	127.950	33.986	0.375	Pass
28	16659	127.017	33.592	0.373	Pass
29	16375	122.549	31.125	0.369	Pass
30	16370	125.016	33.877	0.362	Pass
		134.152	39.556	0.368	Pass
		131.151	36.121	0.380	Pass
		128.784	36.511	0.363	Pass
		123.516	31.423	0.371	Pass
		132.418	38.954	0.364	Pass
		132.051	34.973	0.388	Pass
		124.083	34.752	0.352	Pass
		128.384	38.413	0.349	Pass

Passive cycle rate data

(4)

サンプルA測定_サンプルなしBG適用.txt

INCC 5.1.2

Facility: PFFF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.22 11:21:36
 Results file name: 8BML2136.VER
 Inspection number:
 Item id: A P #1 NS10
 Stratium id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.090
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9976 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1357 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7066 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7991 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3609 +- 0.0000
 Pu date: 07.09.07 18.11.22
 Am241: 5.2012 +- 7.2108 +-
 Am date: 07.09.07 18.11.22

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 8.942 +- 0.131
 Passive doubles bkgnd: 0.090 +- 0.017

(1)

サンプルA測定_サンプルなしBG適用.txt

Passive triples bkgnd: 0.017 +- 0.005
 Passive scaler1 bkgnd: 0.838
 Passive scaler2 bkgnd: 4.205

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 493580
 Shift register reals + accidentals sum: 133464
 Shift register accidentals sum: 17325
 Shift register 1st scaler sum: 134784
 Shift register 2nd scaler sum: 79852

Passive summed multiplicity distributions

	R+A sums	A sums
0	392183	478827
1	75341	12740
2	21094	1556
3	4137	388
4	650	62
5	135	0
6	32	0
7	7	0
8	1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	539.502 +- 0.948
Doubles:	128.974 +- 0.687
Triples:	35.973 +- 0.463
Quads:	7.262 +- 0.311
Quads/Triples:	0.200 +- 0.006
Scaler 1:	148.922 +- 0.419
Scaler 2:	84.519 +- 0.365

PRIMARY RESULT

Known alpha results

Alpha:	1.072
Multiplication:	1.009
Multiplication corrected doubles:	121.448 +- 0.281
Pu240e mass (g):	0.375 +- 0.001
Pu240e (%):	35.547
Pu mass (g):	1.054 +- 0.002
Declared Pu240e mass (g):	0.379
Declared Pu mass (g):	1.067

(2)

サンプリング測定_サンプルなしBG適用.txt
 Declared - assay Pu mass (g): 0.013 +- 0.002
 Declared - assay Pu mass (%): 1.186 +- 0.228

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.013 +- 0.001
 Alpha: 1.109 +- 0.009
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.367 +- 0.002
 Pu240e (%): 35.547
 Pu mass (g): 1.032 +- 0.005
 Pu mass (g): 0.379
 Declared Pu240e mass (g): 1.067
 Declared Pu mass (g): 0.035 +- 0.005
 Declared - assay Pu mass (%): 3.273 +- 0.501

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	Rt+A	Scaler1	Scaler2	QC Tests
1	16336	4348	4397	2718	Pass
2	16327	4499	4427	2570	Pass
3	16651	4659	4496	2701	Pass
4	16502	4405	4529	2648	Pass
5	16630	4525	4492	2777	Pass
6	16732	4642	4518	2727	Pass
7	16316	4396	4369	2670	Pass
8	16324	4365	4469	2618	Pass

(3)

サンプリング測定_サンプルなしBG適用.txt
 9 16412 4390 575 4531 2556 Pass
 10 16380 4415 572 4555 2597 Pass
 11 16335 4259 569 4470 2727 Pass
 12 16567 4473 586 4492 2669 Pass
 13 16399 4405 574 4391 2626 Pass
 14 16573 4485 586 4546 2681 Pass
 15 16276 4424 565 4477 2557 Pass
 16 16278 4500 565 4499 2632 Pass
 17 16621 4732 589 4558 2681 Pass
 18 16324 4456 568 4539 2580 Pass
 19 16498 4420 581 4597 2600 Pass
 20 16585 4398 587 4504 2714 Pass
 21 16343 4247 570 4390 2630 Pass
 22 16336 4320 569 4454 2612 Pass
 23 16709 4621 596 4591 2732 Pass
 24 16595 4548 588 4561 2664 Pass
 25 16246 4427 563 4380 2707 Pass
 26 16233 4268 562 4428 2737 Pass
 27 16648 4564 591 4522 2754 Pass
 28 16659 4554 592 4628 2645 Pass
 29 16375 4295 572 4428 2661 Pass
 30 16370 4424 572 4546 2661 Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	535.613	125.897	35.096	0.358	Pass
2	535.313	130.931	37.283	0.368	Pass
3	546.114	135.532	36.777	0.393	Pass
4	541.147	127.397	36.847	0.354	Pass
5	545.414	131.098	38.291	0.362	Pass
6	548.814	134.765	37.892	0.382	Pass
7	534.946	127.530	35.684	0.362	Pass
8	535.213	126.497	35.151	0.361	Pass
9	538.147	127.097	34.347	0.369	Pass
10	537.080	128.030	36.516	0.359	Pass
11	535.580	122.929	32.792	0.359	Pass
12	543.314	129.497	35.397	0.373	Pass
13	537.713	127.630	32.952	0.380	Pass
14	543.514	129.898	38.516	0.355	Pass
15	533.613	128.564	36.149	0.364	Pass
16	533.680	131.097	36.756	0.372	Pass
17	545.114	138.032	43.332	0.364	Pass
18	535.213	129.530	36.309	0.367	Pass
19	541.014	127.897	33.969	0.375	Pass
20	543.914	126.964	33.575	0.373	Pass
21	535.847	122.496	31.108	0.369	Pass
22	535.613	124.963	33.860	0.362	Pass
23	548.048	134.098	39.539	0.368	Pass
24	544.247	131.931	36.104	0.380	Pass
25	532.613	128.730	36.494	0.363	Pass
26	532.180	123.463	31.407	0.371	Pass
27	546.014	132.365	38.937	0.364	Pass
28	546.381	131.998	34.956	0.388	Pass
29	536.913	124.030	34.735	0.351	Pass
30	536.747	128.330	38.396	0.348	Pass

(4)

サンプルB測定_サンプルありBG適用.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.19 11:31:51
 Results file name: 8BJL3151.VER
 Inspection number:
 Item id: B #1 S10
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 3.220
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9977 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1349 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7064 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.8002 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3609 +- 0.0000
 Pu date: 07.09.07 18.11.19
 Am241: 5.2012 +- 7.2097 +-
 Am date: 07.09.07 18.11.19

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 13.148 +- 0.140
 Passive doubles bkgnd: 0.078 +- 0.021

(1)

サンプルB測定_サンプルありBG適用.txt

Passive triples bkgnd: 0.015 +- 0.009
 Passive scaler1 bkgnd: 1.160
 Passive scaler2 bkgnd: 6.302

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 1454632
 Shift register reals + accidentals sum: 501101
 Shift register accidentals sum: 150475
 Shift register 1st scaler sum: 402261
 Shift register 2nd scaler sum: 227636

Passive summed multiplicity distributions

	R+A sums	A sums
0	1084669	1330542
1	268438	103702
2	78039	15551
3	18688	3873
4	3770	793
5	800	134
6	174	28
7	39	0
8	12	0
9	2	0
10	1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	1603.299 +-	1.996
Doubles:	389.689 +-	1.466
Triples:	110.191 +-	1.233
Quads:	22.559 +-	0.774
Quads/Triples:	0.203 +-	0.005
Scaler 1:	445.797 +-	0.852
Scaler 2:	246.627 +-	0.525

Known alpha results

Alpha:	1.072	
Multiplication:	1.013	
Multiplication corrected doubles:	359.811 +-	0.590
Pu240e mass (g):	1.110 +-	0.002
Pu240e (%):	35.547	
Pu mass (g):	3.124 +-	0.005
Declared Pu240e mass (g):	1.120	
Declared Pu mass (g):	3.152	
Declared - assay Pu mass (g):	0.028 +-	0.005

(2)

Declared - assay Pu mass (%) : 0.901 +- 0.163
 サンプルB測定_サンプルありBG適用.txt

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 3.240449e+002
 b: 0.000000e+000
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results
 Multiplication: 1.014 +- 0.001
 Alpha: 1.089 +- 0.006
 Multiplication correction factor: 1.000
 Pu240e mass (g): 1.100 +- 0.005
 Pu240e (%): 35.547
 Pu mass (g): 3.093 +- 0.013
 Declared Pu240e mass (g): 1.120
 Declared Pu mass (g): 3.152
 Declared - assay Pu mass (g): 0.059 +- 0.013
 Declared - assay Pu mass (%): 1.862 +- 0.405

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	48390	16707	4995	13176	7729	Pass
2	48324	16708	4982	13340	7567	Pass
3	48553	16888	5029	13462	7577	Pass
4	49300	17281	5185	13671	7677	Pass
5	48938	16778	5109	13664	7672	Pass
6	48412	16801	5000	13451	7511	Pass

(3)

サンプルB測定_サンプルありBG適用.txt

Cycle	48485	16923	5015	13441	7619	Pass
7	48474	16802	5013	13213	7633	Pass
8	48606	17085	5040	13431	7589	Pass
9	48390	16589	4995	13448	7445	Pass
10	49026	17399	5128	13724	7635	Pass
11	48581	16689	5035	13494	7568	Pass
12	48159	16334	4948	13281	7558	Pass
13	48828	16489	5086	13456	7640	Pass
14	48153	16447	4947	13388	7529	Pass
15	48095	16413	4935	13094	7698	Pass
16	48550	16593	5029	13278	7696	Pass
17	47853	15978	4885	13382	7502	Pass
18	48596	16662	5038	13495	7500	Pass
19	48693	16821	5058	13531	7532	Pass
20	48472	16714	5012	13273	7614	Pass
21	48316	16881	4980	13361	7544	Pass
22	48845	16583	5090	13405	7740	Pass
23	48166	16616	4949	13401	7457	Pass
24	48236	16808	4964	13291	7543	Pass
25	48361	16825	4990	13518	7522	Pass
26	49013	16535	5125	13478	7646	Pass
27	48602	16643	5039	13441	7714	Pass
28	48078	16350	4931	13371	7414	Pass
29	48137	16759	4943	13302	7565	Pass
30						

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1600.041	390.505	112.725	1.087	Pass
2	1597.840	390.971	113.823	1.083	Pass
3	1605.475	395.408	117.064	1.083	Pass
4	1630.381	403.314	110.692	1.160	Pass
5	1618.312	389.073	106.973	1.117	Pass
6	1600.774	393.473	117.781	1.070	Pass
7	1603.208	397.041	116.825	1.093	Pass
8	1602.841	393.073	113.791	1.093	Pass
9	1607.242	401.611	116.431	1.117	Pass
10	1600.041	386.569	104.907	1.119	Pass
11	1621.246	409.149	122.389	1.115	Pass
12	1606.409	388.571	108.819	1.103	Pass
13	1592.339	379.632	105.183	1.084	Pass
14	1614.644	380.201	94.345	1.159	Pass
15	1592.139	383.434	105.656	1.099	Pass
16	1590.205	382.700	105.007	1.100	Pass
17	1605.375	385.570	108.837	1.089	Pass
18	1582.136	369.860	98.171	1.084	Pass
19	1606.909	387.571	112.273	1.076	Pass
20	1610.143	392.207	111.177	1.105	Pass
21	1602.775	390.171	107.244	1.121	Pass
22	1597.573	396.807	122.751	1.055	Pass
23	1615.211	383.203	103.610	1.111	Pass
24	1592.572	389.003	116.350	1.058	Pass
25	1594.906	394.906	115.715	1.090	Pass
26	1599.074	394.606	107.217	1.142	Pass
27	1620.812	380.436	103.275	1.100	Pass
28	1607.109	386.904	108.644	1.096	Pass

(4)

29	1589.638	サンブル測定_サンブルありBG適用.txt	1.110	Pass
30	1591.605	380.732 102.011	1.084	Pass
		393.972 116.023		

サンプルB測定_サンプルなしBG適用.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.19 11:31:50
 Results file name: 8BJL3150.VER
 Inspection number:
 Item id: B #1 NS10
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 3.220
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9977 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1349 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7064 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.8002 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3609 +- 0.0000
 Pu date: 07.09.07 18.11.19
 Am241: 5.2012 +- 7.2097 +-
 Am date: 07.09.07 18.11.19

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 8.993 +- 0.118
 Passive doubles bkgnd: 0.030 +- 0.005

(1)

サンプルB測定_サンプルなしBG適用.txt

Passive triples bkgnd: 0.000 +- 0.000
 Passive scaler1 bkgnd: 0.822
 Passive scaler2 bkgnd: 4.145

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 1454632
 Shift register reals + accidentals sum: 501101
 Shift register accidentals sum: 150475
 Shift register 1st scaler sum: 402261
 Shift register 2nd scaler sum: 227636

Passive summed multiplicity distributions

	R+A sums	A sums
0	1084669	1330542
1	268438	103702
2	78039	15551
3	18688	3873
4	3770	793
5	800	134
6	174	28
7	39	0
8	12	0
9	2	0
10	1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	1607.454 +- 1.994
Doubles:	389.737 +- 1.466
Triples:	110.206 +- 1.233
Quads:	22.559 +- 0.774
Quads/Triples:	0.203 +- 0.005
Scaler 1:	446.135 +- 0.852
Scaler 2:	248.784 +- 0.525

Known alpha results

Alpha:	1.072
Multiplication:	1.012
Multiplication corrected doubles:	360.911 +- 0.590
Pu240e mass (g):	1.114 +- 0.002
Pu240e (%):	35.547
Pu mass (g):	3.133 +- 0.005
Declared Pu240e mass (g):	1.120
Declared Pu mass (g):	3.152
Declared - assay Pu mass (g):	0.019 +- 0.005

(2)

Declared - assay Pu mass (%): 0.598 ± 0.163
 サンプルB測定_サンプルなしBG適用 txt

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 3.240449e+002
 b: 0.000000e+000
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.014 ± 0.001
 Alpha: 1.094 ± 0.006
 Multiplication correction factor: 1.000
 Pu240e mass (g): 1.100 ± 0.005
 Pu240e (%): 35.547
 Pu mass (g): 3.093 ± 0.013
 Declared Pu240e mass (g): 1.120
 Declared Pu mass (g): 3.152
 Declared - assay Pu mass (g): 0.059 ± 0.013
 Declared - assay Pu mass (%): 1.862 ± 0.405

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	48390	16707	4995	13176	7729	Pass
2	48324	16708	4982	13340	7567	Pass
3	48553	16888	5029	13462	7577	Pass
4	49300	17281	5185	13671	7677	Pass
5	48938	16778	5109	13664	7672	Pass
6	48412	16801	5000	13451	7511	Pass

(3)

サンプルB測定_サンプルなしBG適用.txt

Cycle	48485	48474	48606	48390	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16923	5015	13441	7619	Pass
7	48485	48474	48606	48390	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16923	5015	13441	7619	Pass
8	48474	48606	48390	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16802	5013	13213	7633	Pass	
9	48606	48390	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	17085	5040	13431	7589	Pass		
10	48390	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16589	5128	13724	7635	Pass			
11	49026	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16689	5035	13494	7568	Pass				
12	48581	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16634	4948	13281	7558	Pass					
13	48159	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16489	5086	13456	7640	Pass						
14	48828	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16447	4947	13388	7529	Pass							
15	48153	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16413	4935	13094	7698	Pass								
16	48095	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16593	5029	13278	7696	Pass									
17	48550	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16662	5038	13495	7500	Pass										
18	47853	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16821	5058	13531	7532	Pass											
19	48596	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16714	5012	13273	7614	Pass												
20	48693	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16881	4980	13361	7544	Pass													
21	48472	48316	48945	48166	48236	48361	49013	48602	48078	48137	16821	5058	13495	7500	Pass														
22	48316	48945	48166	48236	48361	49013	48602	48078	48137	16881	4980	13361	7544	Pass															
23	48945	48166	48236	48361	49013	48602	48078	48137	16881	4980	13361	7544	Pass																
24	48166	48236	48361	49013	48602	48078	48137	16821	5058	13531	7532	Pass																	
25	48236	48361	49013	48602	48078	48137	16821	5058	13531	7532	Pass																		
26	48361	49013	48602	48078	48137	16821	5058	13531	7532	Pass																			
27	49013	48602	48078	48137	16821	5058	13531	7532	Pass																				
28	48602	48078	48137	16821	5058	13531	7532	Pass																					
29	48078	48137	16821	5058	13531	7532	Pass																						
30	48137	16821	5058	13531	7532	Pass																							

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1604.196	390.553	112.740	1.087	Pass
2	1601.995	391.020	113.839	1.083	Pass
3	1609.630	395.456	117.079	1.083	Pass
4	1634.536	403.362	110.707	1.160	Pass
5	1622.467	389.121	106.988	1.117	Pass
6	1604.929	393.521	117.796	1.070	Pass
7	1607.363	397.090	116.840	1.093	Pass
8	1606.996	393.121	113.806	1.093	Pass
9	1611.397	401.659	116.446	1.117	Pass
10	1604.196	386.618	104.922	1.119	Pass
11	1625.401	409.198	122.404	1.115	Pass
12	1610.564	388.619	108.834	1.103	Pass
13	1596.494	379.680	105.198	1.084	Pass
14	1618.799	380.250	94.360	1.159	Pass
15	1596.294	383.482	105.671	1.099	Pass
16	1594.360	382.748	105.022	1.100	Pass
17	1609.530	385.618	108.852	1.089	Pass
18	1586.291	369.908	98.186	1.084	Pass
19	1611.064	387.619	112.288	1.076	Pass
20	1614.298	392.255	111.192	1.105	Pass
21	1606.930	390.220	107.259	1.121	Pass
22	1601.728	396.856	122.766	1.055	Pass
23	1619.366	383.251	103.625	1.111	Pass
24	1596.727	389.051	116.366	1.058	Pass
25	1599.061	394.954	115.730	1.090	Pass
26	1603.229	394.655	107.232	1.142	Pass
27	1624.967	380.484	103.290	1.100	Pass
28	1611.264	386.952	108.660	1.096	Pass

(4)

29	1593.793	サンブル測定_サンブルなしBG適用.txt	1.111	Pass
30	1595.760	380.781	102.026	
		394.020	116.038	1.083 Pass

サンプルC測定_サンプルありBG適用.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.15 11:38:23
 Results file name: 8BFL3823_VER
 Inspection number:
 Item id: C #1 S10
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 9.010
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:
 Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1239 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0177 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9484 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.1084 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8016 +- 0.0000
 Pu date: 12.06.21 0.0000 18.11.15
 Am241: 3.1000 +- 0.0000 4.3371 +- 0.0000
 Am date: 11.12.08 18.11.15

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 21.060 +- 0.206
 Passive doubles bkgnd: 0.028 +- 0.011

(1)

サンプルC測定_サンプルありBG適用.txt

Passive triples bkgnd: -0.000 +- 0.000
 Passive scaler1 bkgnd: 1.878
 Passive scaler2 bkgnd: 10.235

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 4867886
 Shift register reals + accidentals sum: 2763424
 Shift register accidentals sum: 1685081
 Shift register 1st scaler sum: 1389400
 Shift register 2nd scaler sum: 721651

Passive summed multiplicity distributions

R+A sums	A sums
0	2989022
1	1254041
2	436066
3	136431
4	38456
5	10298
6	2659
7	682
8	182
9	37
10	6
11	5
12	1

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	5389.827 +- 2.245
Doubles:	1200.015 +- 2.850
Triples:	345.796 +- 2.901
Quads:	72.021 +- 2.932
Quads/Triples:	0.207 +- 0.007
Scaler 1:	1541.899 +- 1.343
Scaler 2:	791.599 +- 1.049

PRIMARY RESULT

Known alpha results
 Alpha: 0.853
 Multiplication: 1.000
 Multiplication corrected doubles: 1200.015 +- 2.850
 Pu240e mass (g): 3.703 +- 0.009

(2)

サンプルC測定_サンプルありBG適用.txt

Pu240e (%) : 37.847
 Pu mass (g) : 9.785 +- 0.023
 Declared Pu240e mass (g) : 3.369
 Declared Pu mass (g) : 8.902
 Declared - assay Pu mass (g) : -0.883 +- 0.023
 Declared - assay Pu mass (%) : -9.917 +- 0.261

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 3.240449e+002
 b: 0.000000e+000
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.016 +- 0.001
 Alpha: 1.316 +- 0.008
 Multiplication correction factor: 1.000
 Pu240e mass (g): 3.329 +- 0.012
 Pu240e (%): 37.847
 Pu mass (g): 8.796 +- 0.032
 Pu mass (g): 3.369
 Declared Pu240e mass (g): 8.902
 Declared Pu mass (g): 0.106 +- 0.032
 Declared - assay Pu mass (g): 1.191 +- 0.363

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	162332	92148	56217	46226	24307	Pass
2	162572	92464	56383	46695	24108	Pass
3	162224	91724	56142	46011	24262	Pass
4	162367	92378	56241	46468	23790	Pass

(3)

サンプルC測定_サンプルありBG適用.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5392.134	1199.556	328.661	3.442	Pass
2	5400.140	1204.567	351.455	3.313	Pass
3	5388.531	1187.903	329.849	3.377	Pass
4	5393.301	1206.434	337.285	3.417	Pass
5	5374.119	1174.878	327.564	3.330	Pass
6	5403.809	1211.178	366.570	3.246	Pass
7	5389.498	1218.618	359.937	3.326	Pass
8	5412.283	1221.698	348.691	3.414	Pass
9	5385.028	1183.395	348.777	3.229	Pass
10	5378.890	1191.338	342.299	3.311	Pass
11	5393.635	1187.938	328.442	3.387	Pass
12	5383.594	1187.935	332.180	3.362	Pass
13	5370.250	1221.983	355.215	3.374	Pass
14	5391.400	1194.014	342.897	3.319	Pass
15	5377.489	1211.035	369.117	3.230	Pass
16	5397.471	1213.647	374.740	3.206	Pass
17	5394.969	1202.862	357.496	3.265	Pass
18	5378.890	1178.919	334.278	3.304	Pass
19	5388.197	1178.622	318.912	3.407	Pass
20	5392.834	1201.960	333.090	3.423	Pass
21	5397.471	1233.678	383.653	3.246	Pass
22	5398.772	1195.218	343.090	3.323	Pass
23	5402.442	1194.051	341.969	3.325	Pass
24	5358.974	1172.970	322.793	3.354	Pass
25	5395.269	1183.532	337.465	3.305	Pass
26	5403.776	1215.485	362.962	3.291	Pass

(4)

27	5382.192	サンブルC測定_サンブルありBG適用.txt	3.411	Pass	
28	5401.374	1208.967	340.028	3.233	Pass
29	5366.814	1192.448	354.705	3.406	Pass
30	5401.274	1213.602	344.189	3.323	Pass
		1212.012	355.503		

サンプルC測定_サンプルなしBG適用.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 18.11.15 11:38:22
 Results file name: 8BFL3822_VER
 Inspection number:
 Item id: C #1 NS10
 Stratium id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 9.010
 Measurement option: Verification
 Data source: Database
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:
 Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1239 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0177 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9484 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.1084 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8016 +- 0.0000
 Pu date: 12.06.21 0.0000 18.11.15
 Am241: 3.1000 +- 0.0000 4.3371 +- 0.0000
 Am date: 11.12.08 18.11.15

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 9.455 +- 0.135
 Passive doubles bkgnd: 0.092 +- 0.026

(1)

サンプルC測定_サンプルなしBG適用.txt

Passive triples bkgnd: 0.047 +- 0.025
 Passive scaler1 bkgnd: 1.118
 Passive scaler2 bkgnd: 4.270

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 4867886
 Shift register reals + accidentals sum: 2763424
 Shift register accidentals sum: 1685081
 Shift register 1st scaler sum: 1389400
 Shift register 2nd scaler sum: 721651

Passive summed multiplicity distributions

R+A sums	A sums
0	2989022
1	1254041
2	436066
3	136431
4	38456
5	10298
6	2659
7	682
8	182
9	37
10	6
11	5
12	1

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles: 5401.432 +- 2.240
 Doubles: 1199.951 +- 2.850
 Triples: 345.749 +- 2.901
 Quads: 72.021 +- 2.932
 Quads/Triples: 0.207 +- 0.007
 Scaler 1: 1542.659 +- 1.343
 Scaler 2: 797.564 +- 1.049

PRIMARY RESULT

Known alpha results

Alpha: 0.853
 Multiplication: 1.000
 Multiplication corrected doubles: 1199.951 +- 2.850
 Pu240e mass (g): 3.703 +- 0.009

(2)

サンプルC測定_サンプルなしBG適用.txt

Pu240e (%) : 37.847
 Pu mass (g) : 9.784 +- 0.023
 Declared Pu240e mass (g) : 3.369
 Declared Pu mass (g) : 8.902
 Declared - assay Pu mass (g) : -0.882 +- 0.023
 Declared - assay Pu mass (%) : -9.911 +- 0.261

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 3.240449e+002
 b: 0.000000e+000
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.016 +- 0.001
 Alpha: 1.321 +- 0.008
 Multiplication correction factor: 1.000
 Pu240e mass (g): 3.329 +- 0.012
 Pu240e (%): 37.847
 Pu mass (g): 8.795 +- 0.032
 Declared Pu240e mass (g): 3.369
 Declared Pu mass (g): 8.902
 Declared - assay Pu mass (g): 0.107 +- 0.032
 Declared - assay Pu mass (%): 1.202 +- 0.363

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	162332	92148	56217	46226	24307	Pass
2	162572	92464	56383	46695	24108	Pass
3	162224	91724	56142	46011	24262	Pass
4	162367	92378	56241	46468	23790	Pass

(3)

サンプルC測定_サンプルなしBG適用.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5403.739	1199.493	328.614	3.442	Pass
2	5411.745	1204.503	351.408	3.313	Pass
3	5400.136	1187.840	329.802	3.377	Pass
4	5404.906	1206.370	337.238	3.416	Pass
5	5385.724	1174.814	327.518	3.330	Pass
6	5415.414	1211.115	366.523	3.246	Pass
7	5401.103	1218.555	359.890	3.325	Pass
8	5423.888	1221.635	348.644	3.414	Pass
9	5396.633	1183.331	348.730	3.228	Pass
10	5390.495	1191.275	342.252	3.310	Pass
11	5405.240	1187.875	328.395	3.387	Pass
12	5395.199	1187.871	332.133	3.362	Pass
13	5381.855	1221.920	355.168	3.373	Pass
14	5403.005	1193.950	342.850	3.319	Pass
15	5389.094	1210.972	369.070	3.230	Pass
16	5409.076	1213.583	374.693	3.205	Pass
17	5406.574	1202.799	357.449	3.265	Pass
18	5390.495	1178.856	334.231	3.304	Pass
19	5399.802	1178.558	318.865	3.407	Pass
20	5404.439	1201.897	333.043	3.423	Pass
21	5409.076	1233.615	383.606	3.245	Pass
22	5410.377	1195.155	343.043	3.323	Pass
23	5414.047	1193.988	341.922	3.325	Pass
24	5370.579	1172.906	322.746	3.353	Pass
25	5406.874	1183.468	337.418	3.304	Pass
26	5415.381	1215.422	362.915	3.290	Pass

Passive cycle rate data

Cycle 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

27	5393.797	サンブルC測定_サンブルなしBG適用.txt	3.411	Pass	
28	5412.979	1208.904	339.981	3.233	Pass
29	5378.419	1192.385	354.658	3.406	Pass
30	5412.879	1213.539	344.142	3.322	Pass
		1211.949	355.456		

【AVIS 性能確認試験】

(2) 3.2 ゲルマニウム検出器の改良に伴う精度評価

表 ^{239}Pu 、 ^{240}Pu 及び ^{241}Pu の同位体組成比の解析に
 使用されたガンマ線エネルギーとピーク面積

エネルギー (keV)	核種	ピーク面積 (Counts)	%RSD
59.536	Pu241	245	0.58
96.130	Pu239	8	2.79
96.245	Pu241	71	1.35
97.072	Pu241	18627	1.35
98.780	Pu239	514	2.79
101.066	Pu241	31859	1.10
102.961	Pu241	9	1.10
103.064	Pu239	115	2.79
103.672	Pu241	5617	1.10
104.242	Pu240	6219	2.79
113.316	Pu241	8335	1.97
114.249	Pu241	26771	1.06
114.927	Pu241	568	1.35
115.395	Pu239	348	14.64
116.270	Pu239	30	>99.99%
117.554	Pu241	1607	8.91
117.967	Pu241	47	149.88
118.430	Pu241	0	>99.99%
118.650	Pu241	256	1.35
123.620	Pu239	5	2.79
124.530	Pu239	0	>99.99%
125.222	Pu239	16	2.79
129.294	Pu239	2078	2.79
141.657	Pu239	0	>99.99%
143.350	Pu239	0	>99.99%
144.211	Pu239	126	21.34
146.077	Pu239	55	21.34
148.567	Pu241	9767	1.28
164.597	Pu241	2871	2.43
203.545	Pu239	432	8.64
208.000	Pu241	44730	0.58

【AVIS 性能確認試験】

(3) 3.4 計数装置の性能確認試験

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 10:02:13
 Results file name: 92KK0213_VER
 Inspection number:
 Item id: A 5min
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
 Pu date: 12.06.21
 Am241: 3.1000 +- 0.0000 4.3768 +- 0.0000
 Am date: 11.12.08 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 10
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 184617
 Shift register reals + accidentals sum: 45031
 Shift register accidentals sum: 7272
 Shift register 1st scaler sum: 51730
 Shift register 2nd scaler sum: 28499

Passive summed multiplicity distributions

	R+A sums	A sums
0	149964	178322
1	26067	5519
2	7048	603
3	1319	142
4	187	24
5	29	0
6	3	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	607.857 +- 1.600
Doubles:	125.824 +- 0.959
Triples:	32.809 +- 0.762
Quads:	5.180 +- 0.436
Quads/Triples:	0.156 +- 0.010
Scaler 1:	171.550 +- 0.539
Scaler 2:	91.645 +- 0.482

PRIMARY RESULT

Known alpha results

Alpha:	0.855
Multiplication:	1.000
Multiplication corrected doubles:	125.824 +- 0.959
Pu240e mass (g):	0.388 +- 0.003
Pu240e (%):	37.857
Pu mass (g):	1.026 +- 0.008
Declared Pu240e mass (g):	0.374
Declared Pu mass (g):	0.988
Declared - assay Pu mass (g):	-0.038 +- 0.008
Declared - assay Pu mass (%):	-3.859 +- 0.791

(2)

サンプルA測定_AMSR_5分.txt

Passive cycle rate data

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.006 +- 0.002
 Alpha: 1.360 +- 0.018
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.372 +- 0.004
 Pu240e (%): 37.857
 Pu mass (g): 0.982 +- 0.010
 Pu mass (g): 0.374
 Declared Pu240e mass (g): 0.988
 Declared Pu mass (g): 0.005 +- 0.010
 Declared - assay Pu mass (g): 0.536 +- 0.985

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	18510	4484	731	5204	2854	Pass
2	18447	4460	726	5131	2864	Pass
3	18707	4644	747	5258	2875	Pass
4	18221	4386	708	5089	2809	Pass
5	18534	4580	733	5173	2872	Pass
6	18425	4525	724	5150	2921	Pass
7	18431	4332	725	5241	2749	Pass
8	18656	4627	742	5178	2866	Pass
9	18423	4473	724	5170	2856	Pass
10	18263	4520	712	5136	2833	Pass

(3)

サンプルA測定_AMSR_5分.txt

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	609.468	125.061	30.834	0.382	Pass
2	607.367	124.427	34.730	0.351	Pass
3	616.035	129.862	32.773	0.392	Pass
4	599.833	122.560	29.850	0.378	Pass
5	610.268	128.195	34.179	0.374	Pass
6	606.634	126.661	33.282	0.373	Pass
7	606.834	120.193	28.392	0.377	Pass
8	614.335	129.462	35.421	0.371	Pass
9	606.567	124.927	33.101	0.365	Pass
10	601.234	126.894	35.529	0.358	Pass

(4)

サンプル測定_AMSR_10分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 10:08:27
 Results file name: 92KK0827.VER
 Inspection number:
 Item id: A 10min
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-490020403

Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
 Pu date: 12.06.21
 Am241: 3.1000 +- 0.0000 4.3768 +- 0.0000
 Am date: 11.12.08 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプル測定_AMSR_10分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 368603
 Shift register reals + accidentals sum: 89454
 Shift register accidentals sum: 14493
 Shift register 1st scaler sum: 103314
 Shift register 2nd scaler sum: 57153

Passive summed multiplicity distributions

	R+A sums	A sums
0	299756	356040
1	51797	11028
2	13987	1194
3	2631	285
4	378	45
5	47	0
6	6	0
7	1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	606.806 +- 1.225
Doubles:	124.896 +- 0.702
Triples:	32.571 +- 0.522
Quads:	5.112 +- 0.309
Quads/Triples:	0.155 +- 0.007
Scaler 1:	171.307 +- 0.439
Scaler 2:	91.903 +- 0.436

PRIMARY RESULT

Known alpha results

Alpha:	0.855
Multiplication:	1.000
Multiplication corrected doubles:	124.896 +- 0.702
Pu240e mass (g):	0.385 +- 0.002
Pu240e (%):	37.857
Pu mass (g):	1.018 +- 0.006
Declared Pu240e mass (g):	0.374
Declared Pu mass (g):	0.988
Declared - assay Pu mass (g):	-0.031 +- 0.006

(2)

サンプルの測定_AMSR_10分.txt
 Declared - assay Pu mass (%): -3.093 +- 0.579|

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.006 +- 0.001
 Alpha: 1.374 +- 0.014
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.369 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.975 +- 0.007
 Declared Pu240e mass (g): 0.374
 Declared Pu mass (g): 0.988
 Declared - assay Pu mass (g): 0.013 +- 0.007
 Declared - assay Pu mass (%): 1.290 +- 0.668

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	18485	4485	729	5138	2830	Pass
2	18309	4327	715	5175	2790	Pass
3	18606	4555	739	5187	2905	Pass
4	18541	4635	733	5221	2905	Pass
5	18405	4555	723	5207	2831	Pass
6	18478	4435	728	5151	2883	Pass
7	18354	4483	719	5093	2815	Pass
8	18773	4617	752	5275	2952	Pass
9	18312	4419	715	5152	2916	Pass

(3)

サンプルの測定_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
10	18402	4443	722	2751	Pass
11	18561	4583	735	2908	Pass
12	18330	4449	717	2781	Pass
13	18554	4473	734	2872	Pass
14	18588	4525	737	2910	Pass
15	18201	4262	707	2861	Pass
16	18390	4593	721	2823	Pass
17	18060	4276	696	2887	Pass
18	18393	4445	722	2751	Pass
19	18274	4410	712	2866	Pass
20	18587	4484	737	2916	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	608.634	125.161	32.524	0.371	Pass
2	602.767	120.360	30.617	0.361	Pass
3	612.668	127.161	36.510	0.352	Pass
4	610.501	130.028	35.365	0.374	Pass
5	605.967	127.694	33.208	0.378	Pass
6	608.401	123.527	30.417	0.378	Pass
7	604.267	125.427	35.058	0.354	Pass
8	618.235	128.795	34.559	0.374	Pass
9	602.867	123.427	28.679	0.391	Pass
10	605.867	123.994	31.927	0.369	Pass
11	611.168	128.228	32.383	0.387	Pass
12	603.467	124.360	31.611	0.373	Pass
13	610.934	124.594	31.310	0.377	Pass
14	612.068	126.228	31.795	0.381	Pass
15	599.167	118.459	30.318	0.354	Pass
16	605.467	129.028	37.382	0.356	Pass
17	594.466	119.293	29.081	0.367	Pass
18	605.567	124.060	33.787	0.356	Pass
19	601.600	123.227	31.891	0.366	Pass
20	612.035	124.861	32.991	0.366	Pass

(4)

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 10:20:24
 Results file name: 92KK2024_VER
 Inspection number:
 Item id:
 Stratum id:
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
 Pu date: 12.06.21
 Am241: 3.1000 +- 0.0000 4.3768 +- 0.0000
 Am date: 11.12.08 19.02.20
 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 555102
 Shift register reals + accidentals sum: 136122
 Shift register accidentals sum: 21913
 Shift register 1st scaler sum: 155924
 Shift register 2nd scaler sum: 85548

Passive summed multiplicity distributions

R+A sums	A sums
0 450723	536131
1 78294	16644
2 21242	1806
3 4152	432
4 590	74
5 83	0
6 14	0
7 3	0
8 1	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	609.248 +- 1.015
Doubles:	126.860 +- 0.505
Triples:	33.824 +- 0.334
Quads:	5.701 +- 0.263
Quads/Triples:	0.168 +- 0.006
Scaler 1:	172.366 +- 0.503
Scaler 2:	91.702 +- 0.359

PRIMARY RESULT

Known alpha results

Alpha:	0.855
Multiplication:	1.000
Multiplication corrected doubles:	126.860 +- 0.505
Pu240e mass (g):	0.391 +- 0.002
Pu240e (%):	37.857
Pu mass (g):	1.034 +- 0.004
Declared Pu240e mass (g):	0.374
Declared Pu mass (g):	0.988

(2)

サンプリング測定_AMSR_15分.txt
 Declared - assay Pu mass (g): -0.047 +- 0.004
 Declared - assay Pu mass (%): -4.714 +- 0.417

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.008 +- 0.001
 Alpha: 1.375 +- 0.010
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.370 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.976 +- 0.005
 Pu mass (g): 0.374
 Declared Pu240e mass (g): 0.988
 Declared Pu mass (g): 0.011 +- 0.005
 Declared - assay Pu mass (%): 1.124 +- 0.511

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	Scaler1	Scaler2	QC Tests
1	18599	4737	5198	2855	Pass
2	18401	4658	5240	2852	Pass
3	18412	4455	5199	2899	Pass
4	18699	4593	5106	2894	Pass
5	18550	4494	5201	2862	Pass
6	18665	4704	5294	2960	Pass
7	18660	4542	5111	3016	Pass
8	18648	4673	5258	2824	Pass

(3)

サンプリング測定_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
9	18434	4521	36218	0.384	Pass
10	18432	4499	39272	0.353	Pass
11	18559	4508	34373	0.354	Pass
12	18543	4544	34532	0.371	Pass
13	18529	4497	34805	0.355	Pass
14	18727	4584	37732	0.367	Pass
15	18695	4580	32869	0.375	Pass
16	18627	4446	34854	0.382	Pass
17	18618	4523	33986	0.371	Pass
18	18575	4590	32825	0.385	Pass
19	18375	4463	30757	0.378	Pass
20	18443	4576	32149	0.386	Pass
21	18582	4601	33636	0.354	Pass
22	18415	4470	31549	0.382	Pass
23	18284	4407	34941	0.369	Pass
24	18217	4402	33202	0.356	Pass
25	18888	4638	33561	0.381	Pass
26	18298	4388	32584	0.369	Pass
27	18416	4470	33310	0.355	Pass
28	18236	4423	32666	0.360	Pass
29	18293	4544	34103	0.379	Pass
30	18282	4592	32189	0.360	Pass
			32372	0.370	Pass
			31713	0.370	Pass
			33472	0.376	Pass
			36753	0.361	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	612.435	133.262	36.218	0.384	Pass
2	605.834	131.162	39.272	0.353	Pass
3	606.201	124.361	34.373	0.354	Pass
4	615.768	128.195	34.532	0.371	Pass
5	610.801	125.294	34.805	0.355	Pass
6	614.635	131.996	37.732	0.367	Pass
7	614.468	126.595	32.869	0.375	Pass
8	614.068	130.995	34.854	0.382	Pass
9	606.934	126.494	33.986	0.367	Pass
10	606.867	125.761	32.825	0.371	Pass
11	611.101	125.728	32.978	0.370	Pass
12	610.568	126.961	33.769	0.371	Pass
13	610.101	125.461	30.757	0.385	Pass
14	616.702	127.828	33.285	0.378	Pass
15	615.635	127.761	32.149	0.386	Pass
16	613.368	123.494	33.636	0.354	Pass
17	613.068	126.094	31.549	0.382	Pass
18	611.634	128.428	34.941	0.369	Pass
19	604.967	124.727	34.270	0.356	Pass
20	607.234	128.295	33.202	0.381	Pass
21	611.868	128.762	33.561	0.381	Pass
22	606.301	124.861	32.584	0.369	Pass
23	601.934	123.093	33.310	0.355	Pass
24	599.700	123.093	32.666	0.360	Pass
25	622.069	129.195	34.103	0.379	Pass
26	602.400	122.427	32.189	0.360	Pass
27	606.334	124.827	32.372	0.370	Pass
28	600.333	123.760	31.713	0.370	Pass
29	602.234	127.628	33.472	0.376	Pass
30	601.867	129.261	36.753	0.361	Pass

(4)

サンプルA測定_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:58:04
 Results file name: 92K05804_01_VER
 Inspection number:
 Item id: A 5min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-145804.seq.dat
 Ending comment:

Isotopes id: A					
Isotopes source code: 0D					
Pu238:	1.1680 +-	0.0000	1.1220 +-		
Pu239:	63.2610 +-	0.0000	64.0449 +-		
Pu240:	26.6430 +-	0.0000	26.9593 +-		
Pu241:	4.1840 +-	0.0000	3.0701 +-		
Pu242:	4.7440 +-	0.0000	4.8036 +-		
Pu date: 12.06.21			19.02.20		
Am241:	3.1000 +-	0.0000	4.2658 +-		
Am date: 12.06.21			19.02.20		

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプルA測定_MCSR_5分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 10
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 463.759 +- 1.645
 Doubles: 97.865 +- 1.192
 Triples: 25.596 +- 0.657
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.000
 Multiplication corrected doubles: 97.865 +- 1.192
 Pu240e mass (g): 0.302 +- 0.004
 Pu240e (%): 37.857
 Pu mass (g): 0.798 +- 0.010

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.006 +- 0.002
 Alpha: 1.318 +- 0.028
 Multiplication correction factor: 1.000

(2)

サンプルA測定_MCSR_5分.txt
 Pu240e mass (g): 0.289 +- 0.004
 Pu240e (%) : 37.857
 Pu mass (g) : 0.763 +- 0.011

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	14053	3329	374	0	0	Off
2	14120	3323	387	0	0	Off
3	14075	3168	451	0	0	Off
4	14175	3282	367	0	0	Off
5	14377	3521	404	0	0	Off
6	14264	3377	381	0	0	Off
7	14073	3390	414	0	0	Off
8	13969	3291	352	0	0	Off
9	14366	3454	426	0	0	Off
10	13919	3164	369	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	460.889	98.451	26.720	0.284	Off
2	463.123	97.818	23.063	0.307	Off
3	461.623	90.517	21.203	0.285	Off
4	464.956	97.118	25.543	0.286	Off
5	471.690	103.852	28.352	0.299	Off
6	467.923	99.818	25.284	0.300	Off
7	461.556	99.152	27.282	0.283	Off
8	458.089	97.918	25.927	0.287	Off
9	471.323	100.885	25.996	0.301	Off
10	456.422	93.117	26.608	0.259	Off

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 15:09:23
 Results file name: 92KP0923_01_VER
 Inspection number:
 Item id: A.10min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-150923.seq.dat
 Ending comment:

Isotopics source code: 0D	1.1680 +-	0.0000	1.1220 +-
Pu238:			
Pu239:	63.2610 +-	0.0000	64.0449 +-
Pu240:	26.6430 +-	0.0000	26.9593 +-
Pu241:	4.1840 +-	0.0000	3.0701 +-
Pu242:	4.7440 +-	0.0000	4.8036 +-
Pu date: 12.06.21			19.02.20
Am241: 3.1000 +-		0.0000	4.2658 +-
Am date: 12.06.21			19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 469.011 +- 1.058
 Doubles: 100.257 +- 0.735
 Triples: 25.958 +- 0.443
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.000
 Multiplication corrected doubles: 100.257 +- 0.735
 Pu240e mass (g): 0.309 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.817 +- 0.006

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.006 +- 0.001
 Alpha: 1.275 +- 0.012
 Multiplication correction factor: 1.000

(2)

サンブルA測定_MCSR_10分.txt
 Pu240e mass (g): 0.298 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.787 +- 0.005

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	14457	3440	393	0	0	Off
2	14211	3179	378	0	0	Off
3	14470	3419	484	0	0	Off
4	14326	3440	423	0	0	Off
5	14062	3383	393	0	0	Off
6	14421	3549	392	0	0	Off
7	14308	3372	399	0	0	Off
8	14355	3370	439	0	0	Off
9	14439	3509	421	0	0	Off
10	14153	3508	425	0	0	Off
11	14099	3344	366	0	0	Off
12	14117	3442	400	0	0	Off
13	14321	3326	398	0	0	Off
14	14486	3490	431	0	0	Off
15	14232	3184	380	0	0	Off
16	14387	3398	396	0	0	Off
17	14431	3507	326	0	0	Off
18	14211	3439	333	0	0	Off
19	14374	3449	419	0	0	Off
20	14073	3442	411	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	474.357	101.519	27.171	0.295	Off
2	466.156	93.318	23.165	0.284	Off
3	474.790	97.785	23.876	0.301	Off
4	469.990	100.519	25.556	0.302	Off
5	461.189	99.618	25.936	0.295	Off
6	473.157	105.186	27.165	0.313	Off
7	469.390	99.052	27.237	0.283	Off

(3)

サンブルA測定_MCSR_10分.txt

8	470.957	97.652	23.829	0.300	Off
9	473.757	102.886	26.156	0.309	Off
10	464.223	102.719	27.376	0.300	Off
11	462.423	99.218	24.808	0.301	Off
12	463.023	101.352	27.561	0.292	Off
13	469.823	97.552	24.981	0.292	Off
14	475.324	101.919	25.253	0.311	Off
15	466.856	93.418	21.304	0.299	Off
16	472.023	100.019	25.240	0.302	Off
17	473.490	105.986	28.837	0.306	Off
18	466.156	103.486	28.409	0.297	Off
19	471.590	100.952	26.381	0.298	Off
20	461.556	100.985	28.963	0.281	Off

(4)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 15:19:46
 Results file name: 92KP1946_01_VER
 Inspection number:
 Item id: A.15min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-151946.seq.dataz
 Ending comment:

Isotopes id: A					
Isotopes source code: 0D	1.1680 +-	0.0000	1.1220 +-		
Pu238:					
Pu239:	63.2610 +-	0.0000	64.0449 +-		
Pu240:	26.6430 +-	0.0000	26.9593 +-		
Pu241:	4.1840 +-	0.0000	3.0701 +-		
Pu242:	4.7440 +-	0.0000	4.8036 +-		
Pu date: 12.06.21			19.02.20		
Am241: 3.1000 +-		0.0000	4.2658 +-		
Am date: 12.06.21			19.02.20		

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 464.998 +- 1.047
 Doubles: 100.504 +- 0.548
 Triples: 26.661 +- 0.308
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.000
 Multiplication corrected doubles: 100.504 +- 0.548
 Pu240e mass (g): 0.310 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.819 +- 0.004

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.008 +- 0.001
 Alpha: 1.279 +- 0.013
 Multiplication correction factor: 1.000

(2)

サンプルA測定_MCSR_15分.txt

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	462.823	100.885	23.726	0.317	Off
2	462.689	97.485	27.091	0.276	Off
3	467.790	98.618	27.170	0.281	Off
4	458.489	103.219	27.464	0.302	Off
5	464.523	100.085	27.436	0.287	Off
6	464.623	97.985	25.967	0.287	Off
7	453.722	91.684	22.095	0.284	Off
8	454.622	97.918	26.885	0.280	Off
9	471.290	101.585	26.066	0.303	Off
10	468.456	103.119	29.392	0.288	Off
11	458.289	96.051	25.144	0.283	Off
12	457.656	96.751	24.868	0.289	Off
13	462.356	100.318	24.644	0.308	Off
14	462.323	99.685	27.171	0.287	Off
15	465.790	99.118	25.634	0.295	Off
16	470.423	99.885	26.190	0.294	Off
17	471.290	102.952	26.724	0.305	Off
18	462.356	101.685	26.028	0.304	Off
19	460.756	100.085	26.421	0.294	Off
20	456.589	100.518	29.656	0.274	Off
21	468.356	102.752	29.286	0.287	Off
22	471.590	104.786	28.532	0.302	Off
23	472.423	100.752	27.650	0.288	Off
24	470.857	102.186	25.503	0.310	Off
25	465.523	98.051	26.283	0.285	Off
26	462.356	99.818	25.906	0.296	Off
27	467.923	103.386	27.085	0.305	Off
28	467.690	103.152	27.427	0.302	Off
29	469.890	106.519	29.565	0.303	Off
30	476.490	104.086	26.891	0.310	Off

(4)

サンプルA測定_MCSR_15分.txt
 Pu240e mass (g): 0.294 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 0.777 +- 0.005

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	14111	3412	384	0	0	Off
2	14107	3298	372	0	0	Off
3	14260	3388	428	0	0	Off
4	13981	3450	352	0	0	Off
5	14162	3414	410	0	0	Off
6	14165	3344	403	0	0	Off
7	13838	3151	399	0	0	Off
8	13865	3318	379	0	0	Off
9	14365	3506	457	0	0	Off
10	14280	3481	386	0	0	Off
11	13975	3278	395	0	0	Off
12	13956	3329	425	0	0	Off
13	14097	3391	380	0	0	Off
14	14096	3387	395	0	0	Off
15	14200	3376	401	0	0	Off
16	14339	3390	392	0	0	Off
17	14365	3486	396	0	0	Off
18	14097	3392	340	0	0	Off
19	14049	3355	351	0	0	Off
20	13924	3412	395	0	0	Off
21	14277	3482	398	0	0	Off
22	14374	3511	366	0	0	Off
23	14399	3381	357	0	0	Off
24	14352	3454	387	0	0	Off
25	14192	3341	398	0	0	Off
26	14097	3371	375	0	0	Off
27	14264	3468	365	0	0	Off
28	14257	3474	378	0	0	Off
29	14323	3566	369	0	0	Off
30	14521	3538	414	0	0	Off

(3)

サンプルB測定_AMSR_5分.txt

INCC 5.1.2
 Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 10:39:55
 Results file name: 92KK3955.VER
 Inspection number:
 Item id: B 5min
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 9.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:
 Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
 Pu date: 12.06.21
 Am241: 3.1000 +- 0.0000 19.02.20
 Am date: 11.12.08 4.3768 +- 19.02.20
 Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルB測定_AMSR_5分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352
 Number passive cycles: 10
 Count time (sec): 30
 Passive summed raw data
 Shift register singles sum: 1624121
 Shift register reals + accidentals sum: 920137
 Shift register accidentals sum: 562727
 Shift register 1st scaler sum: 457430
 Shift register 2nd scaler sum: 246422
 Passive summed multiplicity distributions
 R+A sums A sums
 0 997634 1199689
 1 418714 322398
 2 145411 74803
 3 45075 20329
 4 12678 5281
 5 3414 1236
 6 873 290
 7 236 71
 8 72 16
 9 12 4
 10 2 0
 Passive messages
 Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits
 Results
 Singles: 5408.306 +- 3.179
 Doubles: 1193.180 +- 3.790
 Triples: 340.910 +- 3.911
 Quads: 71.648 +- 3.298
 Quads/Triples: 0.210 +- 0.008
 Scaler 1: 1523.883 +- 2.110
 Scaler 2: 818.055 +- 1.858

PRIMARY RESULT

Known alpha results
 Alpha: 0.855
 Multiplication: 1.000
 Multiplication corrected doubles: 1193.180 +- 3.790
 Pu240e mass (g): 3.682 +- 0.012
 Pu240e (%): 37.857
 Pu mass (g): 9.726 +- 0.031

(2)

サンプルB測定_AMSR_5分.txt

```

Declared Pu240e mass (g): 3.365
Declared Pu mass (g): 8.888
Declared - assay Pu mass (g): -0.838 +- 0.031
Declared - assay Pu mass (%): -9.432 +- 0.348

```

Known alpha calibration parameters

```

Alpha weight: 1.000000e+000
Rho zero: 4.707231e-001
k: 2.166000e+000
a: 0.000000e+000
b: 3.240449e+002
variance a: 0.000000e+000
variance b: 0.000000e+000
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

```

Passive multiplicity results

```

Multiplication: 1.015 +- 0.001
Alpha: 1.326 +- 0.009
Multiplication correction factor: 1.000
Pu240e mass (g): 3.328 +- 0.016
Pu240e (%): 37.857
Pu mass (g): 8.791 +- 0.041
Declared Pu240e mass (g): 3.365
Declared Pu mass (g): 8.888
Declared - assay Pu mass (g): 0.098 +- 0.041
Declared - assay Pu mass (%): 1.098 +- 0.463

```

Passive multiplicity calibration parameters

```

Spontaneous fission rate: 4.735000e+002
1st factorial moment spontaneous fission: 2.154000e+000
2nd factorial moment spontaneous fission: 3.789000e+000
3rd factorial moment spontaneous fission: 5.211000e+000
1st factorial moment induced fission: 3.163000e+000
2nd factorial moment induced fission: 8.240000e+000
3rd factorial moment induced fission: 1.732100e+001
a: 1.000000e+000
b: 0.000000e+000
c: 0.000000e+000
sigma x: 0.000000e+000
alpha weight: 0.000000e+000
efficiency correction factor: 1.000000e+000

```

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	162440	91751	56292	45631	24377	Pass
2	162586	92381	56393	45804	24513	Pass
3	162077	91806	56041	45717	24556	Pass
4	162697	92695	56470	46033	24583	Pass
5	162433	92250	56287	45896	24435	Pass
6	162887	92706	56602	45948	24914	Pass

(3)

サンプルB測定_AMSR_5分.txt

```

7 162378 91754 56249 45573 24830 Pass
8 162461 92171 56306 45852 24732 Pass
9 162349 91702 56229 45596 24772 Pass
10 161813 90921 55858 45380 24710 Pass

```

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5409.236	1183.766	328.973	3.363	Pass
2	5414.107	1201.429	341.632	3.363	Pass
3	5397.127	1193.978	334.311	3.376	Pass
4	5417.810	1209.342	368.427	3.225	Pass
5	5409.003	1200.592	344.319	3.341	Pass
6	5424.148	1205.305	351.850	3.313	Pass
7	5407.168	1185.301	328.809	3.371	Pass
8	5409.937	1197.321	345.284	3.319	Pass
9	5406.201	1184.232	331.767	3.346	Pass
10	5388.320	1170.538	333.689	3.267	Pass

(4)

サンプルB測定_AMSR_10分.txt

INCC 5.1.2

Facility: PPF
Material balance area: XXXX
Detector type: AVIS R-123
Detector id:
Electronics id:
Inventory change code:
I/O code:

Measurement date: 19.02.20 10:45:58
Results file name: 92KK4558_VER
Inspection number:
Item id: B 10min
Stratum id: XXXX
Bias uncertainty: 0.0000
Random uncertainty: 0.0000
Systematic uncertainty: 0.0000
Relative std deviation: 0.0000
Material type: Pu
Original declared mass: 9.000
Measurement option: Verification
Data source: Shift register
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name: JAEA
Passive comment:

Isotopics id: PU-490020403
Isotopics source code: 0D
Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
Pu date: 12.06.21 0.0000 19.02.20 0.0000
Am241: 3.1000 +- 0.0000 4.3768 +- 0.0000
Am date: 11.12.08 19.02.20

Predelay: 1.50
Gate length: 64.00
2nd gate length: 64.00
High voltage: 1740
Die away time: 30.0000
Efficiency: 0.6750
Multiplicity deadtime: 72.6000
Coefficient A deadtime: 0.2904
Coefficient B deadtime: 0.0211
Coefficient C deadtime: 0.0000
Doubles gate fraction: 0.7930
Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
Passive singles bkgnd: 7.560 +- 0.078
Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルB測定_AMSR_10分.txt

Passive triples bkgnd: 0.008 +- 0.007
Passive scaler1 bkgnd: 0.883
Passive scaler2 bkgnd: 3.352

Number passive cycles: 20
Count time (sec): 30

Passive summed raw data

Shift register singles sum: 3247098
Shift register reals + accidentals sum: 1843116
Shift register accidentals sum: 1124664
Shift register 1st scaler sum: 916064
Shift register 2nd scaler sum: 490992

Passive summed multiplicity distributions

	R+A sums	A sums
0	1993607	2399082
1	836891	643873
2	291097	149747
3	90641	40582
4	25584	10532
5	6791	2510
6	1822	592
7	492	136
8	131	34
9	31	4
10	8	0
11	2	0
12	1	0

Passive messages

Known alpha: failed stratum rejection limits
Multiplicity: failed stratum rejection limits

Results

Singles:	5406.398 +- 3.697
Doubles:	1199.242 +- 3.510
Triples:	346.470 +- 3.155
Quads:	75.932 +- 3.139
Quads/Triples:	0.218 +- 0.007
Scaler 1:	1525.890 +- 1.544
Scaler 2:	814.968 +- 1.074

PRIMARY RESULT

Known alpha results

Alpha:	0.855
Multiplication:	1.000
Multiplication corrected doubles:	1199.242 +- 3.510
Pu240e mass (g):	3.701 +- 0.011

(2)

サンブル測定_AMSR_10分.txt

Pu240e (%) :	37.857	
Pu mass (g) :	9.776	+
Declared Pu240e mass (g) :	3.365	0.029
Declared Pu mass (g) :	8.888	
Declared - assay Pu mass (g) :	-0.888	+
Declared - assay Pu mass (%) :	-9.988	+

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.016 + 0.001
 Alpha: 1.328 + 0.006
 Multiplication correction factor: 1.000 + 0.010
 Pu240e mass (g) : 37.857
 Pu mass (g) : 8.770 + 0.027
 Declared Pu240e mass (g) : 3.365
 Declared Pu mass (g) : 8.888
 Declared - assay Pu mass (g) : 0.118 + 0.027
 Declared - assay Pu mass (%) : 1.325 + 0.301

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	162442	92825	56293	45894	24614	Pass
2	162883	93256	56599	46092	24480	Pass
3	163011	92823	56689	45715	24761	Pass
4	162539	91761	56360	45871	24622	Pass

(3)

サンブル測定_AMSR_10分.txt

93205	162737	56498	24385	Pass
92295	162964	46001	24646	Pass
92124	162204	56128	24656	Pass
91232	161870	45947	24485	Pass
92734	162857	56581	24816	Pass
91320	161674	45387	24389	Pass
92311	162409	56270	24446	Pass
91355	161589	55703	24418	Pass
92287	161917	55930	24587	Pass
92653	162882	46004	24577	Pass
91699	162311	56203	24349	Pass
91259	161536	55667	24327	Pass
92657	162284	56183	24800	Fail
90944	162048	46038	24535	Pass
91957	162096	56054	24546	Pass
93016	163035	56705	24808	Pass
92060	162094	56052	24545	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5409.303	1219.589	368.929	3.271	Pass
2	5424.015	1223.767	358.853	3.357	Pass
3	5428.285	1206.308	350.074	3.330	Pass
4	5412.539	1181.830	326.795	3.368	Pass
5	5419.144	1225.435	371.776	3.281	Pass
6	5426.717	1189.815	343.028	3.297	Pass
7	5401.364	1201.691	346.583	3.331	Pass
8	5390.222	1179.619	331.852	3.324	Pass
9	5423.147	1206.940	351.365	3.324	Pass
10	5383.683	1187.062	333.628	3.348	Pass
11	5408.202	1203.196	351.868	3.304	Pass
12	5380.848	1190.199	345.273	3.285	Pass
13	5391.789	1213.740	370.014	3.237	Pass
14	5423.981	1203.669	351.159	3.310	Pass
15	5404.933	1185.000	330.299	3.360	Pass
16	5379.079	1188.196	342.565	3.294	Pass
17	5404.032	1217.650	315.239	3.621	Fail
18	5396.160	1165.900	325.299	3.301	Pass
19	5397.761	1198.585	330.402	3.425	Pass
20	5429.085	1212.217	344.386	3.396	Pass
21	5397.694	1202.091	355.163	3.277	Pass

outlier test

(4)

サンプルB測定_AMSR_15分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 10:59:13
 Results file name: 92KK5913.VER
 Inspection number:
 Item id: B 15min
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 9.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:
 Isotopics id: PU-490020403
 Isotopics source code: 0D
 Pu238: 1.1680 +- 0.0000 1.1220 +- 0.0000
 Pu239: 63.2610 +- 0.0000 64.0449 +- 0.0000
 Pu240: 26.6430 +- 0.0000 26.9593 +- 0.0000
 Pu241: 4.1840 +- 0.0000 3.0701 +- 0.0000
 Pu242: 4.7440 +- 0.0000 4.8036 +- 0.0000
 Pu date: 12.06.21 19.02.20
 Am241: 3.1000 +- 0.0000 4.3768 +- 0.0000
 Am date: 11.12.08 19.02.20
 Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルB測定_AMSR_15分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352
 Number passive cycles: 30
 Count time (sec): 30
 Passive summed raw data
 Shift register singles sum: 4869282
 Shift register reals + accidentals sum: 2758785
 Shift register accidentals sum: 1686055
 Shift register 1st scaler sum: 1372047
 Shift register 2nd scaler sum: 736797
 Passive summed multiplicity distributions
 R+A sums A sums
 0 2990848 3597644
 1 1255235 965674
 2 435448 224460
 3 136428 60861
 4 37825 15782
 5 10046 3741
 6 2597 856
 7 656 203
 8 143 45
 9 40 4
 10 14 0
 11 2 0
 Passive messages
 Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits
 Results
 Singles: 5404.880 +- 3.181
 Doubles: 1193.736 +- 2.998
 Triples: 338.618 +- 2.759
 Quads: 67.294 +- 2.917
 Quads/Triples: 0.197 +- 0.007
 Scaler 1: 1523.613 +- 1.206
 Scaler 2: 815.312 +- 1.070

PRIMARY RESULT

Known alpha results
 Alpha: 0.855
 Multiplication: 1.000
 Multiplication corrected doubles: 1193.736 +- 2.998
 Pu240e mass (g): 3.684 +- 0.009
 Pu240e (%): 37.857

(2)

サンブル測定_AMSR_15分.txt
 Pu mass (g): 9.731 +- 0.024
 Declared Pu240e mass (g): 3.365
 Declared Pu mass (g): 8.888
 Declared - assay Pu mass (g): -0.843 +- 0.024
 Declared - assay Pu mass (%): -9.483 +- 0.275

Known alpha calibration parameters
 Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results
 Multiplication: 1.014 +- 0.001
 Alpha: 1.314 +- 0.008
 Multiplication correction factor: 1.000
 Pu240e mass (g): 3.346 +- 0.014
 Pu240e (%): 37.857
 Pu mass (g): 8.839 +- 0.037
 Declared Pu240e mass (g): 3.365
 Declared Pu mass (g): 8.888
 Declared - assay Pu mass (g): 0.050 +- 0.037
 Declared - assay Pu mass (%): 0.558 +- 0.421

Passive multiplicity calibration parameters
 Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data
 Cycle R+A A Scaler1 Scaler2 QC Tests
 1 162892 92814 56605 45728 24877 Pass
 2 160780 90251 55147 45343 24324 Pass
 3 162232 91417 56148 45817 24204 Pass
 4 161550 90938 55677 45631 24458 Pass
 5 162597 92020 56401 45775 24481 Pass

(3)

サンブル測定_AMSR_15分.txt
 92337 56304 45616 24637 Pass
 92746 56708 46162 24728 Pass
 91408 56208 45880 24835 Pass
 92512 46066 24846 24846 Pass
 91974 55940 45682 24508 Pass
 91075 45558 24503 24508 Pass
 91859 56071 45548 24698 Pass
 91796 55981 45717 24245 Pass
 91509 45604 24506 24506 Pass
 92758 46001 24587 24587 Pass
 92707 45755 24837 24837 Pass
 92041 56083 45854 24376 Pass
 93317 56834 45716 24705 Pass
 91644 56198 24655 24655 Pass
 90165 55862 45439 24683 Pass
 91305 45563 24568 24568 Pass
 91716 46094 24464 24464 Pass
 91907 45806 24715 24715 Pass
 91955 55896 24337 24337 Pass
 92675 45442 24524 24524 Pass
 93135 56637 45850 24510 Pass
 92092 56460 45884 24504 Pass
 91811 55978 45648 24496 Pass
 92259 56376 45956 24590 Pass
 92642 56469 45592 24396 Pass

Passive cycle rate data
 Cycle Singles Doubles Triples Mass QC Tests
 1 5424.315 1208.810 341.956 3.396 Pass
 2 5353.860 1171.895 331.753 3.288 Pass
 3 5402.298 1177.420 327.377 3.343 Pass
 4 5379.547 1177.145 332.538 3.307 Pass
 5 5414.474 1189.109 351.192 3.239 Pass
 6 5409.804 1202.929 331.170 3.441 Pass
 7 5429.252 1203.103 344.510 3.351 Pass
 8 5405.200 1175.117 320.252 3.381 Pass
 9 5420.912 1201.064 333.078 3.418 Pass
 10 5392.290 1202.957 327.873 3.464 Pass
 11 5374.443 1185.256 338.604 3.306 Pass
 12 5398.595 1194.746 327.951 3.423 Pass
 13 5394.258 1195.646 331.773 3.402 Pass
 14 5400.897 1181.493 328.830 3.353 Pass
 15 5414.874 1213.481 359.969 3.300 Pass
 16 5422.847 1206.239 350.481 3.327 Pass
 17 5399.162 1200.422 344.431 3.340 Pass
 18 5435.257 1217.962 329.369 3.525 Pass
 19 5404.733 1183.330 323.489 3.398 Pass
 20 5388.520 1145.165 304.297 3.346 Pass
 21 5400.630 1174.849 322.470 3.364 Pass
 22 5414.507 1178.960 335.227 3.297 Pass
 23 5399.996 1195.381 371.280 3.139 Pass
 24 5390.155 1203.791 345.820 3.347 Pass
 25 5407.235 1216.016 351.642 3.367 Pass
 26 5425.816 1218.459 370.071 3.258 Pass
 27 5417.343 1189.544 327.598 3.400 Pass

(4)

28	5394.125	サンプルB測定_AMSR_15分.txt	3.221	Pass	
29	5413.273	1196.247	359.378	3.277	Pass
30	5417.777	1197.923	351.915	3.390	Pass
		1207.606	342.052		

サンプルB測定_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 11:11:04
 Results file name: 92KL1104_01_VER
 Inspection number:
 Item id: B.5min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-111104.seq.dat
 Ending comment:

Isotopes id: B					
Isotopes source code: 0D					
Pu238:	1.1680 +- 0.0000	1.1220 +- 0.0000			
Pu239:	63.2610 +- 0.0000	64.0449 +- 0.0000			
Pu240:	26.6430 +- 0.0000	26.9593 +- 0.0000			
Pu241:	4.1840 +- 0.0000	3.0701 +- 0.0000			
Pu242:	4.7440 +- 0.0000	4.8036 +- 0.0000			
Pu date: 12.06.21		19.02.20			
Am241:	3.1000 +- 0.0000	4.2658 +- 0.0000			
Am date: 12.06.21		19.02.20			

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプルB測定_MCSR_5分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 10
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 4166.862 +- 4.202
 Doubles: 1282.742 +- 3.106
 Triples: 385.067 +- 5.082
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Multiplication: 0.847
 Alpha: 1.040
 Multiplication corrected doubles: 1020.875 +- 1.365
 Pu240e mass (g): 3.150 +- 0.004
 Pu240e (%): 37.857
 Pu mass (g): 8.322 +- 0.011

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.021 +- 0.001
 Alpha: 0.680 +- 0.006
 Multiplication correction factor: 1.000

(2)

サンプル測定_MCSR_5分.txt
 Pu240e mass (g): 3.530 +- 0.017
 Pu240e (%) : 37.857
 Pu mass (g) : 9.324 +- 0.046

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	125629	68814	30711	0	0	Off
2	124539	68921	30596	0	0	Off
3	124937	68569	30257	0	0	Off
4	125526	69487	31091	0	0	Off
5	124670	68991	30101	0	0	Off
6	125350	69019	30704	0	0	Off
7	124890	68835	30439	0	0	Off
8	125378	68808	30764	0	0	Off
9	125473	69128	30294	0	0	Off
10	125555	69071	30311	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4181.347	1271.584	369.097	3.568	Off
2	4144.992	1278.979	394.641	3.461	Off
3	4158.266	1278.551	379.813	3.540	Off
4	4177.912	1281.361	380.246	3.550	Off
5	4149.361	1297.837	404.110	3.495	Off
6	4172.041	1278.656	361.381	3.645	Off
7	4156.699	1281.353	386.028	3.519	Off
8	4172.975	1269.612	367.846	3.566	Off
9	4176.144	1295.978	402.887	3.492	Off
10	4178.879	1293.510	404.765	3.470	Off

サンプルB測定_MCSR_10分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 11:16:20
 Results file name: 92KL1620_01_VER
 Inspection number:
 Item id: B.10min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-111619.seq.dat
 Ending comment:

Isotopics source code: 0D	1.1680 +-	0.0000	1.1220 +-
Pu238:			
Pu239:	63.2610 +-	0.0000	64.0449 +-
Pu240:	26.6430 +-	0.0000	26.9593 +-
Pu241:	4.1840 +-	0.0000	3.0701 +-
Pu242:	4.7440 +-	0.0000	4.8036 +-
Pu date: 12.06.21			19.02.20
Am241: 3.1000 +-		0.0000	4.2658 +-
Am date: 12.06.21			19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Drive away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプルB測定_MCSR_10分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 4169.313 +- 3.354
 Doubles: 1281.468 +- 2.780
 Triples: 380.470 +- 2.905
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.040
 Multiplication corrected doubles: 1021.828 +- 1.112
 Pu240e mass (g): 3.153 +- 0.003
 Pu240e (%): 37.857
 Pu mass (g): 8.330 +- 0.009

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.020 +- 0.001
 Alpha: 0.673 +- 0.004
 Multiplication correction factor: 1.000

(2)

サンブルB測定_MCSR_10分.txt
 Pu240e mass (g): 3.550 +- 0.012
 Pu240e (%): 37.857
 Pu mass (g): 9.376 +- 0.030

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	126049	69741	31154	0	0	Off
2	125894	69455	30563	0	0	Off
3	124981	68623	30831	0	0	Off
4	125988	69792	30746	0	0	Off
5	125546	69146	30622	0	0	Off
6	124898	68501	30300	0	0	Off
7	125495	69069	30392	0	0	Off
8	125143	68778	30422	0	0	Off
9	125719	69693	30855	0	0	Off
10	125151	68496	29990	0	0	Off
11	125070	68326	30670	0	0	Off
12	125121	69154	30687	0	0	Off
13	124661	68243	30266	0	0	Off
14	125461	69652	31070	0	0	Off
15	125374	69395	31090	0	0	Off
16	124900	68379	30262	0	0	Off
17	125054	68915	30536	0	0	Off
18	124560	68716	30335	0	0	Off
19	124625	68001	30079	0	0	Off
20	125674	69345	30564	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4195.356	1287.742	390.881	3.519	Off
2	4190.186	1297.919	388.452	3.579	Off
3	4159.734	1261.197	356.894	3.591	Off
4	4193.321	1303.060	383.776	3.629	Off
5	4178.579	1285.633	379.526	3.574	Off
6	4156.966	1274.846	387.525	3.481	Off
7	4176.878	1290.739	401.624	3.475	Off

(3)

サンブルB測定_MCSR_10分.txt

8	4165.137	1280.022	386.375	3.510	Off
9	4184.349	1296.115	385.190	3.590	Off
10	4165.404	1285.028	383.527	3.549	Off
11	4162.702	1256.659	361.282	3.545	Off
12	4164.403	1283.726	381.408	3.555	Off
13	4149.061	1267.367	356.174	3.624	Off
14	4175.744	1287.568	371.990	3.625	Off
15	4172.842	1278.322	367.357	3.609	Off
16	4157.032	1272.042	383.475	3.490	Off
17	4162.169	1280.788	390.331	3.492	Off
18	4145.692	1280.849	391.541	3.486	Off
19	4147.860	1265.531	365.745	3.560	Off
20	4182.848	1294.212	396.394	3.519	Off

(4)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 11:26:38
 Results file name: 92KL2638_01_VER
 Inspection number:
 Item id: B.15min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-112637.seq.dazax
 Ending comment:

Isotopics source code: 0D	1.1680 +-	0.0000	1.1220 +-
Pu238:			
Pu239:	63.2610 +-	0.0000	64.0449 +-
Pu240:	26.6430 +-	0.0000	26.9593 +-
Pu241:	4.1840 +-	0.0000	3.0701 +-
Pu242:	4.7440 +-	0.0000	4.8036 +-
Pu date:	12.06.21		19.02.20
Am241:	3.1000 +-	0.0000	4.2658 +-
Am date:	12.06.21		19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 4151.853 +- 2.911
 Doubles: 1287.780 +- 3.038
 Triples: 384.897 +- 3.562
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.042
 Multiplication corrected doubles: 1015.526 +- 1.014
 Pu240e mass (g): 3.134 +- 0.003
 Pu240e (%): 37.857
 Pu mass (g): 8.278 +- 0.008

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.020 +- 0.001
 Alpha: 0.663 +- 0.005
 Multiplication correction factor: 1.000

(2)

サンプルB測定_MCSR_15分.txt

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4140.722	1293.228	385.517	3.577	Off
2	4171.875	1304.821	357.483	3.787	Off
3	4167.505	1282.292	372.054	3.601	Off
4	4168.473	1291.136	390.025	3.541	Off
5	4169.106	1298.145	389.949	3.573	Off
6	4178.745	1305.124	408.575	3.503	Off
7	4142.323	1305.043	412.934	3.481	Off
8	4153.864	1240.069	327.129	3.668	Off
9	4142.690	1296.566	382.081	3.611	Off
10	4152.830	1285.157	378.819	3.576	Off
11	4156.065	1291.265	387.938	3.553	Off
12	4147.193	1288.425	375.135	3.612	Off
13	4169.206	1301.449	408.448	3.487	Off
14	4136.620	1266.728	367.379	3.557	Off
15	4162.302	1299.945	384.199	3.614	Off
16	4164.470	1259.797	366.126	3.531	Off
17	4159.067	1303.915	426.794	3.401	Off
18	4164.670	1291.101	397.708	3.499	Off
19	4159.901	1299.877	404.132	3.504	Off
20	4153.530	1304.580	388.694	3.610	Off
21	4160.534	1308.454	402.322	3.553	Off
22	4149.294	1272.406	376.518	3.531	Off
23	4132.884	1252.410	373.768	3.456	Off
24	4152.129	1298.172	373.999	3.663	Off
25	4160.701	1285.393	372.233	3.614	Off
26	4130.883	1276.004	390.700	3.470	Off
27	4128.949	1288.952	394.249	3.510	Off
28	4109.771	1279.333	405.138	3.408	Off
29	4143.191	1278.945	364.848	3.627	Off
30	4126.080	1284.679	382.493	3.555	Off

(4)

サンプルB測定_MCSR_15分.txt

Pu240e mass (g): 3.555 +- 0.015
 Pu240e (%): 37.857
 Pu mass (g): 9.390 +- 0.039

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	124411	68385	29633	0	0	Off
2	125345	69734	30635	0	0	Off
3	125214	69126	30702	0	0	Off
4	125243	69278	30589	0	0	Off
5	125262	69308	30409	0	0	Off
6	125551	69355	30247	0	0	Off
7	124459	69104	29998	0	0	Off
8	124805	67751	30592	0	0	Off
9	124470	68698	29846	0	0	Off
10	124774	68768	30258	0	0	Off
11	124871	68758	30065	0	0	Off
12	124605	68724	30116	0	0	Off
13	125265	69469	30471	0	0	Off
14	124288	67791	29833	0	0	Off
15	125058	69398	30445	0	0	Off
16	125123	68516	30766	0	0	Off
17	124961	69718	30646	0	0	Off
18	125129	69064	30376	0	0	Off
19	124986	69081	30130	0	0	Off
20	124795	69205	30113	0	0	Off
21	125005	69390	30182	0	0	Off
22	124668	68777	30649	0	0	Off
23	124176	67879	30350	0	0	Off
24	124753	69057	30157	0	0	Off
25	125010	68686	30169	0	0	Off
26	124116	68251	30015	0	0	Off
27	124058	68168	29544	0	0	Off
28	123483	67819	29483	0	0	Off
29	124485	68194	29870	0	0	Off
30	123972	68522	30026	0	0	Off

(3)

サンプル測定_AMSR_5分.txt

INCC 5.1.2
 Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 13:36:03
 Results file name: 92KN3603_VER
 Inspection number:
 Item id: C 5min
 Stratium id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07
 Am241: 5.2012 +- 0.0000 7.2437 +- 0.0000
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプル測定_AMSR_5分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352
 Number passive cycles: 10
 Count time (sec): 30
 Passive summed raw data
 Shift register singles sum: 163288
 Shift register reals + accidentals sum: 44438
 Shift register accidentals sum: 5688
 Shift register 1st scaler sum: 44684
 Shift register 2nd scaler sum: 26331
 Passive summed multiplicity distributions

	R+A sums	A sums
0	129646	158449
1	24940	4174
2	7028	513
3	1374	126
4	238	21
5	34	0
6	14	0
7	5	0
8	4	0
9	3	0
10	2	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles: 536.755 +- 1.059
 Doubles: 129.125 +- 0.871
 Triples: 37.437 +- 1.485
 Quads: 9.992 +- 2.599
 Quads/Triples: 0.250 +- 0.050
 Scaler 1: 148.063 +- 0.839
 Scaler 2: 84.418 +- 0.448

Known alpha results

Multiplication corrected doubles: 120.571 +- 0.321
 Pu240e mass (g): 0.372 +- 0.001
 Pu240e (%): 35.554
 Pu mass (g): 1.047 +- 0.003
 Declared Pu240e mass (g): 0.348
 Declared Pu mass (g): 0.979
 Declared - assay Pu mass (g): -0.068 +- 0.003

(2)

Declared - assay Pu mass (%): -6.946 ± 0.285
 サンプルC測定_AMSR_5分.txt

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results
 Multiplication: 1.016 ± 0.004
 Alpha: 1.141 ± 0.042
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.358 ± 0.008
 Pu240e (%): 35.554
 Pu mass (g): 1.008 ± 0.022
 Declared Pu240e mass (g): 0.348
 Declared Pu mass (g): 0.979
 Declared - assay Pu mass (g): -0.029 ± 0.022
 Declared - assay Pu mass (%): -2.973 ± 2.242

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16330	4415	569	4515	2602	Pass
2	16318	4621	568	4526	2680	Pass
3	16494	4465	580	4597	2623	Pass
4	16468	4499	579	4440	2578	Pass
5	16213	4433	561	4447	2644	Pass
6	16279	4452	565	4338	2717	Pass

(3)

サンプルC測定_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
7	16385	4446	573	4501	2625
8	16359	4387	571	4521	2590
9	16209	4435	560	4358	2615
10	16233	4285	562	4441	2657

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	536.795	128.159	33.378	0.380	Pass
2	536.395	135.060	44.009	0.346	Pass
3	542.262	129.459	34.182	0.381	Pass
4	541.395	130.626	35.220	0.380	Pass
5	532.895	129.025	35.038	0.373	Pass
6	535.095	129.525	47.264	0.301	Pass
7	538.628	129.059	35.808	0.368	Pass
8	537.762	127.158	34.854	0.366	Pass
9	532.761	129.125	39.730	0.344	Pass
10	533.561	124.058	34.893	0.351	Pass

(4)

サンプルC測定_AMSR_10分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 13:42:14
 Results file name: 92KN4214.VER
 Inspection number:
 Item id: C 10min
 Stratum id: XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07 19.02.20
 Am241: 5.2012 +- 7.2437 +-
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016

(1)

サンプルC測定_AMSR_10分.txt

Passive triples bkgrnd: 0.008 +- 0.007
 Passive scaler1 bkgrnd: 0.883
 Passive scaler2 bkgrnd: 3.352

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 327655
 Shift register reals + accidentals sum: 88378
 Shift register accidentals sum: 11454
 Shift register 1st scaler sum: 89865
 Shift register 2nd scaler sum: 52466

Passive summed multiplicity distributions

	R+A sums	A sums
0	260313	317902
1	50144	8420
2	13948	1030
3	2762	254
4	405	41
5	69	0
6	11	0
7	3	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	538.553 +- 1.421
Doubles:	128.165 +- 0.686
Triples:	34.908 +- 0.453
Quads:	6.289 +- 0.283
Quads/Triples:	0.179 +- 0.006
Scaler 1:	148.892 +- 0.427
Scaler 2:	84.092 +- 0.465

Known alpha results

Alpha:	1.073
Multiplication:	1.009
Multiplication corrected doubles:	121.220 +- 0.398
Pu240e mass (g):	0.374 +- 0.001
Pu240e (%) :	35.554
Pu mass (g):	1.052 +- 0.003
Declared Pu240e mass (g):	0.348
Declared Pu mass (g):	0.979
Declared - assay Pu mass (g):	-0.074 +- 0.003
Declared - assay Pu mass (%):	-7.522 +- 0.353

Known alpha calibration parameters

(2)

サンプル測定_AMSR_10分.txt

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results
 Multiplication: 1.010 +- 0.001
 Alpha: 1.093 +- 0.010
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.370 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 1.041 +- 0.006
 Pu mass (g): 0.348
 Declared Pu240e mass (g): 0.979
 Declared Pu mass (g): -0.062 +- 0.006
 Declared - assay Pu mass (g): -6.347 +- 0.647

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16227	4317	562	4365	2648	Pass
2	16395	4361	573	4493	2589	Pass
3	16568	4358	586	4491	2683	Pass
4	16639	4525	591	4496	2686	Pass
5	16606	4565	588	4539	2717	Pass
6	16257	4471	564	4486	2605	Pass
7	16240	4396	563	4575	2632	Pass
8	16502	4525	581	4474	2660	Pass
9	16308	4398	567	4478	2544	Pass

(3)

サンプル測定_AMSR_10分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests	
10	16580	4613	586	4583	2546	Pass
11	16269	4439	565	4414	2668	Pass
12	16176	4263	558	4420	2576	Pass
13	16284	4315	566	4508	2609	Pass
14	16053	4335	550	4523	2505	Pass
15	16440	4533	577	4512	2690	Pass
16	16682	4375	594	4551	2653	Pass
17	16097	4264	553	4432	2584	Pass
18	16621	4428	589	4437	2717	Pass
19	16434	4486	576	4539	2618	Pass
20	16277	4411	565	4549	2536	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	533.361	125.125	33.401	0.366	Pass
2	538.962	126.225	33.902	0.376	Pass
3	544.729	125.692	31.341	0.382	Pass
4	547.096	131.093	34.518	0.386	Pass
5	545.996	132.526	36.528	0.380	Pass
6	534.361	130.192	38.975	0.354	Pass
7	533.795	127.725	33.648	0.376	Pass
8	542.529	131.426	36.167	0.377	Pass
9	536.061	127.658	33.807	0.375	Pass
10	545.129	134.193	38.480	0.375	Pass
11	534.761	129.092	35.742	0.369	Pass
12	531.661	123.458	32.013	0.367	Pass
13	535.261	124.925	32.148	0.373	Pass
14	527.561	126.125	35.818	0.355	Pass
15	540.462	131.826	37.317	0.372	Pass
16	548.529	125.992	34.207	0.364	Pass
17	529.028	123.658	34.930	0.349	Pass
18	546.496	127.926	36.100	0.361	Pass
19	540.262	130.292	34.763	0.381	Pass
20	535.028	128.159	34.359	0.374	Pass

(4)

サンプルC測定_AMSR_15分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:02:13
 Results file name: 92K00213.VER
 Inspection number:
 Item id:
 Stratum id:
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 1.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07 19.02.20
 Am241: 5.2012 +- 7.2437 +-
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルC測定_AMSR_15分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 491181
 Shift register reals + accidentals sum: 132799
 Shift register accidentals sum: 17158
 Shift register 1st scaler sum: 134092
 Shift register 2nd scaler sum: 78775

Passive summed multiplicity distributions

R+A sums	A sums
0	390329
1	74903
2	20902
3	4242
4	686
5	96
6	19
7	4

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	538.218 +- 1.032
Doubles:	128.449 +- 0.583
Triples:	35.667 +- 0.487
Quads:	6.646 +- 0.273
Quads/Triples:	0.185 +- 0.006
Scaler 1:	148.108 +- 0.478
Scaler 2:	84.176 +- 0.334

PRIMARY RESULT

Known alpha results

Alpha:	1.073
Multiplication:	1.009
Multiplication corrected doubles:	121.081 +- 0.294
Pu240e mass (g):	0.374 +- 0.001
Pu240e (%):	35.554
Pu mass (g):	1.051 +- 0.003
Declared Pu240e mass (g):	0.348
Declared Pu mass (g):	0.979
Declared - assay Pu mass (g):	-0.072 +- 0.003

(2)

サンプリング測定_AMSR_15分.txt
 Declared - assay Pu mass (%): -7.398 ± 0.261

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

Passive multiplicity results

Multiplication: 1.012 ± 0.001
 Alpha: 1.108 ± 0.008
 Multiplication correction factor: 1.000
 Pu240e mass (g): 0.366 ± 0.002
 Pu240e (%): 35.554
 Pu mass (g): 1.031 ± 0.005
 Declared Pu240e mass (g): 0.348
 Declared Pu mass (g): 0.979
 Declared - assay Pu mass (g): -0.052 ± 0.005
 Declared - assay Pu mass (%): -5.311 ± 0.535

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16451	4372	577	4520	2630	Pass
2	16586	4554	587	4570	2642	Pass
3	16515	4459	582	4532	2673	Pass
4	16366	4332	571	4437	2611	Pass
5	16323	4389	568	4577	2506	Pass
6	16291	4344	566	4403	2653	Pass
7	16402	4301	574	4453	2629	Pass
8	15862	4233	537	4275	2512	Pass
9	16564	4611	585	4487	2675	Pass

(3)

サンプリング測定_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
10	16374	4335	34.418	0.365	Pass
11	16175	4450	38.293	0.367	Pass
12	16478	4530	34.058	0.380	Pass
13	16433	4445	32.209	0.374	Pass
14	16401	4480	35.078	0.365	Pass
15	16439	4543	32.726	0.374	Pass
16	16627	4589	30.828	0.379	Pass
17	16297	4380	33.435	0.356	Pass
18	16445	4462	33.435	0.356	Pass
19	16201	4348	34.723	0.358	Pass
20	16297	4408	36.459	0.367	Pass
21	16556	4507	38.127	0.366	Pass
22	16250	4312	37.523	0.357	Pass
23	16150	4247	37.657	0.362	Pass
24	16363	4363	42.431	0.370	Pass
25	16201	4431	37.882	0.346	Pass
26	16588	4400	42.431	0.346	Pass
27	16219	4326	38.598	0.352	Pass
28	16558	4592	35.256	0.359	Pass
29	16230	4523	36.208	0.357	Pass
30	16539	4533	31.392	0.373	Pass
			124.925	0.378	Pass
			122.991	0.365	Pass
			126.358	0.369	Pass
			128.992	0.352	Pass
			127.059	0.385	Pass
			125.458	0.358	Pass
			133.526	0.380	Pass
			131.992	0.370	Pass
			131.593	0.379	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	540.828	126.458	34.418	0.365	Pass
2	545.329	132.193	38.293	0.367	Pass
3	542.962	129.192	34.058	0.380	Pass
4	537.995	125.325	32.209	0.374	Pass
5	536.561	127.325	35.078	0.365	Pass
6	535.495	125.892	32.726	0.374	Pass
7	539.195	124.191	30.828	0.379	Pass
8	521.194	123.157	33.435	0.356	Pass
9	544.595	134.160	37.639	0.381	Pass
10	538.262	125.392	34.723	0.358	Pass
11	531.628	129.692	36.459	0.367	Pass
12	541.729	131.659	38.127	0.366	Pass
13	540.228	128.926	37.523	0.357	Pass
14	539.162	130.159	37.657	0.362	Pass
15	540.428	132.159	37.882	0.370	Pass
16	546.696	133.260	42.431	0.346	Pass
17	535.695	127.058	36.284	0.352	Pass
18	540.628	129.459	38.598	0.352	Pass
19	532.495	126.225	35.256	0.359	Pass
20	535.695	127.992	36.868	0.357	Pass
21	544.329	130.693	36.208	0.373	Pass
22	534.128	124.925	31.392	0.378	Pass
23	530.794	122.991	31.908	0.365	Pass
24	537.895	126.358	33.797	0.369	Pass
25	532.495	128.992	38.337	0.352	Pass
26	545.396	127.059	31.876	0.385	Pass
27	533.095	125.458	34.860	0.358	Pass
28	544.395	133.526	37.259	0.380	Pass
29	533.461	131.992	37.807	0.370	Pass
30	543.762	131.593	36.062	0.379	Pass

(4)

サンプルC測定_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 13:30:29
 Results file name: 92KN3029_01_VER
 Inspection number:
 Item id: C 5min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-133029.seq.dataz
 Ending comment:

Isotopics source code: 0D	1.0670 +-	0.0000	0.9961 +-
Pu238:			
Pu239:	64.7610 +-	0.0000	66.1592 +-
Pu240:	25.1940 +-	0.0000	25.7153 +-
Pu241:	4.7090 +-	0.0000	2.7670 +-
Pu242:	4.2690 +-	0.0000	4.3625 +-
Pu date: 07.09.07			19.02.20
Am241: 5.2010 +-		0.0000	7.2435 +-
Am date: 07.09.07			19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプルC測定_MCSR_5分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 10
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 409.076 +- 1.201
 Doubles: 100.113 +- 0.742
 Triples: 28.616 +- 0.734
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 1.073
 Multiplication: 1.014
 Multiplication corrected doubles: 91.595 +- 0.345
 Pu240e mass (g): 0.283 +- 0.001
 Pu240e (%): 35.554
 Pu mass (g): 0.795 +- 0.003

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.015 +- 0.002
 Alpha: 1.086 +- 0.019
 Multiplication correction factor: 1.000

(2)

サンプルC測定_MCSR_5分.txt
 Pu240e mass (g): 0.281 +- 0.004
 Pu240e (%) : 35.554
 Pu mass (g) : 0.789 +- 0.010

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	12633	3308	319	0	0	Off
2	12352	3293	268	0	0	Off
3	12631	3445	331	0	0	Off
4	12619	3336	284	0	0	Off
5	12406	3245	288	0	0	Off
6	12492	3356	269	0	0	Off
7	12381	3225	336	0	0	Off
8	12515	3237	317	0	0	Off
9	12582	3320	305	0	0	Off
10	12376	3288	287	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	413.553	99.584	28.259	0.280	Off
2	404.186	100.783	32.642	0.259	Off
3	413.486	103.751	28.313	0.300	Off
4	413.086	101.684	28.677	0.288	Off
5	405.986	98.517	26.636	0.286	Off
6	408.853	102.850	32.266	0.271	Off
7	405.152	96.250	26.728	0.274	Off
8	409.619	97.283	25.628	0.287	Off
9	411.853	100.450	27.428	0.290	Off
10	404.986	99.983	29.597	0.274	Off

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 13:46:08
 Results file name: 92KN4608_01_VER
 Inspection number:
 Item id: C.10min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-134608.seq.dataz
 Ending comment:

Isotopics source code: 0D	1.0670 +-	0.0000	0.9961 +-
Pu238:			
Pu239:	64.7610 +-	0.0000	66.1592 +-
Pu240:	25.1940 +-	0.0000	25.7153 +-
Pu241:	4.7090 +-	0.0000	2.7670 +-
Pu242:	4.2690 +-	0.0000	4.3625 +-
Pu date: 07.09.07			19.02.20
Am241: 5.2010 +-		0.0000	7.2435 +-
Am date: 07.09.07			19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Drive away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 20
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 410.953 +- 0.975
 Doubles: 99.727 +- 0.704
 Triples: 27.583 +- 0.592
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 1.073
 Multiplication: 1.012 +- 0.287
 Multiplication corrected doubles: 92.162 +- 0.001
 Pu240e mass (g): 0.284 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 0.800 +- 0.002

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.012 +- 0.002
 Alpha: 1.067 +- 0.014
 Multiplication correction factor: 1.000

(2)

サンブルC測定_MCSR_10分.txt
 Pu240e mass (g): 0.285 +- 0.002
 Pu240e (%) : 35.554
 Pu mass (g) : 0.803 +- 0.006

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	12590	3260	352	0	0	Off
2	12669	3265	355	0	0	Off
3	12464	3307	317	0	0	Off
4	12580	3309	278	0	0	Off
5	12761	3409	318	0	0	Off
6	12711	3391	282	0	0	Off
7	12628	3471	358	0	0	Off
8	12527	3448	333	0	0	Off
9	12355	3419	308	0	0	Off
10	12307	3340	276	0	0	Off
11	12650	3342	319	0	0	Off
12	12688	3353	335	0	0	Off
13	12743	3311	351	0	0	Off
14	12390	3357	313	0	0	Off
15	12496	3290	306	0	0	Off
16	12563	3218	351	0	0	Off
17	12428	3171	335	0	0	Off
18	12558	3291	319	0	0	Off
19	12565	3192	310	0	0	Off
20	12427	3160	322	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	412.119	96.883	25.212	0.287	Off
2	414.753	96.950	25.212	0.288	Off
3	407.919	99.617	26.524	0.292	Off
4	411.786	100.984	27.903	0.289	Off
5	417.820	102.984	30.619	0.281	Off
6	416.153	103.584	28.717	0.296	Off
7	413.386	103.717	30.068	0.288	Off

(3)

サンブルC測定_MCSR_10分.txt

8	410.019	103.784	30.217	0.288	Off
9	404.286	103.650	31.276	0.281	Off
10	402.686	102.084	29.314	0.286	Off
11	414.120	100.717	30.643	0.271	Off
12	415.386	100.550	31.757	0.263	Off
13	417.220	98.617	25.465	0.294	Off
14	405.452	101.417	29.576	0.281	Off
15	408.986	99.417	25.425	0.298	Off
16	411.219	95.516	24.622	0.285	Off
17	406.719	94.483	24.914	0.278	Off
18	411.053	99.017	24.937	0.299	Off
19	411.286	96.016	24.212	0.290	Off
20	406.686	94.549	25.108	0.277	Off

(4)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 13:56:44
 Results file name: 92KN5644_01_VER
 Inspection number:
 Item id: C.15min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG_JM2G_AVIS_20190220-135644.seq.datanz
 Ending comment:

Isotopics source code: 0D	1.0670 +- 0.0000	0.9961 +-
Pu238:		
Pu239:	64.7610 +- 0.0000	66.1592 +-
Pu240:	25.1940 +- 0.0000	25.7153 +-
Pu241:	4.7090 +- 0.0000	2.7670 +-
Pu242:	4.2690 +- 0.0000	4.3625 +-
Pu date: 07.09.07		19.02.20
Am241: 5.2010 +- 0.0000		7.2435 +-
Am date: 07.09.07		19.02.20

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Drive away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 411.415 +- 0.909
 Doubles: 100.707 +- 0.542
 Triples: 28.156 +- 0.417
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 1.073
 Multiplication: 1.014 +- 0.260
 Multiplication corrected doubles: 92.115 +- 0.001
 Pu240e mass (g): 0.284 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 0.800 +- 0.002

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.013 +- 0.001
 Alpha: 1.061 +- 0.011
 Multiplication correction factor: 1.000

(2)

サンプルC測定_MCSR_15分.txt

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	418.286	101.984	29.149	0.286	Off
2	416.653	104.651	30.469	0.290	Off
3	413.686	99.484	26.360	0.295	Off
4	416.486	100.184	26.496	0.292	Off
5	406.319	98.050	24.599	0.297	Off
6	415.153	100.784	26.178	0.300	Off
7	409.386	102.017	28.230	0.282	Off
8	410.919	97.650	25.481	0.289	Off
9	400.319	96.249	25.721	0.281	Off
10	419.453	107.551	31.496	0.297	Off
11	415.686	100.650	28.802	0.282	Off
12	405.852	98.383	27.830	0.278	Off
13	407.953	102.784	30.277	0.283	Off
14	417.586	104.851	29.255	0.299	Off
15	411.019	98.417	28.833	0.271	Off
16	412.553	103.217	27.281	0.304	Off
17	412.353	100.517	29.421	0.277	Off
18	416.920	104.584	33.403	0.272	Off
19	409.319	99.883	27.767	0.285	Off
20	408.353	102.884	31.584	0.275	Off
21	407.086	99.017	27.383	0.283	Off
22	405.086	98.116	30.531	0.259	Off
23	415.320	104.618	29.732	0.295	Off
24	415.986	97.217	24.462	0.294	Off
25	406.619	100.717	27.243	0.292	Off
26	403.019	94.116	24.799	0.277	Off
27	408.619	102.784	29.308	0.289	Off
28	407.853	101.050	29.134	0.282	Off
29	415.920	98.017	24.597	0.297	Off
30	412.686	100.784	28.856	0.282	Off

(4)

サンプルC測定_MCSR_15分.txt
 Pu240e mass (g): 0.286 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 0.805 +- 0.005

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	12775	3383	322	0	0	Off
2	12726	3470	329	0	0	Off
3	12637	3278	292	0	0	Off
4	12721	3349	342	0	0	Off
5	12416	3253	310	0	0	Off
6	12681	3316	291	0	0	Off
7	12508	3394	332	0	0	Off
8	12554	3249	318	0	0	Off
9	12236	3195	306	0	0	Off
10	12810	3592	364	0	0	Off
11	12697	3342	321	0	0	Off
12	12402	3269	316	0	0	Off
13	12465	3365	280	0	0	Off
14	12754	3469	322	0	0	Off
15	12557	3253	299	0	0	Off
16	12603	3434	336	0	0	Off
17	12597	3305	288	0	0	Off
18	12734	3484	345	0	0	Off
19	12506	3286	288	0	0	Off
20	12477	3364	276	0	0	Off
21	12439	3254	282	0	0	Off
22	12379	3238	293	0	0	Off
23	12686	3444	304	0	0	Off
24	12706	3248	330	0	0	Off
25	12425	3296	273	0	0	Off
26	12317	3120	295	0	0	Off
27	12485	3356	271	0	0	Off
28	12462	3334	301	0	0	Off
29	12704	3260	318	0	0	Off
30	12607	3331	306	0	0	Off

(3)

サンプル測定_AMSR_5分.txt

INCC 5.1.2
 Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:25:52
 Results file name: 92K02552.VER
 Inspection number:
 Item id:
 Stratum id:
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 3.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07
 Am241: 5.2012 +- 0.0000 7.2437 +- 0.0000
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプル測定_AMSR_5分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352
 Number passive cycles: 10
 Count time (sec): 30
 Passive summed raw data
 Shift register singles sum: 483906
 Shift register reals + accidentals sum: 167283
 Shift register accidentals sum: 49956
 Shift register 1st scaler sum: 134296
 Shift register 2nd scaler sum: 74650
 Passive summed multiplicity distributions
 R+A sums A sums
 0 360567 442726
 1 89313 34404
 2 26148 5164
 3 6272 1296
 4 1256 260
 5 283 45
 6 53 10
 7 11 0
 8 3 0
 Passive messages
 Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits
 Results
 Singles: 1605.649 +- 2.682
 Doubles: 391.212 +- 1.825
 Triples: 110.974 +- 1.525
 Quads: 22.053 +- 1.072
 Quads/Triples: 0.198 +- 0.008
 Scaler 1: 446.770 +- 1.040
 Scaler 2: 245.482 +- 0.877
 Known alpha results
 Alpha: 1.073
 Multiplication: 1.013
 Multiplication corrected doubles: 359.815 +- 0.782
 Pu240e mass (g): 1.110 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 3.123 +- 0.007
 Pu mass (g): 1.044
 Declared Pu240e mass (g): 2.936
 Declared Pu mass (g): -0.187 +- 0.007
 Declared - assay Pu mass (g): -6.385 +- 0.231

(2)

サンプル測定_AMSR_5分.txt
Known alpha calibration parameters

Alpha weight: 1.000000e+000
Rho zero: 4.707231e-001
k: 2.166000e+000
a: 0.000000e+000
b: 3.240449e+002
variance a: 0.000000e+000
variance b: 0.000000e+000
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication:	1.014 +- 0.001
Alpha:	1.087 +- 0.011
Multiplication correction factor:	1.000
Pu240e mass (g):	1.102 +- 0.007
Pu240e (%):	35.554
Pu mass (g):	3.099 +- 0.019
Declared Pu240e mass (g):	1.044
Declared Pu mass (g):	2.936
Declared - assay Pu mass (g):	-0.163 +- 0.019
Declared - assay Pu mass (%):	-5.559 +- 0.662

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
1st factorial moment spontaneous fission: 2.154000e+000
2nd factorial moment spontaneous fission: 3.789000e+000
3rd factorial moment spontaneous fission: 5.211000e+000
1st factorial moment induced fission: 3.163000e+000
2nd factorial moment induced fission: 8.240000e+000
3rd factorial moment induced fission: 1.732100e+001
a: 1.000000e+000
b: 0.000000e+000
c: 0.000000e+000
sigma x: 0.000000e+000
alpha weight: 0.000000e+000
efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	RtA	A	Scaler1	Scaler2	QC Tests
1	48761	16790	5072	13474	7472	Pass
2	48288	16547	4974	13543	7531	Pass
3	48868	16958	5095	13488	7566	Pass
4	48152	16520	4946	13282	7380	Pass
5	48234	16485	4963	13370	7469	Pass
6	48051	16586	4926	13422	7341	Pass
7	48370	16637	4991	13354	7580	Pass
8	48416	17076	5001	13424	7363	Pass

(3)

サンプル測定_AMSR_5分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
9	48318	16813	13337	7500	Pass
10	48448	16871	13602	7448	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1617.998	390.723	111.373	1.096	Pass
2	1602.228	385.885	108.542	1.092	Pass
3	1621.566	395.559	112.709	1.111	Pass
4	1597.694	385.918	102.513	1.132	Pass
5	1600.428	384.184	105.064	1.107	Pass
6	1594.326	388.786	113.704	1.073	Pass
7	1604.962	388.320	113.916	1.069	Pass
8	1606.496	402.627	118.743	1.107	Pass
9	1603.228	394.523	114.463	1.095	Pass
10	1607.563	395.591	108.711	1.137	Pass

(4)

サンプルD測定_AMSR_10分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:

Measurement date: 19.02.20 14:32:09
 Results file name: 92K03209_VER
 Inspection number:
 Item id: D 10min
 XXXX
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 3.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07 19.02.20
 Am241: 5.2012 +- 7.2437 +-
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルD測定_AMSR_10分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 20
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 969796
 Shift register reals + accidentals sum: 334531
 Shift register accidentals sum: 100325
 Shift register 1st scaler sum: 269277
 Shift register 2nd scaler sum: 149357

Passive summed multiplicity distributions

R+A sums	A sums
0	723000
1	178887
2	52190
3	12502
4	2538
5	519
6	122
7	28
8	8
9	1
10	1

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	1608.956 +- 1.831
Doubles:	390.465 +- 1.313
Triples:	110.795 +- 1.228
Quads:	22.762 +- 1.134
Quads/Triples:	0.204 +- 0.008
Scaler 1:	447.912 +- 0.876
Scaler 2:	245.577 +- 0.589

Known alpha results

Alpha:	1.073
Multiplication:	1.012
Multiplication corrected doubles:	360.826 +- 0.539
Pu240e mass (g):	1.114 +- 0.002
Pu240e (%):	35.554
Pu mass (g):	3.132 +- 0.005
Declared Pu240e mass (g):	1.044
Declared Pu mass (g):	2.936
Declared - assay Pu mass (g):	-0.196 +- 0.005

(2)

Declared - assay Pu mass (%): -6.684 +- 0.159

サンプルD測定_AMSR_10分.txt

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results
 Multiplication: 1.014 +- 0.001
 Alpha: 1.096 +- 0.009
 Multiplication correction factor: 1.000
 Pu240e mass (g): 1.099 +- 0.006
 Pu240e (%): 35.554
 Pu mass (g): 3.092 +- 0.017
 Pu mass (g): 1.044
 Declared Pu240e mass (g): 1.044
 Declared Pu mass (g): 2.936
 Declared - assay Pu mass (g): -0.156 +- 0.017
 Declared - assay Pu mass (%): -5.318 +- 0.577

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	48556	16979	5030	13640	7466	Pass
2	48518	16743	5022	13464	7448	Pass
3	48479	16654	5014	13529	7354	Pass
4	48244	16543	4965	13330	7427	Pass
5	48343	16626	4986	13622	7461	Pass
6	48668	16848	5053	13604	7486	Pass

(3)

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1611.164	398.426	119.994	1.079	Pass
2	1609.897	390.822	113.696	1.082	Pass
3	1608.596	388.120	105.324	1.124	Pass
4	1600.761	386.052	111.367	1.075	Pass
5	1604.062	388.120	115.799	1.057	Pass
6	1614.898	393.290	119.112	1.060	Pass
7	1602.795	391.555	105.943	1.136	Pass
8	1605.162	388.220	110.852	1.088	Pass
9	1613.831	395.391	112.254	1.113	Pass
10	1604.829	379.783	105.771	1.081	Pass
11	1601.728	389.087	110.081	1.097	Pass
12	1610.330	399.126	117.085	1.101	Pass
13	1624.133	396.093	107.236	1.149	Pass
14	1600.061	379.282	100.072	1.116	Pass
15	1598.727	382.850	102.987	1.114	Pass
16	1603.162	384.451	107.530	1.092	Pass
17	1611.097	395.891	112.769	1.112	Pass
18	1617.565	394.858	114.638	1.095	Pass
19	1605.996	391.922	116.409	1.071	Pass
20	1630.335	395.960	106.952	1.150	Pass

(4)

サンプルD測定_AMSR_15分.txt

INCC 5.1.2

Facility: PPF
 Material balance area: XXXX
 Detector type: AVIS R-123
 Detector id:
 Electronics id:
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:44:26
 Results file name: 92K04426.VER
 Inspection number:
 Item id:
 Stratum id:
 Bias uncertainty: 0.0000
 Random uncertainty: 0.0000
 Systematic uncertainty: 0.0000
 Relative std deviation: 0.0000
 Material type: Pu
 Original declared mass: 3.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: On
 Error calculation: Sample method
 Accidentals method: Measured
 Inspector name: JAEA
 Passive comment:

Isotopics id: PU-400025106
 Isotopics source code: 0D
 Pu238: 1.0670 +- 0.0000 0.9961 +- 0.0000
 Pu239: 64.7610 +- 0.0000 66.1592 +- 0.0000
 Pu240: 25.1940 +- 0.0000 25.7153 +- 0.0000
 Pu241: 4.7090 +- 0.0000 2.7670 +- 0.0000
 Pu242: 4.2690 +- 0.0000 4.3625 +- 0.0000
 Pu date: 07.09.07 19.02.20
 Am241: 5.2012 +- 7.2437 +-
 Am date: 07.09.07 19.02.20

Predelay: 1.50
 Gate length: 64.00
 2nd gate length: 64.00
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211
 Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225

Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgnd: 7.560 +- 0.078
 Passive doubles bkgnd: 0.062 +- 0.016

(1)

サンプルD測定_AMSR_15分.txt

Passive triples bkgnd: 0.008 +- 0.007
 Passive scaler1 bkgnd: 0.883
 Passive scaler2 bkgnd: 3.352

Number passive cycles: 30
 Count time (sec): 30

Passive summed raw data

Shift register singles sum: 1453090
 Shift register reals + accidentals sum: 500895
 Shift register accidentals sum: 150154
 Shift register 1st scaler sum: 404086
 Shift register 2nd scaler sum: 224364

Passive summed multiplicity distributions

R+A sums	A sums
0 1083435	1329324
1 267816	103385
2 78522	15529
3 18552	3904
4 3749	781
5 781	133
6 177	29
7 48	0
8 10	0

Passive messages

Known alpha: failed stratum rejection limits
 Multiplicity: failed stratum rejection limits

Results

Singles:	1607.174 +- 1.845
Doubles:	389.833 +- 1.935
Triples:	110.019 +- 1.205
Quads:	22.097 +- 0.805
Quads/Triples:	0.200 +- 0.006
Scaler 1:	448.101 +- 0.708
Scaler 2:	245.942 +- 0.596

Known alpha results

Alpha:	1.073
Multiplication:	1.012
Multiplication corrected doubles:	360.461 +- 0.596
Pu240e mass (g):	1.112 +- 0.002
Pu240e (%):	35.554
Pu mass (g):	3.129 +- 0.005
Declared Pu240e mass (g):	1.044
Declared Pu mass (g):	2.936
Declared - assay Pu mass (g):	-0.193 +- 0.005
Declared - assay Pu mass (%):	-6.576 +- 0.176

(2)

Known alpha calibration parameters

サンブル測定_AMSR_15分.txt
 Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results
 Multiplication: 1.014 +- 0.001
 Alpha: 1.091 +- 0.008
 Multiplication correction factor: 1.000
 Pu240e mass (g): 1.101 +- 0.005
 Pu240e (%): 35.554
 Pu mass (g): 3.097 +- 0.013
 1.044
 Declared Pu240e mass (g): 2.936
 Declared Pu mass (g): -0.162 +- 0.013
 Declared - assay Pu mass (g): -5.512 +- 0.459

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

Passive cycle raw data

Cycle	Singles	RtA	A	Scaler1	Scaler2	QC Tests
1	48062	16138	4928	13416	7313	Pass
2	48157	16415	4947	13386	7463	Pass
3	48462	17036	5010	13547	7471	Pass
4	48999	17449	5122	13559	7568	Pass
5	48570	16717	5033	13476	7568	Pass
6	48335	16666	4984	13400	7464	Pass
7	48448	16478	5007	13479	7461	Pass
8	47981	16145	4911	13394	7261	Pass

(3)

サンブル測定_AMSR_15分.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests	
9	48155	16425	4947	13436	7489	Pass
10	48105	16006	4937	13296	7491	Pass
11	48563	16963	5031	13435	7542	Pass
12	48770	16811	5074	13538	7545	Pass
13	48735	17061	5067	13506	7506	Pass
14	48172	16616	4950	13469	7301	Pass
15	48544	17161	5027	13496	7389	Pass
16	48305	16482	4978	13482	7455	Pass
17	48971	17020	5116	13621	7470	Pass
18	48582	16727	5035	13393	7533	Pass
19	48268	16429	4970	13411	7446	Pass
20	48819	16825	5084	13628	7366	Pass
21	48460	16852	5010	13781	7471	Pass
22	48333	16704	4984	13362	7649	Pass
23	47743	16366	4863	13211	7427	Pass
24	48357	17065	4989	13477	7604	Pass
25	48275	16471	4972	13334	7462	Pass
26	48972	17027	5116	13678	7716	Pass
27	48569	16905	5032	13476	7382	Pass
28	48526	17124	5024	13357	7495	Pass
29	48607	16827	5040	13577	7500	Pass
30	48245	15984	4966	13465	7556	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1594.693	373.779	100.746	1.086	Pass
2	1597.860	382.383	103.157	1.111	Pass
3	1608.029	400.993	115.929	1.117	Pass
4	1625.934	411.033	120.301	1.136	Pass
5	1611.630	389.588	110.559	1.096	Pass
6	1603.795	389.521	105.553	1.129	Pass
7	1607.563	382.484	103.828	1.106	Pass
8	1591.992	374.579	107.404	1.046	Pass
9	1597.794	382.717	107.020	1.087	Pass
10	1596.127	369.077	101.711	1.057	Pass
11	1611.397	397.859	117.728	1.091	Pass
12	1618.299	391.356	116.349	1.068	Pass
13	1617.132	399.927	117.799	1.100	Pass
14	1598.361	388.986	104.112	1.136	Pass
15	1610.763	404.595	122.211	1.095	Pass
16	1602.795	383.584	108.934	1.079	Pass
17	1625.000	396.926	111.471	1.125	Pass
18	1612.030	389.855	113.568	1.079	Pass
19	1601.561	382.084	102.001	1.117	Pass
20	1619.932	391.490	108.423	1.119	Pass
21	1607.963	394.857	110.378	1.123	Pass
22	1603.728	390.788	109.510	1.109	Pass
23	1584.057	383.549	112.226	1.058	Pass
24	1604.529	402.660	116.076	1.124	Pass
25	1601.795	383.418	107.411	1.088	Pass
26	1625.033	397.160	105.211	1.167	Pass
27	1611.597	395.891	114.157	1.104	Pass
28	1610.163	403.461	119.978	1.103	Pass
29	1612.864	393.023	111.791	1.105	Pass
30	1600.794	367.377	94.923	1.094	Pass

(4)

サンプル測定_MCSR_5分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:20:43
 Results file name: 92K02043_01_VER
 Inspection number:
 Item id: D 5min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-142042.seq.dataz
 Ending comment:

Isotopes id: D					
Isotopes source code: 0D	1.0670	0.0000	0.9961	0.0000	
Pu238:					
Pu239:	64.7610	0.0000	66.1592	0.0000	
Pu240:	25.1940	0.0000	25.7153	0.0000	
Pu241:	4.7090	0.0000	2.7670	0.0000	
Pu242:	4.2690	0.0000	4.3625	0.0000	
Pu date: 07.09.07			19.02.20		
Am241: 5.2010		0.0000	7.2435		
Am date: 07.09.07			19.02.20		

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプル測定_MCSR_5分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 10
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 1231.625 +- 1.841
 Doubles: 328.216 +- 2.186
 Triples: 96.686 +- 2.126
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 1.073
 Multiplication: 1.031
 Multiplication corrected doubles: 271.265 +- 0.603
 Pu240e mass (g): 0.837 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 2.354 +- 0.005

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.018 +- 0.002
 Alpha: 0.938 +- 0.016
 Multiplication correction factor: 1.000

(2)

サンプル測定_MCSR_5分.txt
 Pu240e mass (g): 0.906 +- 0.010
 Pu240e (%) : 35.554
 Pu mass (g) : 2.549 +- 0.027

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	37169	12622	2661	0	0	Off
2	37275	12496	2773	0	0	Off
3	37463	12721	2790	0	0	Off
4	37083	12243	2621	0	0	Off
5	37087	12465	2613	0	0	Off
6	36839	12221	2739	0	0	Off
7	37242	12500	2689	0	0	Off
8	37117	12998	2789	0	0	Off
9	37364	12715	2682	0	0	Off
10	37083	12566	2742	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1231.518	332.091	101.810	0.894	Off
2	1235.052	324.155	96.567	0.888	Off
3	1241.320	331.091	97.190	0.916	Off
4	1228.651	320.786	84.711	0.946	Off
5	1228.784	328.456	94.555	0.921	Off
6	1220.516	316.117	96.085	0.854	Off
7	1233.952	327.089	95.572	0.908	Off
8	1229.784	340.360	111.502	0.877	Off
9	1238.019	334.492	93.664	0.954	Off
10	1228.651	327.522	95.195	0.912	Off

サンプル測定_MCSR_10分.txt

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:26:44
 Results file name: 92K02644_01_VER
 Inspection number:
 Item id: D.10min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-142644.seq.datanz
 Ending comment:

Isotopics id: D				
Isotopics source code: 0D	1.0670 +-	0.0000	0.9961 +-	
Pu238:				
Pu239:	64.7610 +-	0.0000	66.1592 +-	
Pu240:	25.1940 +-	0.0000	25.7153 +-	
Pu241:	4.7090 +-	0.0000	2.7670 +-	
Pu242:	4.2690 +-	0.0000	4.3625 +-	
Pu date: 07.09.07			19.02.20	
Am241: 5.2010 +-		0.0000	7.2435 +-	
Am date: 07.09.07			19.02.20	

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

サンプル測定_MCSR_10分.txt

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000

Number Passive cycles: 20
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 1231.215 +- 1.692
 Doubles: 327.187 +- 1.636
 Triples: 96.223 +- 1.305
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 1.073
 Multiplication: 1.030
 Multiplication corrected doubles: 271.325 +- 0.520
 Pu240e mass (g): 0.837 +- 0.002
 Pu240e (%): 35.554
 Pu mass (g): 2.355 +- 0.005

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.018 +- 0.001
 Alpha: 0.942 +- 0.007
 Multiplication correction factor: 1.000

(2)

サンブルD測定_MCSR_10分.txt
 Pu240e mass (g): 0.904 +- 0.004
 Pu240e (%): 35.554
 Pu mass (g): 2.544 +- 0.012

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	37134	12765	2628	0	0	Off
2	37464	12701	2641	0	0	Off
3	37283	12536	2663	0	0	Off
4	37080	12358	2700	0	0	Off
5	36726	12221	2694	0	0	Off
6	37213	12709	2633	0	0	Off
7	37623	12693	2787	0	0	Off
8	37063	12597	2618	0	0	Off
9	36985	12453	2650	0	0	Off
10	37397	12560	2662	0	0	Off
11	36909	12080	2737	0	0	Off
12	36968	12379	2728	0	0	Off
13	37270	12619	2730	0	0	Off
14	37375	12609	2751	0	0	Off
15	37152	12625	2637	0	0	Off
16	36900	12094	2657	0	0	Off
17	36987	12296	2708	0	0	Off
18	36995	12371	2610	0	0	Off
19	37253	12464	2646	0	0	Off
20	37421	12706	2677	0	0	Off

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1230.351	337.959	108.490	0.883	Off
2	1241.353	335.393	101.171	0.913	Off
3	1235.319	329.157	93.294	0.931	Off
4	1228.551	321.987	93.470	0.897	Off
5	1216.749	317.618	95.188	0.866	Off
6	1232.985	335.926	100.154	0.922	Off
7	1246.654	330.258	97.712	0.909	Off

(3)

サンブルD測定_MCSR_10分.txt

8	1227.984	332.691	102.145	0.895	Off
9	1225.384	326.822	100.335	0.878	Off
10	1239.119	329.991	96.795	0.914	Off
11	1222.850	311.483	85.635	0.896	Off
12	1224.817	321.753	93.272	0.897	Off
13	1234.885	329.690	101.283	0.886	Off
14	1238.386	328.657	91.949	0.937	Off
15	1230.951	332.991	98.335	0.919	Off
16	1222.550	314.617	85.444	0.912	Off
17	1225.450	319.652	87.713	0.921	Off
18	1225.717	325.421	97.064	0.891	Off
19	1234.319	327.323	94.142	0.917	Off
20	1239.920	334.359	100.967	0.909	Off

(4)

INCC 6.18.440.18406 (IAEATest) UNVALIDATED!

Facility: JMG-
 Material balance area: JM2G
 Detector type: AVIS
 Detector id: AVIS
 Electronics id: MCSR
 Inventory change code:
 I/O code:
 Measurement date: 19.02.20 14:38:43
 Results file name: 92K03843_01_VER
 Inspection number:
 Item id: D.15min
 Stratum id: XXXX
 Bias uncertainty: 0.000
 Random uncertainty: 0.000
 Systematic uncertainty: 0.000
 Relative std deviation: 0.000
 Material type: Pu
 Original declared mass: 0.000
 Measurement option: Verification
 Data source: Shift register
 QC tests: Off
 Error calculation: Sample method
 Accidents method: Measured
 Inspector name:
 Passive comment: Original file name
 JMG-JM2G_AVIS_20190220-143842.seq.dataz
 Ending comment:

Isotopes id: A					
Isotopes source code: 0D					
Pu238:	1.1680 +-	0.0000	1.1220 +-		
Pu239:	63.2610 +-	0.0000	64.0449 +-		
Pu240:	26.6430 +-	0.0000	26.9593 +-		
Pu241:	4.1840 +-	0.0000	3.0701 +-		
Pu242:	4.7440 +-	0.0000	4.8036 +-		
Pu date:	12.06.21		19.02.20		
Am241:	3.1000 +-	0.0000	4.2658 +-		
Am date:	12.06.21		19.02.20		

Predelay: 1.500
 Gate length: 64.000
 High voltage: 1740
 Die away time: 30.0000
 Efficiency: 0.6750
 Multiplicity deadtime: 72.6000
 Coefficient A deadtime: 0.2904
 Coefficient B deadtime: 0.0211

(1)

Coefficient C deadtime: 0.0000
 Doubles gate fraction: 0.7930
 Triples gate fraction: 0.6225
 Normalization constant: 1.0000 +- 0.0000
 Passive singles bkgrnd: 7.560 +- 0.078
 Passive doubles bkgrnd: 0.062 +- 0.016
 Passive triples bkgrnd: 0.008 +- 0.007
 Active singles bkgrnd: 0.000 +- 0.000
 Active doubles bkgrnd: 0.000 +- 0.000
 Active triples bkgrnd: 0.000 +- 0.000
 Number Passive cycles: 30
 Count time (sec): 30.000

Passive messages

Known alpha: passed stratum rejection limits
 Multiplicity: passed stratum rejection limits

Passive results

Singles: 1230.794 +- 1.585
 Doubles: 327.911 +- 1.391
 Triples: 95.377 +- 1.021
 Scaler 1: 0.000 +- 0.000
 Scaler 2: 0.000 +- 0.000

Known alpha results

Alpha: 0.847
 Multiplication: 1.009
 Multiplication corrected doubles: 310.887 +- 0.552
 Pu240e mass (g): 0.959 +- 0.002
 Pu240e (%): 37.857
 Pu mass (g): 2.534 +- 0.005

Known alpha calibration parameters

Alpha weight: 1.000000e+000
 Rho zero: 4.707231e-001
 k: 2.166000e+000
 a: 0.000000e+000
 b: 3.240449e+002
 variance a: 0.000000e+000
 variance b: 0.000000e+000
 covariance ab: 0.000000e+000
 sigma x: 0.000000e+000

PRIMARY RESULT

Passive multiplicity results

Multiplication: 1.017 +- 0.001
 Alpha: 0.925 +- 0.008
 Multiplication correction factor: 1.000

(2)

サンプルD測定_MCSR_15分.txt

Passive cycle DTC rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	1232.318	324.722	91.111	0.924	Off
2	1226.517	321.420	88.664	0.924	Off
3	1228.384	323.221	90.558	0.920	Off
4	1234.185	348.597	109.306	0.928	Off
5	1243.120	340.995	104.360	0.920	Off
6	1234.985	322.921	93.206	0.903	Off
7	1218.649	329.222	93.924	0.928	Off
8	1238.253	327.657	92.215	0.931	Off
9	1228.484	324.021	97.021	0.885	Off
10	1215.482	309.915	90.077	0.861	Off
11	1244.287	324.223	91.794	0.917	Off
12	1225.317	314.851	87.909	0.898	Off
13	1229.184	329.156	99.463	0.875	Off
14	1235.786	336.126	108.344	0.875	Off
15	1231.952	330.690	102.114	0.886	Off
16	1220.083	325.587	96.777	0.894	Off
17	1225.384	328.155	95.468	0.914	Off
18	1245.554	333.093	101.001	0.903	Off
19	1239.753	329.757	96.447	0.915	Off
20	1227.051	323.020	93.247	0.903	Off
21	1228.284	319.053	86.963	0.923	Off
22	1231.151	327.256	88.789	0.950	Off
23	1227.484	327.089	94.519	0.914	Off
24	1236.752	337.593	97.474	0.945	Off
25	1239.220	331.125	94.051	0.936	Off
26	1210.314	322.819	99.971	0.863	Off
27	1222.216	334.424	96.807	0.935	Off
28	1228.418	327.989	93.894	0.922	Off
29	1229.985	326.455	94.018	0.914	Off
30	1245.254	336.194	92.003	0.972	Off

(4)

サンプルD測定_MCSR_15分.txt

Pu240e mass (g): 0.913 +- 0.005
 Pu240e (%): 37.857
 Pu mass (g): 2.411 +- 0.012

Passive multiplicity calibration parameters

Spontaneous fission rate: 4.735000e+002
 1st factorial moment spontaneous fission: 2.154000e+000
 2nd factorial moment spontaneous fission: 3.789000e+000
 3rd factorial moment spontaneous fission: 5.211000e+000
 1st factorial moment induced fission: 3.163000e+000
 2nd factorial moment induced fission: 8.240000e+000
 3rd factorial moment induced fission: 1.732100e+001
 a: 1.000000e+000
 b: 0.000000e+000
 c: 0.000000e+000
 sigma x: 0.000000e+000
 alpha weight: 0.000000e+000
 efficiency correction factor: 1.000000e+000

END PRIMARY RESULT

Passive cycle raw data

Cycle	Singles	R+A	Scaler1	Scaler2	QC Tests
1	37193	12432	0	0	Off
2	37019	12314	0	0	Off
3	37075	12442	0	0	Off
4	37249	13018	0	0	Off
5	37517	13007	0	0	Off
6	37273	12408	0	0	Off
7	36783	12342	0	0	Off
8	37371	12442	0	0	Off
9	37078	12459	0	0	Off
10	36688	11936	0	0	Off
11	37552	12489	0	0	Off
12	36983	12193	0	0	Off
13	37099	12474	0	0	Off
14	37297	12738	0	0	Off
15	37182	12665	0	0	Off
16	36826	12351	0	0	Off
17	36985	12532	0	0	Off
18	37590	12772	0	0	Off
19	37416	12596	0	0	Off
20	37035	12385	0	0	Off
21	37072	12221	0	0	Off
22	37158	12540	0	0	Off
23	37048	12438	0	0	Off
24	37326	12669	0	0	Off
25	37400	12665	0	0	Off
26	36533	12196	0	0	Off
27	36890	12584	0	0	Off
28	37076	12581	0	0	Off
29	37123	12547	0	0	Off
30	37581	12825	0	0	Off

(3)

【IPCA 性能確認試験】

(1) 4.1 長期管理限界の妥当性確認

October 2018 IPCA 2 Report

Prepared for:

Japan Nuclear Material Control Center

Prepared by:

M.T. Andrews¹, J. Archuleta², A. Favalli², D. Henzlova², C.D. Rael², J.B. Marlow², M.T. Swinhoe²

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Date: 2018-11-17

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November 2018

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Acronyms

CPS	Counts Per Second
FRAM	Fixed Energy Response Function Analysis with Multiple Efficiencies
HPGe	High Purity Germanium
IPCA 2	Improved Plutonium Canister Assay System 2
LANL	Los Alamos National Laboratory
MOX	Mixed- OXide
RSD	Relative Standard Deviation

Overview

This report summarizes the analysis of IPCA2 data collected in October 2018. Measurements of plutonium neutron efficiency, AmLi stability, Curium stability and HPGe isotopic analysis of plutonium samples were performed and analyzed. Measurements were compared to room temperature and humidity, and no dependence was observed. The end of this report contains notes on anomalous measurements and a summary of all IPCA 2 measurements performed since October 2018.

Plutonium Efficiency

Measurements

Eight plutonium efficiency measurements were performed from October 15 – 25th 2018 with the FCZ-156 source (823.6 neutrons s⁻¹). This source was placed in the IPCA 2 for a duration of 1800 s during which 60 cycles of 30 s were used to calculate a singles rate (in counts per second). The signals rate was divided by source activity to determine an average efficiency for the month of October 2018 as 7.30 ± 0.06 (1s) %. All measurements were within the control chart 2σ bands, denoted with dotted lines in Figure 1, all Pu efficiency measurements since May 2013 are shown in Figure 2.

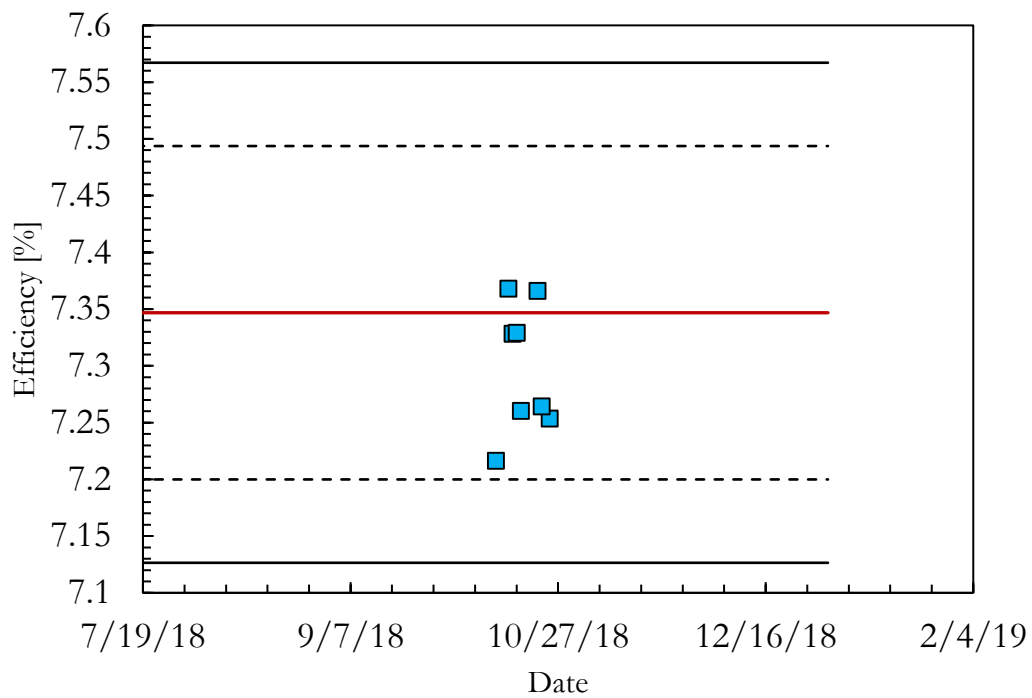


Figure 1: Pu efficiency measurements for October 2018.

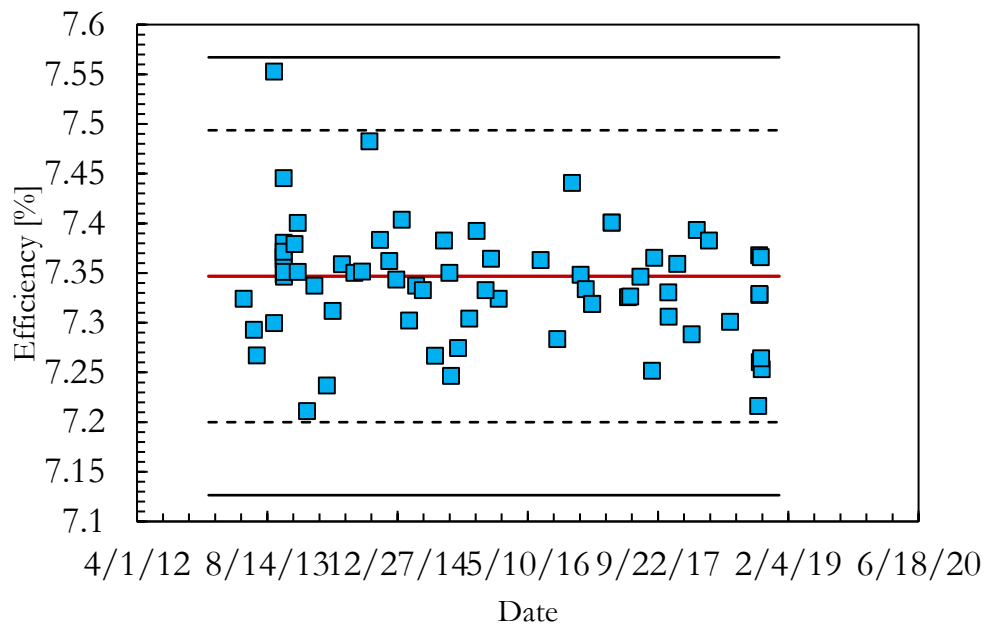


Figure 2: Pu efficiency measurements for May 2013 – October 2013.

Dependence on Weather

Room temperature and humidity data has been collected alongside IPCA 2 measurements in the month of October. Plutonium efficiency measurements appear to show no dependence on humidity, Figure 3, or room temperature, Figure 4. These measurements will continue on a monthly basis.

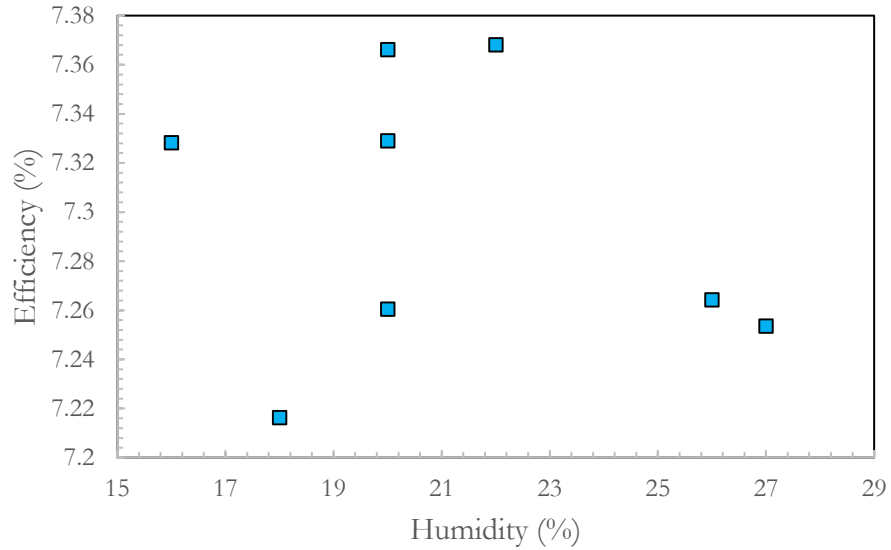


Figure 3: Pu efficiency measurements show no dependence on humidity.

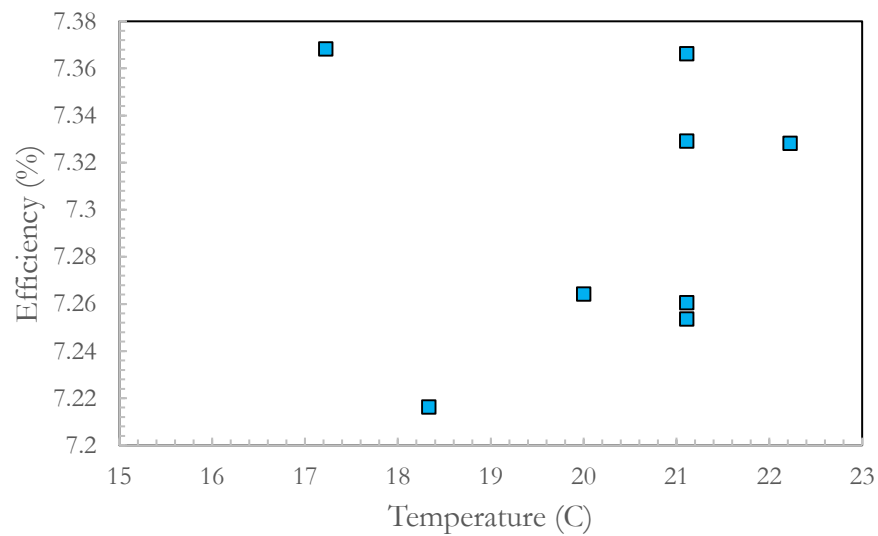


Figure 4: Pu efficiency measurements show no clear dependence on room temperature.

AmLi Stability

Measurements

Ten AmLi measurements were performed in October of 2018 with an average (decay corrected) count of 24477 ± 27 . With one exception they were within the 3σ control line, Figure 5, however they were consistently low when compared to historical data, Figure 6. In October of 2018 we began to perform a Curium stability measurement, to assess its feasibility as an alternative to AmLi, those measurements are described in the next section. No dependence on humidity or room temperature were observed, Figure 7 and Figure 8 respectively.

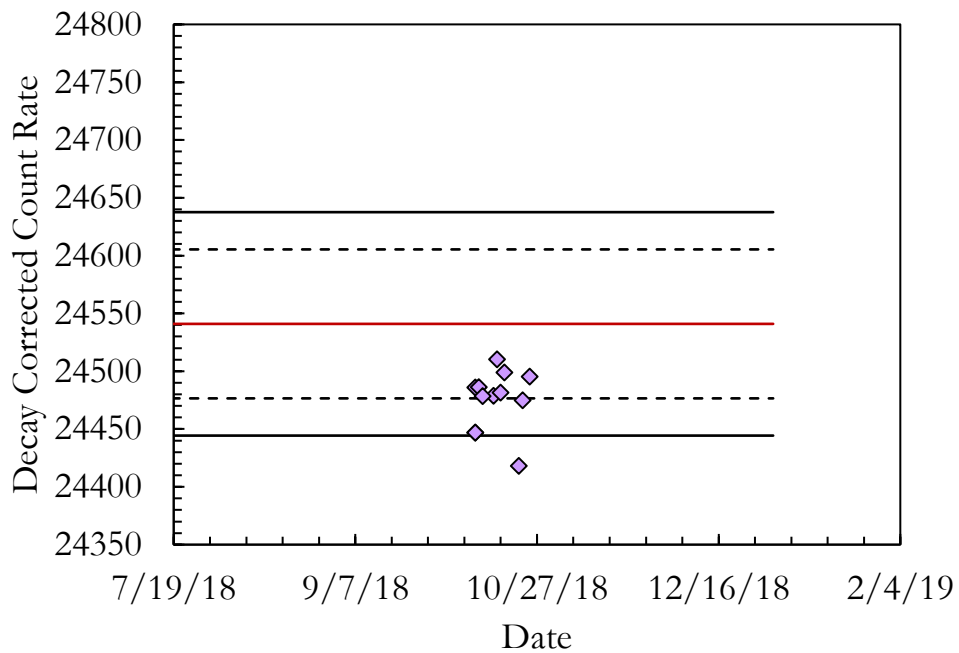


Figure 5: AmLi stability measurements in the month of October 2018.

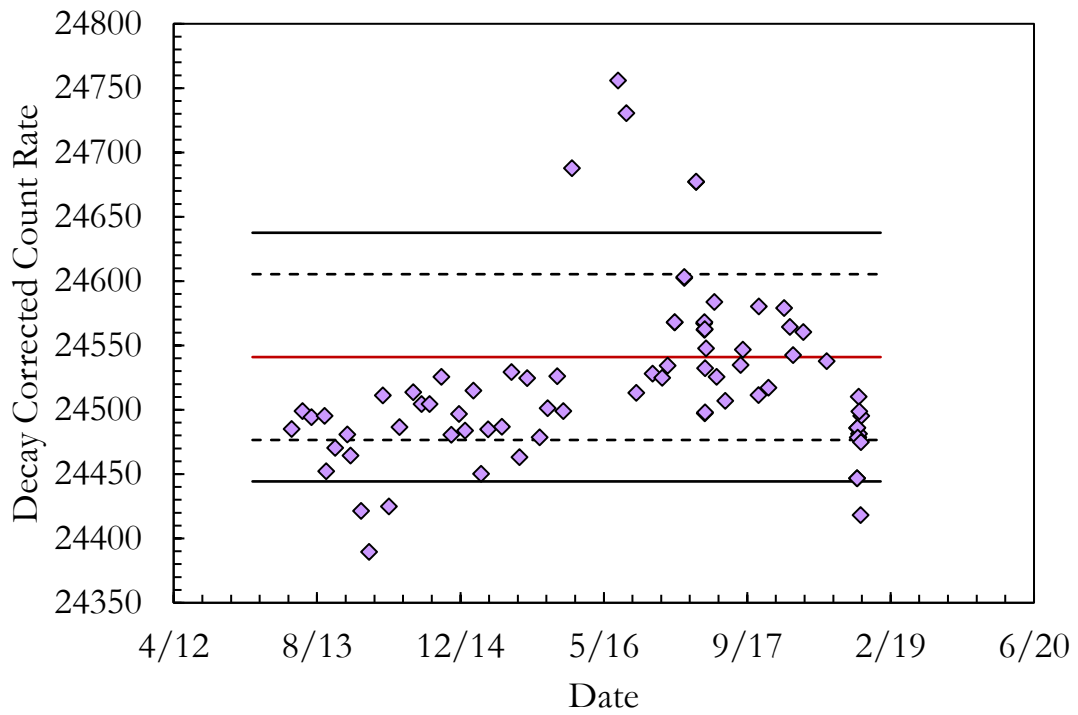


Figure 6: AmLi stability measurements from May 2013 – October 2018.

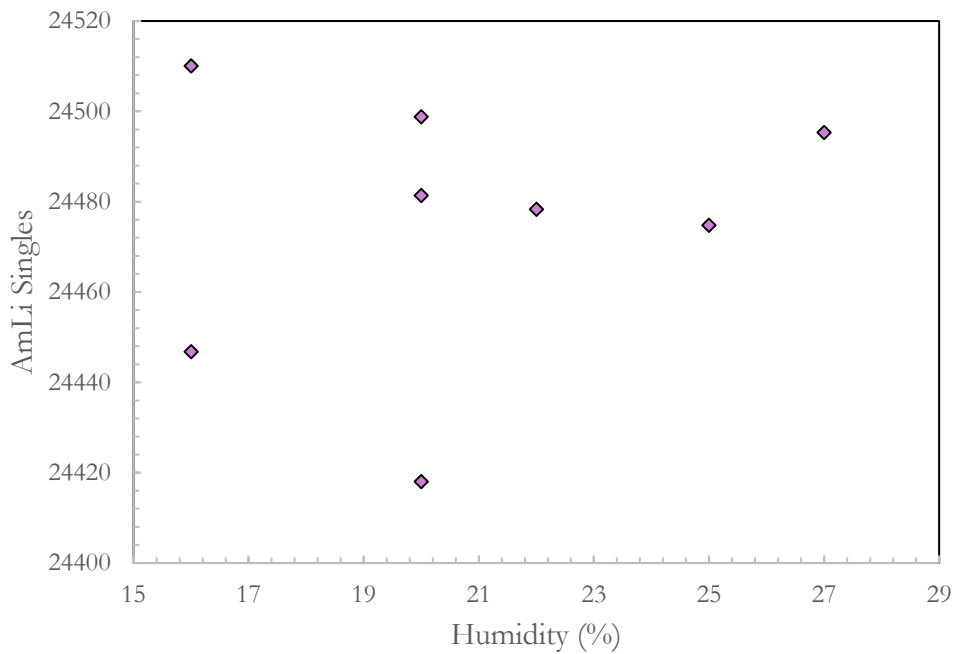


Figure 7: AmLi stability measurements showed no dependence on humidity.

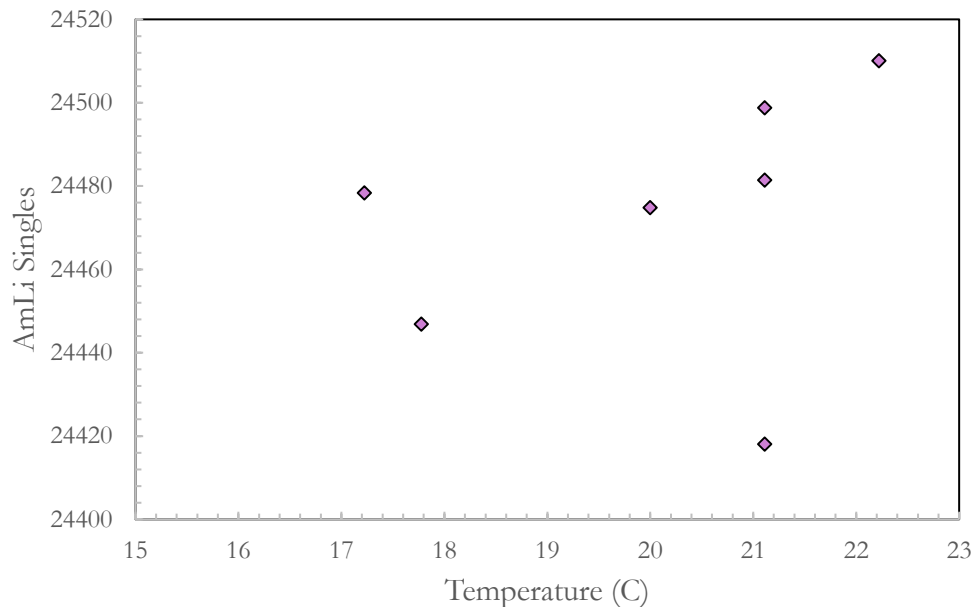


Figure 8: AmLi stability measurements showed no clear dependence on room temperature.

Curium Stability

We are currently examining the use of a Curium source as a replacement for the AmLi stability measurements. Seven curium measurements were performed in the month of October 2018 with an average count of 986 ± 2 . So far no instabilities have been observed, however measurements should continue throughout 2018 and 2019 to confirm. The count rates are plotted in Figure 9 and so far no dependence on humidity and room temperature has been observed.

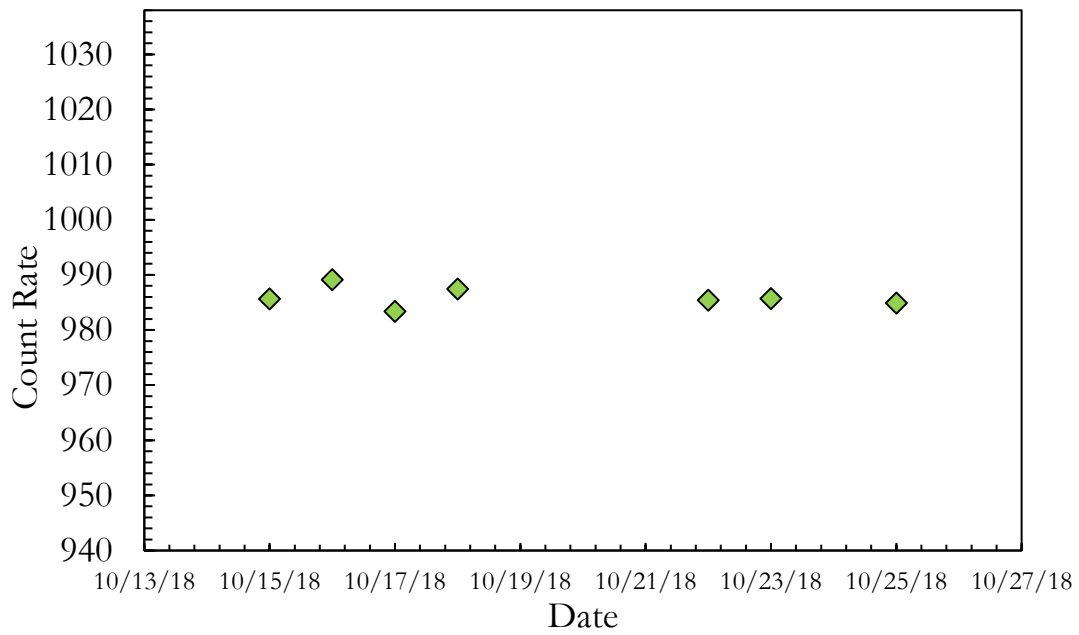


Figure 9: Curium count rates appear consistent in October of 2018.

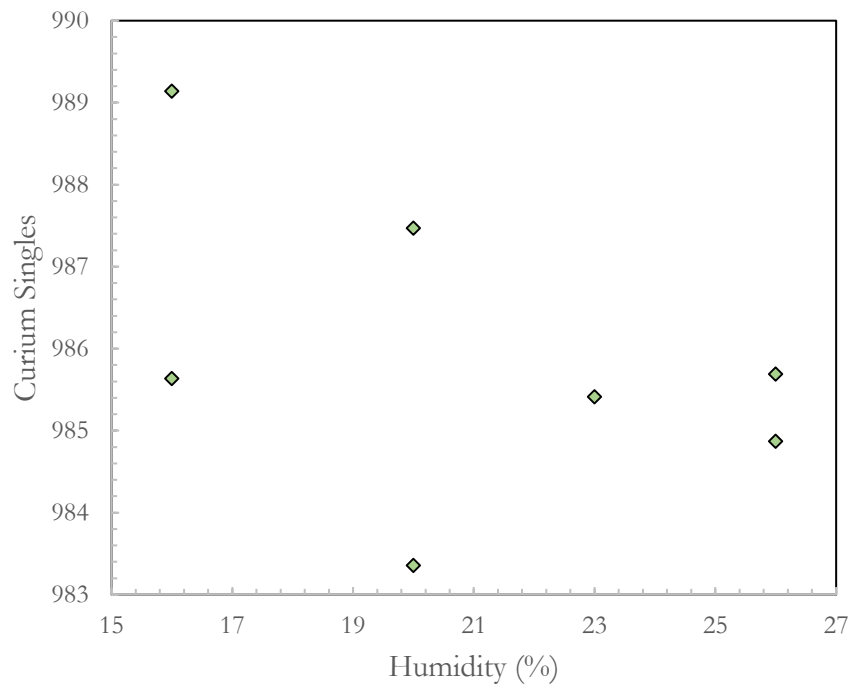


Figure 10: Curium count rates appear to have no dependence on humidity so far.

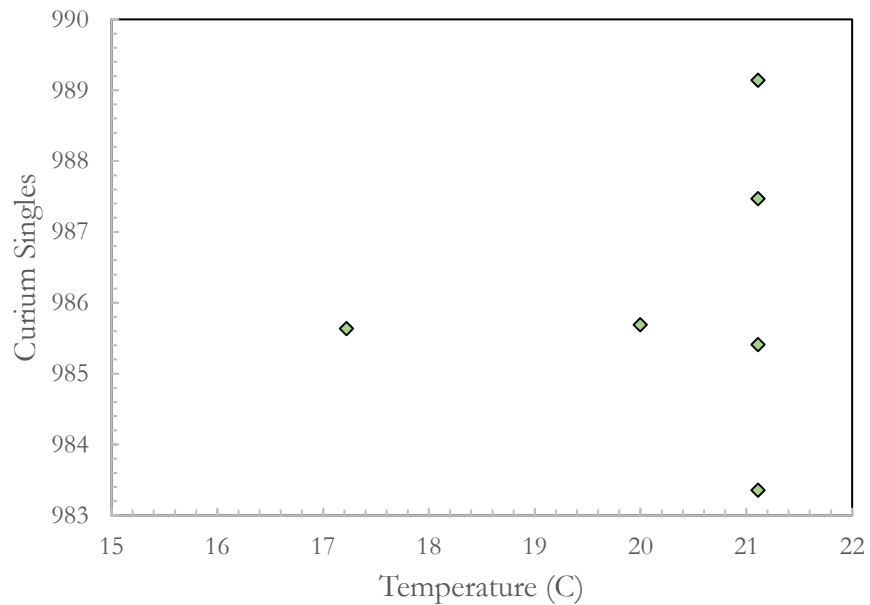


Figure 11: Curium count rates appear to have no dependence on room temperature so far.

Plutonium Isotopics

In the month of October 2018 seven Pu isotopic measurements were made with the top detector (12698B), 4 with the middle (41993A), and none with the middle (4200A). All measurements made with the top detector, were within control bounds, Figure 12 and Figure 13. Two of the October middle detector $^{240/239}\text{Pu}$ calculations were outside of the control lines, Figure 15. These measurements were accompanied by a relative standard deviation (RSD) calculated by FRAM as greater than 10 %.

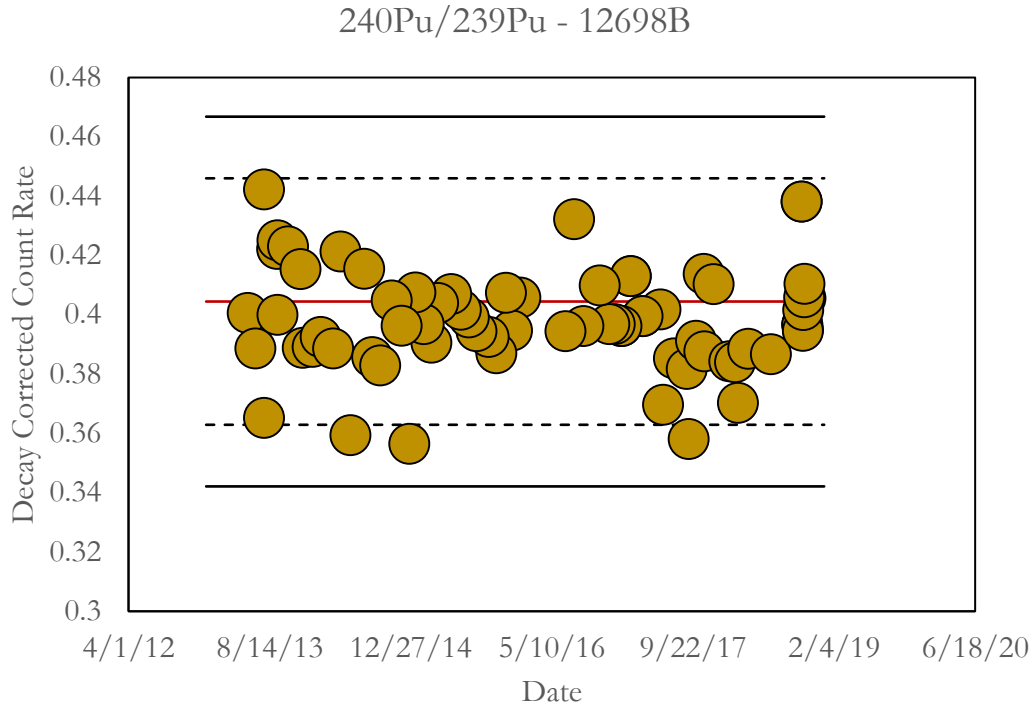


Figure 12: $^{240}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe.

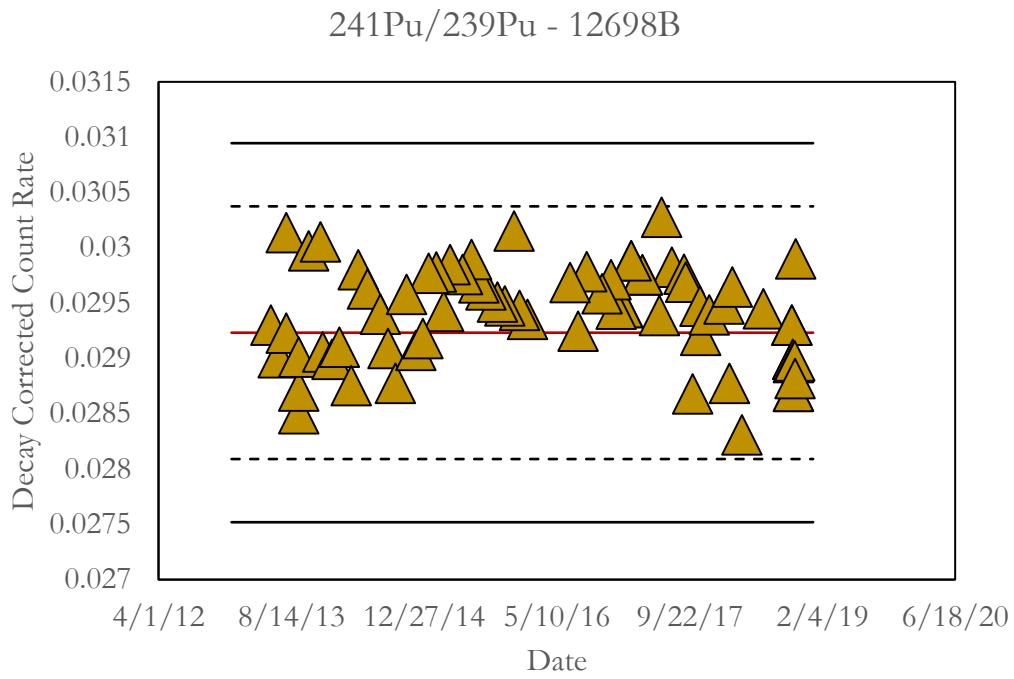


Figure 13: $^{241}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe.

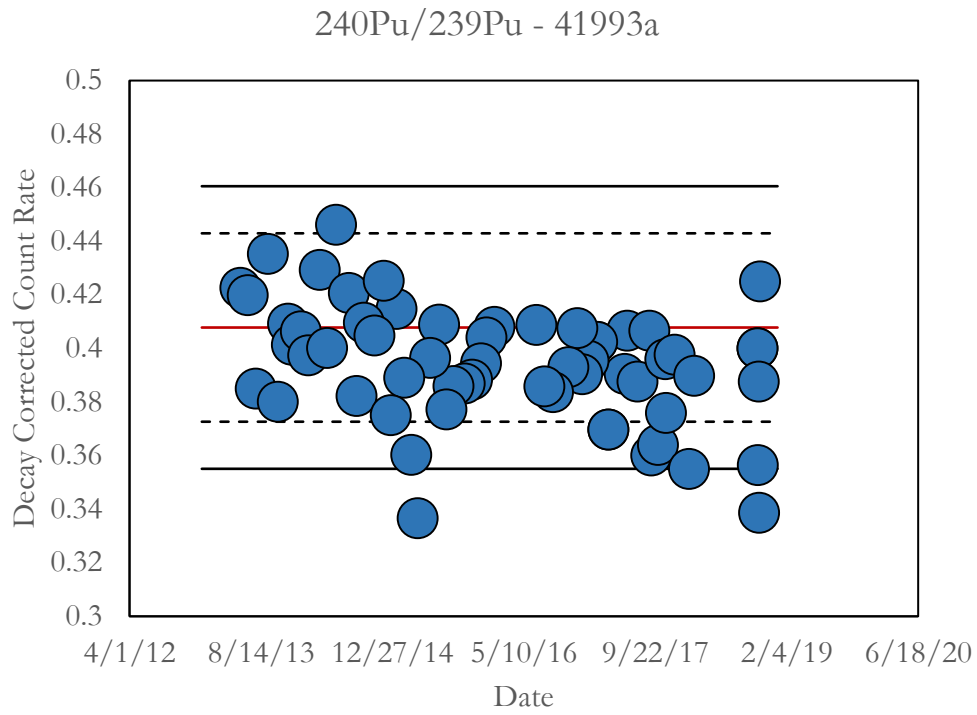


Figure 14: $^{240}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe.

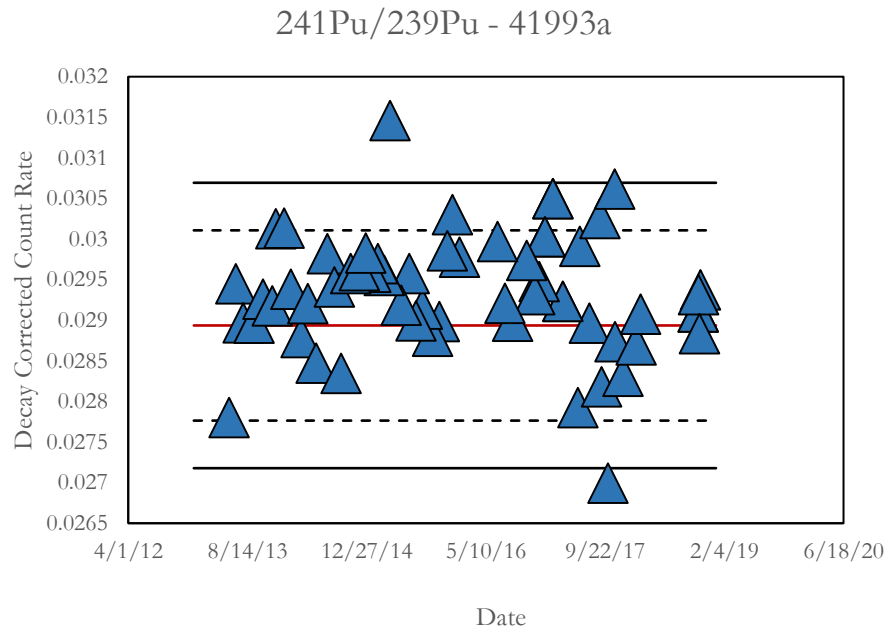


Figure 15: $^{241}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe.

Notes on Instrument Anomalies

- Middle (41993a) and bottom (4200a) detectors failed after January 2018
- Troubleshooting was performed in October 2018 and resulted in the resurrection of middle (41993a) HPGe detector.
 - Middle detector X-Cooler and DSPEC were replaced with LANL spares.
- Noise on IPCA2 neutron signal was observed during October control measurements.
 - Possible cause may be related to cell-phone repeaters recently installed in the building.

Load Cell Data

Seven load cell measurements were performed in October 2018, each measured a weight of exactly 22.69 kg.

Response to JSGO Requests in October 2018

During the October 24 – 26 2018 visit at Los Alamos National Laboratory the following information was requested:

- When was the current HPGe system purchased?
 - The HPGe detectors were purchased on May 18th 2009.
- What is the actual diameter of the HPGe opening in IPCA 2?
 - Below is a figure from the IPCA 2 assembly drawing document, 68Y-156222. The inner diameter of the tungsten opening looks to be 3.461” [87.91 cm].

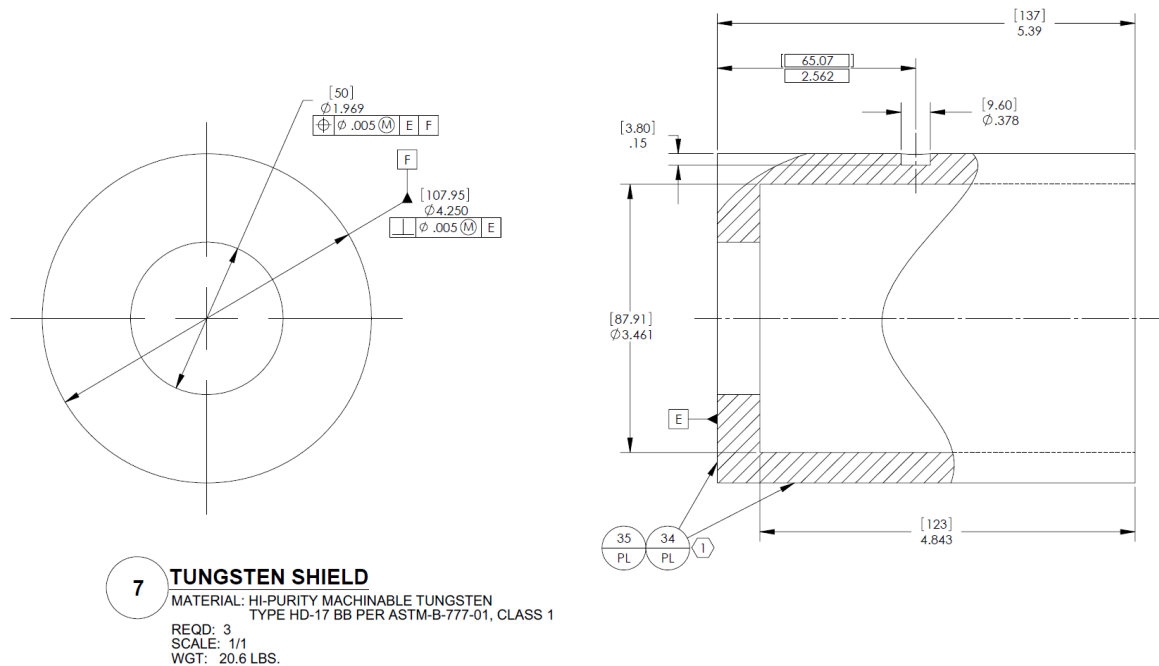


Figure 16: IPCA2 drawing of tungsten shield containing HPGe detector.

Summary on Number of Measurements Performed Since Oct 2018

Table 1: The number of measurements taken monthly organized by each type.

Month	Pu Eff	AmLi	Cu	12698B (Top)	41993A (Middle)	4200A (Bottom)	Load Cell
October 2018	8	10	7	7	5	0	7
Total	8	10	7	7	5	0	7

LA-CP-18-20842

November 2018 IPCA2 Report

Prepared for:

Japan Atomic Energy Agency

Prepared by:

D. Henzlova¹, J. Archuleta¹, M.T. Andrews², A. Favalli¹, J.B. Marlow¹, C.D. Rael¹, M.T. Swinhoe¹

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² Monte Carlo Methods, Codes, and Applications Group (XCP-3)

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Date: 2018-12-7

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December 2018

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Acronyms

cps	counts per second
FRAM	Fixed Energy Response Function Analysis with Multiple Efficiencies
HPGe	High Purity Germanium
IPCA2	Improved Plutonium Canister Assay System 2
LANL	Los Alamos National Laboratory
MOX	Mixed-OXide
RSD	Relative Standard Deviation

1. Overview

This report summarizes the analysis of IPCA2 data collected in November 2018. Measurements of Plutonium neutron efficiency, AmLi stability, Curium stability and HPGe isotopic analysis of Plutonium samples were performed and analyzed. Measurements were compared to room temperature and humidity, and no dependence was observed. The end of this report contains summary of all IPCA2 measurements performed since October 2018.

2. Plutonium Efficiency

2.1. Efficiency Monitoring

Three plutonium efficiency measurements were performed on November 14, 19 and 26, 2018 with the FZC158 source (823.6 neutrons s^{-1} emission rate). This source was placed in the IPCA2 for a duration of 1800 s during which 60 cycles of 30 s were used to calculate a Singles rate (in counts per second, cps). The Singles rate was divided by source activity to determine an average efficiency for the month of November 2018, which corresponds to 7.29 ± 0.06 . All measurements were within the control chart 2σ bands, denoted with dotted lines in Figure 1, all Pu efficiency measurements since May 2013 are shown in Figure 2.

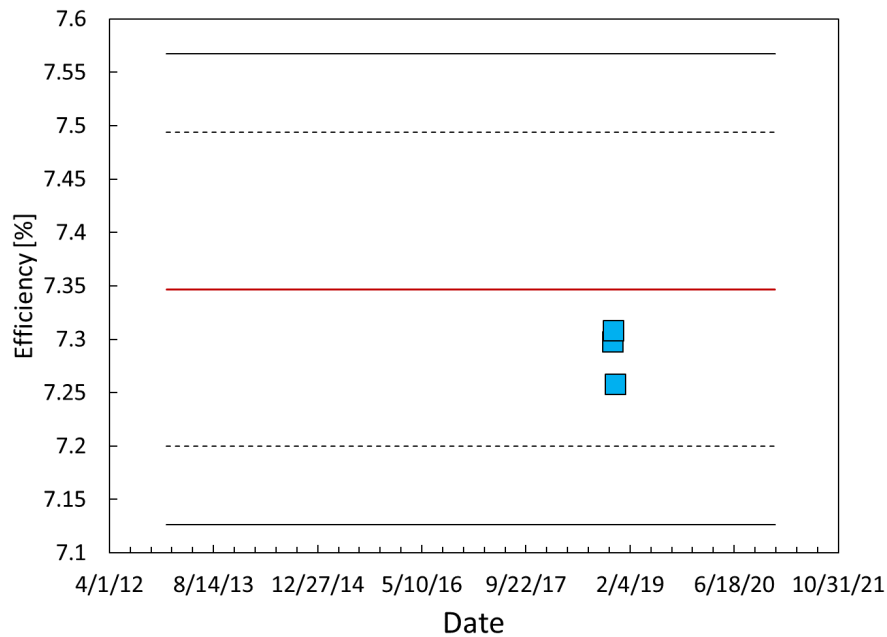


Figure 1: Pu efficiency measurements for November 2018.

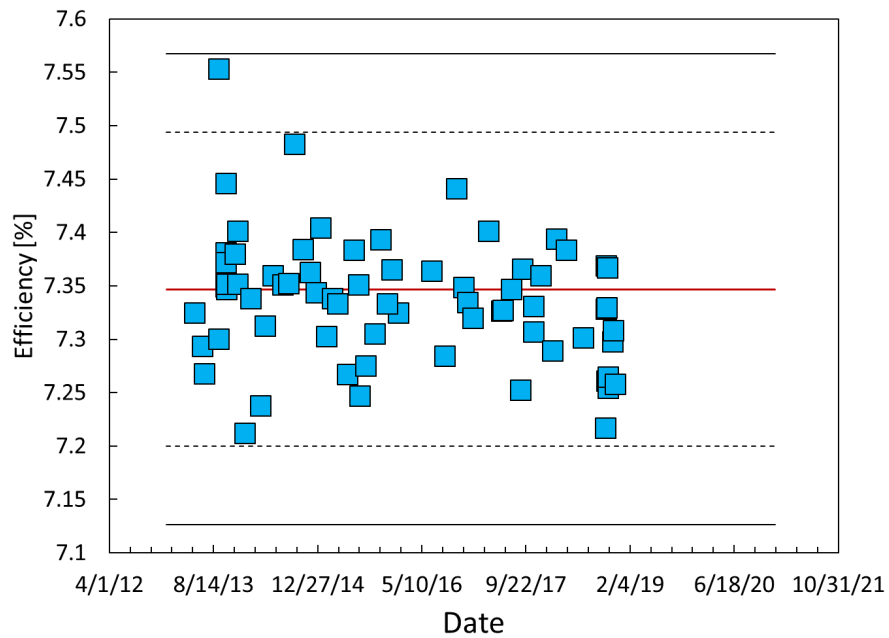


Figure 2: Pu efficiency measurements for May 2013 – November 2018.

2.1. Efficiency Dependence on Environmental Conditions

Room temperature and humidity data has been collected alongside IPCA2 measurements since October 2018. Plutonium efficiency measurements exhibit no dependence on humidity, Figure 3, or room temperature, Figure 4. Note that the data in Figure 3 and 4 only include October and November 2018 results. These measurements will continue on a monthly basis.

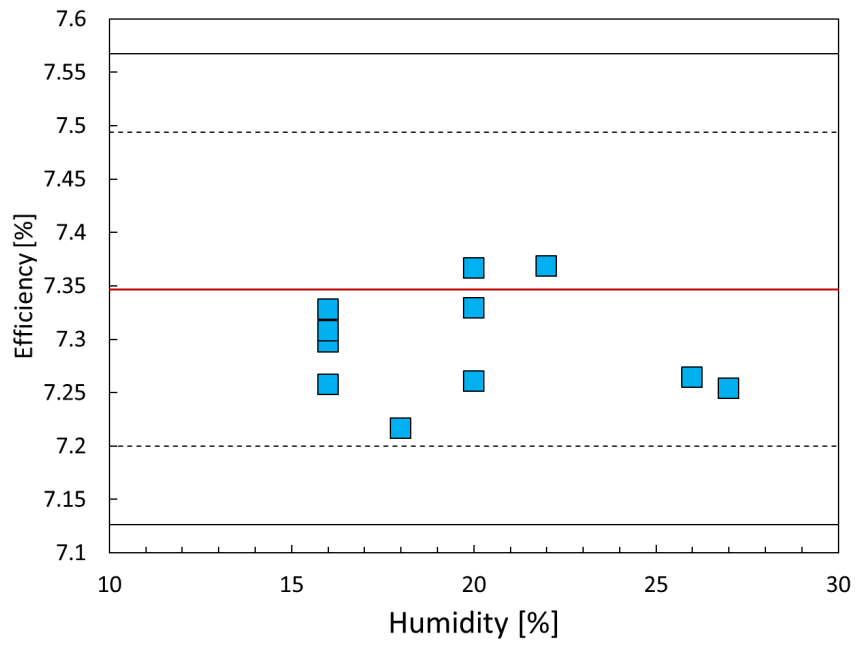


Figure 3: Pu efficiency measurements as a function of humidity.

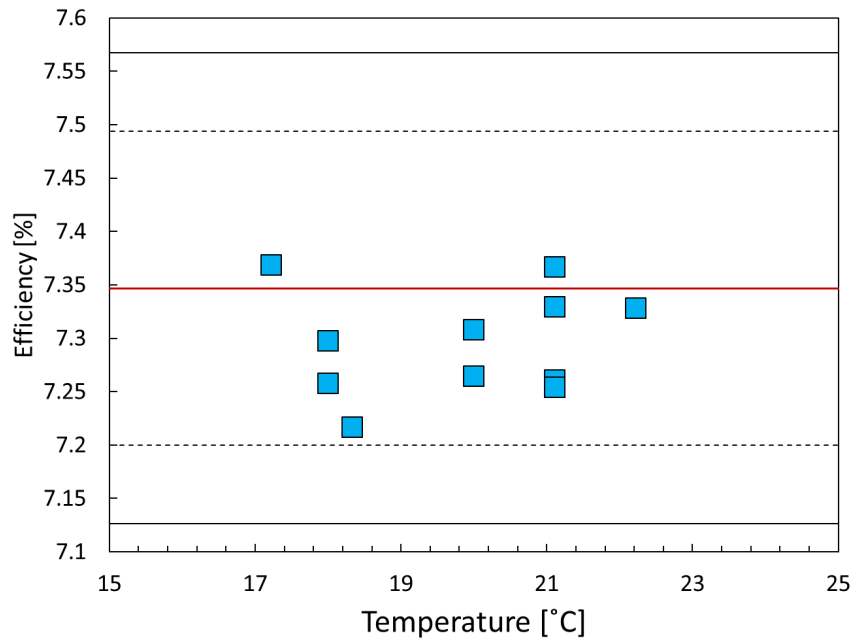


Figure 4: Pu efficiency measurements as a function of room temperature.

3. AmLi Stability

3.1. AmLi Stability Results

Three AmLi stability measurements were performed in November of 2018 with an average (decay corrected) count rate of 24462 ± 52 . With one exception they were within the 3σ control line, Figure 5. Overview of all AmLi stability data is shown in Figure 6. In October of 2018 we began to perform a Curium stability measurement, to assess its feasibility as an alternative to AmLi, those measurements are described in the next section. No dependence of AmLi count rate on humidity or room temperature was observed, as shown in Figure 7 and Figure 8, respectively. Note that the data in Figure 7 and 8 only include October and November 2018 results and are systematically lower than average, which was established including the higher count rate data points shown in Figure 6. New control bounds will be established based on all JFY18 data and subsequently will be updated annually.

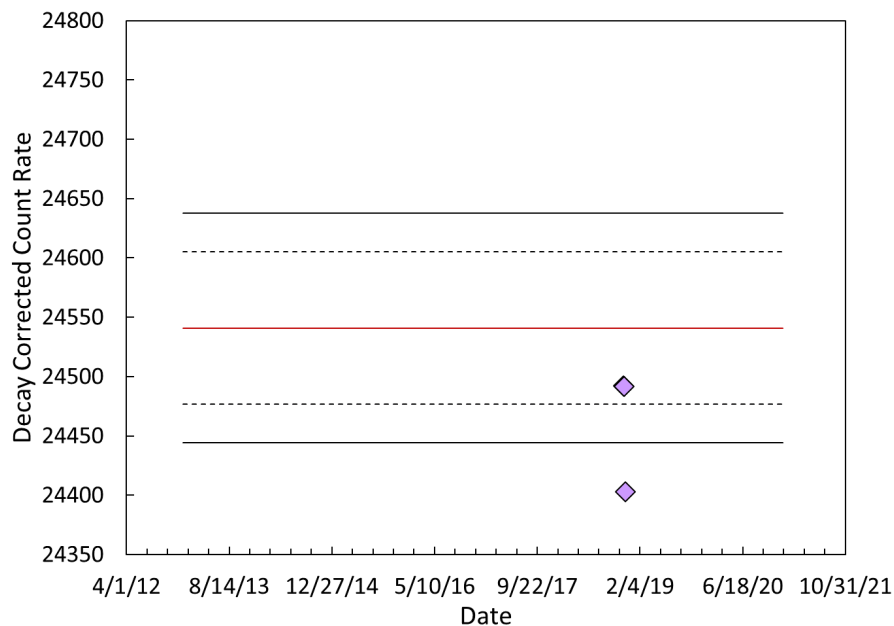


Figure 5: AmLi stability measurements in the month of November 2018.

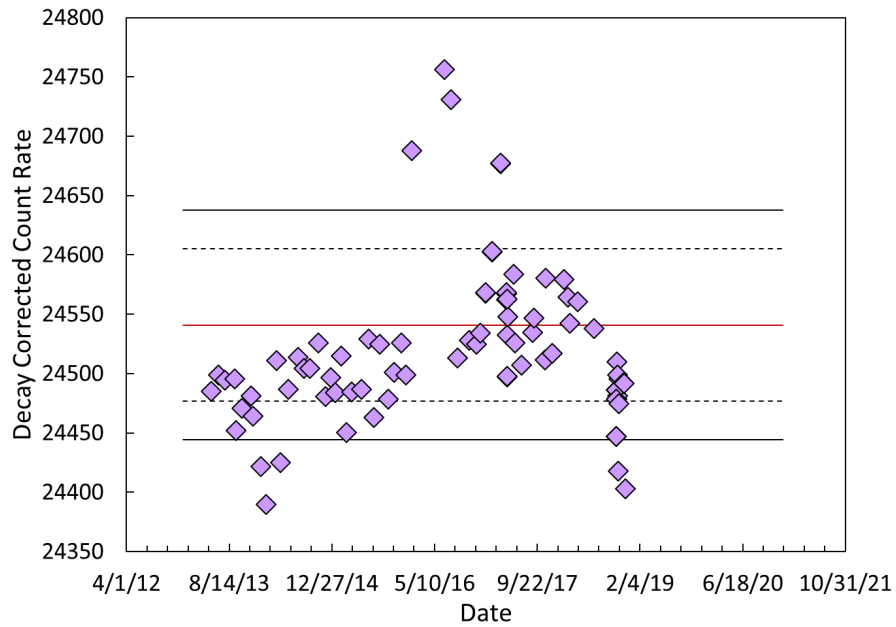


Figure 6: AmLi stability measurements from May 2013 – November 2018.

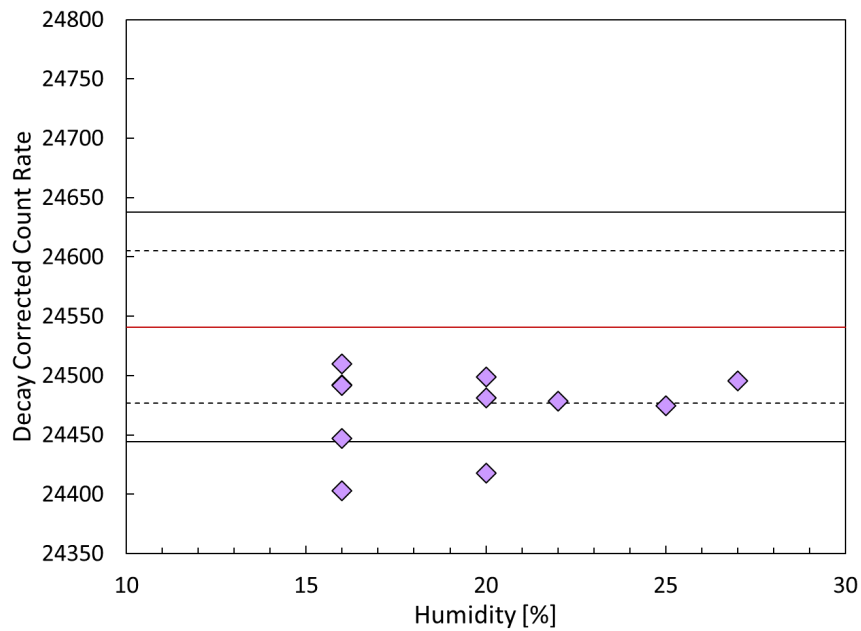


Figure 7: AmLi stability measurements as a function of humidity.

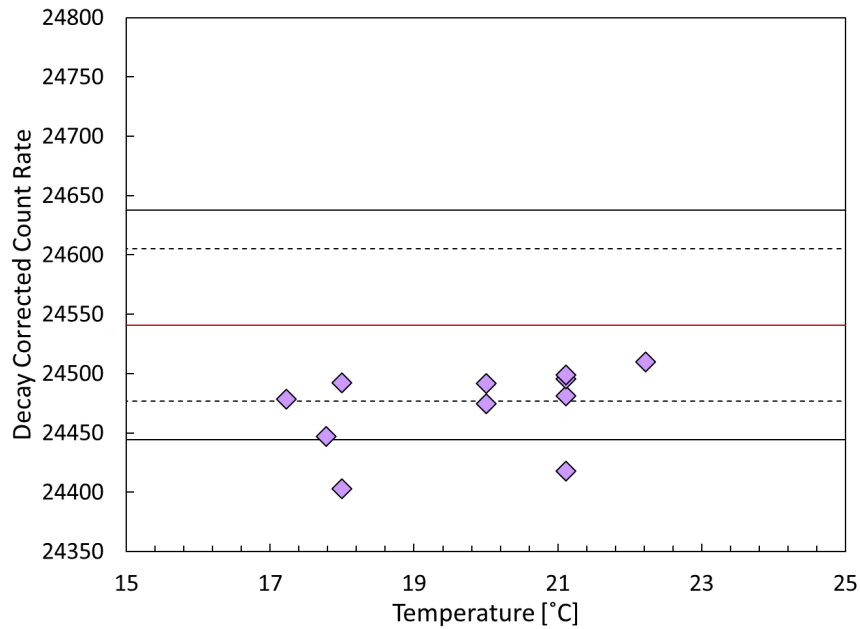


Figure 8: AmLi stability measurements as a function of temperature.

4. Curium Stability

We are currently examining the use of a Curium source as a replacement for the AmLi stability measurements to mitigate trends observed in the AmLi data likely caused by source positioning and redistribution of contents occurring during regular source handling. Three Curium measurements were performed in the month of November 2018 with an average count rate of 983.3 ± 0.4 . So far no instabilities have been observed, however measurements should continue over extended period of time to confirm the overall trend and establish control bounds. The count rates are plotted in Figure 9 and so far no dependence on humidity and room temperature has been observed.

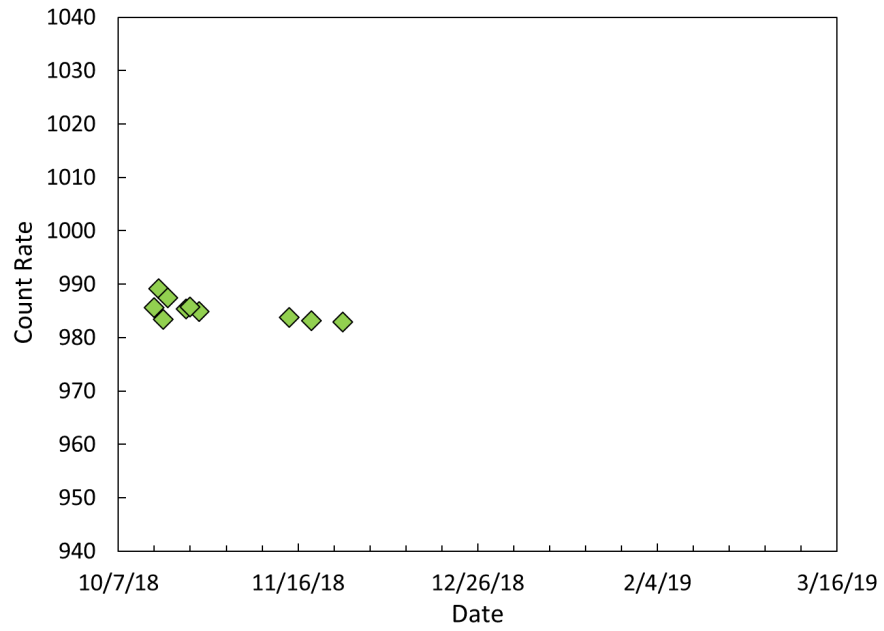


Figure 9: Curium count rates since October 2018.

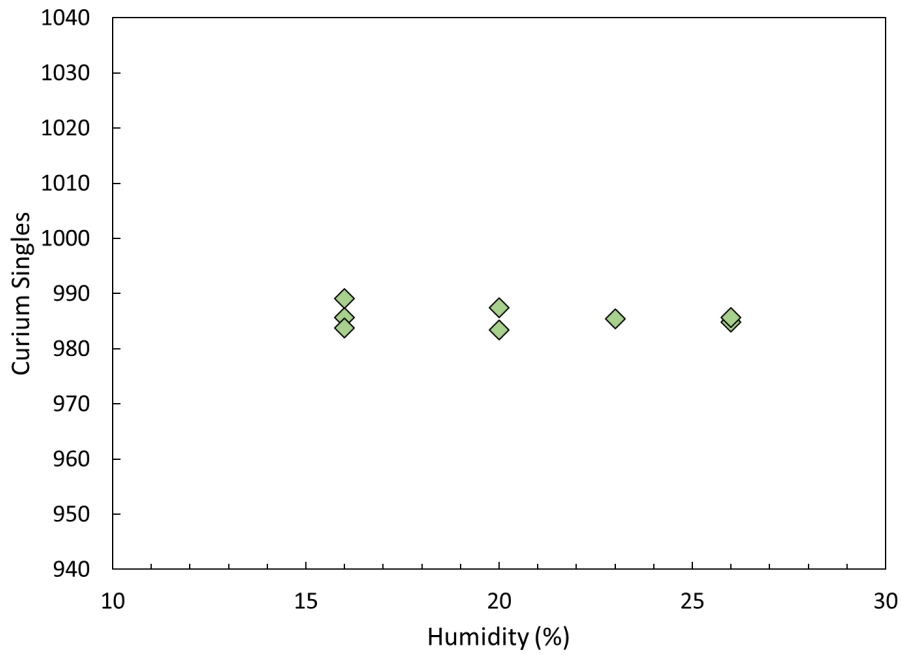


Figure 10: Curium count rates as a function of humidity.

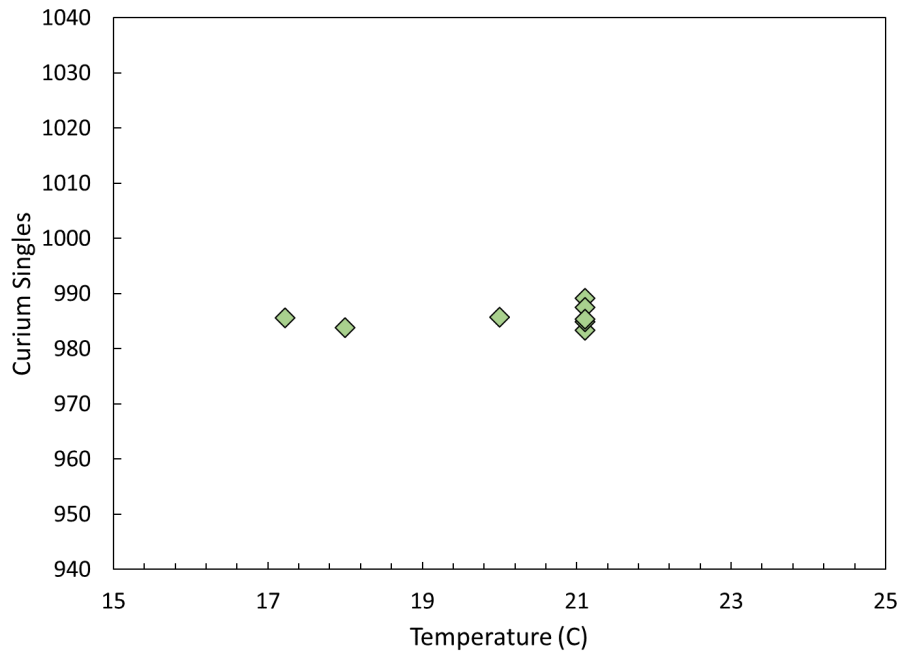


Figure 11: Curium count rates as a function of room temperature.

5. Plutonium Isotopics

In the month of November 2018 three Pu isotopic measurements were made with the top and the middle (41993A) detectors. No measurements were performed with the bottom detector (4200A), investigations are ongoing to evaluate the cause for its failure reported during October 2018 JAEA visit. All measurements made with the middle detector, were within control bounds, Figure 14 and Figure 15. The November top detector $^{241/239}\text{Pu}$ results exhibit trends outside of the control lines, Figure 13, however, $^{240/239}\text{Pu}$ results for the top detector are all well within the expected limits. The cause of this observation is currently under investigation and will be further assessed during December measurements. Note that no equipment substitutions were performed with the top detector and it still uses the same components (DSPEC and X-Cooler) as during previous year.

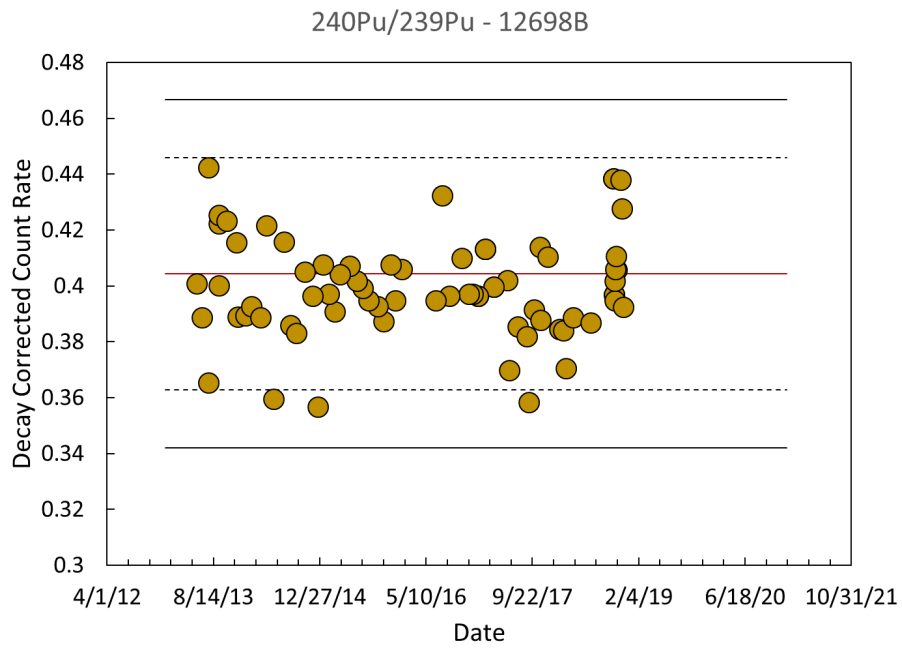


Figure 12: $^{240}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe.

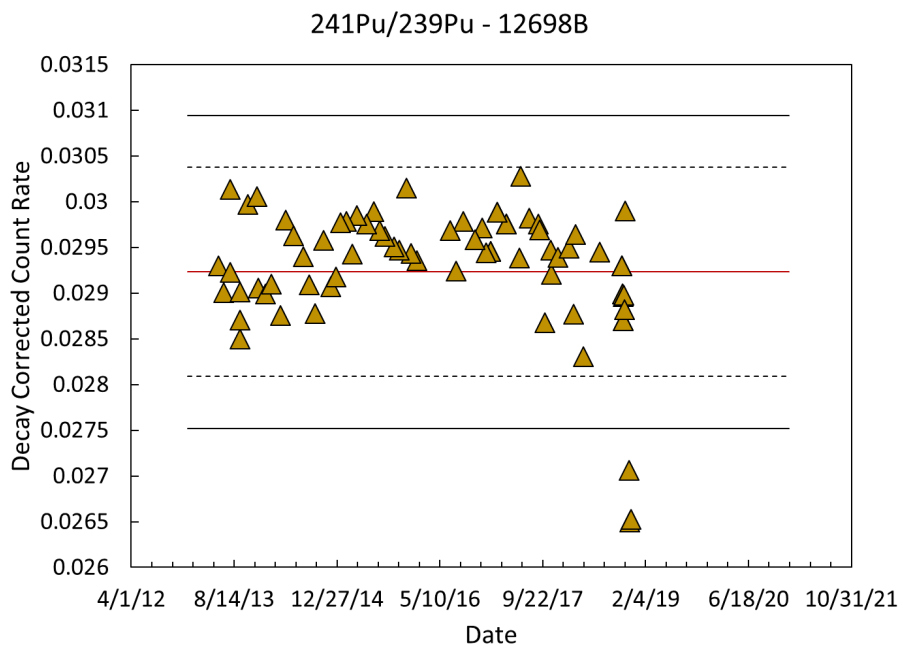


Figure 13: $^{241}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe.

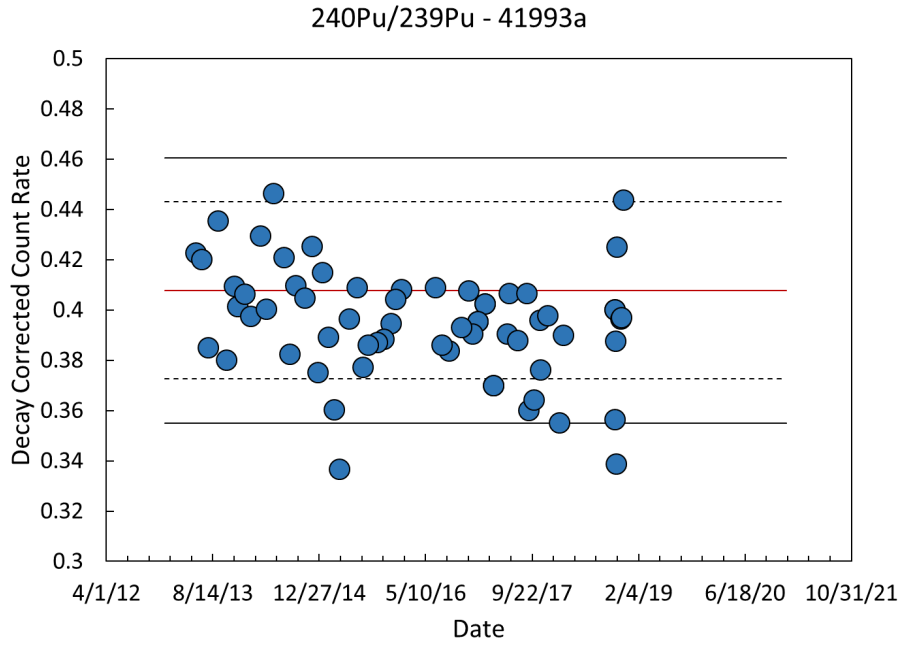


Figure 14: $^{240/239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe.

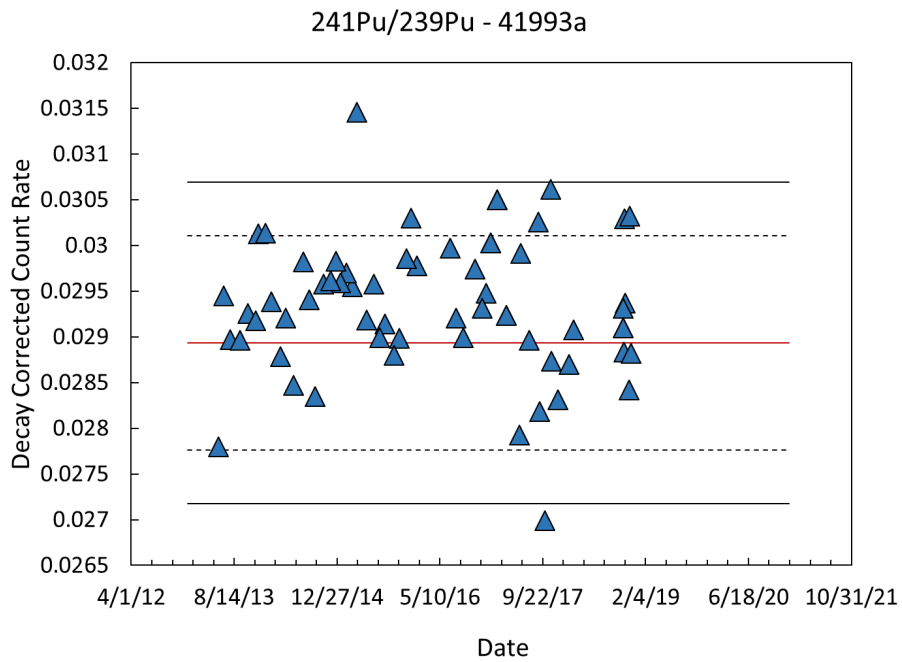


Figure 15: $^{241/239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe.

6. Load Cell Data

Three load cell measurements were performed in November 2018, each measured a weight of exactly 22.69 kg.

7. Notes on Instrument Anomalies

- Middle (41993a) and bottom (4200a) detectors failed after January 2018
- Troubleshooting was performed in October 2018 and resulted in the resurrection of the middle (41993a) HPGe detector.
 - Middle detector X-Cooler and DSPEC were replaced with LANL spares.
- Noise on IPCA2 neutron signal was observed during October 2018 control measurements and was mitigated by additional grounding of the guide rods inside iPCa2.
 - Possible cause may have been related to cell-phone repeaters recently installed in the building.

8. Summary on Number of Measurements Performed Since October 2018

Note that October charts include higher number of measurements due to troubleshooting activities that were performed that month (as discussed during October 2018 JAEA visit).

Table 1: The number of measurements taken monthly organized by each type.

Month	Pu Eff	AmLi	Cu	12698B (Top)	41993A (Middle)	4200A (Bottom)	Load Cell
October 2018	8	10	7	7	5	0	7
November 2018	3	3	3	3	3	0	3
Total	11	13	10	10	8	0	10

LA-CP-19-20016

December 2018 IPCA2 Report

Prepared for:

Japan Atomic Energy Agency

Prepared by:

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January 2019

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Acronyms

cps	counts per second
FRAM	Fixed Energy Response Function Analysis with Multiple Efficiencies
HPGe	High Purity Germanium
IPCA2	Improved Plutonium Canister Assay System 2
LANL	Los Alamos National Laboratory
MOX	Mixed-OXide
RSD	Relative Standard Deviation

1. Overview

This report summarizes the analysis of IPCA2 data collected in December 2018. Measurements of Plutonium neutron efficiency, AmLi stability, Curium stability and HPGe isotopic analysis of Plutonium samples were performed and analyzed. Measurements were compared to room temperature and humidity, and no dependence was observed. The end of this report contains summary of all IPCA2 measurements performed since October 2018.

2. Plutonium Efficiency

2.1. Efficiency Monitoring

Three plutonium efficiency measurements were performed on December 11 and 19, 2018 with the FZC158 source (823.6 neutrons s^{-1} emission rate). This source was placed in the IPCA2 for a duration of 1800 s during which 60 cycles of 30 s were used to calculate a Singles rate (in counts per second, cps). The Singles rate was divided by source activity to determine an average efficiency for the month of December 2018, which corresponds to 7.26 ± 0.04 . Both measurements were within the control chart 2σ bands, denoted with dotted lines in Figure 1, all Pu efficiency measurements since May 2013 are shown in Figure 2.

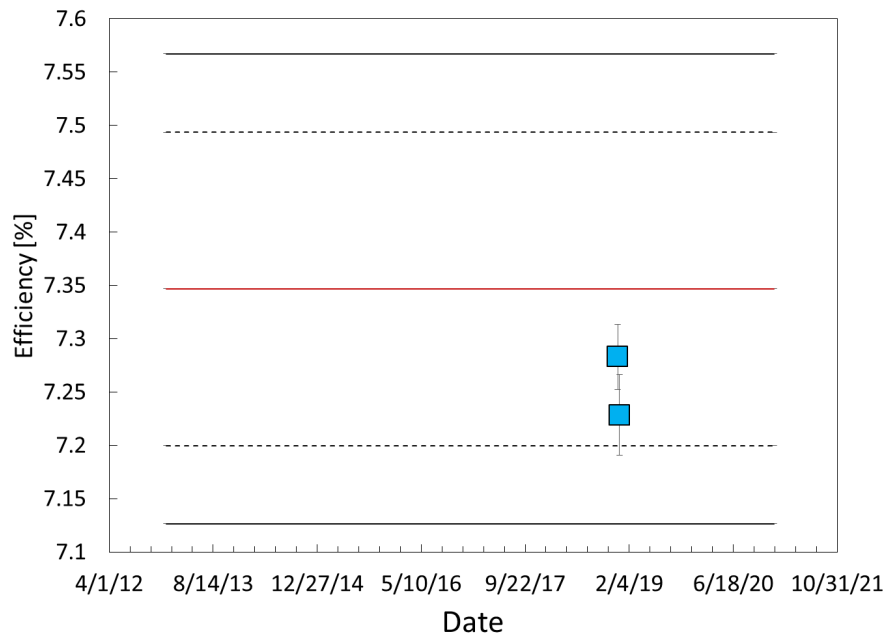


Figure 1: Pu efficiency measurements for December 2018.

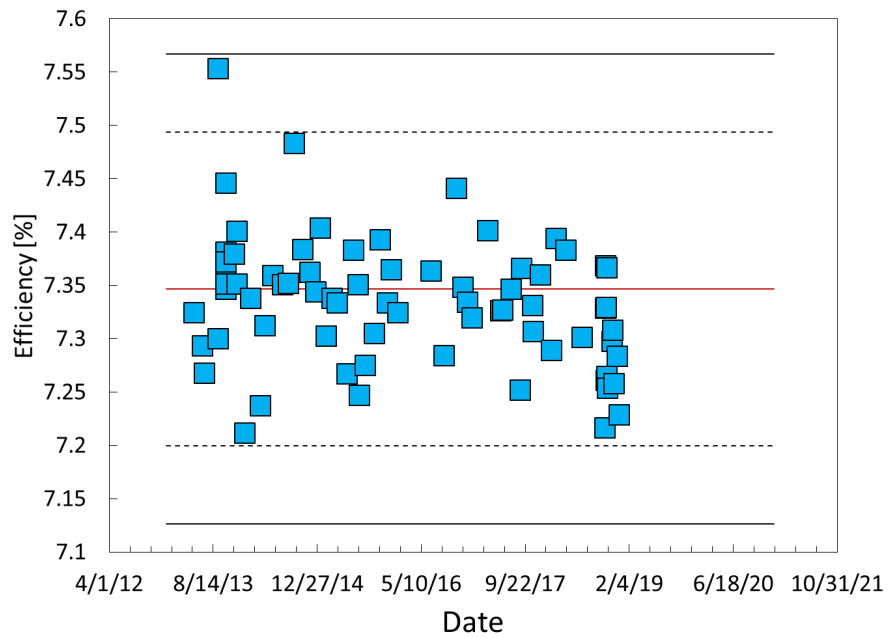


Figure 2: Pu efficiency measurements for May 2013 – December 2018.

2.1. Efficiency Dependence on Environmental Conditions

Room temperature and humidity data has been collected alongside IPCA2 measurements since October 2018. Plutonium efficiency measurements exhibit no dependence on humidity, Figure 3, or room temperature, Figure 4. Note that the data in Figure 3 and 4 only include October through December 2018 results. These measurements will continue on a monthly basis.

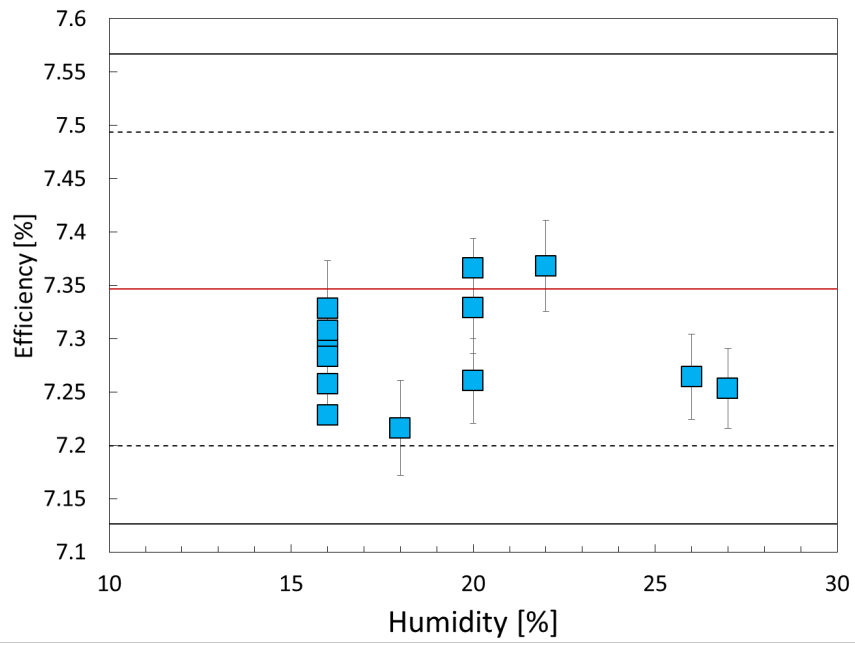


Figure 3: Pu efficiency measurements as a function of humidity.

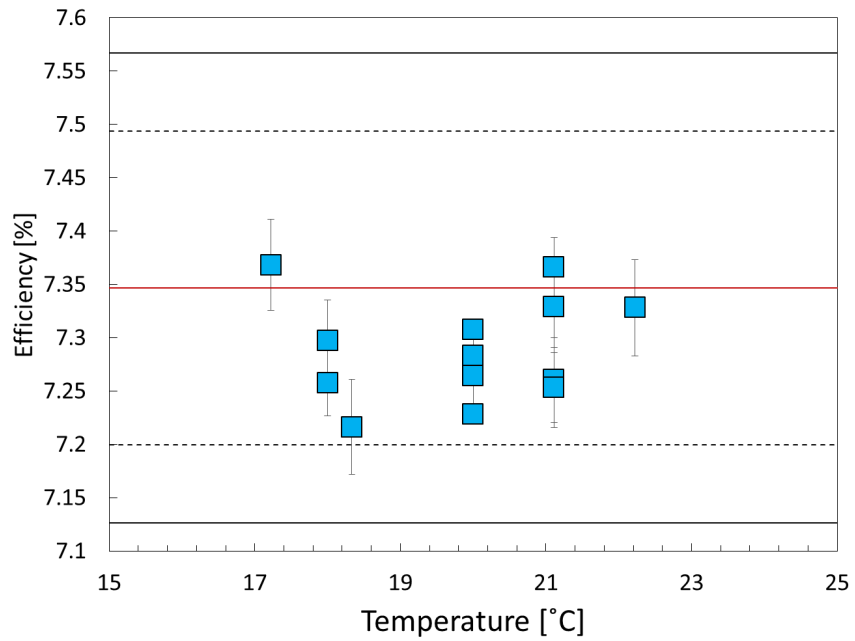


Figure 4: Pu efficiency measurements as a function of room temperature.

3. AmLi Stability

3.1. AmLi Stability Results

Two AmLi stability measurements were performed in December of 2018 with an average (decay corrected) count rate of 24488 ± 2 . Both measurements were within the 3σ control line, Figure 5. Overview of all AmLi stability data is shown in Figure 6. In October of 2018 we began to perform a Curium stability measurement, to assess its feasibility as an alternative to AmLi, those measurements are described in the next section. No dependence of AmLi count rate on humidity or room temperature was observed, as shown in Figure 7 and Figure 8, respectively. Note that the data in Figure 7 and 8 only include October through December 2018 results and are systematically lower than average, which was established including the higher count rate data points shown in Figure 6. New control bounds will be established based on all JFY18 data and subsequently will be updated annually.

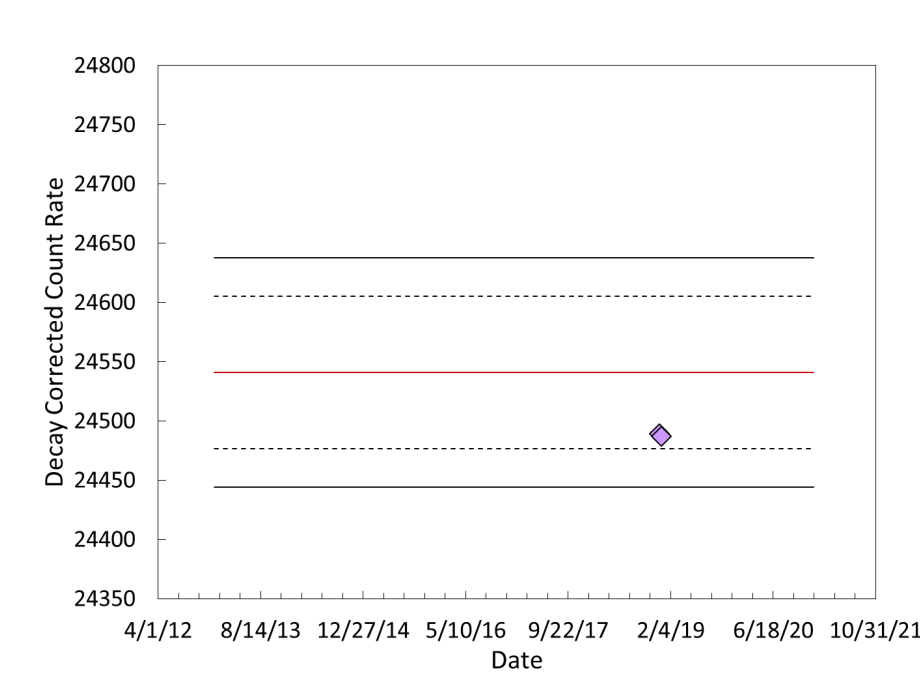


Figure 5: AmLi stability measurements in the month of December 2018. Note that error bars are smaller than the size of symbols.

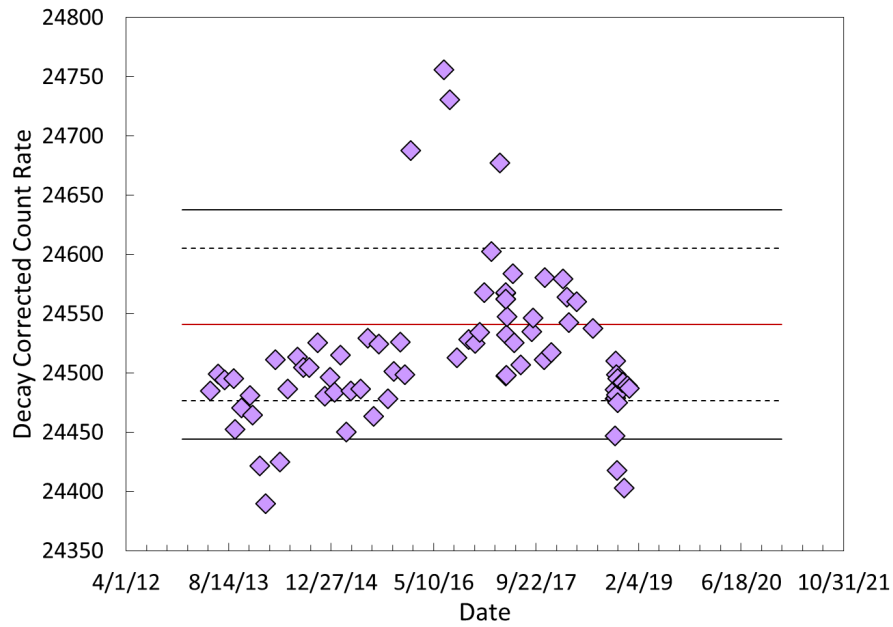


Figure 6: AmLi stability measurements from May 2013 – December 2018.

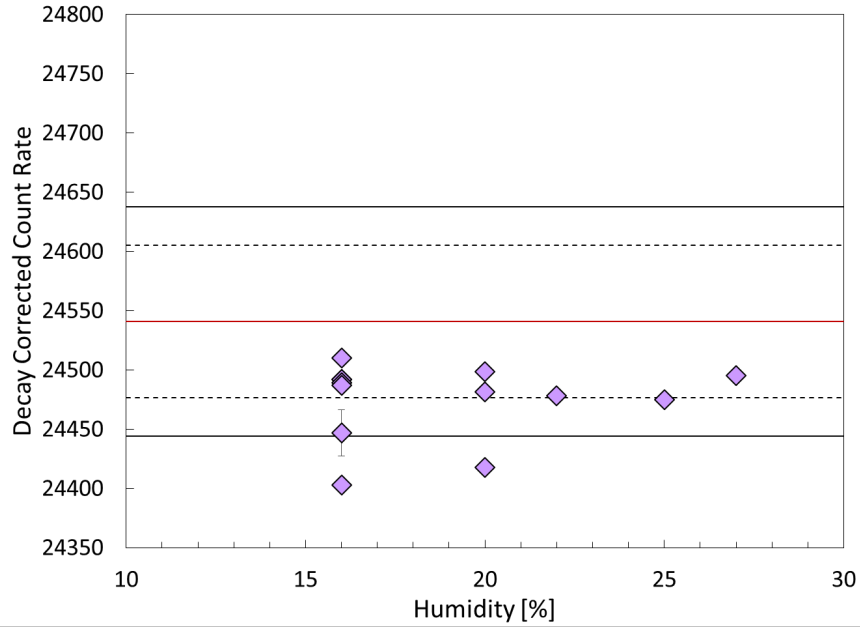


Figure 7: AmLi stability measurements as a function of humidity.

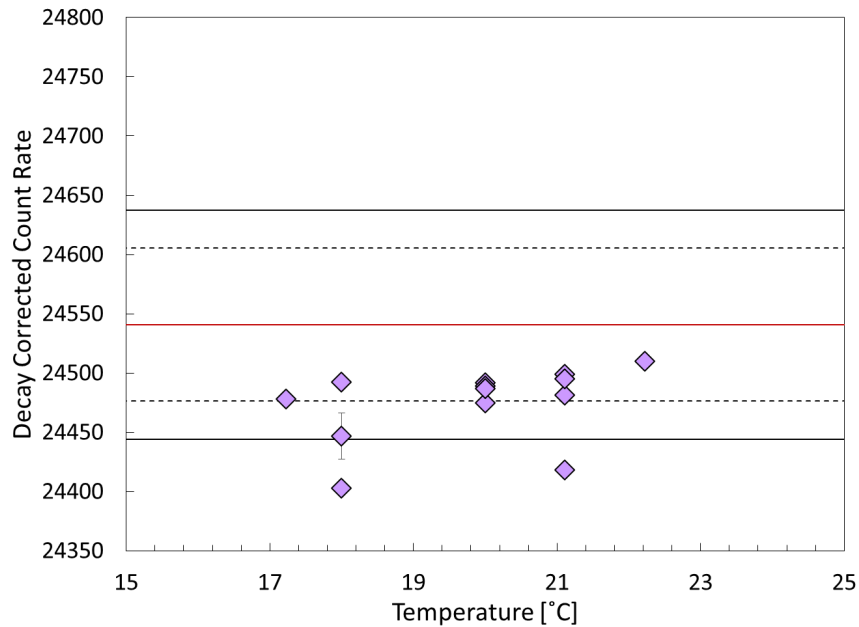


Figure 8: AmLi stability measurements as a function of temperature.

4. Curium Stability

We are currently examining the use of a Curium source as a replacement for the AmLi stability measurements to mitigate trends observed in the AmLi data likely caused by source positioning and redistribution of contents occurring during regular source handling. Two Curium measurements were performed in the month of December 2018 with an average count rate of 980 ± 3 . Measurements will continue to confirm the overall trend and establish control bounds from the data acquired during JFY18. The count rates are plotted in Figure 9 and so far no dependence on humidity and room temperature has been observed.

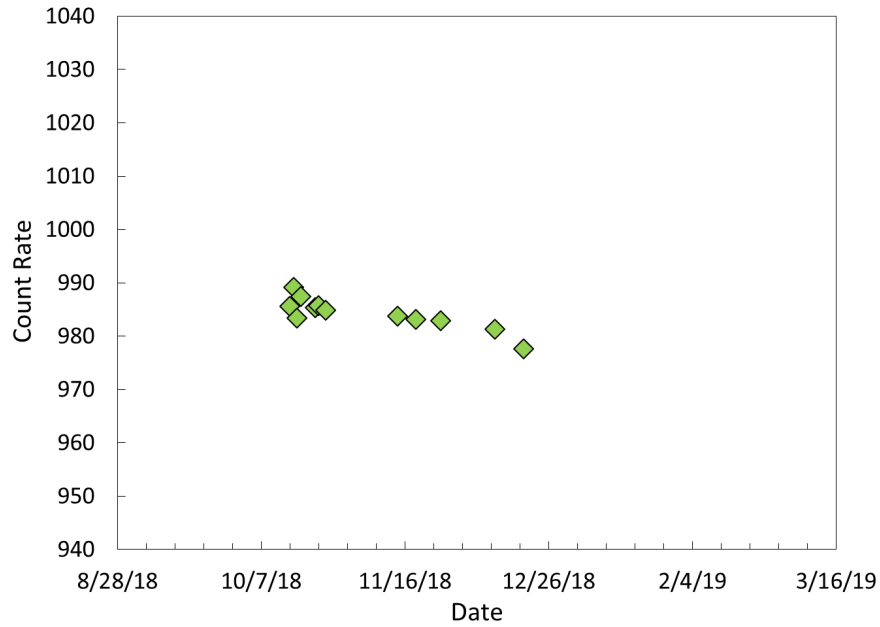


Figure 9: Curium count rates since October 2018. Note that error bars are smaller than the size of symbols.

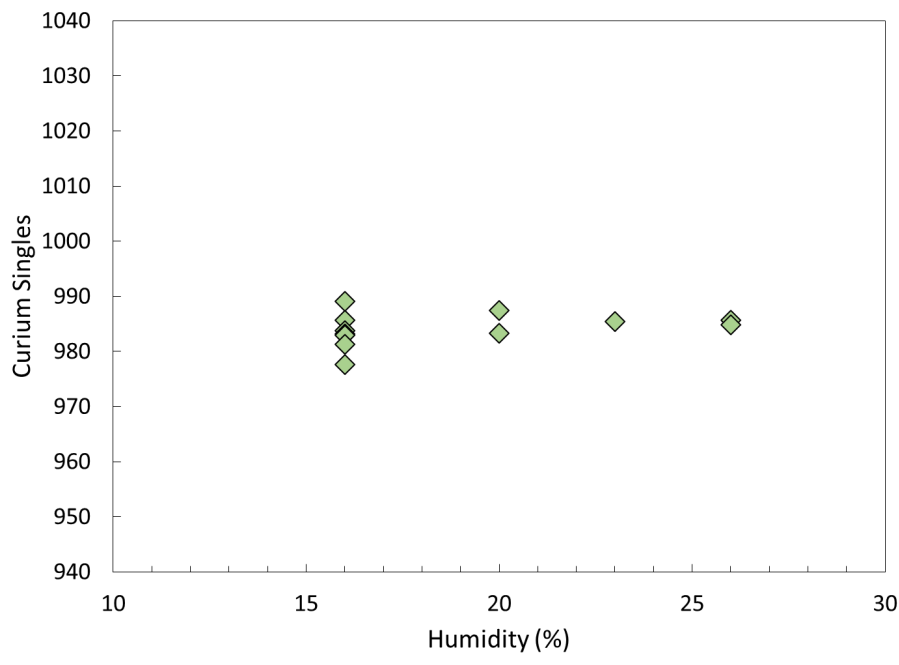


Figure 10: Curium count rates as a function of humidity. Note that error bars are smaller than the size of symbols.

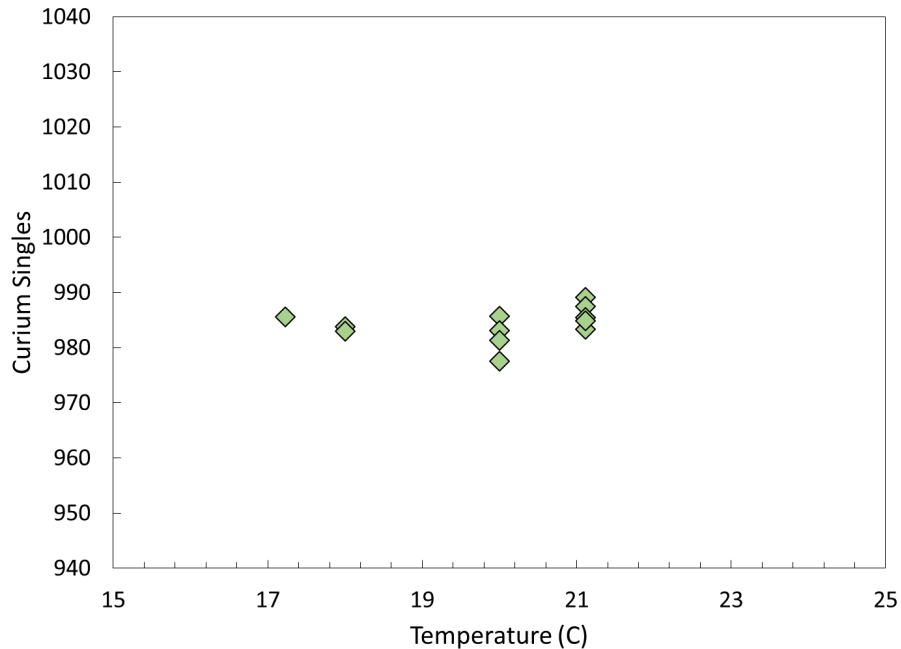


Figure 11: Curium count rates as a function of room temperature. Note that error bars are smaller than the size of symbols.

5. Plutonium Isotopics

In the month of December 2018 three Pu isotopic measurements were made with the top (12698B) and the middle (41993A) detectors (December 11, 19 and 20). One additional measurement was added on December 20 with respect to the neutron measurements in order to fully understand some unexpected trends observed in one of the December gamma measurements. No measurements were performed with the bottom detector (4200A) and investigations are ongoing to evaluate the cause for its failure reported during the October 2018 JAEA visit.

The December 19 top detector results exhibit trends outside of the control lines, Figure 12 and 13. In fact, the result for $^{240}\text{Pu}/^{239}\text{Pu}$ ratio is 0. As can be seen from Figure 14, this is a consequence of significant broadening of the peaks and associated reduction of the energy resolution in the spectrum recorded from this detector on December 19. To further evaluate this observation, additional measurement was performed on December 20, which yielded results in agreement with trends observed in November measurements. We attribute the striking deterioration of gamma spectrum of the top detector observed on December 19 to a temporary failure of the detector cooling possibly due to an intermittent power outage. The system recovered by the re-measurement taken on December 20 as seen from the spectrum acquired on December 20 (Figure 15), which exhibits no such deterioration of energy resolution. The ^{240}Pu peak energy corresponds to 642.46 keV, which is on the higher energy end of the spectrum. The peak broadening observed in Figure 14 resulted essentially in disappearance of the ^{240}Pu peak as illustrated in Figure 16, where the

energy range of interest is shown for December 19 and 20, with the ^{240}Pu peak energy shown by black cross. Note that the $^{241}\text{Pu}/^{239}\text{Pu}$ ratio remains below the control lines for December 11 and December 20 measurements, similarly as observed in November measurements.

The results of middle detector measurements are shown in Figure 17 and Figure 18. Note a high value of $^{240}\text{Pu}/^{239}\text{Pu}$ ratio corresponding to December 11 measurement. Further investigation revealed a slight gain change (0.4% decrease) on the middle detector during this measurement. Following reanalysis of middle detector data with updated gain (0.1245 keV/ch as opposed to nominal 0.125 keV/ch) resulted in ratio within the control bounds as shown in Figure 19. Note that the $^{241}\text{Pu}/^{239}\text{Pu}$ ratio was within control bounds for both gain values as seen in Figure 18 and 20, but exhibits noticeably lower value when the nominal gain value (0.125 keV/ch) was assumed in the FRAM analysis.

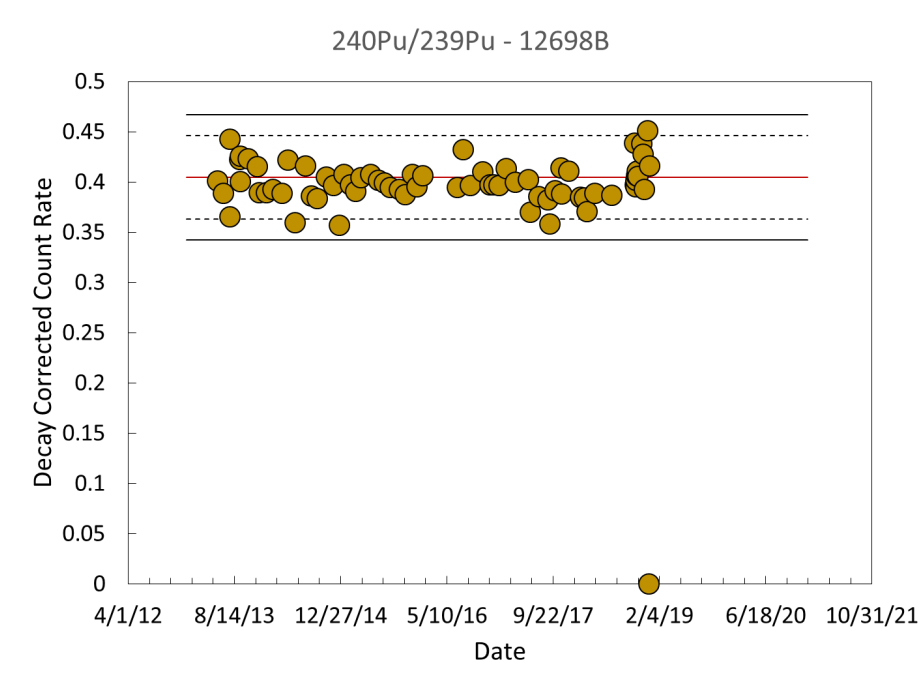


Figure 12: $^{240}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe revealing 0 ratio for December 19 measurement.

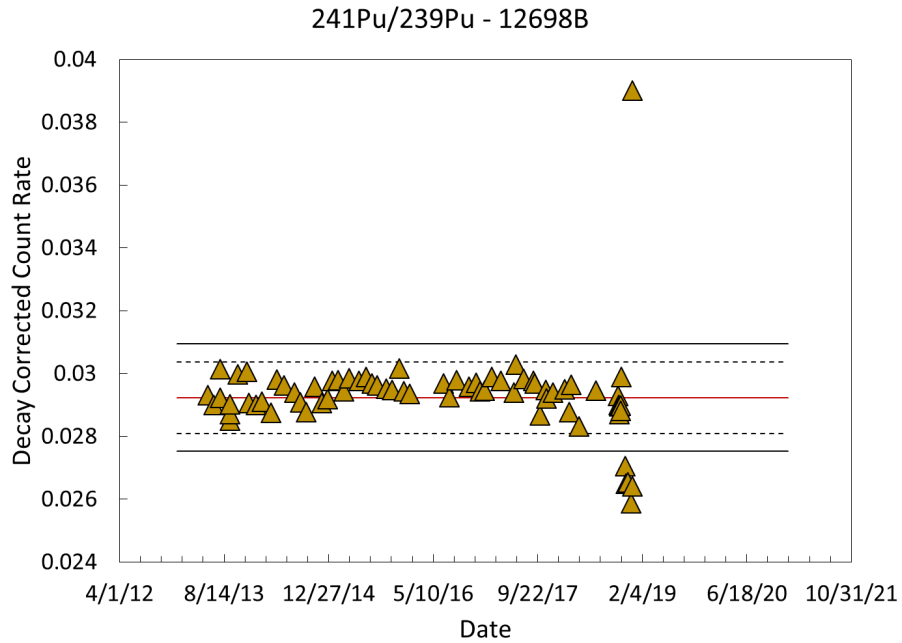


Figure 13: $^{241/239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe revealing high value for December 19 measurement.

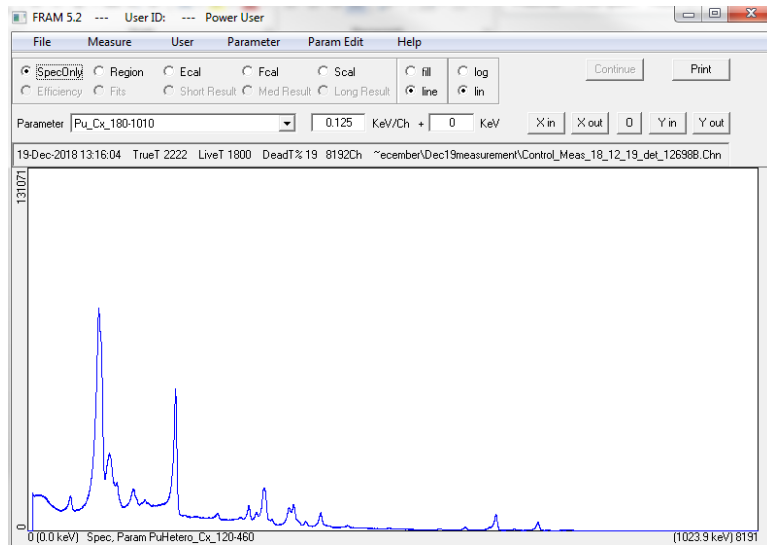


Figure 14: Gamma spectrum acquired on December 19 with top IPCA2 HPGe exhibiting significant distortion.

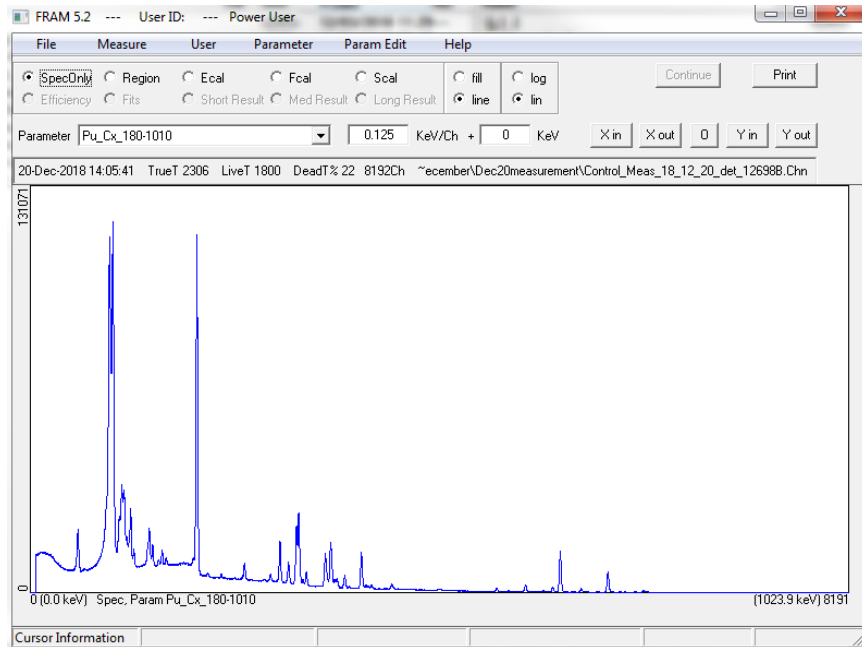


Figure 15: Gamma spectrum acquired on December 20 with top IPCA2 HPGe with restored characteristics.

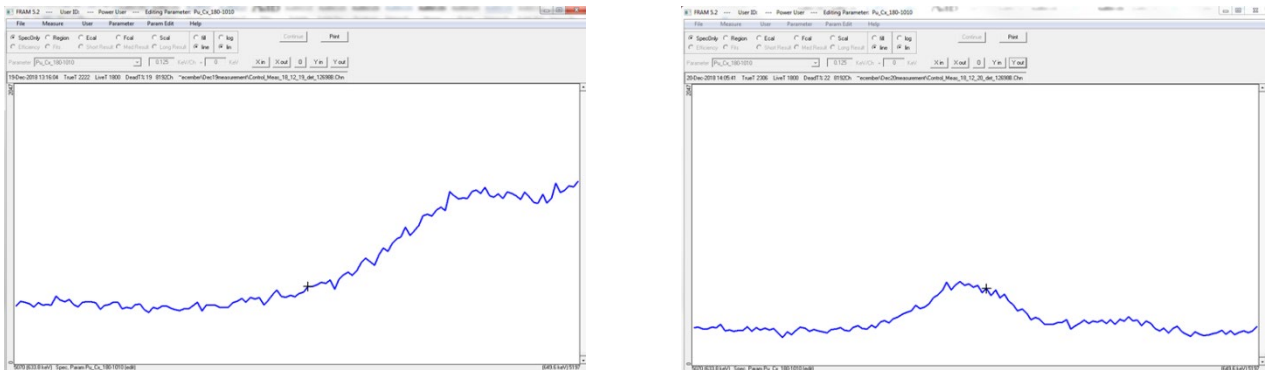


Figure 16: Detail of energy range around ^{240}Pu energy (642.46 keV) for December 19 (left) and December 20 (right) measurements. Location of ^{240}Pu peak is indicated by black cross.

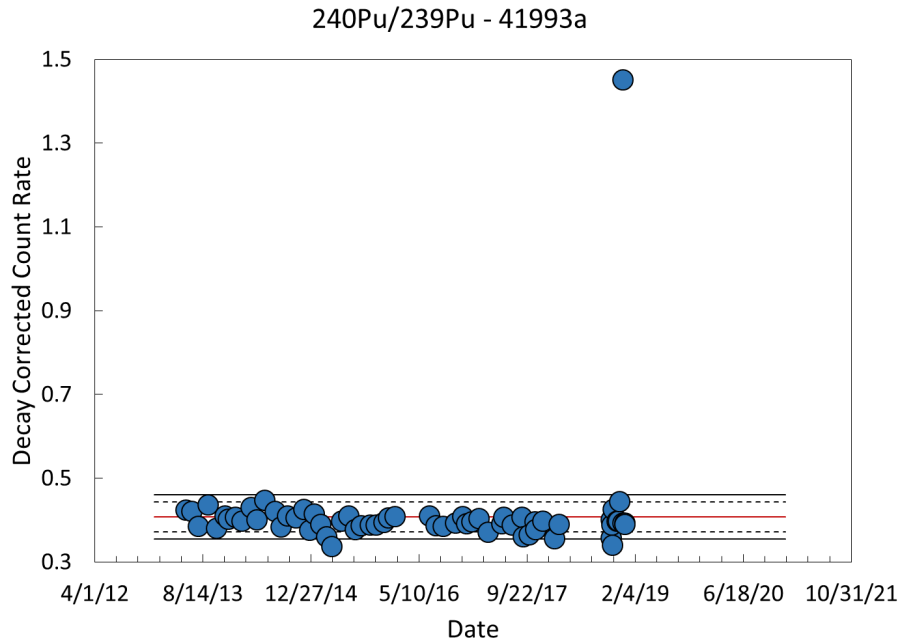


Figure 17: $^{240}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe revealing high ratio for December 11 measurement.

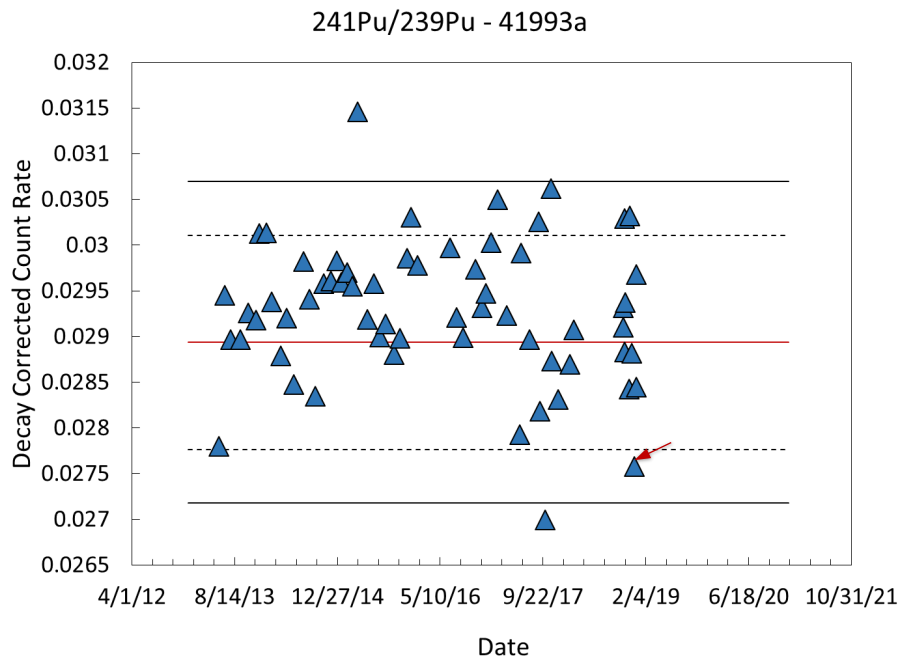


Figure 18: $^{241}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe. The December 11 measurement result is indicated by red arrow.

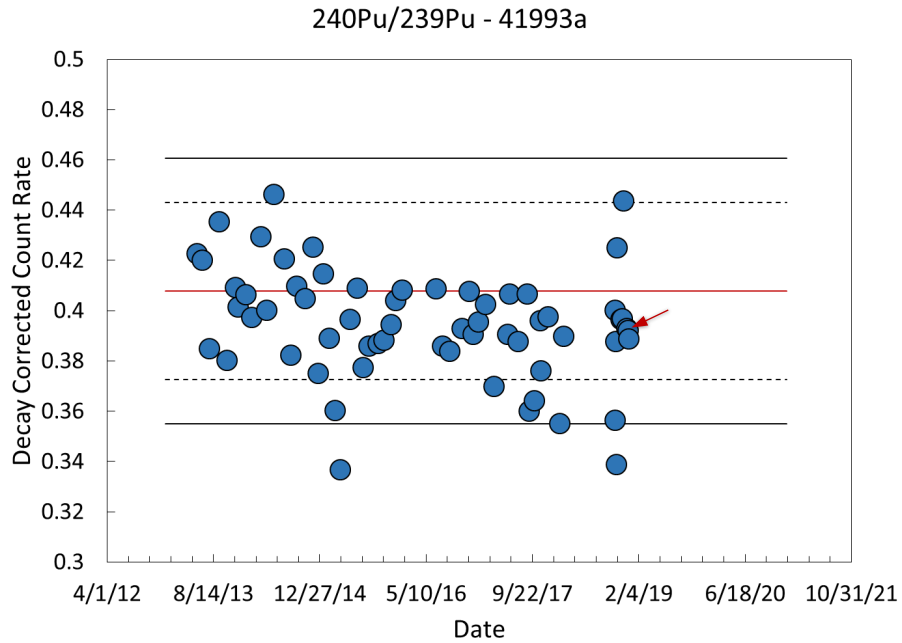


Figure 19: $^{240}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGc with gain updated for December 11 measurement (red arrow).

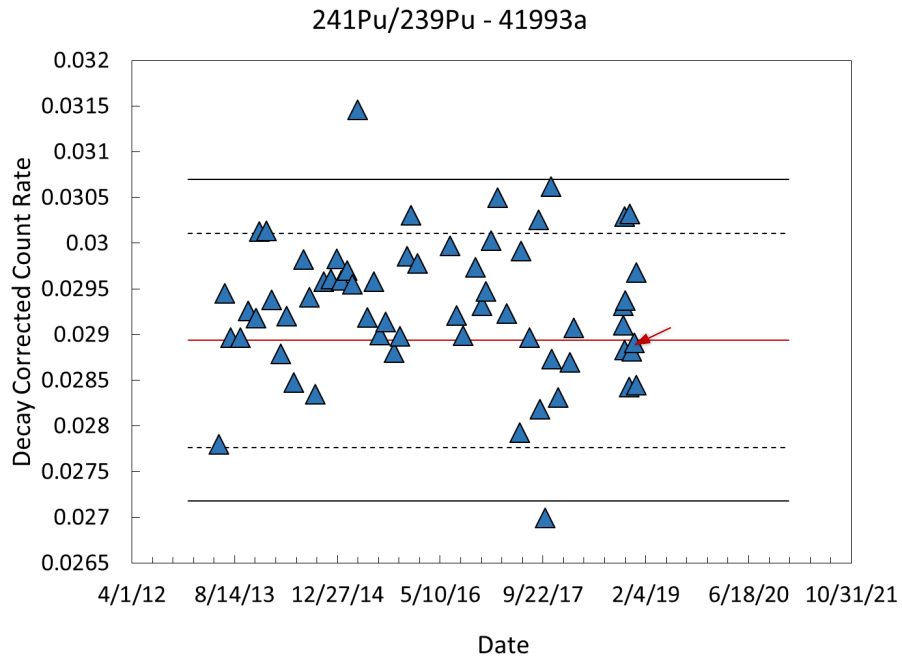


Figure 20: $^{241}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGc with gain updated for December 11 measurement (red arrow).

6. Load Cell Data

Two load cell measurements were performed in December 2018, each measured a weight of exactly 22.69 kg.

7. Summary on Number of Measurements Performed Since October 2018

Note that October charts include higher number of measurements due to troubleshooting activities that were performed that month (as discussed during October 2018 JAEA visit).

Table 1: The number of measurements taken monthly organized by each type.

Month	Pu Eff	AmLi	Cu	12698B (Top)	41993A (Middle)	4200A (Bottom)	Load Cell
October 2018	8	10	7	7	5	0	7
November 2018	3	3	3	3	3	0	3
December 2018	2	2	2	3	3	0	2
Total	13	15	12	13	11	0	12

LA-CP-19-20117

Annual IPCA2 Performance Report for JFY18

Prepared for:

Japan Atomic Energy Agency

Prepared by:

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² Monte Carlo Methods, Codes, and Applications Group (XCP-3)

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Name/Org: Daniela Henzlova / NEN-1

Date: 2019-03-06

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March 2019

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Figure 28: Original [1] bottom HPGe detector control bounds for $^{240}\text{Pu}/^{239}\text{Pu}$ shown with JFY18 data. 30

Figure 29: Original [1] bottom HPGe detector control bounds for $^{241}\text{Pu}/^{239}\text{Pu}$ shown with JFY18 data. 30

Acronyms

cps	counts per second
FRAM	Fixed Energy Response Function Analysis with Multiple Efficiencies
HPGe	High Purity Germanium
IPCA2	Improved Plutonium Canister Assay System 2
LANL	Los Alamos National Laboratory
MOX	Mixed-OXide

1. Overview

This report summarizes the results of monthly control measurements of IPCA2 performed over the period of October 2018 through March 2019 and represents an annual performance overview for JFY18. Note that the start of the measurements in October 2018 was defined by the start of the contract agreement. Monthly measurements of Plutonium neutron detection efficiency, AmLi stability, Curium stability and HPGe gamma spectra of Plutonium standards were performed and analyzed. All the results are shown with respect to original control bounds established from 2013-2017 data in [1]. Updated control bounds established based on this JFY18 data for use during JFY19 measurements are summarized in Appendix A. Based on Pu efficiency measurements, the performance of the IPCA2 during this reporting period was stable within 0.6% at 1 σ level. Measurements were compared to room temperature and humidity and no dependence was found for any detector performance. The end of this report contains summary of all IPCA2 measurements performed since October 2018 and includes discussion of troubleshooting and repair activities performed over the reporting period.

2. Plutonium Efficiency

2.1. Efficiency Monitoring

Plutonium efficiency measurements were performed on monthly basis between October 2018 and March 2019. The LANL Plutonium standard, FZC157 (823.6 neutrons s⁻¹ emission rate), was used in all measurements. This source was placed in the IPCA2 for a duration of 1800 s during which 60 cycles of 30 s were used to calculate a Singles rate (in counts per second, cps). The Singles rate was divided by source activity to determine an efficiency as shown in Figure 1. Average efficiency corresponding to the JFY18 control period was calculated and corresponds to 7.29 ± 0.04 . All measurements were within the control chart 2σ bands, denoted with dotted lines in Figure 1, however, they appear systematically lower than average. We speculate that it could be due to the change in grounding of IPCA2 performed in October 2018 as its onset is correlated with this activity. The grounding was updated to mitigate sudden noise observed in the control measurements performed in early October, as discussed during JAEA visit (for further details see Section 8). Updated control bounds will be established based on the data shown in Figure 1 for use in JFY19 measurements. The updated control bounds are provided for reference in Appendix A. All the Pu efficiency measurements since May 2013 are summarized in Figure 2.

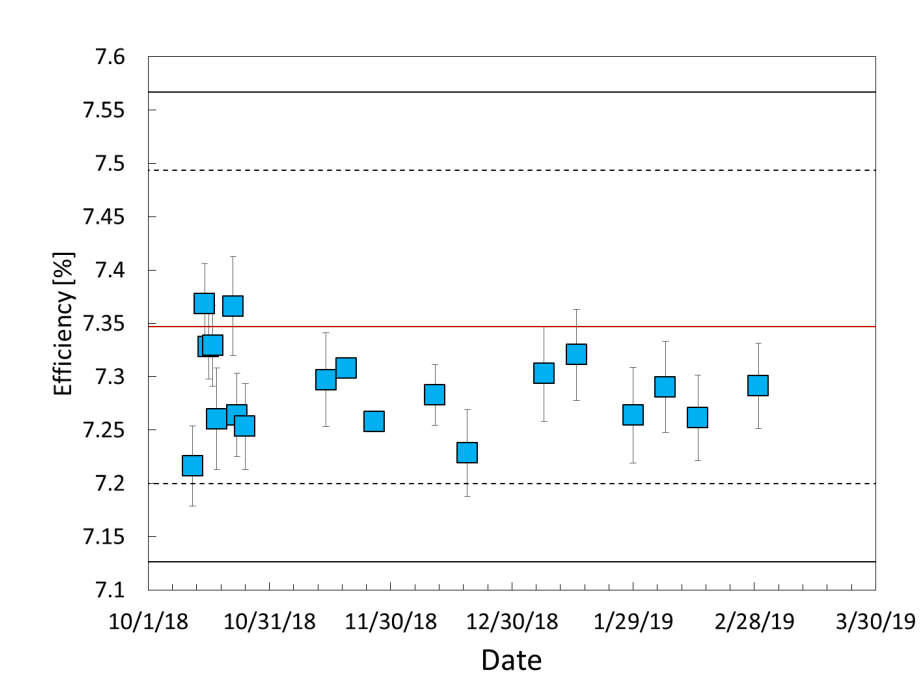


Figure 1: Pu efficiency measurements for JFY18.

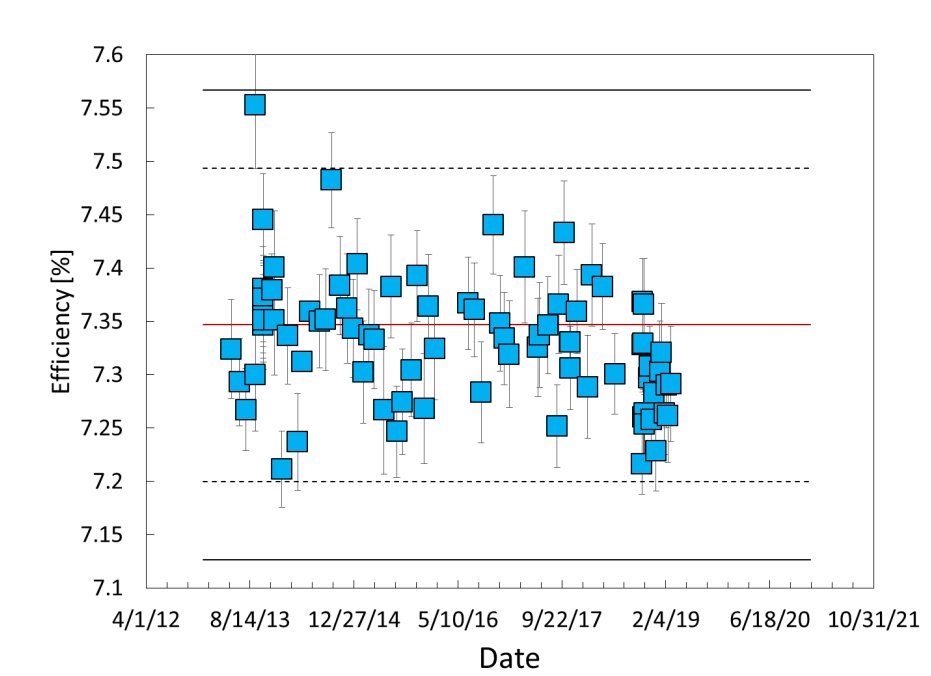


Figure 2: Pu efficiency measurements for May 2013 – March 2019.

2.1. Efficiency Dependence on Environmental Conditions

Room temperature and humidity data has been collected alongside IPCA2 measurements since October 2018. JFY18 plutonium efficiency measurements exhibit no dependence on humidity, Figure 3, or room temperature, Figure 4. Updated control bounds established from this JFY18 data and reported in Appendix A will be used for JFY19 control charts.

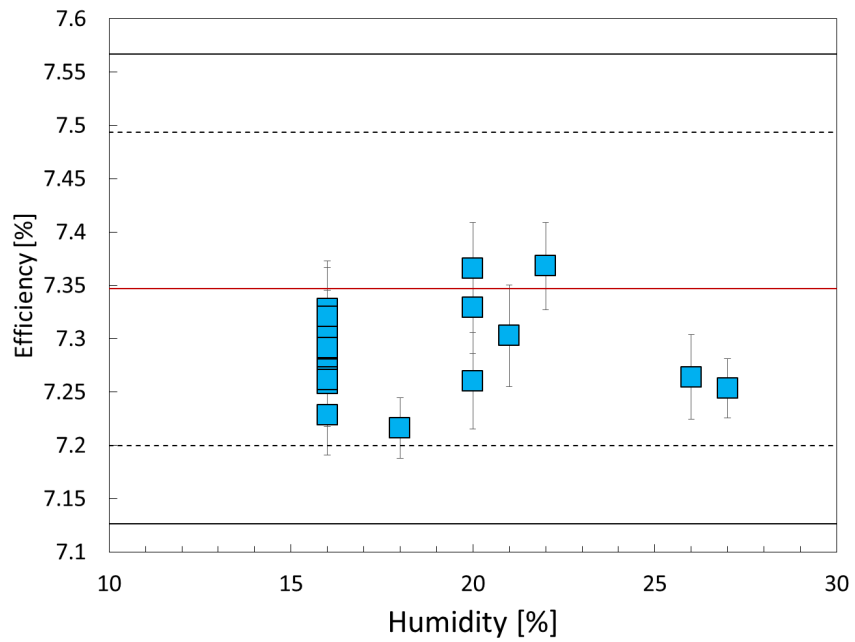


Figure 3: JFY18 Pu efficiency measurements as a function of humidity.

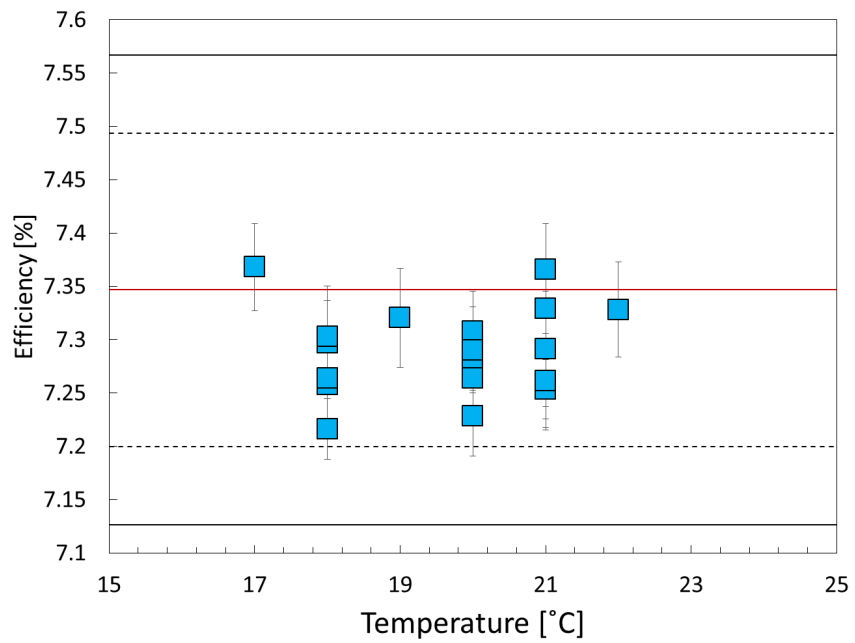


Figure 4: JFY18 Pu efficiency measurements as a function of room temperature.

3. AmLi Stability

3.1. AmLi Stability Measurements

AmLi stability measurements performed between October 2018 and March 2019 are summarized in Figure 5, with an average (decay corrected) count rate of 24484 ± 33 . Overview of all decay corrected AmLi stability data from May 2013 is shown in Figure 6. Note that the decay correction on the AmLi data is with respect to 01/12/2017, when the current control bounds were established in [1]. Most results were within the 3σ control lines, however several anomalous results were observed in late 2016 and late 2018. As discussed in previous annual report [1], it is believed that source positioning and redistribution of contents of AmLi sources resulted in the observed variation of count rates. To mitigate this issue, we began to perform a Curium stability measurement in October 2018, to assess its feasibility as an alternative to AmLi; those measurements are described in the next section. No dependence of AmLi count rate on humidity or room temperature was observed, as shown in Figure 7 and Figure 8, respectively. Note that the data in Figure 5, 7 and 8 are systematically lower than average, which was established including the higher count rate data points shown in Figure 6 (see ref. [1]). New control bounds were established based on all JFY18 data for use in JFY19 control measurements and are reported in Appendix A.

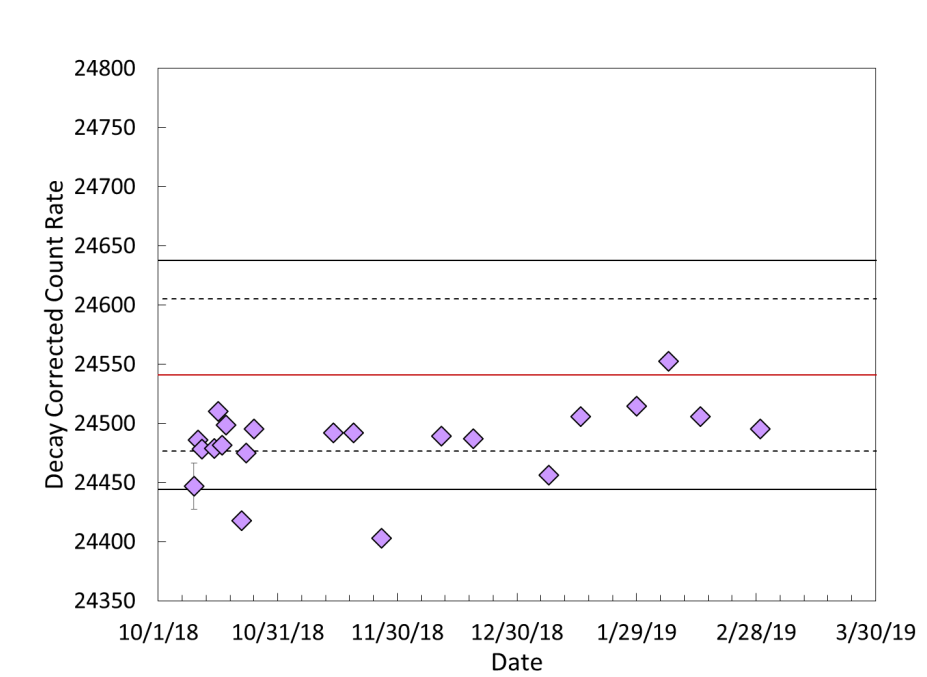


Figure 5: AmLi stability measurements for JFY18. Note that error bars are smaller than the size of symbols.

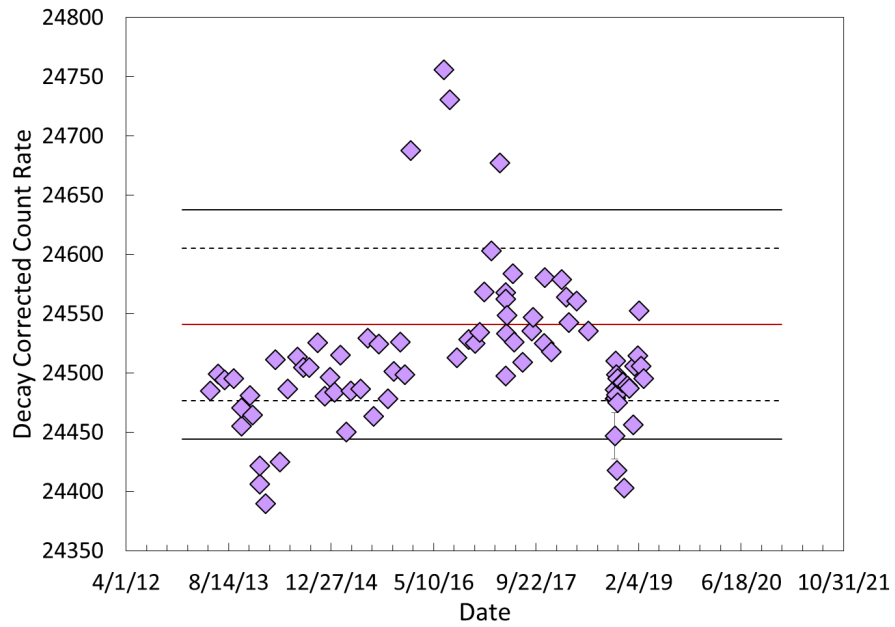


Figure 6: AmLi stability measurements from May 2013 – March 2019.

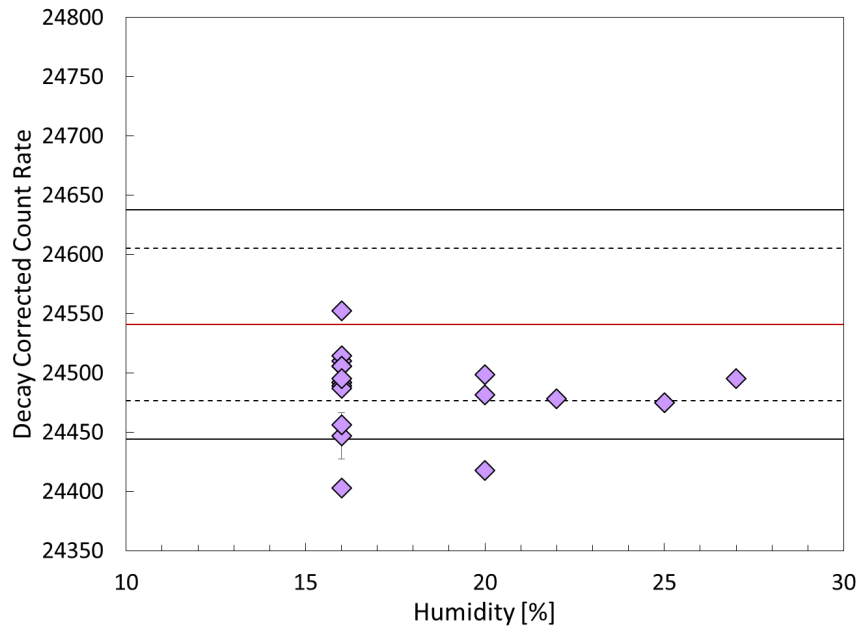


Figure 7: JFY18 AmLi stability measurements as a function of humidity.

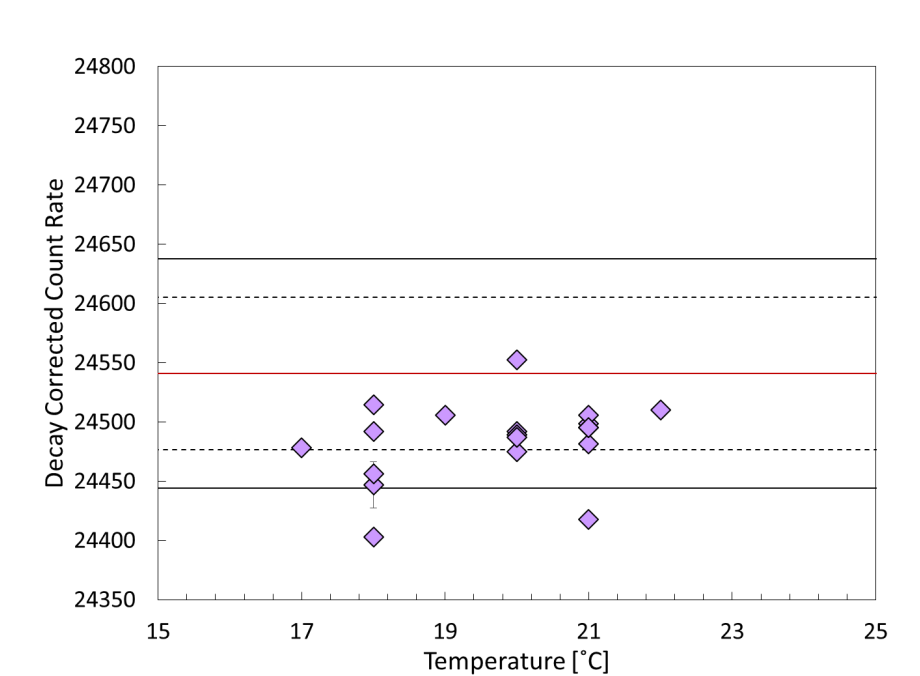


Figure 8: JFY18 AmLi stability measurements as a function of temperature.

4. Curium Stability

In October 2018 we started to perform monthly measurements with a Curium source to evaluate its feasibility as a potential replacement for the AmLi stability measurements. The decay corrected (with respect to the first measurement on 10/15/2018) results of all the Curium measurements performed over the reporting period are summarized in Figure 9 and correspond to an average count rate of 987.3 ± 2.0 . Results reported here were used to establish new control bounds for Curium measurements shown in Figure 9 and Appendix A. Curium stability was also evaluated as a function of humidity and temperature as shown in Figure 10 and Figure 11, respectively. No dependence on humidity and room temperature has been observed over the reporting period.

Based on the trends observed so far, Curium appears to be a viable alternative to AmLi sources. Both sources will continue to be used during JFY19 control measurements.

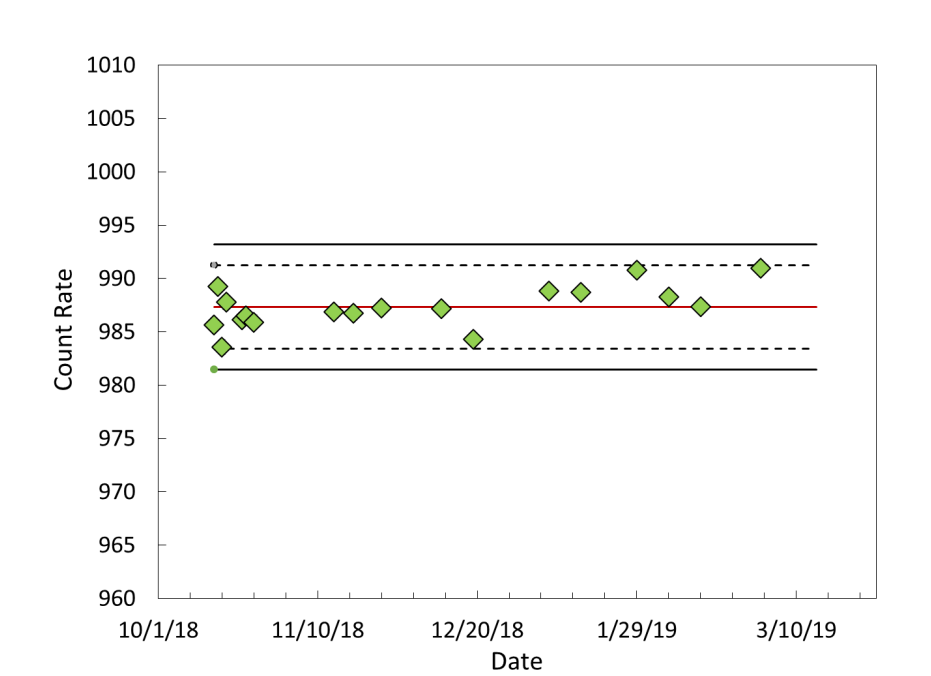


Figure 9: Curium count rates since for JFY18. Note that error bars are smaller than the size of symbols.

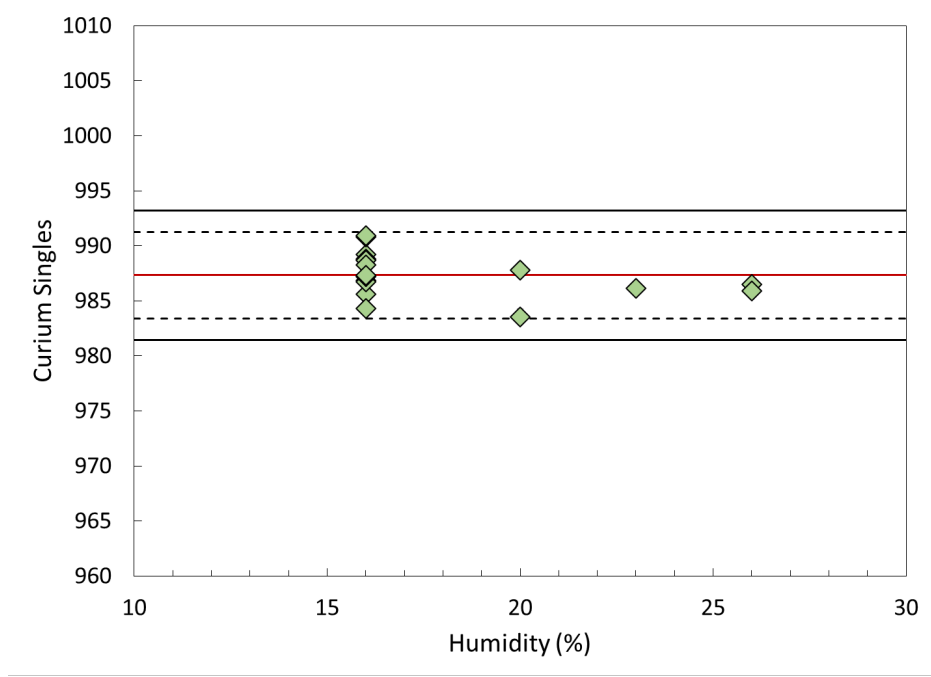


Figure 10: JFY18 Curium count rates as a function of humidity. Note that error bars are smaller than the size of symbols.

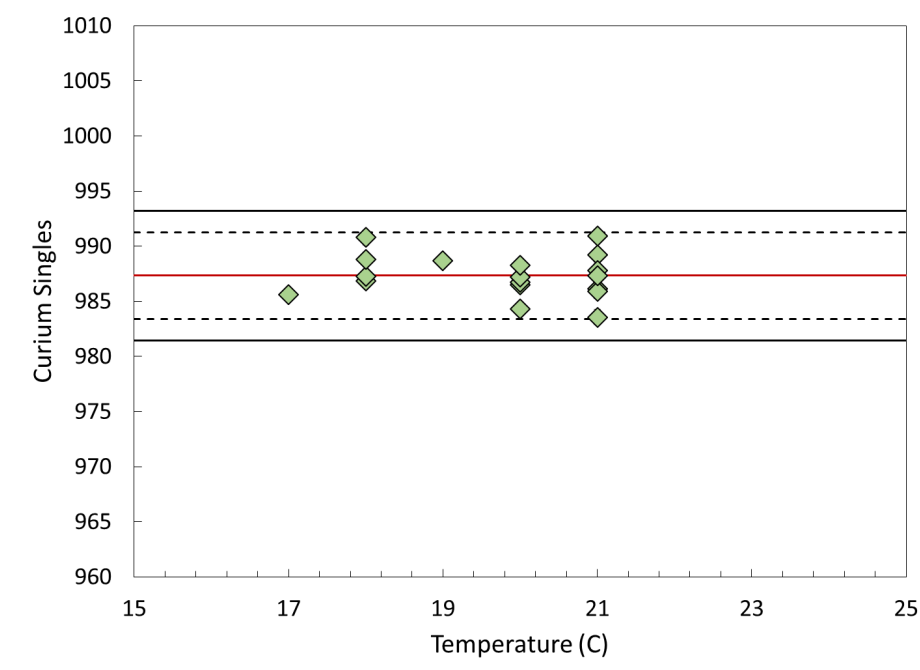


Figure 11: JFY18 Curium count rates as a function of room temperature. Note that error bars are smaller than the size of symbols.

5. HPGe System Performance

October 2018 through March 2019 period has seen many developments on HPGe system performance. Failure of middle (41993a) and bottom (4200a) HPGe detector systems was observed between December 2017 and February 2018. Initial troubleshooting was performed at the start of the new contract period in October 2018 and resulted in the resurrection of the middle (41993a) HPGe detector system by replacing the original X-Cooler and DSPEC with LANL spares. Further troubleshooting during January 2019 resulted in the resurrection of the bottom (4200A) HPGe detector system by replacement of the original X-Cooler with another LANL spare. Full summary of troubleshooting activities is provided in Section 8.1. Current component layout is described in the following section.

The October through December 2018 measurements therefore only included the two working HPGe detectors. The third (bottom) detector was included in the control charts again starting in January 2019.

An overview of all three HPGe detectors performance during October 2018 through March 2019 and over the full monitoring period (i.e. May 2013 – March 2019) is shown in Figures 13-18.

5.1. Current IPCA2 HPGe system configuration

The current configuration of HPGe system components as of February 2019 is shown in Figure 12. Two LANL X-Coolers are used on two of IPCA2 HPGe detectors. One LANL DSPEC is used on one of IPCA2 HPGe detectors.

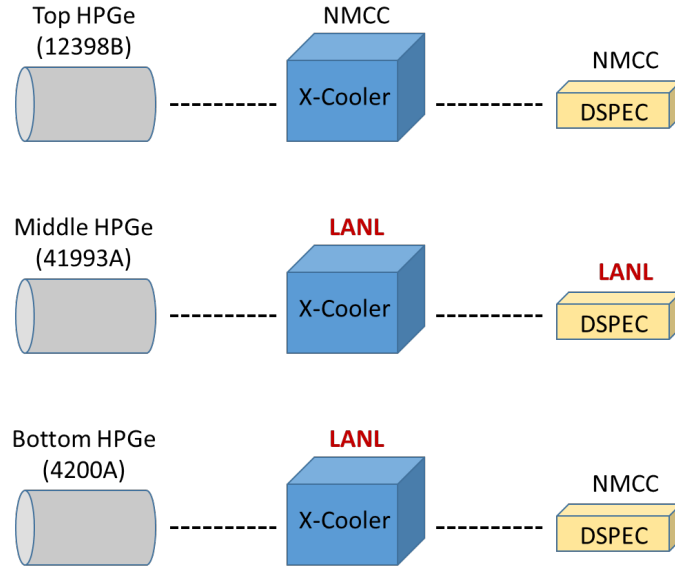


Figure 12: Configuration of IPCA2 HPGe system as of February 2019.

5.2. Top HPGe Detector Performance Summary

The top detector (12698B) shows a good performance over the entire measurement period for the $^{240}\text{Pu}/^{239}\text{Pu}$ ratio with the exception of December 19 measurement, which resulted in 0 ratio (Figure 13, left). The $^{241}\text{Pu}/^{239}\text{Pu}$ ratio for December 19 showed a very high value clearly outside the control bounds (Figure 14, left). This observation was discussed in more detail in the corresponding monthly report [4] and was attributed to a likely temporary failure of the detector cooling during that measurement period. As can be seen from all subsequent $^{240}\text{Pu}/^{239}\text{Pu}$ ratios, the performance was fully restored in the subsequent measurements. Several measurements in November 2018 through January 2019 resulted in $^{241}\text{Pu}/^{239}\text{Pu}$ ratios below the control bounds. The corresponding spectra exhibit slight broadening of peaks, which explains the low $^{241}\text{Pu}/^{239}\text{Pu}$ ratio and could most likely be explained by a temporary reduced cooling performance before and after the cooling failure observed on December 19. The data summarized in Figure 13, 14 (right), with the exception of December 19 data point and the low $^{241}\text{Pu}/^{239}\text{Pu}$ ratios will be used to establish updated control bounds for JFY19 control measurements.

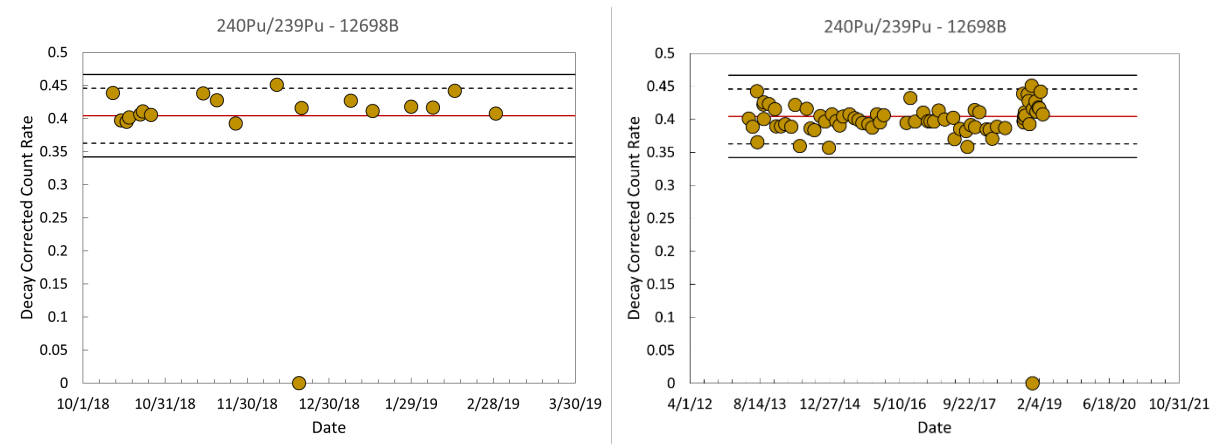


Figure 13: $^{240}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

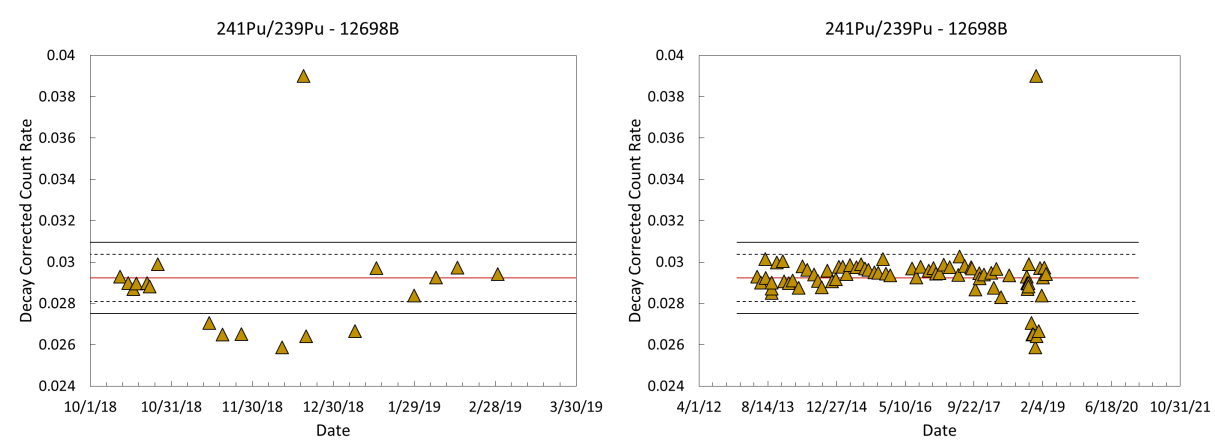


Figure 14: $^{241}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the top IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

5.3. Middle HPGe Detector Performance Summary

The middle HPGe detector shows a consistent performance over the entire evaluation period for both, $^{240}\text{Pu}/^{239}\text{Pu}$ and $^{241}\text{Pu}/^{239}\text{Pu}$ ratios. Note that a slight gain change was observed in December 11 and January 29 data as reported in [4,5], which was resolved by updating the standard gain value (0.125 keV/ch) to 0.1245 keV/ch. The data in Figures 15 and 16 show the corresponding ratio with the corrected gain for both dates.

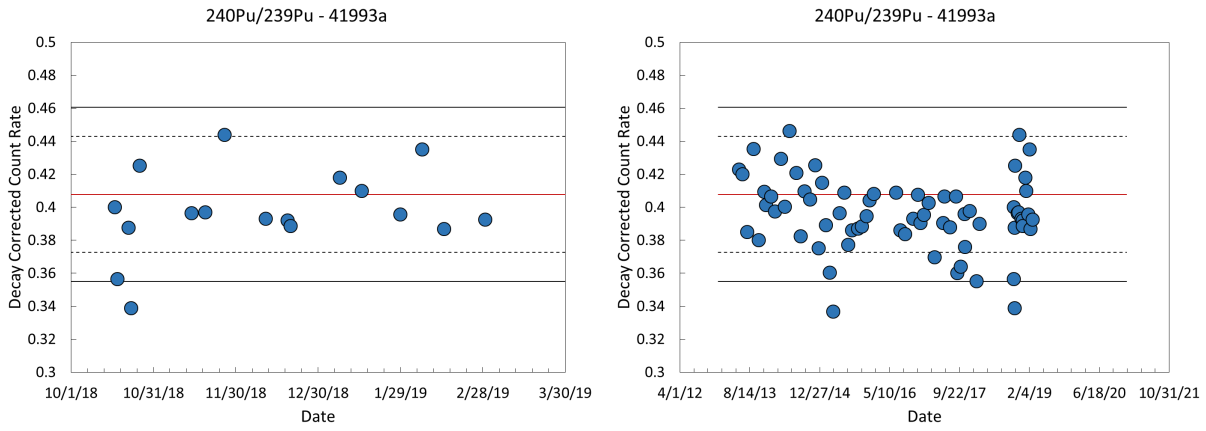


Figure 15: $^{240}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

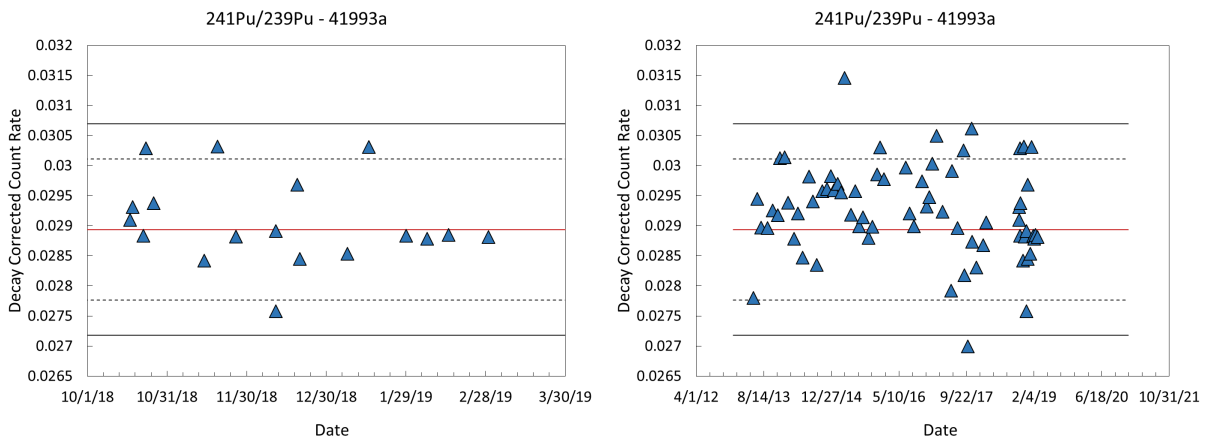


Figure 16: $^{241}\text{Pu}/^{239}\text{Pu}$ isotopic ratios as determined by the middle IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

5.4. Bottom HPGe Detector Performance

As discussed earlier, the bottom HPGe detector system has not been operational until January 2019. The first measurement with the bottom detector was performed shortly after the X-Cooler replacement and exhibit $^{240}\text{Pu}/^{239}\text{Pu}$ and $^{241}\text{Pu}/^{239}\text{Pu}$ ratios just on the level of 3σ control lines as shown in Figures 17 and 18. The subsequent January measurements, however, reveal a good performance, suggesting that the cooling was likely incomplete when the first measurement was performed and therefore resulted in the less than optimal ratios.

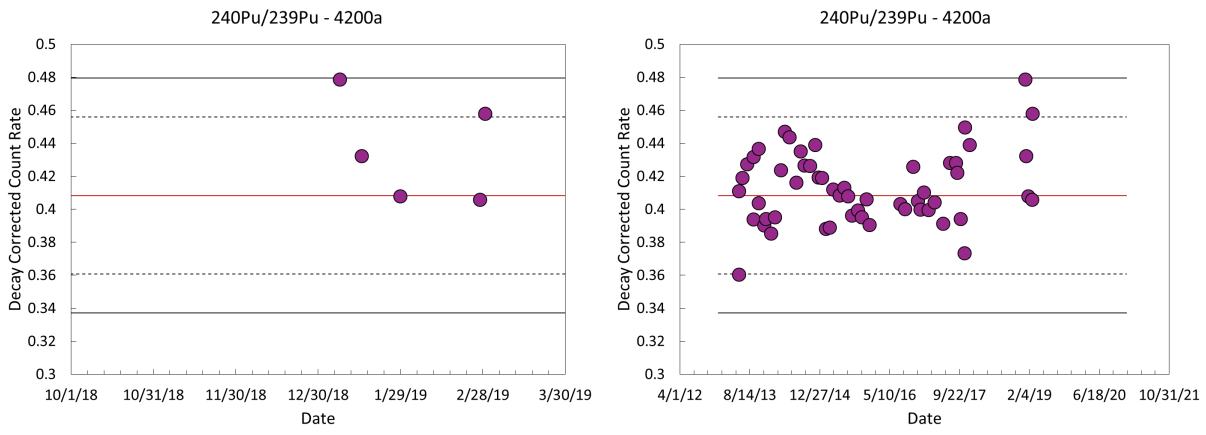


Figure 17: $^{240/239}\text{Pu}$ isotopic ratios as determined by the bottom IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

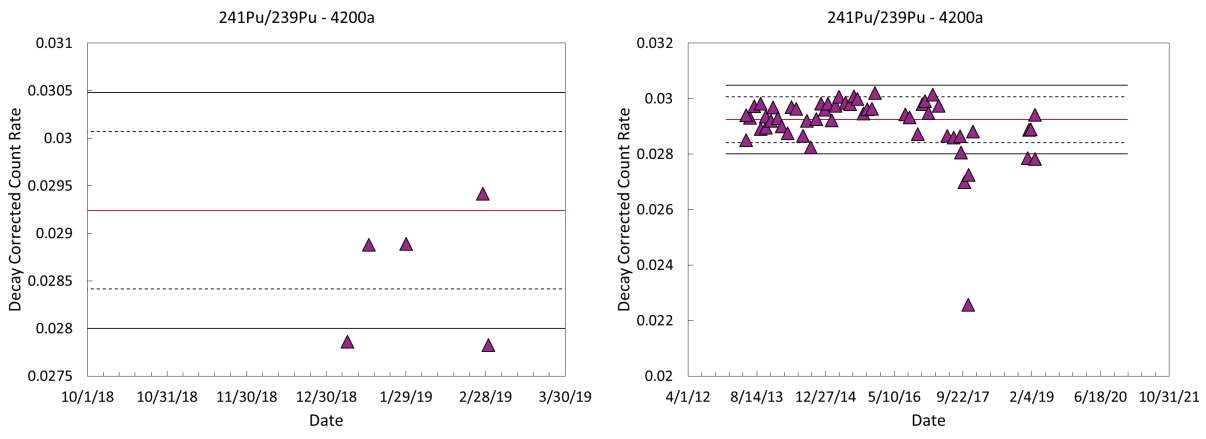


Figure 18: $^{241/239}\text{Pu}$ isotopic ratios as determined by the bottom IPCA2 HPGe for JFY18 (left); for the entire measurement period (right).

6. Load Cell Data

Regular load cell measurements were performed during October 2018 - March 2019 period. Each of these measurements resulted in a consistent weight of 22.69 kg.

7. Continuous Background Monitoring

As part of the contractual agreement, continuous neutron system background was acquired for IPCA2 during November 2018 through March 2019. The measurements were performed using MIC software and analyzed with RadReview. Singles count rates over the reporting period are shown in Figure 19. The Singles background exhibits regular variation between approximately 25 – 32 counts per second, which can be attributed to variation in cosmic ray background. Figure 20 shows temperature and humidity recorded near IPCA2. The high count rate spikes and intervals seen in Singles background correspond to various measurements that are occasionally performed in the High Bay area, where IPCA2 is located. Note that the area is used as a test ground for other LANL developed instrumentation and experiments are routinely performed throughout the year.

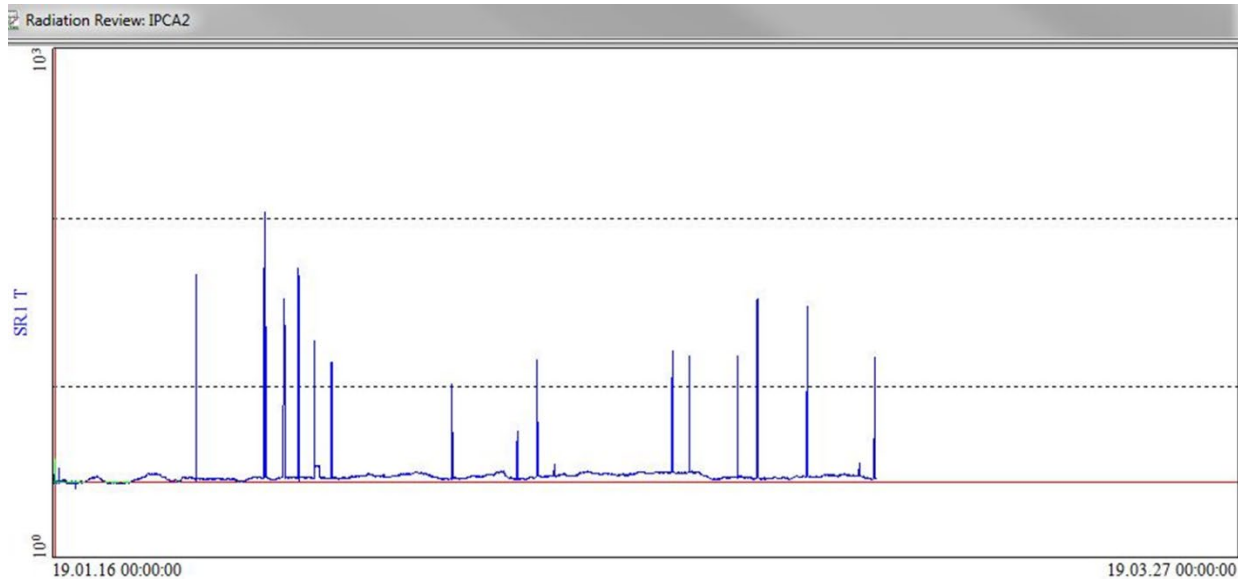


Figure 19: MIC recorded IPCA2 neutron background Singles over November 2018 through March 2019 period.

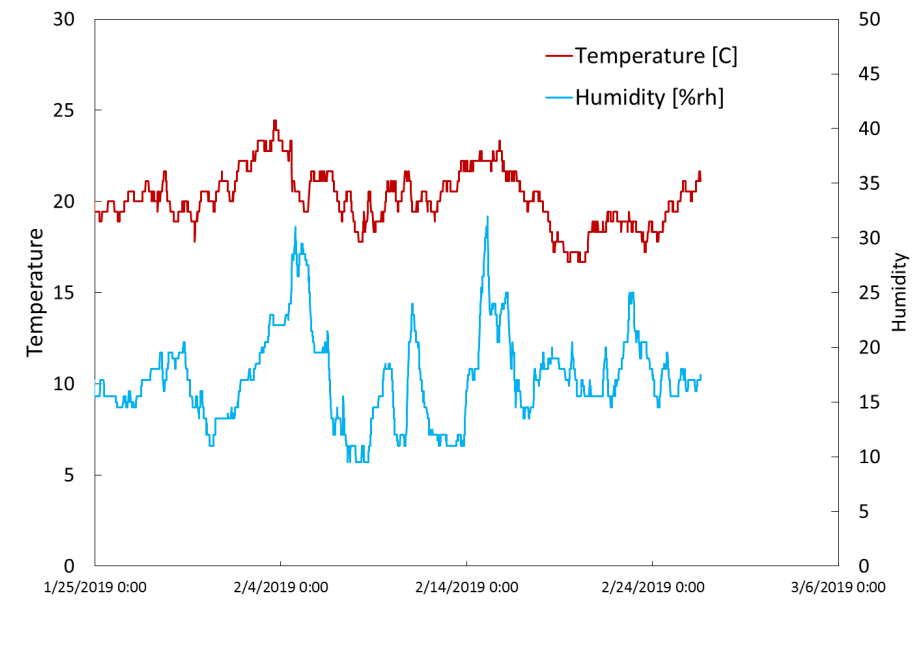


Figure 20: Environmental temperature and humidity recorded at IPCA2 location during the reporting period.

8. Troubleshooting and Repairs

This section provides an overview of all troubleshooting and repair activities performed between October 2018 and March 2019.

8.1. HPGe system troubleshooting and repairs

Failure of performance two of three IPCA2 HPGe detectors (middle (41993a) and bottom (4200a)) was observed between December 2017 and February 2018. Main troubleshooting activities were initiated with the start of new contract in October 2018. The troubleshooting involved evaluation of all the HPGe system components in order to establish if the HPGe detectors themselves are still operational. The activities focused on DSPECs and X-Coolers and involved soft resets (of DSPEC) and component replacements with LANL spares. Prior to these activities, pumping of the middle HPGe detector was also performed in summer 2018. The pumping had no effect on the observed performance failure.

Performed troubleshooting activities resulted in the resurrection of the middle (41993a) HPGe detector by replacing its X-Cooler and DSPEC with LANL spares. Both of these components appeared to have failed. The HPGe detector itself is fully operational as can be seen from results reported in Section 5.3.

Further troubleshooting of the bottom HPGe detector system was performed during January 2019, again focusing on DSPEC and X-Cooler components and resulted in replacement of the X-Cooler with another LANL spare unit. Following the X-Cooler replacement, the HPGe detector performed as expected as can be seen in Section 5.4.

8.1.1. Effect of HPGe detector pumping

During the October JAEA visit it was requested to provide a discussion of HPGe detector pumping on its performance. Note that the middle HPGe detector was not functional at the time when the pumping was performed, and therefore there is no direct data to investigate its performance at that time (summer of 2018). However, Figures 15 (right) and 16 (right) can be used to assess the overall detector performance immediately before the detector failure and after its recovery, which occurred several months after the pumping. The gap in the figures refers to the period of the detector down time and as can be seen from the Pu ratios, the performance is consistent before and after the recovery indicating that pumping performed during that timeframe had not adverse effect.

8.2. Neutron system troubleshooting

Noise in IPCA2 neutron signal was observed on several channels during October 2018 control measurements. Troubleshooting was performed to evaluate grounding of the IPCA2 external body and its tie-rods. The noise was mitigated by more secure grounding of the tie-rods inside IPCA2. Possible cause of this sudden noise was attributed to cell-phone repeaters, which were installed in the building housing IPCA2 shortly prior to start of the measurements. Neutron count rates are continuously monitored in the background mode as well as during monthly measurements to confirm absence of noise issues.

9. Updates to measurement procedure

This section discusses minor updates to measurement procedures proposed for the future control measurements, in order to improve performance and uncertainty.

We propose to unify measurement times per cycle for all the IPCA2 neutron measurements. Currently, the stability measurements (AmLi and Cm) are performed using 100s cycles for 3600 s total measurement time (i.e. 36 x 100s) and Pu efficiency is performed using 30 s cycles for 1800 s (i.e. 60 x 30s). For uncertainty calculation using sample based error it is most suitable to perform measurements with high number of cycles. Therefore, we recommend to use 30 s cycles also for the stability measurements with AmLi and Cm. The total measurement times will remain unchanged for stability measurements, but will be performed with 30 s cycles over 3600 s (i.e. 120 x 30 s, instead of original 36 x 100s).

We recommend to increase the total measurement time for the efficiency measurements to 7200 s from 1800 s. IPCA2 is designed to provide Pu-mass assay with ~1% uncertainty, however the efficiency monitoring measurements exhibit generous 3σ control bounds, corresponding to ~3%. The count rate measured from FZC158 Pu standard is fairly low (~60 counts per second), which explains the sizeable error bars in the individual efficiency measurements (Figures 1-4) in 1800 s measurement time and the noticeable spread of the individual measurements as a function of time. To improve the fidelity of the efficiency measurements, we recommend to increase the measurement time by a factor of 4 (to 7200 s), in order to reduce the uncertainty of individual measurements by a factor of 2 and reduce the spread of the 3σ control bounds.

10. Summary

Table 1 provides an overview of all the control measurements performed over the reporting period (October 2018 – March 2019). Note that October includes higher number of measurements due to troubleshooting activities that were performed that month.

Table 1: The number of measurements taken monthly organized by type.

Month	Pu Eff	AmLi	Cm	12698B (Top)	41993A (Middle)	4200A (Bottom)	Load Cell
October 2018	8	10	7	7	5	0	7
November 2018	3	3	3	3	3	0	3
January 2019	3	3	3	3	3	3	3
February 2019	2	2	2	2	2	1	2
March 2018	1	1	1	1	1	1	1
Total	17	19	16	16	14	7	16

Results of individual monthly control measurements were provided to JAEA in monthly reports [2-5]. This report provides a summary of annual performance of IPCA2 during the reporting period of October 2018 through March 2019.

It is found that plutonium efficiency showed stability and stayed within 2σ of the overall average value of 7.35 % established from 2013-2017 data in reference [1]. No dependence on environmental conditions (temperature, humidity) was observed. The average efficiency of these measurements (performed between October 2018 and March 2019) corresponds to 7.29 ± 0.04 , which is slightly below the previously extracted 7.35%, but within 3σ . Updated control bounds were established based on this dataset (see Appendix A).

The AmLi stability measurements over the reporting period showed good performance, typically within 3σ of the overall average value established in reference [1]. No dependence on environmental conditions (temperature, humidity) was observed. The average count rate (decay corrected count with respect to 01/12/2017) for measurements performed between October 2018 and March 2019 corresponds to 24484 ± 33 , which is slightly below the previously extracted value of 24541, but within 3σ . Updated control bounds were established based on all JFY18 data and are reported in Appendix A.

Curium source measurements were performed to evaluate its feasibility as a potential replacement for the AmLi source to mitigate issues observed in AmLi measurements [1] due to redistribution of source material and positioning. The average count rate (decay corrected with respect to the first measurement on 10/15/2018) for measurements performed between October 2018 and March 2019 corresponds to 987.3 ± 2.0 . No dependence on environmental conditions (temperature, humidity) was observed. Results were used to establish new control bounds as documented in Appendix A. Based on the trends observed so far, Curium appears to be a viable alternative to AmLi sources. Both sources will continue to be used during JFY19 control measurements.

HPGe system monitoring revealed consistent performance of the top detector (12698B) within the 3σ of expected performance, with the exception of several November 2018 through January 2019 $^{241}\text{Pu}/^{239}\text{Pu}$ ratios and December 19 measurement, likely caused by temporary reduction and later complete failure of cooling performance. The cooling, however, appears to have been restored as the January-March 2019 data exhibit trends within 3σ control bounds. The middle detector (41993A) exhibits performance within 3σ control bounds over the entire reporting period. The bottom detector (4200A) system was not functional until January 2019, when the original X-Cooler was replaced using a LANL spare. The detector then exhibited target performance during the subsequent months. The HPGe detector results from this reporting period were used to extract updated control bounds reported in Appendix A. The control bounds for the bottom detector remain the same due to limited number of measurements performed.

In summary, the neutron system performance exhibits expected trends and measurements will continue on monthly basis in JFY19. The HPGe system reveals multiple issues mostly related to failure of cooling modules, but also data acquisition electronics, likely due to limited lifetime of the system components. Since it is anticipated that the entire HPGe system will be replaced by new instrumentation before its installation at J-MOX, the HPGe measurements will be reduced to twice-a-year for JFY19 control period.

11. References

- [1] M.T. Andrews, M.T. Swinhoe, J. Archuleta, D. Henzlova, A. Favalli, J.B. Marlow, “IPCA 2 Data Analysis and Updated Control Charts”, Los Alamos National Laboratory Technical Report, LA-CP-20366 (2017).
- [2] M.T. Andrews, J. Archuleta, A. Favalli, D. Henzlova, C.D. Rael, J.B. Marlow, M.T. Swinhoe, October 2018 IPCA 2 Report, Los Alamos National Laboratory Technical Report, LA-CP-18-20791 (November 2018)
- [3] D. Henzlova, J. Archuleta, M.T. Andrews, A. Favalli, J.B. Marlow, C.D. Rael, M.T. Swinhoe, November 2018 IPCA 2 Report, Los Alamos National Laboratory Technical Report, LA-CP-18-20842 (December 2018)
- [4] D. Henzlova, J. Archuleta, A. Favalli, M.T. Andrews, J.B. Marlow, C.D. Rael, M.T. Swinhoe, December 2018 IPCA 2 Report, Los Alamos National Laboratory Technical Report, LA-CP-19-20016 (January 2019)
- [5] D. Henzlova, J. Archuleta, M.T. Andrews, A. Favalli, J.B. Marlow, C.D. Rael, M.T. Swinhoe, January 2019 IPCA 2 Report, Los Alamos National Laboratory Technical Report, LA-CP-19-20070 (January 2019)

12. Appendix A

This Appendix provides an overview of updated control bounds calculated from JFY18 data that will be used during JFY19 control measurements.

12.1. Updated AmLi control bounds from JFY18 data

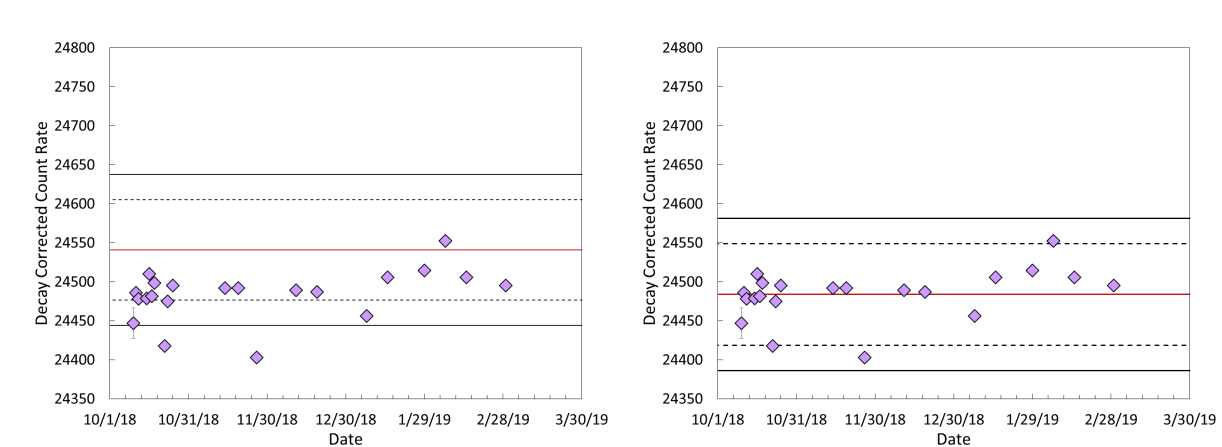


Figure 21: AmLi stability control bounds; original [1] (left); updated based on JFY18 data (right).

12.2. Updated Cm control bounds from JFY18 data

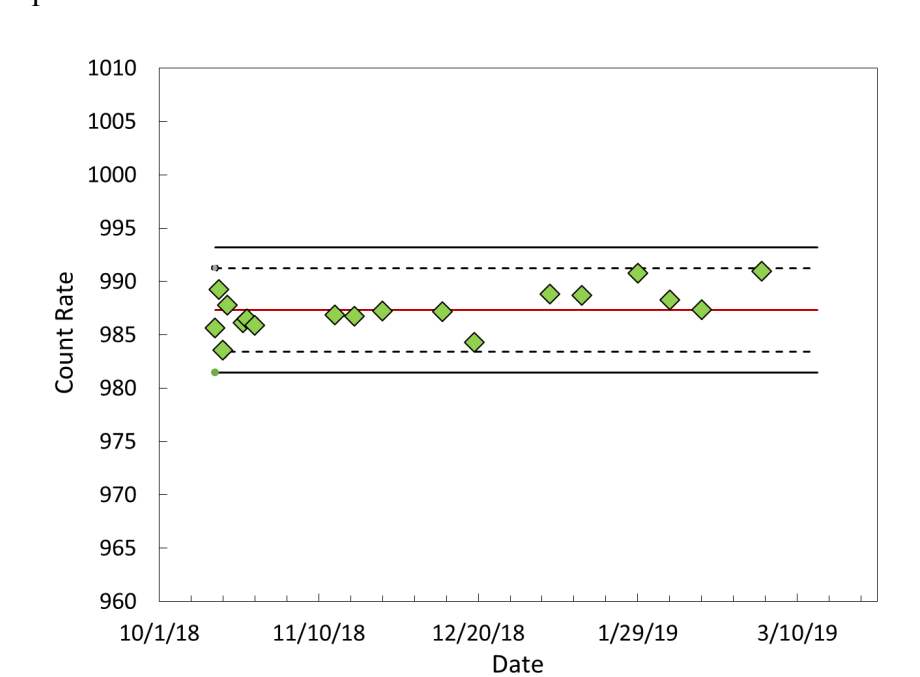


Figure 22: Cm stability control bounds established based on JFY18 data.

12.3. Updated efficiency control bounds from JFY18 data

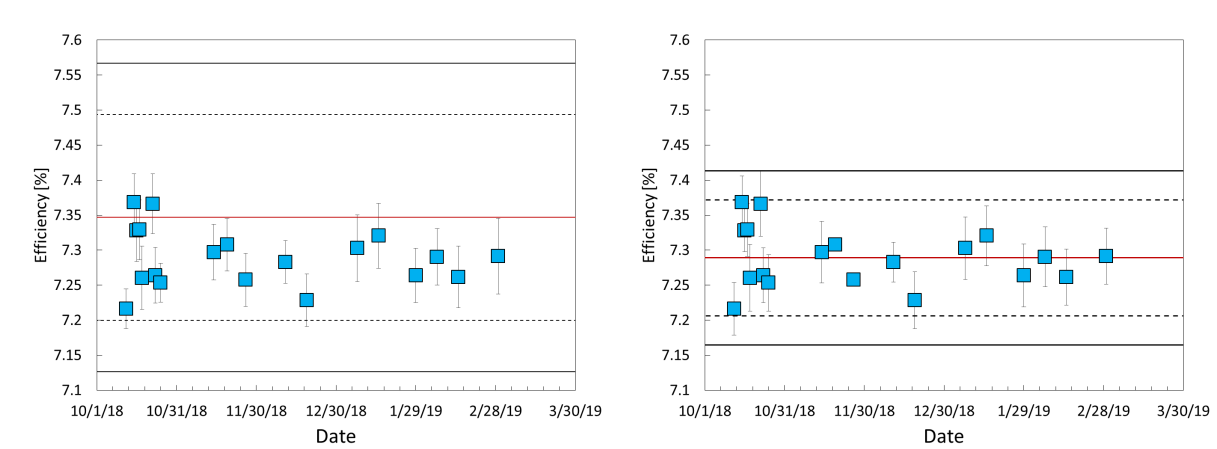


Figure 23: FZC158 efficiency control bounds; original [1] (left); updated based on JFY18 data (right).

12.4. Updated top HPGe detector control bounds

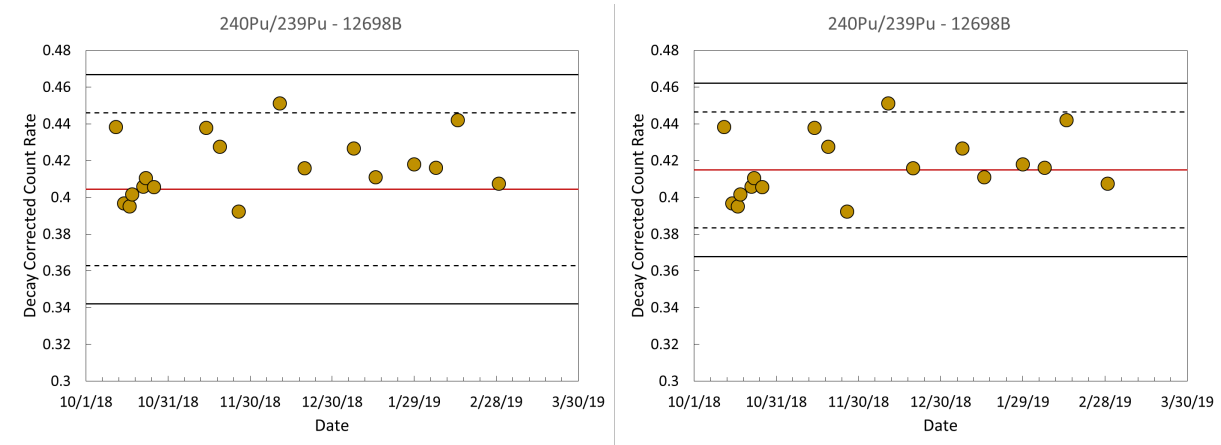


Figure 24: Top HPGe detector control bounds for $^{240}\text{Pu}/^{239}\text{Pu}$; original [1] (left); updated based on JFY18 data with December 19 measurement excluded (right).

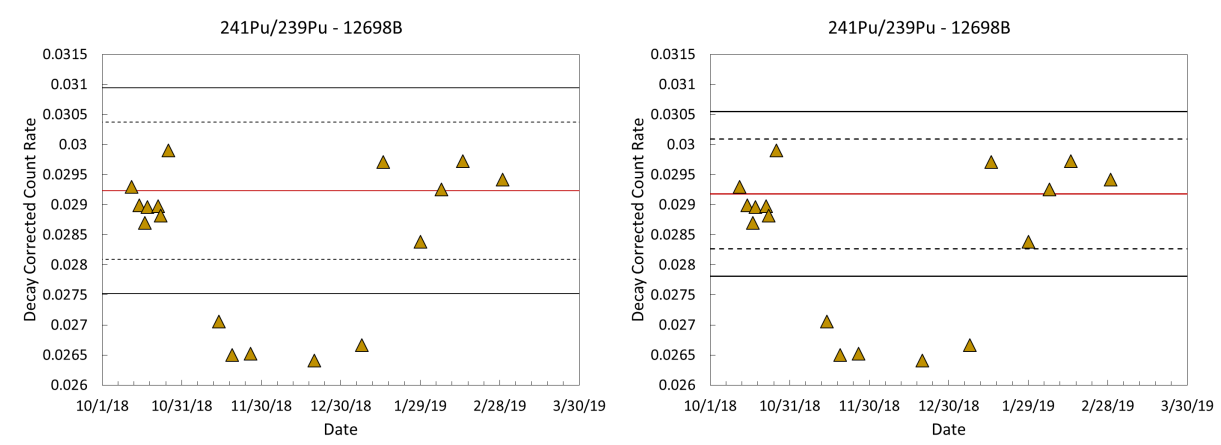


Figure 25: Top HPGe detector control bounds for $^{241}\text{Pu}/^{239}\text{Pu}$; original [1] (left); updated based on JFY18 data with measurements outside the original 3σ excluded (right).

12.5. Updated middle HPGe detector control bounds

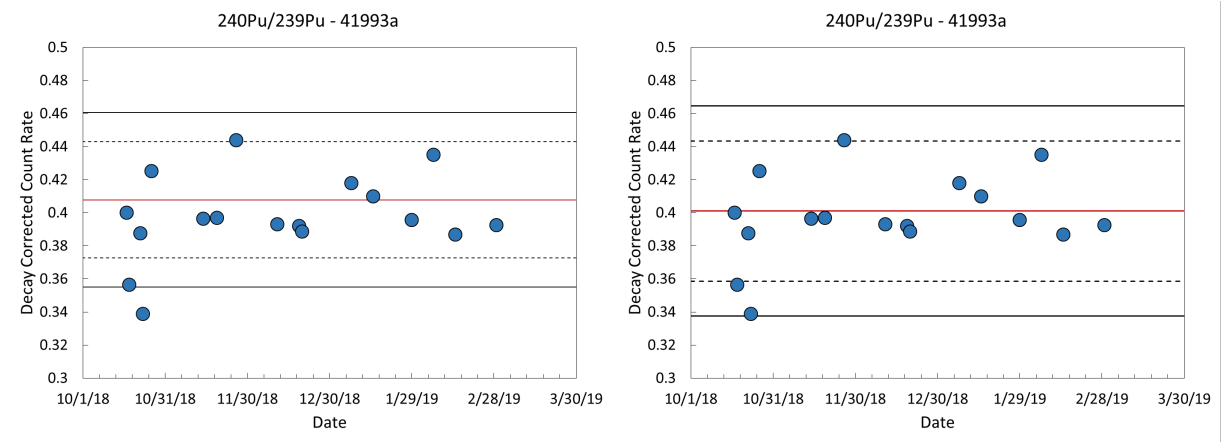


Figure 26: Middle HPGe detector control bounds for $^{240}\text{Pu}/^{239}\text{Pu}$; original [1] (left); updated based on JFY18 data with measurement outside the original 3σ excluded (right).

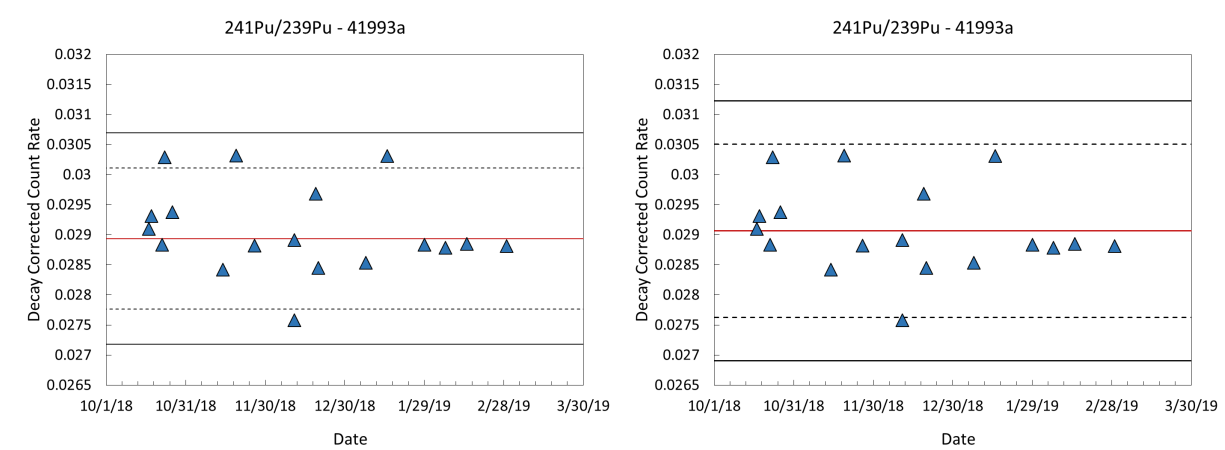


Figure 27: Middle HPGe detector control bounds for $^{241}\text{Pu}/^{239}\text{Pu}$; original [1] (left); updated based on JFY18 data (right);

12.6. Bottom HPGe detector control bounds

Updated control bounds for the bottom detector were not established due to the limited number of measurements performed with this detector during the reporting period. The original control bounds, shown in Figures 29 and 30 will be used in JFY19.

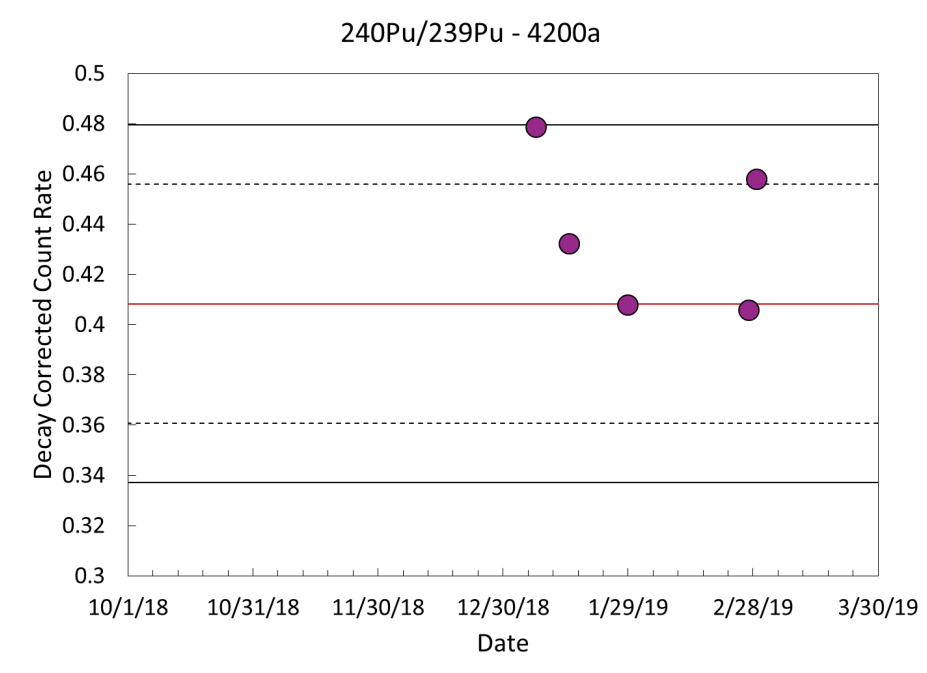


Figure 28: Original [1] bottom HPGe detector control bounds for $^{240}\text{Pu}/^{239}\text{Pu}$ shown with JFY18 data.

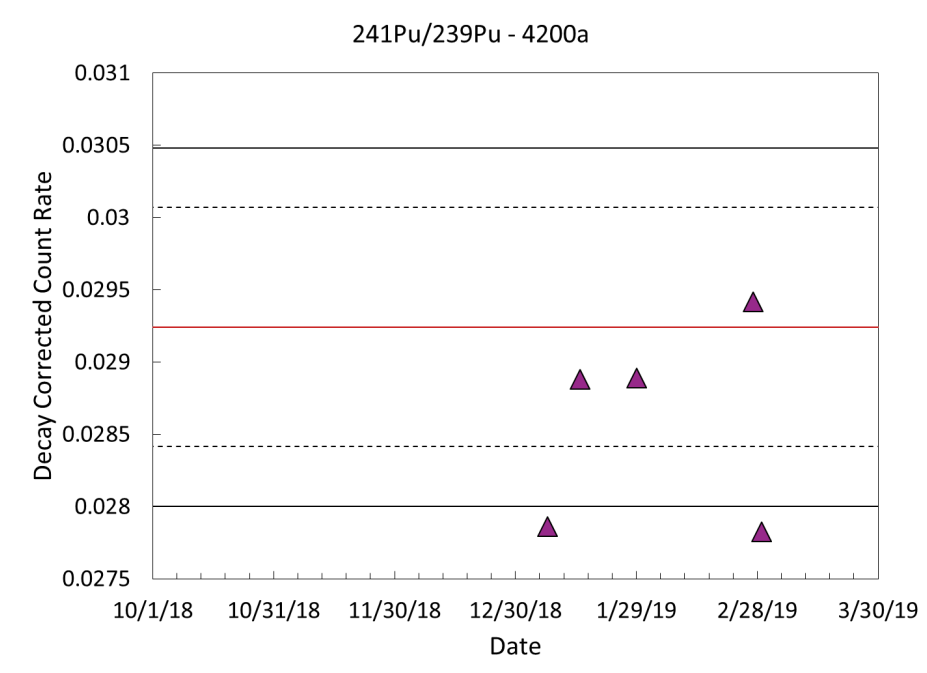


Figure 29: Original [1] bottom HPGe detector control bounds for $^{241}\text{Pu}/^{239}\text{Pu}$ shown with JFY18 data.