

# 添付資料

## 【線源情報】

### 線源証明書

# NOMINAL SOURCE CERTIFICATE

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


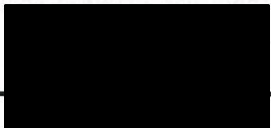
Nuclide	Source No.	Activity	Neutron Output [neutrons/second]	Reference Date
Cf-252	H4-694	100 µCi/3.7 MBq	4.24E+05	15-Oct-10

**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 = 10<sup>3</sup>.
- Nuclear data was taken from "Table of Radioactive Isotopes", edited by Virginia Shirley, 1986.



5 Oct 10  
 \_\_\_\_\_  
 Date

**Notebook Page:** 1465-40

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## 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

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Fax 661•257•8303

# NOMINAL SOURCE CERTIFICATE

**Customer:** Daiichi Clarity Company Ltd.  
**Purchase Order No.:** CTD07  
**Model No.:** N-252  
**Catalog No.:** CF230140100U  
**Capsule Type:** A3014-01  
**Active Diameter:** 0.062" (1.57 mm)  
**Cover:** Stainless Steel  
**Backing:** Stainless Steel

**Certificate Date:** 26-Aug-13  
**Quantity:** 1  
**SS&DR No.:** CA0406S102S  
**ISO/ANSI Classification:** ANSI 77C66535  
**Special Form No.:** USA/0351/S-96 Rev 8  
**Nuclide Half Life:** 2.645 ± 0.008 years  
**Recommended Working Life:** 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cf-252	K7-436	100 µCi (3.7 MBq)	3.79 E+05 n/s	1-Oct-13

**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

4 Sep 13  
Date

**Notebook Page:** 1678-46

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### 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



4 Sep 13  
name, title date

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# 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 = 10<sup>3</sup>.
  - 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.

  
Name

  
Signature

2017-12-13

Date

**Notebook Page:** 1952-70

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## 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
name, title	date



# NOMINAL SOURCE CERTIFICATE

Customer: Daiichi Clarity Co., Ltd.

Purchase Order No.: DN125

Model No.: N-252

Catalog No.: CF230140100U

Capsule Type: A3014-01

Active Diameter: 0.062" (1.6 mm)

Cover: Stainless Steel

Backing: Stainless Steel

Certificate Date: 2020-09-25

Quantity: 1

SS&amp;DR No.: CA0406S102S

ISO/ANSI Classification: ANSI 77C66535

Special Form No.: USA/0351/S-96 Rev 10

Nuclide Half Life: 2.645 ± 0.008 years

Recommended Working Life: 15 years

Nuclide	Source No.	Activity	Radiation Output	Reference Date
Cf-252	T1-349	3.7 MBq (100 µCi)	3.92 E+05 n/s	2020-10-01

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 = 10<sup>3</sup>.
  - 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.

  2020-09-25  
Name Date

Notebook Page: 2190-01

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www.ezag.com

## Cf-252 Technical Data

The Cf-252 used to prepare your order of source T1-349 was taken from Eckert & Ziegler Isotope Products Laboratories Lot #6050711. It had the following composition as of 2020-08-19.

<u>Nuclide</u>	<u>Mass %</u>	<u>Activity %</u>
Cf-249	14.572	0.1723
Cf-250	17.660	5.553
Cf-251	6.859	0.0314
Cf-252	60.910	94.243

The Cm-248 decay product was last separated on 2018-04-19.

Isotopic composition provided by Oak Ridge National Laboratory

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



2020-9-25  
name, title  date

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## 【AFAS 性能確認試験】

### (1) 2.1 長期管理限界の妥当性確認

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 15:36:27
Results file name: 14KP3627.VER
Inspection number:
Item id: BWR BF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive error messages
No known alpha calibration

Results
Singles: 293.677 +- 0.537
Doubles: 3.120 +- 0.157
Triples: 0.000 +- 0.000
Scaler 1: 6.522 +- 0.130
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_01
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 15:20:22
Results file name: 14KP2022.VER
Inspection number:
Item id: BWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive error messages
Known alpha analysis error

Results
Singles: 5385.943 +- 2.028
Doubles: 1149.790 +- 3.490
Triples: 0.000 +- 0.000
Scaler 1: 18.245 +- 0.159
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_01
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 15:05:18
Results file name: 14KP0518.VER
Inspection number:
Item id: BWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 154.412 +- 0.393
Doubles: 0.663 +- 0.075
Triples: 0.000 +- 0.000
Scaler 1: 283.157 +- 0.613
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 16:22:39
Results file name: 14KQ2239.VER
Inspection number:
Item id: PWR BF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 363.330 +- 0.792
Doubles: 4.788 +- 0.172
Triples: 0.000 +- 0.000
Scaler 1: 271.363 +- 0.894
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 16:05:35
Results file name: 14K00535.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 4407.456 +- 2.972
Doubles: 758.993 +- 2.285
Triples: 0.000 +- 0.000
Scaler 1: 36.605 +- 0.219
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.04.20 15:51:31
Results file name: 14KP5131.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.04.20
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.04.20

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.605 +- 0.080
Doubles: 0.003 +- 0.002
Triples: 0.000 +- 0.000
Scaler 1: 253.855 +- 0.488
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 12:53:45  
 Results file name: 15QM5345.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu date:	00.01.01	0.0000	21.05.26	0.0000
Am241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	0.0000	21.05.26	0.0000

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	286.560 +- 0.666
Doubles:	3.433 +- 0.112
Triples:	0.000 +- 0.000
Scaler 1:	6.450 +- 0.052
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	17175	542	298	378	0	Pass
2	17360	515	316	377	0	Pass
3	17243	501	293	382	0	Pass
4	16977	500	288	386	0	Pass
5	17008	488	298	397	0	Pass
6	17206	460	296	394	0	Pass
7	17276	515	315	372	0	Pass
8	17123	532	330	395	0	Pass
9	17326	552	327	387	0	Pass
10	17242	512	296	402	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	286.250	4.067	0.000	0.000	Pass
2	289.333	3.317	0.000	0.000	Pass
3	287.383	3.467	0.000	0.000	Pass
4	282.950	3.533	0.000	0.000	Pass
5	283.467	3.167	0.000	0.000	Pass
6	286.767	2.733	0.000	0.000	Pass
7	287.933	3.333	0.000	0.000	Pass
8	285.383	3.367	0.000	0.000	Pass
9	288.767	3.750	0.000	0.000	Pass
10	287.367	3.600	0.000	0.000	Pass

(2)

202105\_AFAS-B\_Collar.txt

202105\_AFAS-B\_Collar.txt

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 11:11:18  
 Results file name: 15QL1118.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu date:	00.01.01	0.0000	21.05.26	0.0000
Am241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	0.0000	21.05.26	0.0000

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles:	5252.854 +- 3.912
Doubles:	1123.376 +- 5.007
Triples:	0.000 +- 0.000
Scaler 1:	17.513 +- 0.161
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	314588	171998	105620	1046	0	Pass
2	315795	174605	106717	1127	0	Pass
3	314664	172408	106102	1052	0	Pass
4	314683	173174	105630	1026	0	Pass
5	315988	175083	106754	1050	0	Pass
6	314403	172129	106452	1059	0	Pass
7	314488	173269	105041	1062	0	Pass
8	314875	173606	106858	1035	0	Pass
9	313711	171785	103708	1035	0	Pass
10	315862	173981	107399	1016	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5247.550	1110.033	0.000	0.000	Pass
2	5267.701	1135.299	0.000	0.000	Pass
3	5248.819	1108.830	0.000	0.000	Pass
4	5249.136	1129.533	0.000	0.000	Pass
5	5270.923	1142.676	0.000	0.000	Pass
6	5244.462	1098.308	0.000	0.000	Pass
7	5245.881	1140.969	0.000	0.000	Pass
8	5252.342	1116.224	0.000	0.000	Pass
9	5232.909	1138.434	0.000	0.000	Pass
10	5268.820	1113.459	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 10:54:14  
 Results file name: 15QK5414.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.05.26  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.05.26

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 150.187 +- 0.444  
 Doubles: 0.728 +- 0.075  
 Triples: 0.000 +- 0.000  
 Scaler 1: 276.342 +- 0.871  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8899	132	74	16659	0	Pass
2	9115	148	106	16687	0	Pass
3	9008	147	81	16592	0	Pass
4	8996	150	86	16614	0	Pass
5	9137	118	92	16283	0	Pass
6	8987	122	92	16509	0	Pass
7	8944	116	84	16785	0	Pass
8	9105	149	105	16785	0	Pass
9	9012	121	83	16527	0	Pass
10	8909	127	90	16364	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	148.317	0.967	0.000	0.000	Pass
2	151.917	0.700	0.000	0.000	Pass
3	150.133	1.100	0.000	0.000	Pass
4	149.933	1.067	0.000	0.000	Pass
5	152.283	0.433	0.000	0.000	Pass
6	149.783	0.500	0.000	0.000	Pass
7	149.067	0.533	0.000	0.000	Pass
8	151.750	0.733	0.000	0.000	Pass
9	150.200	0.633	0.000	0.000	Pass
10	148.483	0.617	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 13:57:02  
 Results file name: 15QN5702.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.05.26  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.05.26

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
No known alpha calibration

Results

Singles: 353.257 +- 0.944  
 Doubles: 4.490 +- 0.305  
 Triples: 0.000 +- 0.000  
 Scaler 1: 264.672 +- 0.623  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	21011	690	474	16030	0	Pass
2	21262	804	452	15875	0	Pass
3	21073	670	451	15782	0	Pass
4	21268	796	488	15784	0	Pass
5	21467	715	530	15905	0	Pass
6	21260	733	518	16093	0	Pass
7	21009	742	462	15863	0	Pass
8	21380	800	473	15944	0	Pass
9	21298	768	500	15822	0	Pass
10	20926	802	478	15705	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	350.183	3.600	0.000	0.000	Pass
2	354.367	5.867	0.000	0.000	Pass
3	351.217	3.650	0.000	0.000	Pass
4	354.467	5.133	0.000	0.000	Pass
5	357.783	3.083	0.000	0.000	Pass
6	354.333	3.583	0.000	0.000	Pass
7	350.150	4.667	0.000	0.000	Pass
8	356.333	5.450	0.000	0.000	Pass
9	354.967	4.467	0.000	0.000	Pass
10	348.767	5.400	0.000	0.000	Pass

(2)



INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 13:41:58  
 Results file name: 15QN4158.VER  
 Inspection number:  
 Item id: PWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu date:	00.01.01	21.05.26	0.0000 +- 0.0000	0.0000
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	21.05.26		

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

(1)

Passive scaler2 bkgrnd: 0.000

Number passive cycles: 9  
Count time (sec): 60

Passive error messages

No passive calibration curve calibration  
No known alpha calibration

Results

Singles:	4291.090 +- 2.978
Doubles:	735.064 +- 2.468
Triples:	0.000 +- 0.000
Scaler 1:	35.920 +- 0.412
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	256532	114267	69996	2182	0	Pass
2	257333	114421	70839	1998	0	Pass
3	257882	114924	70379	2284	0	Pass
4	257431	114641	71123	2181	0	Pass
5	257385	115127	70702	2148	0	Pass
6	258231	115392	71230	2129	0	Pass
7	256753	113974	70469	2141	0	Pass
8	257709	114786	70229	2173	0	Pass
9	257073	113905	70124	2161	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4277.115	738.942	0.000	0.000	Pass
2	4290.474	727.445	0.000	0.000	Pass
3	4299.631	743.521	0.000	0.000	Pass
4	4292.109	726.377	0.000	0.000	Pass
5	4291.342	741.516	0.000	0.000	Pass
6	4305.452	737.130	0.000	0.000	Pass
7	4280.801	726.157	0.000	0.000	Pass
8	4296.746	743.721	0.000	0.000	Pass
9	4286.138	730.766	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.05.26 13:23:52  
 Results file name: 15QN2352.VER  
 Inspection number:  
 Item id: PWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu date:	00.01.01	21.05.26	0.0000 +- 0.0000	0.0000
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	21.05.26		

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	4.455 +- 0.072
Doubles:	-0.002 +- 0.003
Triples:	0.000 +- 0.000
Scaler 1:	248.272 +- 0.560
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	260	0	0	14760	0	Pass
2	264	0	0	14992	0	Pass
3	263	0	0	14856	0	Pass
4	261	0	0	14967	0	Pass
5	245	1	0	14693	0	Pass
6	289	0	1	14884	0	Pass
7	283	0	0	14946	0	Pass
8	263	0	0	14933	0	Pass
9	284	0	1	15044	0	Pass
10	261	0	0	14888	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4.333	0.000	0.000	0.000	Pass
2	4.400	0.000	0.000	0.000	Pass
3	4.383	0.000	0.000	0.000	Pass
4	4.350	0.000	0.000	0.000	Pass
5	4.083	0.017	0.000	0.000	Pass
6	4.817	-0.017	0.000	0.000	Pass
7	4.717	0.000	0.000	0.000	Pass
8	4.383	0.000	0.000	0.000	Pass
9	4.733	-0.017	0.000	0.000	Pass
10	4.350	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.06.23 10:24:48  
 Results file name: 16NK2448.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.06.23  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 281.313 +- 0.964  
 Doubles: 2.943 +- 0.143  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.260 +- 0.137  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16643	483	336	355	0	Pass
2	17230	546	324	373	0	Pass
3	16980	487	325	374	0	Pass
4	17061	436	304	360	0	Pass
5	16882	462	295	432	0	Pass
6	16699	492	284	373	0	Pass
7	16970	484	292	367	0	Pass
8	16832	477	305	337	0	Pass
9	16730	467	293	388	0	Pass
10	16761	485	295	397	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	277.383	2.450	0.000	0.000	Pass
2	287.167	3.700	0.000	0.000	Pass
3	283.000	2.700	0.000	0.000	Pass
4	284.350	2.200	0.000	0.000	Pass
5	281.367	2.783	0.000	0.000	Pass
6	278.317	3.467	0.000	0.000	Pass
7	282.833	3.200	0.000	0.000	Pass
8	280.533	2.867	0.000	0.000	Pass
9	278.833	2.900	0.000	0.000	Pass
10	279.350	3.167	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.06.23 10:09:42  
 Results file name: 16NK0942.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.06.23  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 5146.282 +- 3.619  
 Doubles: 1101.048 +- 3.187  
 Triples: 0.000 +- 0.000  
 Scaler 1: 17.268 +- 0.153  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	308048	167045	100905	978	0	Pass
2	308564	167795	101575	1048	0	Pass
3	307871	167128	101385	1069	0	Pass
4	309117	167195	102200	1020	0	Pass
5	308132	167942	101474	1015	0	Pass
6	309067	167937	102019	1030	0	Pass
7	308205	167315	101692	1024	0	Pass
8	309945	167827	102453	1073	0	Pass
9	308555	166398	101310	1041	0	Pass
10	307716	167423	100542	1063	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5138.369	1105.975	0.000	0.000	Pass
2	5146.983	1107.319	0.000	0.000	Pass
3	5135.414	1099.335	0.000	0.000	Pass
4	5156.215	1086.841	0.000	0.000	Pass
5	5139.771	1111.461	0.000	0.000	Pass
6	5155.380	1102.275	0.000	0.000	Pass
7	5140.990	1097.332	0.000	0.000	Pass
8	5170.038	1093.189	0.000	0.000	Pass
9	5146.833	1088.390	0.000	0.000	Pass
10	5132.826	1118.362	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_01
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.06.23 09:53:37
Results file name: 16NJ5337.VER
Inspection number:
Item id: BWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.06.23
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive error messages
Known alpha analysis error
Results

Singles: 147.743 +- 0.685
Doubles: 0.703 +- 0.063
Triples: 0.000 +- 0.000
Scaler 1: 271.437 +- 0.670
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.06.23 11:11:04
Results file name: 16NL1104.VER
Inspection number:
Item id: PWR BF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.06.23
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive error messages
No passive calibration curve calibration
No known alpha calibration
Results

Singles: 346.652 +- 0.717
Doubles: 4.405 +- 0.173
Triples: 0.000 +- 0.000
Scaler 1: 258.090 +- 0.393
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.06.23 10:56:00
Results file name: 16NK5600.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.06.23
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 4204.955 +- 3.437
Doubles: 719.856 +- 2.892
Triples: 0.000 +- 0.000
Scaler 1: 34.788 +- 0.239
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.06.23 10:40:52
Results file name: 16NK4052.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.06.23
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.06.23

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.357 +- 0.075
Doubles: -0.005 +- 0.004
Triples: 0.000 +- 0.000
Scaler 1: 243.883 +- 0.412
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.07.08 09:59:16  
 Results file name: 178J5916.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.07.08  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 No known alpha calibration  
 Results  
 Singles: 277.687 +- 0.704  
 Doubles: 3.020 +- 0.115  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.175 +- 0.097  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16713	494	268	364	0	Pass
2	16663	474	317	372	0	Pass
3	16826	475	305	342	0	Pass
4	16916	513	337	349	0	Pass
5	16649	485	312	388	0	Pass
6	16682	467	292	392	0	Pass
7	16575	464	260	388	0	Pass
8	16588	478	285	376	0	Pass
9	16483	451	297	350	0	Pass
10	16517	464	280	384	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	278.550	3.767	0.000	0.000	Pass
2	277.717	2.617	0.000	0.000	Pass
3	280.433	2.833	0.000	0.000	Pass
4	281.933	2.933	0.000	0.000	Pass
5	277.483	2.883	0.000	0.000	Pass
6	278.033	2.917	0.000	0.000	Pass
7	276.250	3.400	0.000	0.000	Pass
8	276.467	3.217	0.000	0.000	Pass
9	274.717	2.567	0.000	0.000	Pass
10	275.283	3.067	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.07.08 13:53:18  
 Results file name: 178N5318.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: Initial

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.07.08  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 20  
 Count time (sec): 60  
 Passive error messages  
 No known alpha calibration  
 Results  
 Singles: 278.307 +- 0.494  
 Doubles: 2.955 +- 0.073  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.255 +- 0.069  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16706	538	345	362	0	Pass
2	16863	461	332	372	0	Pass
3	16745	471	275	376	0	Pass
4	16865	491	309	369	0	Pass
5	16681	497	307	382	0	Pass
6	16731	479	322	343	0	Pass
7	16568	470	268	373	0	Pass
8	16861	461	296	362	0	Pass
9	16525	459	264	335	0	Pass
10	16674	516	327	380	0	Pass
11	16768	496	312	385	0	Pass
12	16982	507	307	364	0	Pass
13	16695	483	295	391	0	Pass
14	16664	459	308	402	0	Pass
15	16511	492	308	368	0	Pass
16	16575	488	310	386	0	Pass
17	16821	449	299	414	0	Pass
18	16565	458	291	393	0	Pass
19	16534	461	297	385	0	Pass
20	16634	486	304	364	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	278.433	3.217	0.000	0.000	Pass
2	281.050	2.150	0.000	0.000	Pass
3	279.083	3.267	0.000	0.000	Pass
4	281.083	3.033	0.000	0.000	Pass
5	278.017	3.167	0.000	0.000	Pass
6	278.850	2.617	0.000	0.000	Pass
7	276.133	3.367	0.000	0.000	Pass
8	281.017	2.750	0.000	0.000	Pass
9	275.417	3.250	0.000	0.000	Pass
10	277.900	3.150	0.000	0.000	Pass

(2)

11	279.467	3.067	0.000	0.000	Pass
12	283.033	3.333	0.000	0.000	Pass
13	278.250	3.133	0.000	0.000	Pass
14	277.733	2.517	0.000	0.000	Pass
15	275.183	3.067	0.000	0.000	Pass
16	276.250	2.967	0.000	0.000	Pass
17	280.350	2.500	0.000	0.000	Pass
18	276.083	2.783	0.000	0.000	Pass
19	275.567	2.733	0.000	0.000	Pass
20	277.233	3.033	0.000	0.000	Pass

(3)

INCC 5.1.2

Facility: PPF  
Material balance area: JM2G  
Detector type: AFAS  
Detector id: JSR\_01  
Electronics id: JSR-12  
Inventory change code:  
I/O code:  
Measurement date: 21.07.08 09:44:44  
Results file name: 178J4444.VER  
Inspection number:  
Item id: BWR COLLAR  
Stratum id: XXXX  
Material type: Pu  
Original declared mass: 0.000  
Measurement option: Verification  
Data source: Review disk file  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment:

Isotopics id: Default  
Isotopics source code: OD  
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu date: 00.01.01 21.07.08  
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000  
Number passive cycles: 10  
Count time (sec): 60

Passive error messages  
Known alpha analysis error

Results

Singles: 5099.743 +- 2.534  
Doubles: 1094.432 +- 3.118  
Triples: 0.000 +- 0.000  
Scaler 1: 17.235 +- 0.189  
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	306114	165583	99712	1015	0	Pass
2	305690	165879	100293	983	0	Pass
3	305647	164545	100065	1011	0	Pass
4	306147	165464	100076	1079	0	Pass
5	304869	164338	99739	1059	0	Pass
6	304961	164491	98948	1000	0	Pass
7	306053	165620	99712	1026	0	Pass
8	306212	165627	99439	1099	0	Pass
9	305993	165644	100668	1037	0	Pass
10	305657	164721	98747	1032	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	5106.082	1101.454	0.000	0.000	Pass
2	5099.004	1096.684	0.000	0.000	Pass
3	5098.286	1078.189	0.000	0.000	Pass
4	5106.633	1093.378	0.000	0.000	Pass
5	5085.298	1080.170	0.000	0.000	Pass
6	5086.834	1095.956	0.000	0.000	Pass
7	5105.064	1102.072	0.000	0.000	Pass
8	5107.718	1106.756	0.000	0.000	Pass
9	5104.062	1086.487	0.000	0.000	Pass
10	5098.453	1103.171	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
Material balance area: JM2G  
Detector type: AFAS  
Detector id: JSR\_01  
Electronics id: JSR-12  
Inventory change code:  
I/O code:  
Measurement date: 21.07.08 09:27:40  
Results file name: 178J2740.VER  
Inspection number:  
Item id: BWR TF  
Stratum id: XXXX  
Material type: Pu  
Original declared mass: 0.000  
Measurement option: Verification  
Data source: Review disk file  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment:

Isotopics id: Default  
Isotopics source code: OD  
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu date: 00.01.01 21.07.08  
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000

INCC 5.1.2

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

Facility: PPF  
Material balance area: JM2G  
Detector type: AFAS  
Detector id: JSR\_01  
Electronics id: JSR-12  
Inventory change code:  
I/O code:  
Measurement date: 21.07.08 13:22:43  
Results file name: 178N2243.VER  
Inspection number:  
Item id: BWR TF  
Stratum id: XXXX  
Material type: Pu  
Original declared mass: 0.000  
Measurement option: Verification  
Data source: Review disk file  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment: Initial

Passive error messages  
Known alpha analysis error

Results

Singles: 146.262 +- 0.395  
Doubles: 0.845 +- 0.075  
Triples: 0.000 +- 0.000  
Scaler 1: 267.672 +- 0.823  
Scaler 2: 0.000 +- 0.000

Isotopics id: Default  
Isotopics source code: OD  
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu date: 00.01.01 21.07.08  
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Am date: 00.01.01 21.07.08  
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 cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8854	138	82	15862	0	Pass
2	8852	149	80	16135	0	Pass
3	8779	123	92	16266	0	Pass
4	8797	130	81	15992	0	Pass
5	8777	135	69	15766	0	Pass
6	8638	119	74	16136	0	Pass
7	8671	114	75	15987	0	Pass
8	8759	128	96	16203	0	Pass
9	8864	133	82	16140	0	Pass
10	8766	148	79	16116	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	147.567	0.933	0.000	0.000	Pass
2	147.533	1.150	0.000	0.000	Pass
3	146.317	0.517	0.000	0.000	Pass
4	146.617	0.817	0.000	0.000	Pass
5	146.283	1.100	0.000	0.000	Pass
6	143.967	0.750	0.000	0.000	Pass
7	144.517	0.650	0.000	0.000	Pass
8	145.983	0.533	0.000	0.000	Pass
9	147.733	0.850	0.000	0.000	Pass
10	146.100	1.150	0.000	0.000	Pass

(2)

(1)

Passive scaler2 bkgrnd: 0.000

11	146.983	1.167	0.000	0.000	Pass
12	148.533	0.733	0.000	0.000	Pass
13	143.933	0.600	0.000	0.000	Pass
14	148.900	0.783	0.000	0.000	Pass
15	145.317	0.650	0.000	0.000	Pass
16	147.517	0.800	0.000	0.000	Pass
17	147.233	0.967	0.000	0.000	Pass
18	144.417	0.933	0.000	0.000	Pass
19	145.967	0.700	0.000	0.000	Pass
20	147.317	0.917	0.000	0.000	Pass

Number passive cycles: 20  
Count time (sec): 60

Passive error messages  
Known alpha analysis error

Results

Singles: 146.452 +- 0.321  
Doubles: 0.797 +- 0.049  
Triples: 0.000 +- 0.000  
Scaler 1: 267.571 +- 0.437  
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8741	130	86	15990	0	Pass
2	8801	138	95	15937	0	Pass
3	8829	136	83	16067	0	Pass
4	8638	110	86	16032	0	Pass
5	8759	138	58	16226	0	Pass
6	8849	128	89	16263	0	Pass
7	8838	122	86	15897	0	Pass
8	8777	131	88	16053	0	Pass
9	8862	144	81	16269	0	Pass
10	8682	126	89	15942	0	Pass
11	8819	133	63	16070	0	Pass
12	8912	130	86	16073	0	Pass
13	8636	116	80	16040	0	Pass
14	8934	124	77	16156	0	Pass
15	8719	124	85	16199	0	Pass
16	8851	122	74	15930	0	Pass
17	8834	138	80	15941	0	Pass
18	8665	125	69	16097	0	Pass
19	8758	130	88	15987	0	Pass
20	8839	142	87	15916	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	145.683	0.733	0.000	0.000	Pass
2	146.683	0.717	0.000	0.000	Pass
3	147.150	0.883	0.000	0.000	Pass
4	143.967	0.400	0.000	0.000	Pass
5	145.983	1.333	0.000	0.000	Pass
6	147.483	0.650	0.000	0.000	Pass
7	147.300	0.600	0.000	0.000	Pass
8	146.283	0.717	0.000	0.000	Pass
9	147.700	1.050	0.000	0.000	Pass
10	144.700	0.617	0.000	0.000	Pass

(2)

(3)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.07.08 10:46:04  
 Results file name: 178K4604.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000

Pu date: 00.01.01 21.07.08  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60

Passive error messages

No passive calibration curve calibration  
 No known alpha calibration

Results

Singles:	342.537 +- 0.687
Doubles:	4.424 +- 0.265
Triples:	0.000 +- 0.000
Scaler 1:	256.248 +- 0.635
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	20490	680	466	15352	0	Pass
2	20363	722	474	15389	0	Pass
3	20492	690	502	15204	0	Pass
4	20853	737	457	15562	0	Pass
5	20508	722	430	15486	0	Pass
6	20603	696	463	15303	0	Pass
7	20616	677	428	15233	0	Pass
8	20608	781	425	15346	0	Pass
9	20489	739	416	15536	0	Pass
10	20494	701	430	15338	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	341.510	3.567	0.000	0.000	Pass
2	339.393	4.134	0.000	0.000	Pass
3	341.543	3.134	0.000	0.000	Pass
4	347.560	4.667	0.000	0.000	Pass
5	341.810	4.867	0.000	0.000	Pass
6	343.394	3.884	0.000	0.000	Pass
7	343.610	4.150	0.000	0.000	Pass
8	343.477	5.934	0.000	0.000	Pass
9	341.493	5.384	0.000	0.000	Pass
10	341.577	4.517	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.07.08 14:21:01  
 Results file name: 17802101.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: Initial

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000

Pu date: 00.01.01 21.07.08  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.07.08

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 20  
 Count time (sec): 60

Passive error messages

No passive calibration curve calibration  
 No known alpha calibration

Results

Singles:	343.439 +- 0.495
Doubles:	4.628 +- 0.138
Triples:	0.000 +- 0.000
Scaler 1:	257.083 +- 0.420
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	20660	740	491	15555	0	Pass
2	20906	801	445	15360	0	Pass
3	20573	711	467	15468	0	Pass
4	20541	695	428	15212	0	Pass
5	20614	717	477	15661	0	Pass
6	20662	708	470	15453	0	Pass
7	20516	737	425	15394	0	Pass
8	20463	719	448	15471	0	Pass
9	20648	736	476	15405	0	Pass
10	20547	750	488	15404	0	Pass
11	20677	744	396	15352	0	Pass
12	20360	714	464	15383	0	Pass
13	20439	739	429	15525	0	Pass
14	20733	746	444	15450	0	Pass
15	20743	753	473	15552	0	Pass
16	20688	747	438	15225	0	Pass
17	20530	728	491	15379	0	Pass
18	20468	698	461	15297	0	Pass
19	20548	686	420	15391	0	Pass
20	20798	740	425	15563	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	344.344	4.150	0.000	0.000	Pass
2	348.444	5.934	0.000	0.000	Pass
3	342.893	4.067	0.000	0.000	Pass
4	342.360	4.451	0.000	0.000	Pass
5	343.577	4.000	0.000	0.000	Pass
6	344.377	3.967	0.000	0.000	Pass
7	341.943	5.201	0.000	0.000	Pass
8	341.060	4.517	0.000	0.000	Pass
9	344.144	4.334	0.000	0.000	Pass

(2)



10	342.460	4.367	0.000	0.000	Pass
11	344.627	5.801	0.000	0.000	Pass
12	339.343	4.167	0.000	0.000	Pass
13	340.660	5.167	0.000	0.000	Pass
14	345.560	5.034	0.000	0.000	Pass
15	345.727	4.667	0.000	0.000	Pass
16	344.810	5.151	0.000	0.000	Pass
17	342.177	3.950	0.000	0.000	Pass
18	341.143	3.950	0.000	0.000	Pass
19	342.477	4.434	0.000	0.000	Pass
20	346.644	5.251	0.000	0.000	Pass

(3)

```

INCC 5.1.2
Facility: PPF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.07.08 10:30:00
Results file name: 178K3000.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.07.08
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.07.08

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

```

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
No known alpha calibration

Results

Singles:	4168.754 +- 4.268
Doubles:	715.978 +- 2.546
Triples:	0.000 +- 0.000
Scaler 1:	34.840 +- 0.250
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	250746	110163	66888	2065	0	Pass
2	249682	109362	65777	2058	0	Pass
3	249219	108594	66236	2098	0	Pass
4	250284	109894	66619	2045	0	Pass
5	248868	108862	66170	2159	0	Pass
6	250648	110336	67342	2021	0	Pass
7	248896	108527	66038	2119	0	Pass
8	250254	109875	66415	2162	0	Pass
9	251008	110089	67504	2111	0	Pass
10	250746	109858	67603	2066	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4180.611	722.293	0.000	0.000	Pass
2	4162.865	727.463	0.000	0.000	Pass
3	4155.142	706.982	0.000	0.000	Pass
4	4172.905	722.292	0.000	0.000	Pass
5	4149.288	712.555	0.000	0.000	Pass
6	4178.976	717.603	0.000	0.000	Pass
7	4149.755	709.167	0.000	0.000	Pass
8	4172.405	725.379	0.000	0.000	Pass
9	4184.980	710.778	0.000	0.000	Pass
10	4180.611	705.269	0.000	0.000	Pass

(2)

```

INCC 5.1.2
Facility: PPF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.07.08 10:14:20
Results file name: 178K1420.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.07.08
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.07.08

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

```

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60
Passive error messages
No known alpha calibration
Results

Singles: 4.427 +- 0.081
Doubles: 0.002 +- 0.002
Triples: 0.000 +- 0.000
Scaler 1: 240.142 +- 0.668
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.07.08 14:45:33
Results file name: 17804533.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment: Initial
Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.07.08
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.07.08
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

(2)

(1)

Passive scaler2 bkgrnd: 0.000
Number passive cycles: 20
Count time (sec): 60
Passive error messages
No known alpha calibration
Results

Singles: 4.365 +- 0.063
Doubles: 0.004 +- 0.002
Triples: 0.000 +- 0.000
Scaler 1: 240.251 +- 0.532
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-20 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 11-20 showing cycle data.

(2)

(3)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 10:38:37  
 Results file name: 181K3837.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 271.400 +- 0.693  
 Doubles: 2.920 +- 0.118  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.108 +- 0.094  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	16306	464	299	382	0	Pass
2	16505	481	307	359	0	Pass
3	16185	434	283	390	0	Pass
4	16090	476	272	360	0	Pass
5	16443	495	328	356	0	Pass
6	16204	429	263	345	0	Pass
7	16151	427	281	380	0	Pass
8	16258	461	292	392	0	Pass
9	16340	510	296	346	0	Pass
10	16358	484	288	355	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	271.767	2.750	0.000	0.000	Pass
2	275.083	2.900	0.000	0.000	Pass
3	269.750	2.517	0.000	0.000	Pass
4	268.167	3.400	0.000	0.000	Pass
5	274.050	2.783	0.000	0.000	Pass
6	270.067	2.767	0.000	0.000	Pass
7	269.183	2.433	0.000	0.000	Pass
8	270.967	2.817	0.000	0.000	Pass
9	272.333	3.567	0.000	0.000	Pass
10	272.633	3.267	0.000	0.000	Pass

(2)

202108\_AFAS-B\_Collar.txt

202108\_AFAS-B\_Collar.txt

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 10:22:32  
 Results file name: 181K2232.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 4938.616 +- 3.035  
 Doubles: 1058.554 +- 3.368  
 Triples: 0.000 +- 0.000  
 Scaler 1: 16.552 +- 0.150  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	296284	156461	93206	972	0	Pass
2	295130	156787	92681	955	0	Pass
3	296455	156316	93293	1041	0	Pass
4	295697	156952	92396	1018	0	Pass
5	295735	155916	93203	991	0	Pass
6	295644	156833	93531	1010	0	Pass
7	297217	157471	94251	987	0	Pass
8	296407	156658	93761	1022	0	Pass
9	296248	156110	93670	964	0	Pass
10	296005	156953	93343	971	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4941.984	1057.600	0.000	0.000	Pass
2	4922.721	1071.815	0.000	0.000	Pass
3	4944.839	1053.723	0.000	0.000	Pass
4	4932.186	1079.345	0.000	0.000	Pass
5	4932.820	1048.531	0.000	0.000	Pass
6	4931.301	1058.378	0.000	0.000	Pass
7	4957.559	1057.025	0.000	0.000	Pass
8	4944.038	1051.615	0.000	0.000	Pass
9	4941.383	1043.973	0.000	0.000	Pass
10	4937.327	1063.532	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 10:00:26  
 Results file name: 181K0026.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 Known alpha analysis error  
 Results  
 Singles: 141.800 +- 0.525  
 Doubles: 0.730 +- 0.062  
 Triples: 0.000 +- 0.000  
 Scaler 1: 259.552 +- 0.575  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8393	125	80	15805	0	Pass
2	8547	144	76	15448	0	Pass
3	8663	136	88	15651	0	Pass
4	8347	121	75	15518	0	Pass
5	8565	119	78	15537	0	Pass
6	8398	129	83	15559	0	Pass
7	8552	124	88	15655	0	Pass
8	8489	119	84	15457	0	Pass
9	8584	125	75	15604	0	Pass
10	8542	100	77	15497	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	139.883	0.750	0.000	0.000	Pass
2	142.450	1.133	0.000	0.000	Pass
3	144.383	0.800	0.000	0.000	Pass
4	139.117	0.767	0.000	0.000	Pass
5	142.750	0.683	0.000	0.000	Pass
6	139.967	0.767	0.000	0.000	Pass
7	142.533	0.600	0.000	0.000	Pass
8	141.483	0.583	0.000	0.000	Pass
9	143.067	0.833	0.000	0.000	Pass
10	142.367	0.383	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 11:23:45  
 Results file name: 181L2345.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 No passive calibration curve calibration  
 No known alpha calibration  
 Results  
 Singles: 335.338 +- 0.601  
 Doubles: 4.605 +- 0.180  
 Triples: 0.000 +- 0.000  
 Scaler 1: 248.162 +- 0.526  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	20159	729	409	14789	0	Pass
2	20144	688	432	14814	0	Pass
3	19872	705	457	15024	0	Pass
4	20112	713	386	14768	0	Pass
5	20320	684	444	14964	0	Pass
6	20153	726	443	15053	0	Pass
7	20152	718	427	14936	0	Pass
8	20018	698	393	14856	0	Pass
9	20150	673	444	14818	0	Pass
10	20123	711	447	14875	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	335.983	5.333	0.000	0.000	Pass
2	335.733	4.267	0.000	0.000	Pass
3	331.200	4.133	0.000	0.000	Pass
4	335.200	5.450	0.000	0.000	Pass
5	338.667	4.000	0.000	0.000	Pass
6	335.883	4.717	0.000	0.000	Pass
7	335.867	4.850	0.000	0.000	Pass
8	333.633	5.083	0.000	0.000	Pass
9	335.833	3.817	0.000	0.000	Pass
10	335.383	4.400	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 11:08:41  
 Results file name: 181L0841.VER  
 Inspection number:  
 Item id: PWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000

Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
 No known alpha calibration

Results

Singles:	4045.585 +- 3.367
Doubles:	692.638 +- 2.253
Triples:	0.000 +- 0.000
Scaler 1:	33.615 +- 0.224
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	242293	104314	62875	2006	0	Pass
2	243931	105127	63394	1963	0	Pass
3	242634	104383	62745	2116	0	Pass
4	241767	103882	62612	2014	0	Pass
5	242637	104555	62784	2056	0	Pass
6	241885	103329	62371	2003	0	Pass
7	243232	105325	63060	2000	0	Pass
8	242466	103730	62904	2027	0	Pass
9	243050	104388	62616	1986	0	Pass
10	242607	104238	62908	1998	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4039.627	691.615	0.000	0.000	Pass
2	4066.946	696.529	0.000	0.000	Pass
3	4045.314	694.938	0.000	0.000	Pass
4	4030.854	688.793	0.000	0.000	Pass
5	4045.365	697.158	0.000	0.000	Pass
6	4032.822	683.586	0.000	0.000	Pass
7	4055.288	705.405	0.000	0.000	Pass
8	4042.513	681.385	0.000	0.000	Pass
9	4052.253	697.176	0.000	0.000	Pass
10	4044.864	689.797	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.08.18 10:53:41  
 Results file name: 181K5341.VER  
 Inspection number:  
 Item id: PWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: Off  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000

Pu date: 00.01.01 21.08.18  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.08.18

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	4.325 +- 0.049
Doubles:	0.002 +- 0.002
Triples:	0.000 +- 0.000
Scaler 1:	232.992 +- 0.497
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	274	1	0	13907	0	Pass
2	246	0	0	14012	0	Pass
3	257	0	0	13989	0	Pass
4	264	0	0	13861	0	Pass
5	259	0	0	14126	0	Pass
6	264	0	0	14102	0	Pass
7	245	0	0	13989	0	Pass
8	256	0	0	13858	0	Pass
9	260	0	0	14040	0	Pass
10	270	0	0	13911	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4.567	0.017	0.000	0.000	Pass
2	4.100	0.000	0.000	0.000	Pass
3	4.283	0.000	0.000	0.000	Pass
4	4.400	0.000	0.000	0.000	Pass
5	4.317	0.000	0.000	0.000	Pass
6	4.400	0.000	0.000	0.000	Pass
7	4.083	0.000	0.000	0.000	Pass
8	4.267	0.000	0.000	0.000	Pass
9	4.333	0.000	0.000	0.000	Pass
10	4.500	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.09.16 09:50:48  
 Results file name: 19GJ5048.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratam id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	21.09.16	0.0000 +- 0.0000
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	21.09.16	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	264.195 +- 0.545
Doubles:	2.858 +- 0.144
Triples:	0.000 +- 0.000
Scaler 1:	6.283 +- 0.088
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	15781	434	283	387	0	Pass
2	15802	423	268	354	0	Pass
3	15878	470	278	385	0	Pass
4	15734	420	264	359	0	Pass
5	16001	440	260	378	0	Pass
6	15912	427	242	374	0	Pass
7	15914	399	283	391	0	Pass
8	15668	429	255	398	0	Pass
9	15874	454	256	352	0	Pass
10	15953	464	256	392	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	263.017	2.517	0.000	0.000	Pass
2	263.367	2.583	0.000	0.000	Pass
3	264.633	3.200	0.000	0.000	Pass
4	262.233	2.600	0.000	0.000	Pass
5	266.683	3.000	0.000	0.000	Pass
6	265.200	3.083	0.000	0.000	Pass
7	265.233	1.933	0.000	0.000	Pass
8	261.133	2.900	0.000	0.000	Pass
9	264.567	3.300	0.000	0.000	Pass
10	265.883	3.467	0.000	0.000	Pass

(2)

202109\_AFAS-B\_Collar.txt

202109\_AFAS-B\_Collar.txt

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.09.16 09:35:48  
 Results file name: 19GJ3548.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratam id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	21.09.16	0.0000 +- 0.0000
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	21.09.16	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles:	4850.960 +- 2.869
Doubles:	1041.088 +- 2.330
Triples:	0.000 +- 0.000
Scaler 1:	16.400 +- 0.243
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	290280	152574	90223	987	0	Pass
2	290578	151841	90338	978	0	Pass
3	290341	152345	89702	1084	0	Pass
4	290767	151736	89543	940	0	Pass
5	291861	153296	90720	998	0	Pass
6	291023	152320	89955	993	0	Pass
7	290353	151701	89389	933	0	Pass
8	290962	152726	89704	1019	0	Pass
9	291614	153263	91283	929	0	Pass
10	290532	152307	90541	979	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4841.760	1042.418	0.000	0.000	Pass
2	4846.735	1028.244	0.000	0.000	Pass
3	4842.779	1047.301	0.000	0.000	Pass
4	4849.890	1039.782	0.000	0.000	Pass
5	4868.152	1046.197	0.000	0.000	Pass
6	4854.163	1042.660	0.000	0.000	Pass
7	4842.979	1041.767	0.000	0.000	Pass
8	4853.145	1053.644	0.000	0.000	Pass
9	4864.028	1036.230	0.000	0.000	Pass
10	4845.967	1032.640	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.09.16 09:20:44  
 Results file name: 19GJ2044.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.09.16  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.09.16

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 Known alpha analysis error  
 Results  
 Singles: 140.860 +- 0.457  
 Doubles: 0.583 +- 0.104  
 Triples: 0.000 +- 0.000  
 Scaler 1: 254.653 +- 0.578  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8378	117	62	15364	0	Pass
2	8336	94	89	15126	0	Pass
3	8370	106	98	15417	0	Pass
4	8500	130	69	15141	0	Pass
5	8399	131	88	15374	0	Pass
6	8576	123	83	15162	0	Pass
7	8550	118	106	15270	0	Pass
8	8505	119	80	15271	0	Pass
9	8383	112	64	15260	0	Pass
10	8519	117	78	15407	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	139.633	0.917	0.000	0.000	Pass
2	138.933	0.083	0.000	0.000	Pass
3	139.500	0.133	0.000	0.000	Pass
4	141.667	1.017	0.000	0.000	Pass
5	139.983	0.717	0.000	0.000	Pass
6	142.933	0.667	0.000	0.000	Pass
7	142.500	0.200	0.000	0.000	Pass
8	141.750	0.650	0.000	0.000	Pass
9	139.717	0.800	0.000	0.000	Pass
10	141.983	0.650	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.09.16 10:38:02  
 Results file name: 19GK3802.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.09.16  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.09.16

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 No passive calibration curve calibration  
 No known alpha calibration  
 Results  
 Singles: 331.108 +- 0.473  
 Doubles: 4.415 +- 0.203  
 Triples: 0.000 +- 0.000  
 Scaler 1: 245.338 +- 0.537  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	19972	710	467	14786	0	Pass
2	19977	702	408	14678	0	Pass
3	19904	736	456	14725	0	Pass
4	19962	674	461	14778	0	Pass
5	19728	688	414	14481	0	Pass
6	19775	637	407	14657	0	Pass
7	19880	661	415	14857	0	Pass
8	19810	687	383	14714	0	Pass
9	19877	716	382	14777	0	Pass
10	19780	647	416	14750	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	332.867	4.050	0.000	0.000	Pass
2	332.950	4.900	0.000	0.000	Pass
3	331.733	4.667	0.000	0.000	Pass
4	332.700	3.550	0.000	0.000	Pass
5	328.800	4.567	0.000	0.000	Pass
6	329.583	3.833	0.000	0.000	Pass
7	331.333	4.100	0.000	0.000	Pass
8	330.167	5.067	0.000	0.000	Pass
9	331.283	5.567	0.000	0.000	Pass
10	329.667	3.850	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.09.16 10:21:57
Results file name: 19GK2157.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.09.16
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.09.16

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 3967.761 +- 4.522
Doubles: 678.837 +- 2.278
Triples: 0.000 +- 0.000
Scaler 1: 33.243 +- 0.271
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.09.16 10:07:52
Results file name: 19GK0752.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.09.16
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.09.16

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.455 +- 0.083
Doubles: 0.003 +- 0.002
Triples: 0.000 +- 0.000
Scaler 1: 227.652 +- 0.664
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)



INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: BWR BOTTOM  
 Detector id: AFASB-Bot  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 13:28:15  
 Results file name: 1ABN2815.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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

Cf252 measured singles rate: 258.0450 +- 0.7363  
 Singles rate expected/measured: 1.0045 +- 0.0403  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Passed.

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	258.523	2.733	-0.029	Pass
2	259.140	3.183	0.030	Pass
3	253.990	2.517	-0.008	Pass
4	259.423	2.600	0.023	Pass
5	257.173	2.683	-0.028	Pass
6	259.823	2.700	0.088	Pass
7	255.773	2.600	-0.059	Pass
8	261.823	3.100	0.131	Pass
9	258.923	2.900	0.068	Pass
10	255.857	2.800	0.037	Pass

Passive singles bkgrnd: 0.910 +- 0.034  
 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

Results

Singles: 258.045 +- 0.736  
 Doubles: 2.782 +- 0.069  
 Triples: 0.025 +- 0.019  
 Quads: 0.001 +- 0.001  
 Quads/Triples: -0.000 +- 0.014  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected singles rate: 259.2078 +- 0.4614

(1)

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: COLLAR  
 Detector id: AFASB  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 10:46:11  
 Results file name: 1ABK4611.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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 results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected doubles rate: 1007.2432 +- 1.3067  
 Cf252 measured doubles rate: 1017.4398 +- 3.4671  
 Doubles rate expected/measured: 0.9900 +- 0.0036  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Failed.  
 Measured percent precision: 0.34  
 Required percent precision: 0.30  
 Repeat measurement for at least: 860 seconds

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	4756.865	1008.607	116.666	Pass
2	4755.479	1015.996	127.100	Pass
3	4733.863	999.816	117.864	Pass
4	4761.756	1032.500	125.734	Pass
5	4763.926	1008.696	118.577	Pass
6	4751.340	1009.456	126.462	Pass
7	4734.314	1018.724	121.040	Pass
8	4769.952	1030.483	127.889	Pass
9	4741.291	1020.801	125.632	Pass
10	4754.278	1029.319	129.781	Pass

Passive singles bkgrnd: 8.795 +- 0.101  
 Passive doubles bkgrnd: 0.007 +- 0.003  
 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 messages

Normalization test failed

Results

Singles: 4752.306 +- 3.884  
 Doubles: 1017.440 +- 3.467  
 Triples: 123.676 +- 1.485  
 Quads: 7.472 +- 0.818  
 Quads/Triples: 0.060 +- 0.006  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

(1)

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: BWR TOP  
 Detector id: AFASB-Top  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 11:12:22  
 Results file name: 1ABL1222.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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

Cf252 measured singles rate: 248.3433 +- 0.5408  
 Singles rate expected/measured: 1.0029 +- 0.0402  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Passed.

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	248.480	2.883	0.137	Pass
2	247.530	2.550	-0.041	Pass
3	245.630	1.983	-0.031	Pass
4	247.880	2.583	0.075	Pass
5	246.813	3.817	0.073	Pass
6	249.447	2.917	0.053	Pass
7	248.580	2.500	0.010	Pass
8	251.813	2.900	-0.030	Pass
9	247.597	2.917	0.087	Pass
10	249.663	2.883	0.154	Pass

Passive singles bkgrnd: 1.153 +- 0.035  
 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

Results

Singles: 248.343 +- 0.541  
 Doubles: 2.793 +- 0.147  
 Triples: 0.049 +- 0.022  
 Quads: 0.012 +- 0.008  
 Quads/Triples: 0.090 +- 0.057  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected singles rate: 249.0531 +- 0.4091

(1)

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: PWR BOTTOM  
 Detector id: AFASP-Bot  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 14:44:26  
 Results file name: 1ABO4426.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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

Cf252 measured singles rate: 238.2450 +- 0.5111  
 Singles rate expected/measured: 1.0036 +- 0.0402  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Passed.

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	236.797	1.900	0.054	Pass
2	235.547	2.850	-0.010	Pass
3	238.413	2.833	-0.010	Pass
4	236.713	2.600	0.094	Pass
5	238.297	2.017	0.052	Pass
6	238.097	2.917	0.055	Pass
7	238.847	2.400	-0.004	Pass
8	241.097	2.567	0.027	Pass
9	238.780	2.300	0.048	Pass
10	239.863	2.550	-0.039	Pass

Passive singles bkgrnd: 1.237 +- 0.061  
 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

Results

Singles: 238.245 +- 0.511  
 Doubles: 2.493 +- 0.109  
 Triples: 0.027 +- 0.013  
 Quads: 0.001 +- 0.002  
 Quads/Triples: 0.019 +- 0.019  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected singles rate: 239.0946 +- 0.3933

(1)

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 14:20:08  
 Results file name: 1ABO2008.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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

Passive singles bkgrnd: 11.258 +- 0.122  
 Passive doubles bkgrnd: 0.010 +- 0.004  
 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 messages

Normalization test failed

Results

Singles: 3892.110 +- 2.426  
 Doubles: 668.271 +- 2.802  
 Triples: 66.072 +- 0.979  
 Quads: 4.263 +- 0.924  
 Quads/Triples: 0.064 +- 0.014  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

(1)

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected doubles rate: 661.3355 +- 1.0035  
 Cf252 measured doubles rate: 668.2714 +- 2.8017  
 Doubles rate expected/measured: 0.9896 +- 0.0044  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Failed.  
 Measured percent precision: 0.42  
 Required percent precision: 0.30  
 Repeat measurement for at least: 1290 seconds

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	3898.897	675.870	67.477	Pass
2	3892.792	661.316	61.984	Pass
3	3887.022	665.837	68.344	Pass
4	3887.872	675.984	62.490	Pass
5	3882.385	659.544	66.948	Pass
6	3896.061	656.326	63.334	Pass
7	3886.755	660.947	67.095	Pass
8	3898.680	682.495	72.058	Pass
9	3884.470	668.373	66.855	Pass
10	3906.168	676.022	64.125	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: PWR TOP  
 Detector id: AFASP-Top  
 Electronics id: JSR-15  
 Measurement date: 21.10.11 13:52:39  
 Results file name: 1ABN5239.NOR  
 Inspection number:  
 Measurement option: Normalization  
 Data source: Shift register  
 QC tests: On  
 Accidentals method: Measured  
 Inspector name:  
 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

Passive singles bkgrnd: 1.857 +- 0.049  
 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

Results

Singles: 222.122 +- 0.362  
 Doubles: 2.267 +- 0.112  
 Triples: 0.028 +- 0.013  
 Quads: 0.001 +- 0.002  
 Quads/Triples: 0.020 +- 0.035  
 Scaler 1: 0.000 +- 0.000  
 Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000  
 Cf252 expected singles rate: 223.0905 +- 0.4988

(1)

Cf252 measured singles rate: 222.1217 +- 0.3620  
 Singles rate expected/measured: 1.0044 +- 0.0402  
 New normalization constant: 1.0000 +- 0.0000  
 Normalization test Passed.

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	222.560	1.917	0.039	Pass
2	221.360	1.683	-0.024	Pass
3	221.593	2.267	0.101	Pass
4	220.743	2.033	0.021	Pass
5	222.660	2.917	0.042	Pass
6	222.810	2.200	-0.015	Pass
7	224.677	2.317	0.050	Pass
8	221.077	2.567	-0.037	Pass
9	222.110	2.550	0.047	Pass
10	221.627	2.217	0.052	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.11.09 10:31:10  
 Results file name: 1B9K3110.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.11.09  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 253.643 +- 0.772  
 Doubles: 2.923 +- 0.104  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.148 +- 0.100  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	15252	417	269	372	0	Pass
2	15207	432	255	364	0	Pass
3	15374	410	245	382	0	Pass
4	15034	424	240	323	0	Pass
5	15443	410	256	377	0	Pass
6	15098	445	252	363	0	Pass
7	15067	447	251	386	0	Pass
8	15395	417	268	369	0	Pass
9	15098	433	241	391	0	Pass
10	15218	445	249	362	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	254.200	2.467	0.000	0.000	Pass
2	253.450	2.950	0.000	0.000	Pass
3	256.233	2.750	0.000	0.000	Pass
4	250.567	3.067	0.000	0.000	Pass
5	257.383	2.567	0.000	0.000	Pass
6	251.633	3.217	0.000	0.000	Pass
7	251.117	3.267	0.000	0.000	Pass
8	256.583	2.483	0.000	0.000	Pass
9	251.633	3.200	0.000	0.000	Pass
10	253.633	3.267	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.11.09 10:16:07  
 Results file name: 1B9K1607.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.11.09  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 4668.887 +- 4.211  
 Doubles: 999.544 +- 2.748  
 Triples: 0.000 +- 0.000  
 Scaler 1: 15.823 +- 0.232  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	280461	143181	83623	877	0	Pass
2	280805	144850	84627	957	0	Pass
3	280176	143837	83397	1011	0	Pass
4	279423	143467	83298	995	0	Pass
5	279099	142367	83243	895	0	Pass
6	280371	143511	83596	948	0	Pass
7	280378	143322	83384	997	0	Pass
8	278157	141905	82166	951	0	Pass
9	280245	143157	84398	946	0	Pass
10	280119	143406	83339	917	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4677.860	995.618	0.000	0.000	Pass
2	4683.602	1006.739	0.000	0.000	Pass
3	4673.103	1010.360	0.000	0.000	Pass
4	4660.534	1005.821	0.000	0.000	Pass
5	4655.126	988.349	0.000	0.000	Pass
6	4676.358	1001.585	0.000	0.000	Pass
7	4676.475	1001.970	0.000	0.000	Pass
8	4639.403	998.619	0.000	0.000	Pass
9	4674.255	982.259	0.000	0.000	Pass
10	4672.152	1004.124	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.11.09 09:59:02  
 Results file name: 1B9J5902.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.11.09  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 134.763 +- 0.273  
 Doubles: 0.747 +- 0.069  
 Triples: 0.000 +- 0.000  
 Scaler 1: 245.345 +- 0.614  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	8096	109	58	14511	0	Pass
2	8091	125	61	14894	0	Pass
3	7994	118	67	14694	0	Pass
4	8143	116	67	14603	0	Pass
5	8074	115	81	14842	0	Pass
6	8108	85	65	14807	0	Pass
7	8040	96	64	14656	0	Pass
8	8028	104	64	14682	0	Pass
9	8145	115	65	14722	0	Pass
10	8139	142	85	14796	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	134.933	0.850	0.000	0.000	Pass
2	134.850	1.067	0.000	0.000	Pass
3	133.233	0.850	0.000	0.000	Pass
4	135.717	0.817	0.000	0.000	Pass
5	134.567	0.567	0.000	0.000	Pass
6	135.133	0.333	0.000	0.000	Pass
7	134.000	0.533	0.000	0.000	Pass
8	133.800	0.667	0.000	0.000	Pass
9	135.750	0.833	0.000	0.000	Pass
10	135.650	0.950	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.11.09 11:19:57  
 Results file name: 1B9L1957.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.11.09  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
No known alpha calibration

Results

Singles: 321.585 +- 0.875  
 Doubles: 4.202 +- 0.143  
 Triples: 0.000 +- 0.000  
 Scaler 1: 234.812 +- 0.670  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	19341	664	382	13990	0	Pass
2	19181	657	398	14228	0	Pass
3	19120	664	398	13888	0	Pass
4	19538	660	420	14073	0	Pass
5	19114	653	395	14336	0	Pass
6	19388	658	414	14005	0	Pass
7	19269	644	391	14091	0	Pass
8	19565	640	437	14088	0	Pass
9	19307	644	423	14155	0	Pass
10	19128	678	383	14033	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	322.350	4.700	0.000	0.000	Pass
2	319.683	4.317	0.000	0.000	Pass
3	318.667	4.433	0.000	0.000	Pass
4	325.633	4.000	0.000	0.000	Pass
5	318.567	4.300	0.000	0.000	Pass
6	323.133	4.067	0.000	0.000	Pass
7	321.150	4.217	0.000	0.000	Pass
8	326.083	3.383	0.000	0.000	Pass
9	321.783	3.683	0.000	0.000	Pass
10	318.800	4.917	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.11.09 11:02:52
Results file name: 1B9L0252.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.11.09
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 3817.495 +- 4.154
Doubles: 656.503 +- 2.842
Triples: 0.000 +- 0.000
Scaler 1: 32.248 +- 0.219
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.11.09 10:46:14
Results file name: 1B9K4614.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.11.09
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.11.09

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.365 +- 0.051
Doubles: -0.002 +- 0.003
Triples: 0.000 +- 0.000
Scaler 1: 219.803 +- 0.676
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.12.24 10:19:11  
 Results file name: 1COK1911.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.12.24  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 246.630 +- 0.702  
 Doubles: 2.838 +- 0.101  
 Triples: 0.000 +- 0.000  
 Scaler 1: 6.418 +- 0.163  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	15033	441	245	372	0	Pass
2	14810	421	246	466	0	Pass
3	14836	407	222	364	0	Pass
4	14856	402	219	403	0	Pass
5	14927	403	217	362	0	Pass
6	14805	416	246	364	0	Pass
7	14658	391	246	384	0	Pass
8	14609	394	251	378	0	Pass
9	14633	401	227	383	0	Pass
10	14811	401	255	375	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	250.550	3.267	0.000	0.000	Pass
2	246.833	2.917	0.000	0.000	Pass
3	247.267	3.083	0.000	0.000	Pass
4	247.600	3.050	0.000	0.000	Pass
5	248.783	3.100	0.000	0.000	Pass
6	246.750	2.833	0.000	0.000	Pass
7	244.300	2.417	0.000	0.000	Pass
8	243.483	2.383	0.000	0.000	Pass
9	243.883	2.900	0.000	0.000	Pass
10	246.850	2.433	0.000	0.000	Pass

(2)

202112\_AFAS-B\_Collar.txt

202112\_AFAS-B\_Collar.txt

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.12.24 10:03:12  
 Results file name: 1COK0312.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 21.12.24  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 4517.404 +- 3.822  
 Doubles: 965.228 +- 3.506  
 Triples: 0.000 +- 0.000  
 Scaler 1: 15.663 +- 0.145  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	270752	135707	78103	923	0	Pass
2	271813	137182	79708	947	0	Pass
3	271573	136631	79301	964	0	Pass
4	270606	136024	78125	901	0	Pass
5	271050	136152	77647	950	0	Pass
6	271822	137060	78059	909	0	Pass
7	269655	134587	77231	984	0	Pass
8	270754	135421	78752	926	0	Pass
9	270216	135576	77452	924	0	Pass
10	270237	135536	78038	970	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4515.805	962.854	0.000	0.000	Pass
2	4533.514	960.692	0.000	0.000	Pass
3	4529.508	958.282	0.000	0.000	Pass
4	4513.368	967.783	0.000	0.000	Pass
5	4520.779	977.917	0.000	0.000	Pass
6	4533.664	986.216	0.000	0.000	Pass
7	4497.495	958.697	0.000	0.000	Pass
8	4515.838	947.225	0.000	0.000	Pass
9	4506.858	971.540	0.000	0.000	Pass
10	4507.209	961.077	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_01
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.12.24 09:46:07
Results file name: 1COJ4607.VER
Inspection number:
Item id: BWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.12.24
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 131.555 +- 0.574
Doubles: 0.693 +- 0.073
Triples: 0.000 +- 0.000
Scaler 1: 237.733 +- 0.780
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 21.12.24 11:04:46
Results file name: 1COL0446.VER
Inspection number:
Item id: PWR BF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 21.12.24
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 311.495 +- 0.929
Doubles: 3.880 +- 0.105
Triples: 0.000 +- 0.000
Scaler 1: 229.125 +- 0.613
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)



INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.12.24 10:49:41  
 Results file name: 1COK4941.VER  
 Inspection number:  
 Item id: PWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000

Pu date: 00.01.01 21.12.24  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
No known alpha calibration

Results

Singles: 3697.208 +- 2.796  
 Doubles: 627.719 +- 2.722  
 Triples: 0.000 +- 0.000  
 Scaler 1: 31.285 +- 0.290  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	221249	89876	52478	1857	0	Pass
2	221141	89659	52304	1924	0	Pass
3	222426	90539	53054	1836	0	Pass
4	222490	90773	52765	1978	0	Pass
5	222063	90547	52325	1876	0	Pass
6	221722	89634	52889	1910	0	Pass
7	221598	89788	52450	1904	0	Pass
8	221511	91063	52509	1876	0	Pass
9	222309	90683	53099	1788	0	Pass
10	221107	89984	52523	1822	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3688.659	624.096	0.000	0.000	Pass
2	3686.858	623.378	0.000	0.000	Pass
3	3708.289	625.552	0.000	0.000	Pass
4	3709.356	634.280	0.000	0.000	Pass
5	3702.235	637.849	0.000	0.000	Pass
6	3696.548	613.200	0.000	0.000	Pass
7	3694.480	623.096	0.000	0.000	Pass
8	3693.029	643.388	0.000	0.000	Pass
9	3706.337	627.203	0.000	0.000	Pass
10	3686.291	625.146	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.12.24 10:35:15  
 Results file name: 1COK3515.VER  
 Inspection number:  
 Item id: PWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu239:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000	0.0000
Pu241:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000
Pu242:	0.0000 +- 0.0000	0.0000	0.0000 +- 0.0000	0.0000

Pu date: 00.01.01 21.12.24  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 21.12.24

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.138 +- 0.053  
 Doubles: -0.002 +- 0.003  
 Triples: 0.000 +- 0.000  
 Scaler 1: 214.178 +- 0.654  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	248	0	0	12828	0	Pass
2	236	0	0	12972	0	Pass
3	244	1	0	12644	0	Pass
4	247	0	1	12738	0	Pass
5	233	0	0	12993	0	Pass
6	248	0	1	13029	0	Pass
7	257	0	0	12861	0	Pass
8	268	0	0	12794	0	Pass
9	254	0	0	12899	0	Pass
10	248	0	0	12749	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4.133	0.000	0.000	0.000	Pass
2	3.933	0.000	0.000	0.000	Pass
3	4.067	0.017	0.000	0.000	Pass
4	4.117	-0.017	0.000	0.000	Pass
5	3.883	0.000	0.000	0.000	Pass
6	4.133	-0.017	0.000	0.000	Pass
7	4.283	0.000	0.000	0.000	Pass
8	4.467	0.000	0.000	0.000	Pass
9	4.233	0.000	0.000	0.000	Pass
10	4.133	0.000	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
Material balance area: JM2G  
Detector type: AFAS  
Detector id: JSR\_02  
Electronics id: JSR-12  
Inventory change code:  
I/O code:  
Measurement date: 22.01.12 10:21:34  
Results file name: 21CK2134.VER  
Inspection number:  
Item id: BWR BF  
Stratum id: XXXX  
Material type: Pu  
Original declared mass: 0.000  
Measurement option: Verification  
Data source: Review disk file  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment:

Isotopics id: Default  
Isotopics source code: OD  
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu date: 00.01.01 22.01.12  
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Am date: 00.01.01 22.01.12

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 241.745 +- 0.624  
Doubles: 2.972 +- 0.092  
Triples: 0.000 +- 0.000  
Scaler 1: 6.088 +- 0.101  
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	14442	392	193	378	0	Pass
2	14647	403	229	347	0	Pass
3	14484	388	219	363	0	Pass
4	14635	417	214	390	0	Pass
5	14332	385	207	380	0	Pass
6	14508	398	241	329	0	Pass
7	14684	422	226	353	0	Pass
8	14410	375	225	387	0	Pass
9	14389	386	210	364	0	Pass
10	14516	396	215	362	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	240.700	3.317	0.000	0.000	Pass
2	244.117	2.900	0.000	0.000	Pass
3	241.400	2.817	0.000	0.000	Pass
4	243.917	3.383	0.000	0.000	Pass
5	238.867	2.967	0.000	0.000	Pass
6	241.800	2.617	0.000	0.000	Pass
7	244.733	3.267	0.000	0.000	Pass
8	240.167	2.500	0.000	0.000	Pass
9	239.817	2.933	0.000	0.000	Pass
10	241.933	3.017	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
Material balance area: JM2G  
Detector type: AFAS  
Detector id: JSR\_01  
Electronics id: JSR-12  
Inventory change code:  
I/O code:  
Measurement date: 22.01.12 10:05:52  
Results file name: 21CK0552.VER  
Inspection number:  
Item id: BWR COLLAR  
Stratum id: XXXX  
Material type: Pu  
Original declared mass: 0.000  
Measurement option: Verification  
Data source: Review disk file  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment:

Isotopics id: Default  
Isotopics source code: OD  
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Pu date: 00.01.01 22.01.12  
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
Am date: 00.01.01 22.01.12

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles: 4456.972 +- 3.568  
Doubles: 950.096 +- 3.872  
Triples: 0.000 +- 0.000  
Scaler 1: 15.317 +- 0.100  
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	267195	133332	76396	883	0	Pass
2	267709	133610	77150	909	0	Pass
3	266833	132522	75863	922	0	Pass
4	267756	133329	76750	923	0	Pass
5	266025	131711	75941	960	0	Pass
6	267052	132962	75350	918	0	Pass
7	266578	131906	75719	925	0	Pass
8	267911	133577	76827	920	0	Pass
9	268236	135083	76719	910	0	Pass
10	266976	133053	75941	920	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4456.436	951.652	0.000	0.000	Pass
2	4465.015	943.701	0.000	0.000	Pass
3	4450.394	947.018	0.000	0.000	Pass
4	4465.799	945.690	0.000	0.000	Pass
5	4436.908	932.151	0.000	0.000	Pass
6	4454.049	962.949	0.000	0.000	Pass
7	4446.138	939.126	0.000	0.000	Pass
8	4468.386	948.550	0.000	0.000	Pass
9	4473.811	975.531	0.000	0.000	Pass
10	4452.781	954.591	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.01.12 09:48:48  
 Results file name: 21CJ4848.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 22.01.12  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 22.01.12

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 Known alpha analysis error  
 Results  
 Singles: 130.065 +- 0.395  
 Doubles: 0.733 +- 0.067  
 Triples: 0.000 +- 0.000  
 Scaler 1: 234.237 +- 0.502  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	7940	109	67	14182	0	Pass
2	7719	118	58	14004	0	Pass
3	7789	101	62	14145	0	Pass
4	7714	96	64	14078	0	Pass
5	7912	101	56	14182	0	Pass
6	7834	111	73	13977	0	Pass
7	7817	123	77	13917	0	Pass
8	7792	101	76	14089	0	Pass
9	7765	129	60	14015	0	Pass
10	7757	106	62	13953	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	132.333	0.700	0.000	0.000	Pass
2	128.650	1.000	0.000	0.000	Pass
3	129.817	0.650	0.000	0.000	Pass
4	128.567	0.533	0.000	0.000	Pass
5	131.867	0.750	0.000	0.000	Pass
6	130.567	0.633	0.000	0.000	Pass
7	130.283	0.767	0.000	0.000	Pass
8	129.867	0.417	0.000	0.000	Pass
9	129.417	1.150	0.000	0.000	Pass
10	129.283	0.733	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPFJ  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.01.12 11:08:45  
 Results file name: 21CL0845.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 22.01.12  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 22.01.12

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 No passive calibration curve calibration  
 No known alpha calibration  
 Results  
 Singles: 307.305 +- 0.824  
 Doubles: 4.007 +- 0.186  
 Triples: 0.000 +- 0.000  
 Scaler 1: 224.327 +- 0.889  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	18562	626	389	13469	0	Pass
2	18568	653	325	13398	0	Pass
3	18414	630	372	13847	0	Pass
4	18544	619	375	13440	0	Pass
5	18192	576	359	13253	0	Pass
6	18138	605	374	13469	0	Pass
7	18413	600	401	13257	0	Pass
8	18539	610	364	13586	0	Pass
9	18557	582	369	13419	0	Pass
10	18456	594	363	13458	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	309.367	3.950	0.000	0.000	Pass
2	309.467	5.467	0.000	0.000	Pass
3	306.900	4.300	0.000	0.000	Pass
4	309.067	4.067	0.000	0.000	Pass
5	303.200	3.617	0.000	0.000	Pass
6	302.300	3.850	0.000	0.000	Pass
7	306.883	3.317	0.000	0.000	Pass
8	308.983	4.100	0.000	0.000	Pass
9	309.283	3.550	0.000	0.000	Pass
10	307.600	3.850	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.01.12 10:52:41  
 Results file name: 21CK5241.VER  
 Inspection number:  
 Item id: PWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	22.01.12	
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	22.01.12	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration  
 No known alpha calibration

Results

Singles:	3649.515 +- 3.559
Doubles:	622.897 +- 2.803
Triples:	0.000 +- 0.000
Scaler 1:	30.835 +- 0.188
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	218713	88515	51284	1843	0	Pass
2	219743	88997	51880	1836	0	Pass
3	218977	88955	51062	1914	0	Pass
4	219738	89356	51505	1864	0	Pass
5	219241	88397	51329	1852	0	Pass
6	218764	88957	50894	1834	0	Pass
7	217417	87834	50512	1788	0	Pass
8	219183	88391	50989	1865	0	Pass
9	218814	87942	50842	1817	0	Pass
10	218428	87677	51457	1888	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	3646.366	621.300	0.000	0.000	Pass
2	3663.543	619.401	0.000	0.000	Pass
3	3650.769	632.348	0.000	0.000	Pass
4	3663.460	631.650	0.000	0.000	Pass
5	3655.171	618.581	0.000	0.000	Pass
6	3647.216	635.184	0.000	0.000	Pass
7	3624.752	622.814	0.000	0.000	Pass
8	3654.204	624.155	0.000	0.000	Pass
9	3648.050	619.114	0.000	0.000	Pass
10	3641.613	604.427	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.01.12 10:37:38  
 Results file name: 21CK3738.VER  
 Inspection number:  
 Item id: PWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	22.01.12	
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	22.01.12	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	4.097 +- 0.042
Doubles:	0.000 +- 0.002
Triples:	0.000 +- 0.000
Scaler 1:	209.675 +- 0.637
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	252	0	0	12560	0	Pass
2	247	0	0	12539	0	Pass
3	246	0	0	12545	0	Pass
4	243	0	0	12829	0	Pass
5	245	1	0	12618	0	Pass
6	235	0	0	12631	0	Pass
7	238	0	0	12578	0	Pass
8	244	0	0	12646	0	Pass
9	264	0	0	12350	0	Pass
10	244	0	1	12509	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4.200	0.000	0.000	0.000	Pass
2	4.117	0.000	0.000	0.000	Pass
3	4.100	0.000	0.000	0.000	Pass
4	4.050	0.000	0.000	0.000	Pass
5	4.083	0.017	0.000	0.000	Pass
6	3.917	0.000	0.000	0.000	Pass
7	3.967	0.000	0.000	0.000	Pass
8	4.067	0.000	0.000	0.000	Pass
9	4.400	0.000	0.000	0.000	Pass
10	4.067	-0.017	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_02  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.02.01 14:52:42  
 Results file name: 22105242.VER  
 Inspection number:  
 Item id: BWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	22.02.01	
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	22.02.01	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles:	241.055 +- 0.801
Doubles:	2.795 +- 0.116
Triples:	0.000 +- 0.000
Scaler 1:	5.927 +- 0.110
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	14403	381	216	340	0	Pass
2	14651	415	210	353	0	Pass
3	14492	392	227	344	0	Pass
4	14364	390	236	349	0	Pass
5	14563	402	206	375	0	Pass
6	14684	383	236	348	0	Pass
7	14584	402	225	352	0	Pass
8	14332	358	217	339	0	Pass
9	14297	377	195	348	0	Pass
10	14263	364	219	408	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	240.050	2.750	0.000	0.000	Pass
2	244.183	3.417	0.000	0.000	Pass
3	241.533	2.750	0.000	0.000	Pass
4	239.400	2.567	0.000	0.000	Pass
5	242.717	3.267	0.000	0.000	Pass
6	244.733	2.450	0.000	0.000	Pass
7	243.067	2.950	0.000	0.000	Pass
8	238.867	2.350	0.000	0.000	Pass
9	238.283	3.033	0.000	0.000	Pass
10	237.717	2.417	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.02.01 14:37:38  
 Results file name: 22103738.VER  
 Inspection number:  
 Item id: BWR COLLAR  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD

Pu238:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu239:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu240:	100.0000 +- 0.0000	100.0000 +- 0.0000	100.0000 +- 0.0000
Pu241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu242:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000 +- 0.0000
Pu date:	00.01.01	22.02.01	
Am241:	0.0000 +- 0.0000	0.0000 +- 0.0000	0.0000
Am date:	00.01.01	22.02.01	

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

Known alpha analysis error

Results

Singles:	4396.923 +- 5.001
Doubles:	932.614 +- 4.162
Triples:	0.000 +- 0.000
Scaler 1:	14.978 +- 0.143
Scaler 2:	0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	263979	130821	74436	883	0	Pass
2	264773	131470	75009	967	0	Pass
3	264782	131571	75441	872	0	Pass
4	263708	129381	73710	884	0	Pass
5	263492	129908	74070	897	0	Pass
6	264702	131272	74815	907	0	Pass
7	262209	128034	74130	889	0	Pass
8	262332	129503	73271	882	0	Pass
9	263121	129500	74375	891	0	Pass
10	263195	129868	74080	915	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	4402.760	942.410	0.000	0.000	Pass
2	4416.012	943.688	0.000	0.000	Pass
3	4416.162	938.156	0.000	0.000	Pass
4	4398.237	930.473	0.000	0.000	Pass
5	4394.631	933.262	0.000	0.000	Pass
6	4414.827	943.620	0.000	0.000	Pass
7	4373.218	900.926	0.000	0.000	Pass
8	4375.271	939.836	0.000	0.000	Pass
9	4388.439	921.342	0.000	0.000	Pass
10	4389.674	932.424	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_01  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.02.01 14:21:34  
 Results file name: 22102134.VER  
 Inspection number:  
 Item id: BWR TF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 22.02.01  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 22.02.01

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 Known alpha analysis error  
 Results  
 Singles: 127.743 +- 0.628  
 Doubles: 0.713 +- 0.084  
 Triples: 0.000 +- 0.000  
 Scaler 1: 231.255 +- 0.578  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	7440	91	54	13968	0	Pass
2	7820	108	62	13954	0	Pass
3	7602	108	65	13822	0	Pass
4	7678	113	53	13873	0	Pass
5	7717	97	67	13978	0	Pass
6	7520	70	63	13754	0	Pass
7	7636	101	52	13736	0	Pass
8	7800	117	67	13820	0	Pass
9	7695	98	55	14062	0	Pass
10	7738	117	54	13786	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	124.000	0.617	0.000	0.000	Pass
2	130.333	0.767	0.000	0.000	Pass
3	126.700	0.717	0.000	0.000	Pass
4	127.967	1.000	0.000	0.000	Pass
5	128.617	0.500	0.000	0.000	Pass
6	125.333	0.117	0.000	0.000	Pass
7	127.267	0.817	0.000	0.000	Pass
8	130.000	0.833	0.000	0.000	Pass
9	128.250	0.717	0.000	0.000	Pass
10	128.967	1.050	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: JM2G  
 Detector type: AFAS  
 Detector id: JSR\_03  
 Electronics id: JSR-12  
 Inventory change code:  
 I/O code:  
 Measurement date: 22.02.01 15:40:56  
 Results file name: 221P4056.VER  
 Inspection number:  
 Item id: PWR BF  
 Stratum id: XXXX  
 Material type: Pu  
 Original declared mass: 0.000  
 Measurement option: Verification  
 Data source: Review disk file  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment:

Isotopics id: Default  
 Isotopics source code: OD  
 Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000  
 Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Pu date: 00.01.01 22.02.01  
 Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000  
 Am date: 00.01.01 22.02.01

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

(1)

Passive scaler2 bkgrnd: 0.000  
 Number passive cycles: 10  
 Count time (sec): 60  
 Passive error messages  
 No passive calibration curve calibration  
 No known alpha calibration  
 Results  
 Singles: 302.923 +- 0.777  
 Doubles: 3.977 +- 0.195  
 Triples: 0.000 +- 0.000  
 Scaler 1: 222.542 +- 0.446  
 Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	18212	624	339	13519	0	Pass
2	18115	556	347	13253	0	Pass
3	18259	599	349	13369	0	Pass
4	18365	624	383	13308	0	Pass
5	18247	589	403	13359	0	Pass
6	17830	585	337	13261	0	Pass
7	18169	588	364	13454	0	Pass
8	18103	627	329	13349	0	Pass
9	18148	577	386	13279	0	Pass
10	18306	607	353	13374	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	303.533	4.750	0.000	0.000	Pass
2	301.917	3.483	0.000	0.000	Pass
3	304.317	4.167	0.000	0.000	Pass
4	306.083	4.017	0.000	0.000	Pass
5	304.117	3.100	0.000	0.000	Pass
6	297.167	4.133	0.000	0.000	Pass
7	302.817	3.733	0.000	0.000	Pass
8	301.717	4.967	0.000	0.000	Pass
9	302.467	3.183	0.000	0.000	Pass
10	305.100	4.233	0.000	0.000	Pass

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_03
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 22.02.01 15:24:52
Results file name: 221P2452.VER
Inspection number:
Item id: PWR COLLAR
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 22.02.01
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 22.02.01

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No passive calibration curve calibration
No known alpha calibration

Results

Singles: 3596.753 +- 3.603
Doubles: 615.135 +- 1.913
Triples: 0.000 +- 0.000
Scaler 1: 30.258 +- 0.171
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PFFF
Material balance area: JM2G
Detector type: AFAS
Detector id: JSR\_02
Electronics id: JSR-12
Inventory change code:
I/O code:
Measurement date: 22.02.01 15:09:47
Results file name: 221P0947.VER
Inspection number:
Item id: PWR TF
Stratum id: XXXX
Material type: Pu
Original declared mass: 0.000
Measurement option: Verification
Data source: Review disk file
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment:

Isotopics id: Default
Isotopics source code: OD
Pu238: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu239: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu240: 100.0000 +- 0.0000 100.0000 +- 0.0000
Pu241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu242: 0.0000 +- 0.0000 0.0000 +- 0.0000
Pu date: 00.01.01 22.02.01
Am241: 0.0000 +- 0.0000 0.0000 +- 0.0000
Am date: 00.01.01 22.02.01

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

(1)

Passive scaler2 bkgrnd: 0.000

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

Passive error messages

No known alpha calibration

Results

Singles: 4.067 +- 0.055
Doubles: 0.000 +- 0.000
Triples: 0.000 +- 0.000
Scaler 1: 208.133 +- 0.659
Scaler 2: 0.000 +- 0.000

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: BWR BOTTOM
Detector id: AFASB-Bot
Electronics id: JSR-15
Measurement date: 22.03.01 16:02:31
Results file name: 231Q0231.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
Passive comment:

Cf252 measured singles rate: 234.5100 +- 0.4706
Singles rate expected/measured: 0.9990 +- 0.0400
New normalization constant: 1.0000 +- 0.0000
Normalization test Passed.

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

Passive singles bkgrnd: 0.658 +- 0.032
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

Results

Singles: 234.510 +- 0.471
Doubles: 2.658 +- 0.100
Triples: 0.022 +- 0.014
Quads: 0.003 +- 0.002
Quads/Triples: 0.055 +- 0.044
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected singles rate: 234.2674 +- 0.4171

(1)

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: COLLAR
Detector id: AFASB
Electronics id: JSR-15
Measurement date: 22.03.01 15:49:30
Results file name: 231P4930.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
Passive comment:

Cf252 measured doubles rate: 921.1711 +- 2.5852
Doubles rate expected/measured: 0.9882 +- 0.0031
New normalization constant: 1.0000 +- 0.0000
Normalization test Passed.

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

Passive singles bkgrnd: 6.980 +- 0.136
Passive doubles bkgrnd: 0.018 +- 0.006
Passive triples bkgrnd: 0.002 +- 0.002
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000

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

Results

Singles: 4293.485 +- 2.183
Doubles: 921.171 +- 2.585
Triples: 112.817 +- 1.219
Quads: 8.384 +- 1.285
Quads/Triples: 0.074 +- 0.011
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected doubles rate: 910.3285 +- 1.1809

(1)

(2)



INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: BWR TOP
Detector id: AFASB-Top
Electronics id: JSR-15
Measurement date: 22.03.01 15:20:26
Results file name: 231P2026.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
Passive comment:

Cf252 measured singles rate: 224.4000 +- 0.5921
Singles rate expected/measured: 1.0031 +- 0.0402
New normalization constant: 1.0000 +- 0.0000
Normalization test Passed.

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

Passive singles bkgrnd: 0.818 +- 0.032
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

Results

Singles: 224.400 +- 0.592
Doubles: 2.358 +- 0.082
Triples: 0.013 +- 0.012
Quads: -0.001 +- 0.000
Quads/Triples: -0.212 +- 0.222
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected singles rate: 225.0898 +- 0.3698

(1)

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: PWR BOTTOM
Detector id: AFASP-Bot
Electronics id: JSR-15
Measurement date: 22.03.02 11:17:58
Results file name: 232L1758.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
Passive comment:

Cf252 measured singles rate: 217.2150 +- 0.5393
Singles rate expected/measured: 0.9941 +- 0.0398
New normalization constant: 1.0000 +- 0.0000
Normalization test Passed.

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

Passive singles bkgrnd: 0.955 +- 0.032
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

Results

Singles: 217.215 +- 0.539
Doubles: 2.400 +- 0.124
Triples: 0.022 +- 0.019
Quads: 0.003 +- 0.002
Quads/Triples: 0.028 +- 0.029
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected singles rate: 215.9344 +- 0.3552

(1)

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: COLLAR
Detector id: AFASP
Electronics id: JSR-15
Measurement date: 22.03.02 11:32:04
Results file name: 232L3204.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
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

Passive singles bkgrnd: 9.353 +- 0.134
Passive doubles bkgrnd: 0.018 +- 0.007
Passive triples bkgrnd: 0.002 +- 0.002
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000

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

Passive messages

Normalization test failed

Results

Singles: 3510.639 +- 3.359
Doubles: 600.627 +- 3.105
Triples: 56.988 +- 1.177
Quads: 3.262 +- 0.601
Quads/Triples: 0.056 +- 0.010
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

(1)

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected doubles rate: 597.2746 +- 0.9063
Cf252 measured doubles rate: 600.6273 +- 3.1053
Doubles rate expected/measured: 0.9944 +- 0.0054
New normalization constant: 1.0000 +- 0.0000
Normalization test Failed.
Measured percent precision: 0.52
Required percent precision: 0.30
Repeat measurement for at least: 1960 seconds

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

(2)

INCC 5.1.2

Facility: PPF
Material balance area: JM2G
Detector type: PWR TOP
Detector id: AFASP-Top
Electronics id: JSR-15
Measurement date: 22.03.02 10:47:20
Results file name: 232K4720.NOR
Inspection number:
Measurement option: Normalization
Data source: Shift register
QC tests: On
Accidentals method: Measured
Inspector name:
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

Passive singles bkgrnd: 1.333 +- 0.045
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 messages

Normalization test failed

Results

Singles: 200.775 +- 0.695
Doubles: 2.055 +- 0.101
Triples: 0.037 +- 0.009
Quads: -0.001 +- 0.000
Quads/Triples: -0.019 +- 0.009
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

(1)

Normalization results for reference source: H4-694

Current normalization constant: 1.0000 +- 0.0000
Cf252 expected singles rate: 201.4806 +- 0.4505
Cf252 measured singles rate: 200.7750 +- 0.6946
Singles rate expected/measured: 1.0035 +- 0.0403
New normalization constant: 1.0000 +- 0.0000
Normalization test Failed.
Measured percent precision: 0.35
Required percent precision: 0.30
Repeat measurement for at least: 880 seconds

Passive cycle raw data

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 5 columns: Cycle, Singles, Doubles, Triples, QC Tests. Rows 1-10 showing cycle rate data.

(2)

## 【AFAS 性能確認試験】

- (2) 2.4 AFAS の故障時の測定パラメータの再評価  
方法の検討及び故障時の測定性能の評価

Background\_Normal.txt

INCC 5.1.2	2	15773.160	9.016	0.188	Pass
	3	15759.022	-16.892	1.106	Pass
Facility: PPF	4	15765.606	11.379	-12.210	Pass
Material balance area: JM2G	5	15770.486	-6.368	1.169	Pass
Detector type: COLLAR	6	15751.518	8.027	6.196	Pass
Detector id: AFASP	7	15750.348	12.518	-8.138	Pass
Electronics id: JSR-15	8	15766.492	10.306	-3.089	Pass
Measurement date: 21.10.13 10:19:35	9	15747.139	-11.881	-13.648	Pass
Results file name: 1ADK1935.BKG	10	15736.126	28.387	13.563	Pass
Inspection number:	11	15793.766	-12.568	-12.909	Pass
Measurement option: Background	12	15734.990	16.557	-12.174	Pass
Detector configuration: Passive	13	15773.879	0.117	-10.155	Pass
Data source: Shift register	14	15759.540	17.043	6.330	Pass
QC tests: On	15	15767.094	-7.960	-4.558	Pass
Error calculation: Sample method	16	15787.716	24.684	22.993	Pass
Accidentals method: Measured	17	15763.216	2.530	5.573	Pass
Inspector name:	18	15760.191	-11.161	0.338	Pass
Passive comment: Normal Long	19	15735.541	-36.364	-12.846	Pass
	20	15779.611	19.674	-1.191	Pass
Predelay: 1.50	21	15805.582	18.819	-2.028	Pass
Gate length: 64.00	22	15773.461	0.184	-10.362	Pass
2nd gate length: 64.00	23	15802.824	15.954	-21.565	Pass
High voltage: 1720	24	15771.288	-1.424	15.683	Pass
Die away time: 50.0000	25	15735.658	-13.607	10.466	Pass
Efficiency: 0.1620	26	15757.300	4.441	2.391	Pass
Multiplicity deadtime: 86.5000	27	15732.750	23.729	-0.326	Pass
Coefficient A deadtime: 0.3458	28	15740.588	-8.094	-5.001	Pass
Coefficient B deadtime: 0.0299	29	15758.971	1.760	10.047	Pass
Coefficient C deadtime: 0.0000	30	15750.315	25.304	-1.285	Pass
Doubles gate fraction: 0.6599					
Triples gate fraction: 0.4260					

Number passive cycles: 30  
Count time (sec): 60

Passive messages

Background doubles rate greater than 1.0

Results

Singles:	15761.615 +- 3.593
Doubles:	4.984 +- 2.844
Triples:	-1.325 +- 1.817
Quads:	-0.366 +- 1.580
Quads/Triples:	-1.838 +- 1.685
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	15744.265	25.421	-4.374	Pass

(1)

(2)

Background\_ampB.txt

INCC 5.1.2	2	14769.897	21.175	-22.397	Pass
	3	14818.956	6.081	63.541	Fail outlier test
Facility: PPF	4	14789.012	-23.185	2.149	Pass
Material balance area: JM2G	5	14760.590	10.420	-17.227	Pass
Detector type: COLLAR	6	14776.397	-8.611	-0.750	Pass
Detector id: AFASP	7	14765.285	30.974	-0.140	Pass
Electronics id: JSR-15	8	14763.029	23.335	5.921	Pass
Measurement date: 21.10.13 10:58:01	9	14736.428	-16.903	9.129	Pass
Results file name: 1ADK5801.BKG	10	14760.022	10.286	-5.429	Pass
Inspection number:	11	14766.388	-23.587	2.701	Pass
Measurement option: Background	12	14783.766	25.145	18.211	Pass
Detector configuration: Passive	13	14779.020	11.961	-6.891	Pass
Data source: Shift register	14	14759.003	-20.186	0.783	Pass
QC tests: On	15	14808.345	-1.826	-15.238	Pass
Error calculation: Sample method	16	14779.187	24.475	14.484	Pass
Accidentals method: Measured	17	14765.302	-15.362	-6.769	Pass
Inspector name:	18	14776.531	-11.961	-8.480	Pass
Passive comment: ampB Long	19	14811.871	34.761	14.110	Pass
	20	14787.709	0.704	1.865	Pass
Predelay: 1.50	21	14779.538	-16.451	15.888	Pass
Gate length: 64.00	22	14806.273	9.599	5.934	Pass
2nd gate length: 64.00	23	14791.519	38.496	11.245	Pass
High voltage: 1720	24	14801.862	0.553	-2.060	Pass
Die away time: 50.0000	25	14814.778	1.307	-5.117	Pass
Efficiency: 0.1620	26	14769.563	0.117	3.477	Pass
Multiplicity deadtime: 86.5000	27	14787.024	2.613	6.738	Pass
Coefficient A deadtime: 0.3458	28	14791.435	-6.031	-16.155	Pass
Coefficient B deadtime: 0.0299	29	14795.245	16.635	-4.278	Pass
Coefficient C deadtime: 0.0000	30	14769.813	-13.067	7.465	Pass
Doubles gate fraction: 0.6599	31	14785.186	24.609	17.781	Pass
Triples gate fraction: 0.4260					

Number passive cycles: 30  
Count time (sec): 60

Passive messages

Background doubles rate greater than 1.0

Results

Singles:	14779.310 +- 3.427
Doubles:	4.352 +- 3.282
Triples:	0.976 +- 1.927
Quads:	1.608 +- 1.041
Quads/Triples:	1.321 +- 1.623
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	14749.294	0.553	2.177	Pass

(1)

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INCC 5.1.2

Facility: PPF  
 Material balance area: JM2G  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Measurement date: 21.10.13 13:48:30  
 Results file name: 1ADN4830.BKG  
 Inspection number:  
 Measurement option: Background  
 Detector configuration: Passive  
 Data source: Shift register  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: ampG Long

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

Number passive cycles: 30  
 Count time (sec): 60

2	14444.777	2.881	-10.216	Pass
3	14447.834	14.221	-7.294	Pass
4	14425.863	-27.135	8.316	Pass
5	14459.196	11.558	0.314	Pass
6	14434.434	11.507	-11.155	Pass
7	14470.207	-10.888	27.935	Pass
8	14457.057	-10.084	10.894	Pass
9	14463.774	-16.566	-0.664	Pass
10	14472.229	3.501	5.606	Pass
11	14431.544	-5.293	1.797	Pass
12	14431.494	-1.524	-15.755	Pass
13	14463.022	-10.938	8.548	Pass
14	14481.234	-1.240	0.229	Pass
15	14454.334	-19.899	-1.848	Pass
16	14441.001	-16.130	10.114	Pass
17	14467.049	8.543	5.253	Pass
18	14449.371	-9.380	8.133	Pass
19	14442.103	14.941	15.468	Pass
20	14480.198	-10.050	-2.163	Pass
21	14471.794	13.032	-10.472	Pass
22	14492.145	7.353	1.290	Pass
23	14447.032	-10.770	-11.540	Pass
24	14464.593	14.154	-3.203	Pass
25	14465.378	-20.770	-1.081	Pass
26	14456.823	15.913	-7.351	Pass
27	14465.311	31.390	15.683	Pass
28	14438.143	10.117	4.724	Pass
29	14434.785	-5.343	1.557	Pass
30	14437.325	7.739	-3.161	Pass

Passive messages

Background triples rate greater than 1.0

Results

Singles:	14454.785 +- 3.056
Doubles:	-0.341 +- 2.494
Triples:	1.162 +- 1.738
Quads:	-1.081 +- 1.208
Quads/Triples:	0.574 +- 0.630
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

Passive cycle rate data

Cycle	Singles	Doubles	Triples	QC Tests
1	14453.498	-1.055	-5.169	Pass

(1)

(2)

INCC 5.1.2

Facility: PPF  
 Material balance area: XXXX  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.10.13 14:48:19  
 Results file name: 1ADO4819.VER  
 Inspection number:  
 Item id: A  
 Stratum id: XXXX  
 Bias uncertainty: 0.0000  
 Random uncertainty: 0.0000  
 Systematic uncertainty: 0.0000  
 Relative std deviation: 0.0000  
 Material type: PWR  
 Original declared mass: 9.551  
 Measurement option: Verification  
 Data source: Database  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: Normal

Isotopics id: PPFPHF  
 Isotopics source code: OD

Pu238:	1.3233 +- 0.0000	1.2535 +- 0.0000
Pu239:	61.4933 +- 0.0000	62.3804 +- 0.0000
Pu240:	27.8411 +- 0.0000	28.2239 +- 0.0000
Pu241:	3.8401 +- 0.0000	2.5593 +- 0.0000
Pu242:	5.5022 +- 0.0000	5.5829 +- 0.0000
Pu date:	13.01.30	21.10.13
Am241:	6.3855 +- 0.0000	7.7170 +- 0.0000
Am date:	13.01.30	21.10.13

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: 15761.615 +- 3.593  
 Passive doubles bkgrnd: 4.984 +- 2.844  
 Passive triples bkgrnd: -1.325 +- 1.817  
 Passive scaler1 bkgrnd: 0.000  
 Passive scaler2 bkgrnd: 0.000

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

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles:	72923.006 +- 9.803
Doubles:	3593.531 +- 39.374
Triples:	294.846 +- 41.581
Quads:	96.609 +- 70.911
Quads/Triples:	0.263 +- 0.231
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

PRIMARY RESULT			
Known alpha results			
Alpha:	1.054		
Multiplication:	1.016		
Multiplication corrected doubles:	3240.645 +- 6.829		
Pu240e mass (g):	3.764 +- 0.008		
Pu240e (%):	40.762		
Pu mass (g):	9.234 +- 0.019		
Declared Pu240e mass (g):	3.837		
Declared Pu mass (g):	9.413		
Declared - assay Pu mass (g):	0.179 +- 0.019		
Declared - assay Pu mass (%):	1.897 +- 0.207		

Known alpha calibration parameters

Alpha weight:	1.000000e+000
Rho zero:	9.280000e-002
k:	2.166000e+000
a:	0.000000e+000
b:	8.609406e+002
variance a:	0.000000e+000
variance b:	0.000000e+000
covariance ab:	0.000000e+000
sigma x:	0.000000e+000

Passive cycle rate data

(1)

(2)

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	72915.371	3427.842	430.245	3.797	Pass
2	72932.211	3725.398	211.610	3.738	Pass
3	72882.216	3564.788	319.860	3.767	Pass
4	72960.340	3561.584	306.182	3.773	Pass
5	72914.846	3768.563	255.513	3.729	Pass
6	72886.430	3631.025	178.968	3.754	Pass
7	72911.427	3556.987	369.191	3.771	Pass
8	72971.662	3372.312	56.077	3.813	Pass
9	72940.724	3659.485	522.370	3.752	Pass
10	72914.829	3667.323	299.089	3.749	Pass

INCC 5.1.2

Facility: PFFF  
Material balance area: XXXX  
Detector type: COLLAR  
Detector id: AFASP  
Electronics id: JSR-15  
Inventory change code:  
I/O code:  
Measurement date: 21.10.13 15:02:08  
Results file name: 1ADP0208.VER  
Inspection number:  
Item id: A  
Stratum id: XXXX  
Bias uncertainty: 0.0000  
Random uncertainty: 0.0000  
Systematic uncertainty: 0.0000  
Relative std deviation: 0.0000  
Material type: PWR  
Original declared mass: 9.551  
Measurement option: Verification  
Data source: Database  
QC tests: On  
Error calculation: Sample method  
Accidentals method: Measured  
Inspector name:  
Passive comment: ampB

Isotopics id: PFPFHF  
Isotopics source code: OD  
Pu238: 1.3233 +- 0.0000 1.2535 +- 0.0000  
Pu239: 61.4933 +- 0.0000 62.3804 +- 0.0000  
Pu240: 27.8411 +- 0.0000 28.2239 +- 0.0000  
Pu241: 3.8401 +- 0.0000 2.5593 +- 0.0000  
Pu242: 5.5022 +- 0.0000 5.5829 +- 0.0000  
Pu date: 13.01.30 21.10.13  
Am241: 6.3855 +- 0.0000 7.7170 +- 0.0000  
Am date: 13.01.30 21.10.13

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

(3)

(1)

Assembly A\_ampB.txt

Passive singles bkgnd: 14779.310 +- 3.427  
Passive doubles bkgnd: 4.352 +- 3.282  
Passive triples bkgnd: 0.976 +- 1.927  
Passive scaler1 bkgnd: 0.000  
Passive scaler2 bkgnd: 0.000

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

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles: 66987.806 +- 13.121  
Doubles: 3015.680 +- 24.921  
Triples: 206.720 +- 41.744  
Quads: -14.783 +- 73.167  
Quads/Triples: 0.285 +- 0.465  
Scaler 1: 0.000 +- 0.000  
Scaler 2: 0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha: 1.054  
Multiplication: 1.000  
Multiplication corrected doubles: 3015.680 +- 24.921  
Pu240e mass (g): 3.503 +- 0.029  
Pu240e (%): 40.762  
Pu mass (g): 8.593 +- 0.071  
Declared Pu240e mass (g): 3.837  
Declared Pu mass (g): 9.413  
Declared - assay Pu mass (g): 0.820 +- 0.071  
Declared - assay Pu mass (%): 8.707 +- 0.754

Known alpha calibration parameters

Alpha weight: 1.000000e+000  
Rho zero: 9.280000e-002  
k: 2.166000e+000  
a: 0.000000e+000  
b: 8.609406e+002  
variance a: 0.000000e+000  
variance b: 0.000000e+000  
covariance ab: 0.000000e+000  
sigma x: 0.000000e+000

Passive cycle rate data

(2)

Assembly A\_ampB.txt

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	67029.421	3005.222	318.493	3.491	Pass
2	67031.585	2954.407	178.092	3.432	Pass
3	66934.453	2878.290	266.534	3.343	Pass
4	67015.678	2945.938	-34.219	3.422	Pass
5	67033.681	3126.321	111.063	3.496	Pass
6	67006.786	3004.290	426.636	3.490	Pass
7	66944.916	3122.127	201.222	3.492	Pass
8	66940.724	3022.600	165.301	3.511	Pass
9	66974.820	3075.046	322.082	3.503	Pass
10	66965.996	3022.558	111.936	3.511	Pass

(3)

INCC 5.1.2

Facility: PFFF  
 Material balance area: XXXX  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.10.13 15:29:09  
 Results file name: 1ADP2909.VER  
 Inspection number:  
 Item id: A  
 Stratum id: XXXX  
 Bias uncertainty: 0.0000  
 Random uncertainty: 0.0000  
 Systematic uncertainty: 0.0000  
 Relative std deviation: 0.0000  
 Material type: PWR  
 Original declared mass: 9.551  
 Measurement option: Verification  
 Data source: Database  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: ampG

Isotopics id:	PPFPFH				
Isotopics source code:	OD				
Pu238:	1.3233 +- 0.0000	1.2535 +- 0.0000			
Pu239:	61.4933 +- 0.0000	62.3804 +- 0.0000			
Pu240:	27.8411 +- 0.0000	28.2239 +- 0.0000			
Pu241:	3.8401 +- 0.0000	2.5593 +- 0.0000			
Pu242:	5.5022 +- 0.0000	5.5829 +- 0.0000			
Pu date:	13.01.30	21.10.13			
Am241:	6.3855 +- 0.0000	7.7170 +- 0.0000			
Am date:	13.01.30	21.10.13			

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

(1)

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	66924.352	3132.429	291.366	3.488	Pass
2	66879.931	2823.464	106.905	3.280	Pass
3	66956.029	3076.064	106.760	3.502	Pass
4	66906.722	3025.648	171.419	3.510	Pass
5	66893.589	2934.713	330.521	3.409	Pass
6	66957.331	3028.461	423.380	3.512	Pass
7	67019.484	2969.795	-28.792	3.449	Pass
8	66945.769	3086.785	367.216	3.499	Pass
9	66938.467	3193.728	294.931	3.476	Pass
10	66992.946	3138.829	228.875	3.491	Pass

(3)

Passive singles bkgrnd: 14454.785 +- 3.056  
 Passive doubles bkgrnd: -0.341 +- 2.494  
 Passive triples bkgrnd: 1.162 +- 1.738  
 Passive scaler1 bkgrnd: 0.000  
 Passive scaler2 bkgrnd: 0.000

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

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles:	66941.462 +- 14.003
Doubles:	3040.992 +- 34.837
Triples:	229.363 +- 44.137
Quads:	-65.504 +- 46.357
Quads/Triples:	0.740 +- 0.904
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha:	1.054
Multiplication:	1.001
Multiplication corrected doubles:	3020.659 +- 6.412
Pu240e mass (g):	3.509 +- 0.007
Pu240e (%):	40.762
Pu mass (g):	8.607 +- 0.018
Declared Pu240e mass (g):	3.837
Declared Pu mass (g):	9.413
Declared - assay Pu mass (g):	0.805 +- 0.018
Declared - assay Pu mass (%):	8.556 +- 0.194

Known alpha calibration parameters

Alpha weight:	1.000000e+000
Rho zero:	9.280000e-002
k:	2.166000e+000
a:	0.000000e+000
b:	8.609406e+002
variance a:	0.000000e+000
variance b:	0.000000e+000
covariance ab:	0.000000e+000
sigma x:	0.000000e+000

Passive cycle rate data

(2)

INCC 5.1.2

Facility: PFFF  
 Material balance area: XXXX  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.10.14 10:47:19  
 Results file name: 1AEK4719.VER  
 Inspection number:  
 Item id: B  
 Stratum id: XXXX  
 Bias uncertainty: 0.0000  
 Random uncertainty: 0.0000  
 Systematic uncertainty: 0.0000  
 Relative std deviation: 0.0000  
 Material type: PWR  
 Original declared mass: 8.486  
 Measurement option: Verification  
 Data source: Shift register  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: Normal

Isotopics id:	PPFPFH				
Isotopics source code:	OD				
Pu238:	1.2638 +- 0.0000	1.1967 +- 0.0000			
Pu239:	62.3620 +- 0.0000	63.2371 +- 0.0000			
Pu240:	27.3883 +- 0.0000	27.7541 +- 0.0000			
Pu241:	3.7397 +- 0.0000	2.4911 +- 0.0000			
Pu242:	5.2462 +- 0.0000	5.3211 +- 0.0000			
Pu date:	13.01.30	21.10.14			
Am241:	6.4546 +- 0.0000	7.7488 +- 0.0000			
Am date:	13.01.30	21.10.14			

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

(1)

Assembly B\_Normal.txt

Passive singles bkgrnd: 15761.615 +- 3.593
Passive doubles bkgrnd: 4.984 +- 2.844
Passive triples bkgrnd: -1.325 +- 1.817
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles: 63256.015 +- 15.842
Doubles: 3009.412 +- 23.884
Triples: 190.142 +- 26.660
Quads: 9.065 +- 53.635
Quads/Triples: 0.095 +- 0.326
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha: 1.065
Multiplication: 1.011
Multiplication corrected doubles: 2812.950 +- 4.283
Pu240e mass (g): 3.267 +- 0.005
Pu240e (%): 39.709
Pu mass (g): 8.228 +- 0.013
Declared Pu240e mass (g): 3.322
Declared Pu mass (g): 8.366
Declared - assay Pu mass (g): 0.138 +- 0.013
Declared - assay Pu mass (%): 1.654 +- 0.150

Known alpha calibration parameters

Alpha weight: 1.000000e+000
Rho zero: 9.280000e-002
k: 2.166000e+000
a: 0.000000e+000
b: 8.609406e+002
variance a: 0.000000e+000
variance b: 0.000000e+000
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

Passive cycle rate data

(2)

Assembly B\_Normal.txt

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle data.

(3)

Assembly B\_ampB.txt

INCC 5.1.2

Facility: PFFF
Material balance area: XXXX
Detector type: COLLAR
Detector id: AFASP
Electronics id: JSR-15
Inventory change code:
I/O code:
Measurement date: 21.10.14 10:59:19
Results file name: 1AEK5919.VER
Inspection number:
Item id: B
Stratum id: XXXX
Bias uncertainty: 0.0000
Random uncertainty: 0.0000
Systematic uncertainty: 0.0000
Relative std deviation: 0.0000
Material type: PWR
Original declared mass: 8.486
Measurement option: Verification
Data source: Shift register
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment: ampB

Isotopics id: PPFPHH
Isotopics source code: OD
Pu238: 1.2638 +- 0.0000 1.1967 +- 0.0000
Pu239: 62.3620 +- 0.0000 63.2371 +- 0.0000
Pu240: 27.3883 +- 0.0000 27.7541 +- 0.0000
Pu241: 3.7397 +- 0.0000 2.4911 +- 0.0000
Pu242: 5.2462 +- 0.0000 5.3211 +- 0.0000
Pu date: 13.01.30 21.10.14
Am241: 6.4546 +- 0.0000 7.7488 +- 0.0000
Am date: 13.01.30 21.10.14

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

(1)

Assembly B\_ampB.txt

Passive singles bkgrnd: 14779.310 +- 3.427
Passive doubles bkgrnd: 4.352 +- 3.282
Passive triples bkgrnd: 0.976 +- 1.927
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000

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

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles: 58171.100 +- 10.095
Doubles: 2541.815 +- 23.644
Triples: 221.537 +- 38.736
Quads: -32.147 +- 36.022
Quads/Triples: -0.418 +- 0.296
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha: 1.065
Multiplication: 1.000
Multiplication corrected doubles: 2541.815 +- 23.644
Pu240e mass (g): 2.952 +- 0.027
Pu240e (%): 39.709
Pu mass (g): 7.435 +- 0.069
Declared Pu240e mass (g): 3.322
Declared Pu mass (g): 8.366
Declared - assay Pu mass (g): 0.931 +- 0.069
Declared - assay Pu mass (%): 11.133 +- 0.827

Known alpha calibration parameters

Alpha weight: 1.000000e+000
Rho zero: 9.280000e-002
k: 2.166000e+000
a: 0.000000e+000
b: 8.609406e+002
variance a: 0.000000e+000
variance b: 0.000000e+000
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

Passive cycle rate data

(2)



Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	58162.170	2598.561	422.496	3.018	Pass
2	58164.533	2471.019	349.123	2.870	Pass
3	58224.739	2483.326	171.200	2.884	Pass
4	58151.199	2602.174	141.819	3.022	Pass
5	58210.122	2688.460	274.450	3.023	Pass
6	58134.928	2545.772	336.357	2.957	Pass
7	58191.471	2538.660	139.549	2.949	Pass
8	58134.000	2436.501	128.218	2.830	Pass
9	58162.322	2504.724	224.557	2.909	Pass
10	58175.521	2548.953	27.275	2.961	Pass

(3)

```

INCC 5.1.2
Facility: PPF
Material balance area: XXXX
Detector type: COLLAR
Detector id: AFASP
Electronics id: JSR-15
Inventory change code:
I/O code:
Measurement date: 21.10.14 11:25:11
Results file name: 1AEL2511.VER
Inspection number:
Item id: B
Stratum id: XXXX
Bias uncertainty: 0.0000
Random uncertainty: 0.0000
Systematic uncertainty: 0.0000
Relative std deviation: 0.0000
Material type: PWR
Original declared mass: 8.486
Measurement option: Verification
Data source: Shift register
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment: ampG

Isotopics id: PPFPH
Isotopics source code: OD
Pu238: 1.2638 +- 0.0000 1.1967 +- 0.0000
Pu239: 62.3620 +- 0.0000 63.2371 +- 0.0000
Pu240: 27.3883 +- 0.0000 27.7541 +- 0.0000
Pu241: 3.7397 +- 0.0000 2.4911 +- 0.0000
Pu242: 5.2462 +- 0.0000 5.3211 +- 0.0000
Pu date: 13.01.30 21.10.14
Am241: 6.4546 +- 0.0000 7.7488 +- 0.0000
Am date: 13.01.30 21.10.14

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

```

(1)

```

Passive singles bkgrnd: 14454.785 +- 3.056
Passive doubles bkgrnd: -0.341 +- 2.494
Passive triples bkgrnd: 1.162 +- 1.738
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000

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

```

Passive messages

Known alpha: failed stratum rejection limits

Results

```

Singles: 57984.087 +- 19.985
Doubles: 2531.354 +- 16.256
Triples: 206.853 +- 39.304
Quads: -15.011 +- 66.885
Quads/Triples: -0.722 +- 0.815
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

```

PRIMARY RESULT

Known alpha results

```

Alpha: 1.065
Multiplication: 1.000
Multiplication corrected doubles: 2531.354 +- 16.256
Pu240e mass (g): 2.940 +- 0.019
Pu240e (%): 39.709
Pu mass (g): 7.404 +- 0.048
Declared Pu240e mass (g): 3.322
Declared Pu mass (g): 8.366
Declared - assay Pu mass (g): 0.962 +- 0.048
Declared - assay Pu mass (%): 11.499 +- 0.568

```

Known alpha calibration parameters

```

Alpha weight: 1.000000e+000
Rho zero: 9.280000e-002
k: 2.166000e+000
a: 0.000000e+000
b: 8.609406e+002
variance a: 0.000000e+000
variance b: 0.000000e+000
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

```

Passive cycle rate data

(2)

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	57895.050	2466.710	136.358	2.865	Pass
2	57929.343	2444.899	98.493	2.840	Pass
3	57995.434	2537.956	138.333	2.948	Pass
4	57926.255	2542.732	238.282	2.953	Pass
5	58073.811	2548.501	493.695	2.960	Pass
6	57987.383	2495.960	226.146	2.899	Pass
7	58004.007	2616.849	233.777	3.026	Pass
8	58092.275	2559.609	283.467	2.973	Pass
9	57974.472	2572.903	45.582	2.988	Pass
10	57962.844	2527.418	173.471	2.936	Pass

(3)

INCC 5.1.2

Facility: PFFF  
 Material balance area: XXXX  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.10.14 13:56:33  
 Results file name: 1AEN5633.VER  
 Inspection number:  
 Item id: C  
 Stratum id: XXXX  
 Bias uncertainty: 0.0000  
 Random uncertainty: 0.0000  
 Systematic uncertainty: 0.0000  
 Relative std deviation: 0.0000  
 Material type: PWR  
 Original declared mass: 5.218  
 Measurement option: Verification  
 Data source: Shift register  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: Normal

Isotopics id:	PPFPH			
Isotopics source code:	OD			
Pu238:	0.8404 +- 0.0000	0.7920 +- 0.0000		
Pu239:	68.9247 +- 0.0000	69.5618 +- 0.0000		
Pu240:	24.2715 +- 0.0000	24.4794 +- 0.0000		
Pu241:	2.4621 +- 0.0000	1.6323 +- 0.0000		
Pu242:	3.5013 +- 0.0000	3.5345 +- 0.0000		
Pu date:	13.01.30	21.10.14		
Am241:	6.2192 +- 0.0000	7.0384 +- 0.0000		
Am date:	13.01.30	21.10.14		

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

(1)

Passive singles bkgrnd: 15761.615 +- 3.593  
 Passive doubles bkgrnd: 4.984 +- 2.844  
 Passive triples bkgrnd: -1.325 +- 1.817  
 Passive scaler1 bkgrnd: 0.000  
 Passive scaler2 bkgrnd: 0.000

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

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles:	32146.677 +- 7.668
Doubles:	1441.171 +- 21.370
Triples:	93.600 +- 20.307
Quads:	41.279 +- 23.911
Quads/Triples:	0.722 +- 0.398
Scaler 1:	0.000 +- 0.000
Scaler 2:	0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha:	1.077
Multiplication:	1.001
Multiplication corrected doubles:	1435.580 +- 3.899
Pu240e mass (g):	1.667 +- 0.005
Pu240e (%):	32.413
Pu mass (g):	5.144 +- 0.014
Declared Pu240e mass (g):	1.675
Declared Pu mass (g):	5.169
Declared - assay Pu mass (g):	0.025 +- 0.014
Declared - assay Pu mass (%):	0.475 +- 0.270

Known alpha calibration parameters

Alpha weight:	1.000000e+000
Rho zero:	9.280000e-002
k:	2.166000e+000
a:	0.000000e+000
b:	8.609406e+002
variance a:	0.000000e+000
variance b:	0.000000e+000
covariance ab:	0.000000e+000
sigma x:	0.000000e+000

Passive cycle rate data

(2)

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	32162.152	1359.847	90.028	1.579	Pass
2	32104.509	1408.061	147.715	1.635	Pass
3	32147.699	1381.869	72.575	1.605	Pass
4	32134.792	1439.746	133.034	1.667	Pass
5	32152.320	1341.084	42.859	1.558	Pass
6	32121.852	1492.049	32.348	1.655	Pass
7	32149.682	1478.745	26.315	1.660	Pass
8	32154.438	1506.910	236.709	1.654	Pass
9	32179.562	1543.406	77.770	1.648	Pass
10	32159.765	1459.991	76.494	1.664	Pass

(3)

INCC 5.1.2

Facility: PFFF  
 Material balance area: XXXX  
 Detector type: COLLAR  
 Detector id: AFASP  
 Electronics id: JSR-15  
 Inventory change code:  
 I/O code:  
 Measurement date: 21.10.14 14:09:58  
 Results file name: 1AE00958.VER  
 Inspection number:  
 Item id: C  
 Stratum id: XXXX  
 Bias uncertainty: 0.0000  
 Random uncertainty: 0.0000  
 Systematic uncertainty: 0.0000  
 Relative std deviation: 0.0000  
 Material type: PWR  
 Original declared mass: 5.218  
 Measurement option: Verification  
 Data source: Database  
 QC tests: On  
 Error calculation: Sample method  
 Accidentals method: Measured  
 Inspector name:  
 Passive comment: ampB

Isotopics id:	PPFPH			
Isotopics source code:	OD			
Pu238:	0.8404 +- 0.0000	0.7920 +- 0.0000		
Pu239:	68.9252 +- 0.0000	69.5618 +- 0.0000		
Pu240:	24.2716 +- 0.0000	24.4794 +- 0.0000		
Pu241:	2.4614 +- 0.0000	1.6323 +- 0.0000		
Pu242:	3.5013 +- 0.0000	3.5345 +- 0.0000		
Pu date:	13.02.01	21.10.14		
Am241:	6.2199 +- 0.0000	7.0384 +- 0.0000		
Am date:	13.02.01	21.10.14		

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

(1)

Assembly C\_ampB.txt

Passive singles bkgrnd: 14779.310 +- 3.427
Passive doubles bkgrnd: 4.352 +- 3.282
Passive triples bkgrnd: 0.976 +- 1.927
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles: 29528.121 +- 12.538
Doubles: 1216.831 +- 15.357
Triples: 85.020 +- 23.247
Quads: 12.271 +- 24.450
Quads/Triples: 0.680 +- 0.306
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha: 1.077
Multiplication: 1.001
Multiplication corrected doubles: 1207.249 +- 2.846
Pu240e mass (g): 1.665 +- 0.004
Pu240e (%): 32.413
Pu mass (g): 5.137 +- 0.013
Declared Pu240e mass (g): 1.675
Declared Pu mass (g): 5.169
Declared - assay Pu mass (g): 0.032 +- 0.013
Declared - assay Pu mass (%): 0.611 +- 0.243

Separator line of symbols

Known alpha calibration parameters

Alpha weight: 1.000000e+000
Rho zero: 8.501387e-002
k: 2.166000e+000
a: 0.000000e+000
b: 7.249903e+002
variance a: 0.000000e+000
variance b: 2.082987e-001
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

Passive cycle raw data

(2)

Assembly C\_ampB.txt

Table with 7 columns: Cycle, Singles, R+A, A, Scaler1, Scaler2, QC Tests. Rows 1-10 showing cycle data.

Passive cycle rate data

Table with 6 columns: Cycle, Singles, Doubles, Triples, Mass, QC Tests. Rows 1-10 showing cycle rate data.

Assembly C\_ampG.txt

INCC 5.1.2

Facility: PFFF
Material balance area: XXXX
Detector type: COLLAR
Detector id: AFASP
Electronics id: JSR-15
Inventory change code:
I/O code:
Measurement date: 21.10.14 14:35:40
Results file name: 1AE03540.VER
Inspection number:
Item id: C
Stratum id: XXXX
Bias uncertainty: 0.0000
Random uncertainty: 0.0000
Systematic uncertainty: 0.0000
Relative std deviation: 0.0000
Material type: PWR
Original declared mass: 5.218
Measurement option: Verification
Data source: Database
QC tests: On
Error calculation: Sample method
Accidentals method: Measured
Inspector name:
Passive comment: ampG

Isotopics id: PPFPH
Isotopics source code: OD
Pu238: 0.8404 +- 0.0000 0.7920 +- 0.0000
Pu239: 68.9252 +- 0.0000 69.5618 +- 0.0000
Pu240: 24.2716 +- 0.0000 24.4794 +- 0.0000
Pu241: 2.4614 +- 0.0000 1.6323 +- 0.0000
Pu242: 3.5013 +- 0.0000 3.5345 +- 0.0000
Pu date: 13.02.01 21.10.14
Am241: 6.2199 +- 0.0000 7.0384 +- 0.0000
Am date: 13.02.01 21.10.14

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

(1)

Passive singles bkgrnd: 14454.785 +- 3.056
Passive doubles bkgrnd: -0.341 +- 2.494
Passive triples bkgrnd: 1.162 +- 1.738
Passive scaler1 bkgrnd: 0.000
Passive scaler2 bkgrnd: 0.000
Number passive cycles: 10
Count time (sec): 60

Passive messages

Known alpha: failed stratum rejection limits

Results

Singles: 29451.419 +- 10.886
Doubles: 1245.222 +- 16.560
Triples: 78.776 +- 18.355
Quads: -12.681 +- 24.513
Quads/Triples: -1.734 +- 1.502
Scaler 1: 0.000 +- 0.000
Scaler 2: 0.000 +- 0.000

PRIMARY RESULT

Known alpha results

Alpha: 1.077
Multiplication: 1.005
Multiplication corrected doubles: 1204.259 +- 3.002
Pu240e mass (g): 1.662 +- 0.009
Pu240e (%): 32.413
Pu mass (g): 5.128 +- 0.028
Declared Pu240e mass (g): 1.675
Declared Pu mass (g): 5.169
Declared - assay Pu mass (g): 0.041 +- 0.028
Declared - assay Pu mass (%): 0.792 +- 0.541

Separator line of symbols

Known alpha calibration parameters

Alpha weight: 1.000000e+000
Rho zero: 8.536166e-002
k: 2.166000e+000
a: 0.000000e+000
b: 7.245155e+002
variance a: 0.000000e+000
variance b: 1.232918e+001
covariance ab: 0.000000e+000
sigma x: 0.000000e+000

Passive cycle raw data

(2)

Assembly C\_ampG.txt

Cycle	Singles	R+A	A	Scaler1	Scaler2	QC Tests
1	2622913	7407463	7338336	0	0	Pass
2	2621898	7408638	7332654	0	0	Pass
3	2623318	7411500	7340582	0	0	Pass
4	2625373	7422474	7352088	0	0	Pass
5	2621770	7405033	7331926	0	0	Pass
6	2625347	7424269	7351936	0	0	Pass
7	2625627	7432079	7353521	0	0	Pass
8	2626068	7431148	7355981	0	0	Pass
9	2627829	7438900	7365848	0	0	Pass
10	2623778	7420203	7343161	0	0	Pass

Passive cycle rate data

Cycle	Singles	Doubles	Triples	Mass	QC Tests
1	29426.579	1170.073	85.029	1.615	Pass
2	29409.533	1286.096	79.543	1.649	Pass
3	29433.380	1200.382	5.843	1.657	Pass
4	29467.891	1191.394	97.579	1.644	Pass
5	29407.384	1237.412	146.098	1.661	Pass
6	29467.455	1224.340	156.676	1.668	Pass
7	29472.157	1329.680	58.339	1.643	Pass
8	29479.563	1272.302	139.596	1.657	Pass
9	29509.137	1236.525	12.540	1.668	Pass
10	29441.105	1304.013	6.436	1.647	Pass

(3)

## 【IPCA 性能確認試験】

### (1) 4.1 長期管理限界の妥当性確認