Laboratories Receiving MAPEP Gross Alpha/Beta Water Standard

ADEM01	Alabama Department of Environmental Management
AFOH01	AFIOH/SDRR
ANLA01	Argonne National Laboratory/Analytical Chemistry Lab.
ANTE01	Paragon Analytics a Division of DataChem Laboratories, Inc.
ARPL01	Analytical Support Operations - Radiochemical Processing Lab
ARSL01	American Radiation Services Inc.
ATLI01	ATL International, Inc.
AY1201	BWXT Y-12, Analytical Chemistry Organization Laboratory
CDHS01	California Department of Health Services
CESL01	Lawrence Livermore National Laboratory - EMRL
CHMH01	222-S Laboratory
CMRC01	Carlsbad Environmental Monitoring and Research Center
CORE02	STL Denver
DEHS01	Department of Environmental Health & Safety
EMBW01	CH2M Hill, Mound Inc., Mound, Environmental Monitoring
EPAL01	U. S. EPA Office of Radiation and Indoor Air
ERCL01	Public Health Laboratories
ERHD99	Radiation Protection Bureau ERHD NMS
ERLG01	Environmental Radiation Laboratory
ERPD99	Environmental Radiation Protection Division
FDHE01	Florida Dept of Health Environmental Laboratory
FERM01	Fluor Fernald
FNAL01	Fermi National Accelerator Laboratory (FermiLab)
GENE01	General Engineering Laboratories, LLC
GPLP01	GPL Laboratories, LLLP
GROW01	FGL Environmental
HCAL01	Hazards Control Analytical Lab
HWRL01	Lawrence Livermore National Laboratory - HWRL
IAEA99	International Atomic Energy Agency
ISUP01	ISU - Department of Physics/Health Physics/EAL
JAEC99	Radiation Measurements Laboratory
KAST99	Environmental Studies Laboratory
LOCK01	ICP Analytical Laboratories Department
LOCK03	RADIATION MEASUREMENTS LABORATORY/AEDL
MART01	USEC, Inc.
MART02	United States Enrichment Corporation
MART03	Radioactive Material Analysis Laboratory
MDPH01	MDPH-Radiation Control Program
NARL01	National Air and Radiation Environmental Laboratory
NESI01	BWXT Services-Nuclear Environmental Laboratory Services
NJDH01	New Jersey Dept. of Health & Senior Services, PHEL, ECLS
NRLL99	National Radiation Laboratory
NTSI01	Nuclear Technology Services, Inc.
OBGL01	O'Brien & Gere Laboratories, Inc.
ODHL01	Ohio Department of Health Laboratory
ORIS01	ORISE/ESSAP

OTLI01	Outreach Technologies, Inc.
PESL01	Environmental Science Lab PNNL/ESL
QUAN01	STL St. Louis
QUAN03	SEVERN TRENT LABORATORIES RICHLAND
RECC01	GEL Laboratories of Ohio, LLC
RPSC01	Radiation Protection Service
RSAL01	RSA Laboratories, Inc.
SAVA01	WSRC/SAVANNAH RIVER NATIONAL LABORATORY/ADS
SCAL01	Sanford Cohen and Associates, Inc.
SEML01	SRS Environmental Monitoring Laboratory
SLDL01	Scientific Laboratory Division
SNRC99	Soreq NRC
SOUT01	Southwest Research Institute
SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagnostics
TDHL01	Texas Department of State Health Services Laboratory
TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
TELE02	Environmental, Inc., Midwest Lab
TMAE01	Eberline Services, Inc.
TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY
TMAR01	Eberline Services
TNUT01	FUSRAP
UQNP99	University of Qatar - Nuclear Physics Lab
WEST03	Waste Sampling and Characterization Facility
WEST04	PACE ANALYTICAL SERVICES WALTZ MILL SITE
WSHL01	Wisconsin State Laboratory of Hygiene
WVDP01	WVDP Environmental Laboratory
YAEC01	Framatome ANP Environmental Laboratory

Labs Not Reporting GrW

LAB_CODE	*LAB_NAME*
ANLA01	Argonne National Laboratory/Analytical Chemistry Lab.
CDHS01	California Department of Health Services
CMRC01	Carlsbad Environmental Monitoring and Research Center
DEHS01	Department of Environmental Health & Safety
EMBW01	CH2M Hill, Mound Inc., Mound, Environmental Monitoring
EPAL01	U. S. EPA Office of Radiation and Indoor Air
ERHD99	Radiation Protection Bureau ERHD NMS
FERM01	Fluor Fernald
IAEA99	International Atomic Energy Agency
JAEC99	Radiation Measurements Laboratory
KAST99	Environmental Studies Laboratory
LOCK03	RADIATION MEASUREMENTS LABORATORY/AEDL
MDPH01	MDPH-Radiation Control Program
PESL01	Environmental Science Lab PNNL/ESL
SAVA01	WSRC/SAVANNAH RIVER NATIONAL LABORATORY/ADS
SRPD01	Sandia National Laboratories, Radiation Protection Sample Dia
UQNP99	University of Qatar - Nuclear Physics Lab
YAEC01	Framatome ANP Environmental Laboratory

Mixed Analyte Performance Evaluation Program

Statistical Summary

Sample ID: MAPEP-05-GrW14

Gross Alpha / Beta Water Standard

Analyte	T(1)	A(2)	Grand Mean	Std. Dev.	Reference Value	Analyte Text	Acceptance Limits	Units
Gross alpha	55	53	0.79	0.20	0.790		>0.0 - 1.580	(Bq/L)
Gross beta	55	53	1.38	0.18	1.350		0.675 - 2.025	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Note:

Outliers are excluded from the statistical summary.
Outliers are defied as laboratory data with a bias greater than 60 percent for gamma spectrometry analyses and 30 percent for all others.

(1) T = Total Number of Laboratories Reporting Analyte.
(2) A = Number of Laboratories with 'Acceptable' Performance.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ADEM01

Alabama Department of Environmental Management
Central Laboratory
Montgomery AL 36109

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.80	0.790	A		1.3	>0.0 - 1.58	0.11		(Bq/L)
Gross beta	1.63	1.350	A		20.7	0.68 - 2.03	0.06		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

AFOH01

AFIOH/SDRR
2350 Gillingham Dr
Brooks City-Base TX 78235-5103

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.22	0.790	A		54.4	>0.0 - 1.58	0.18		(Bq/L)
Gross beta	1.78	1.350	A		31.9	0.68 - 2.03	0.14		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ANTE01

Paragon Analytics a Division of DataChem Laboratories,
225 Commerce Drive
Fort Collins CO 80524-

Sample ID: MAPEP-05-GrW14

Analyte	Result	Ref Value	Flag	Flag Text	Bias (%)	Acceptance Range	Unc Value	Unc. Flag	Units
Gross alpha	0.672	0.790	A		-14.9	>0.0 - 1.58	0.074		(Bq/L)
Gross beta	1.33	1.350	A		-1.5	0.68 - 2.03	0.12		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ARPL01 Analytical Support Operations - Radiochemical Processi
PO Box 999
Richland WA 99352

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.717	0.790	A		-9.2	>0.0 - 1.58	0.014	L	(Bq/L)
Gross beta	1.45	1.350	A		7.4	0.68 - 2.03	0.03	L	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ARSL01

American Radiation Services Inc.
2609 North River Road
Port Allen LA 70767

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.01	0.790	A		27.8	>0.0 - 1.58	0.08		(Bq/L)
Gross beta	1.45	1.350	A		7.4	0.68 - 2.03	0.08		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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10 - Check Isomer
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14 - Solubility Issue
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18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ATLI01

ATL International, Inc.
20010 Century Blvd, Suite 500
Germantown MD 20874

Sample ID: MAPEP-05-GrW14

Analyte	Result	Ref Value	Flag	Flag Text	Bias (%)	Acceptance Range	Unc Value	Unc. Flag	Units
Gross alpha	0.7300	0.790	A		-7.6	>0.0 - 1.58	0.0875		(Bq/L)
Gross beta	1.4620	1.350	A		8.3	0.68 - 2.03	0.0970		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

AY1201

BWXT Y-12, Analytical Chemistry Organization Laborato
Y12, NSC, Bldg. 9995, Rm 142
Oak Ridge TN 37831-8189

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.714	0.790	A		-9.6	>0.0 - 1.58	0.074		(Bq/L)
Gross beta	1.33	1.350	A		-1.5	0.68 - 2.03	0.092		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

CESL01

Lawrence Livermore National Laboratory - EMRL
7000 East Avenue
Livermore CA 94551

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.252	0.790	A		-68.1	>0.0 - 1.58	0.0958	H	(Bq/L)
Gross beta	0.782	1.350	N	17	-42.1	0.68 - 2.03	0.475	H	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Flag Text

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10 - Check Isomer
11 - False Positive Test, Value Not Reported
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17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

CHMH01
222-S Laboratory
Hanford MSIN T6-10
Richland WA 99352

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	.514	0.790	A		-34.9	>0.0 - 1.58	.057		(Bq/L)
Gross beta	1.39	1.350	A		3.0	0.68 - 2.03	.12		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

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Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

CORE02

STL Denver
4955 Yarrow St
Arvada CO 80002

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.709	0.790	A		-10.3	>0.0 - 1.58	0.036		(Bq/L)
Gross beta	1.209	1.350	A		-10.4	0.68 - 2.03	0.045		(Bq/L)

Gross Alpha Flags:

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W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ERCL01 Public Health Laboratories
1610 N.E. 150 th Srteet
Shoreline WA 98155-9701

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.95	0.790	A		20.3	>0.0 - 1.58	0.12		(Bq/L)
Gross beta	1.41	1.350	A		4.4	0.68 - 2.03	0.10		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ERLG01 Environmental Radiation Laboratory
Georgia Institute of Tech.
Atlanta GA 30332

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	.89	0.790	A		12.7	>0.0 - 1.58	.1		(Bq/L)
Gross beta	1.3	1.350	A		-3.7	0.68 - 2.03	.2		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ERPD99 Environmental Radiation Protection Division
Mubarak Al-Kabeer Street, al-Awqaf Compl
Sharq Kuwait 656

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.04	0.790	N	16	-94.9	>0.0 - 1.58			(Bq/L)
Gross beta	0.4	1.350	N	16	-70.4	0.68 - 2.03			(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

FDHE01

Florida Dept of Health Environmental Laboratory
PO Box 680069
Orlando FL 32868-0069

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.97	0.790	A		22.8	>0.0 - 1.58	0.13		(Bq/L)
Gross beta	1.63	1.350	A		20.7	0.68 - 2.03	0.11		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

FNAL01 Fermi National Accelerator Laboratory (FermiLab)
PO Box 500, MS325
Batavia IL 60510

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.16	0.790	A		-79.7	>0.0 - 1.58	0.02		(Bq/L)
Gross beta	1.37	1.350	A		1.5	0.68 - 2.03	0.30	H	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

GENE01

General Engineering Laboratories, LLC
2040 Savage Road
Charleston SC 29407

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.673	0.790	A		-14.8	>0.0 - 1.58	0.038		(Bq/L)
Gross beta	1.343	1.350	A		-0.5	0.68 - 2.03	0.041		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

GPLP01

GPL Laboratories, LLLP
7210A Corporate Court
Frederick MD 21703

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.282	0.790	A		-64.3	>0.0 - 1.58	0.025		(Bq/L)
Gross beta	0.782	1.350	A		-42.1	0.68 - 2.03	0.026		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

GROW01

FGL Environmental
853 Corporation St.
Santa Paula CA 93060-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.678	0.790	A		-14.2	>0.0 - 1.58	0.07		(Bq/L)
Gross beta	1.27	1.350	A		-5.9	0.68 - 2.03	0.08		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

HCAL01

Hazards Control Analytical Lab
Lawrence Livermore National
Livermore CA 94551

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	.803	0.790	A		1.6	>0.0 - 1.58	.090		(Bq/L)
Gross beta	1.33	1.350	A		-1.5	0.68 - 2.03	0.08		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

HWRL01 Lawrence Livermore National Laboratory - HWRL
7000 East Avenue
Livermore CA 94551

Sample ID: MAPEP-05-GrW14

Analyte	Result	Ref Value	Flag	Flag Text	Bias (%)	Acceptance Range	Unc Value	Unc. Flag	Units
Gross alpha	.610	0.790	A		-22.8	>0.0 - 1.58	.055		(Bq/L)
Gross beta	1.20	1.350	A		-11.1	0.68 - 2.03	.056		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ISUP01

ISU - Department of Physics/Health Physics/EAL
785 S. 8th Ave, Rm 120
Pocatello ID 83209-8106

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.43	0.790	A		-45.6	>0.0 - 1.58	0.04		(Bq/L)
Gross beta	1.56	1.350	A		15.6	0.68 - 2.03	0.07		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

LOCK01

ICP Analytical Laboratories Department
CH2M-WG Idaho, LLC
Idaho Falls ID 83415-5210

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.861	0.790	A		9.0	>0.0 - 1.58	0.090		(Bq/L)
Gross beta	1.63	1.350	A		20.7	0.68 - 2.03	0.11		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

MART01

USEC, Inc.

Lab COC, Bldg. X-710, Rm 222

Piketon OH 45661-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.82	0.790	A		3.8	>0.0 - 1.58	0.22	H	(Bq/L)
Gross beta	1.38	1.350	A		2.2	0.68 - 2.03	0.22		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

MART02

United States Enrichment Corporation
5600 Hobbs Road
Paducah KY 42001-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.610	0.790	A		-22.8	>0.0 - 1.58	0.2	H	(Bq/L)
Gross beta	0.690	1.350	A		-48.9	0.68 - 2.03	0.11		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

MART03

Radioactive Material Analysis Laboratory
ORNL
Oak Ridge TN 37831-6043

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.59	0.790	A		-25.3	>0.0 - 1.58	0.06		(Bq/L)
Gross beta	1.47	1.350	A		8.9	0.68 - 2.03	0.15		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

NARL01

National Air and Radiation Environmental Laboratory
540 S. Morris Ave.
Montgomery AL 36115-2601

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.029	0.790	A		30.3	>0.0 - 1.58	0.091		(Bq/L)
Gross beta	1.419	1.350	A		5.1	0.68 - 2.03	0.055		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

NESI01

BWXT Services-Nuclear Environmental Laboratory Servi
Lynchburg Technology Center
Lynchburg VA 24504-5447

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.72	0.790	A		-8.9	>0.0 - 1.58	0.05		(Bq/L)
Gross beta	1.34	1.350	A		-0.7	0.68 - 2.03	0.04	L	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

NJDH01 New Jersey Dept. of Health & Senior Services, PHEL, E
Market and Warren Streets
Trenton NJ 08625-0361

Sample ID: MAPEP-05-GrW14

Analyte	Result	Ref Value	Flag	Flag Text	Bias (%)	Acceptance Range	Unc Value	Unc. Flag	Units
Gross alpha	0.966	0.790	A		22.3	>0.0 - 1.58	0.047		(Bq/L)
Gross beta	1.47	1.350	A		8.9	0.68 - 2.03	0.03	L	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

NRLL99 National Radiation Laboratory
108 Victoria St
Christchurch Christchu 8001

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.822	0.790	A		4.1	>0.0 - 1.58	0.055		(Bq/L)
Gross beta	1.4	1.350	A		3.7	0.68 - 2.03	0.085		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

NTSI01

Nuclear Technology Services, Inc.
635 Hembree Parkway
Roswell GA 30076

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.910	0.790	A		15.2	>0.0 - 1.58	0.180		(Bq/L)
Gross beta	1.300	1.350	A		-3.7	0.68 - 2.03	0.100		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

OBGL01

O'Brien & Gere Laboratories, Inc.
PO Box 4873
Syracuse NY 13221-4873

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.704	0.790	A		-10.9	>0.0 - 1.58	0.14		(Bq/L)
Gross beta	1.19	1.350	A		-11.9	0.68 - 2.03	0.16		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ODHL01 Ohio Department of Health Laboratory
1571 Perry St
Columbus OH 43201

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.84	0.790	A		6.3	>0.0 - 1.58	0.20	H	(Bq/L)
Gross beta	1.18	1.350	A		-12.6	0.68 - 2.03	0.26	H	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

ORIS01 ORISE/ESSAP
PO Box 117
Oak Ridge TN 37831-0117

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.68	0.790	A		-13.9	>0.0 - 1.58	0.06		(Bq/L)
Gross beta	1.23	1.350	A		-8.9	0.68 - 2.03	0.08		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

OTLI01

Outreach Technologies, Inc.
311 N. Aspen
Broken Arrow OK 74012-

Sample ID: MAPEP-05-GrW14

Analyte	Result	Ref Value	Flag	Flag Text	Bias (%)	Acceptance Range	Unc Value	Unc. Flag	Units
Gross alpha	1.02	0.790	A		29.1	>0.0 - 1.58	0.174		(Bq/L)
Gross beta	1.58	1.350	A		17.0	0.68 - 2.03	0.29		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

QUAN01

STL St. Louis
13715 Rider Trail North
Earth City MO 63045-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.776	0.790	A		-1.8	>0.0 - 1.58	0.053		(Bq/L)
Gross beta	1.27	1.350	A		-5.9	0.68 - 2.03	0.04		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

QUAN03

SEVERN TRENT LABORATORIES RICHLAND
2800 GEORGE WASHINGTON WAY
RICHLAND WA 99354-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.606	0.790	A		-23.3	>0.0 - 1.58	0.0739		(Bq/L)
Gross beta	1.28	1.350	A		-5.2	0.68 - 2.03	0.11		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

RECC01

GEL Laboratories of Ohio, LLC
6954 Cornell Road
Cincinnati OH 45242-3025

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	.747	0.790	A		-5.4	>0.0 - 1.58	.0615		(Bq/L)
Gross beta	1.51	1.350	A		11.9	0.68 - 2.03	.0978		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

RPSC01

Radiation Protection Service
Ontario Ministry of Labour
Weston Ontario M9P 3T1

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.03	0.790	A		30.4	>0.0 - 1.58	0.24	H	(Bq/L)
Gross beta	1.22	1.350	A		-9.6	0.68 - 2.03	0.07		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

RSAL01

RSA Laboratories, Inc.
PO Box 61
Hebron CT 06248

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.10	0.790	A		39.2	>0.0 - 1.58	.17		(Bq/L)
Gross beta	1.69	1.350	A		25.2	0.68 - 2.03	.16		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

SCAL01

Sanford Cohen and Associates, Inc.
1000 Monticello Court
Montgomery AL 36117-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.835	0.790	A		5.7	>0.0 - 1.58	0.213	H	(Bq/L)
Gross beta	1.29	1.350	A		-4.4	0.68 - 2.03	0.195		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

SEML01 SRS Environmental Monitoring Laboratory
Bldg 735-B
Aiken SC 29808

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.00	0.790	A		26.6	>0.0 - 1.58	0.18		(Bq/L)
Gross beta	1.46	1.350	A		8.1	0.68 - 2.03	0.20		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

SLDL01

Scientific Laboratory Division
PO Box 4700
Albuquerque NM 87196-4700

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.70	0.790	A		-11.4	>0.0 - 1.58	0.08		(Bq/L)
Gross beta	1.34	1.350	A		-0.7	0.68 - 2.03	0.14		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

SNRC99

Soreq NRC

Radioactivity Measurement Section

Yavne 81800

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	080	0.790	N		10026.6	>0.0 - 1.58	0.09	L	(Bq/L)
Gross beta	1.71	1.350	A		26.7	0.68 - 2.03	0.19		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

SOUT01

Southwest Research Institute
6220 Culebra Rd.
San Antonio TX 78228-0510

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.863	0.790	A		9.2	>0.0 - 1.58	0.149		(Bq/L)
Gross beta	1.37	1.350	A		1.5	0.68 - 2.03	0.180		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TDHL01

Texas Department of State Health Services Laboratory
1100 W 49th Street
Austin TX 78756

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.892	0.790	A		12.9	>0.0 - 1.58	0.089		(Bq/L)
Gross beta	1.49	1.350	A		10.4	0.68 - 2.03	0.13		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TELE01

TELEDYNE BROWN ENGINEERING - ENVIRONMENT
2508 Quality Lane
Knoxville TN 37931-6819

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	8.58E-01	0.790	A		8.6	>0.0 - 1.58	2.53E-01	H	(Bq/L)
Gross beta	1.22E+00	1.350	A		-9.6	0.68 - 2.03	1.36E-01		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TELE02

Environmental, Inc., Midwest Lab
700 Landwehr Road
Northbrook IL 60062-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.57	0.790	A		-27.8	>0.0 - 1.58	0.05		(Bq/L)
Gross beta	1.36	1.350	A		0.7	0.68 - 2.03	0.05		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TMAE01

Eberline Services, Inc.
7021 Pan American Freeway N.E.
Albuquerque NM 87109-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	1.01	0.790	A		27.8	>0.0 - 1.58	0.173		(Bq/L)
Gross beta	1.22	1.350	A		-9.6	0.68 - 2.03	0.154		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TMAO01

EBERLINE SERVICES OAK RIDGE LABORATORY
601 SCARBORO RD
OAK RIDGE TN 37830-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.717	0.790	A		-9.2	>0.0 - 1.58	0.057		(Bq/L)
Gross beta	1.741	1.350	A		29.0	0.68 - 2.03	0.075		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TMAR01

Eberline Services
2030 Wright Ave
Richmond CA 94804-0040

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.576	0.790	A		-27.1	>0.0 - 1.58	0.079		(Bq/L)
Gross beta	1.36	1.350	A		0.7	0.68 - 2.03	0.135		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

TNUT01

FUSRAP
8945 LATTY AVE
BERKELEY MO 63134-

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.9464	0.790	A		19.8	>0.0 - 1.58	0.093		(Bq/L)
Gross beta	1.018	1.350	A		-24.6	0.68 - 2.03	0.089		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

WEST03 Waste Sampling and Characterization Facility
PO Box 1000, S3-30
Richland WA 99352

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.85	0.790	A		7.6	>0.0 - 1.58	0.07		(Bq/L)
Gross beta	1.26	1.350	A		-6.7	0.68 - 2.03	0.07		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

WEST04

PACE ANALYTICAL SERVICES WALTZ MILL SITE
P.O. BOX 158
MADISON PA 15663-0158

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.877	0.790	A		11.0	>0.0 - 1.58	0.230	H	(Bq/L)
Gross beta	1.269	1.350	A		-6.0	0.68 - 2.03	0.260	H	(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

WSHL01 Wisconsin State Laboratory of Hygiene

2601 Agriculture Drive

Madison WI 53718

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.84	0.790	A		6.3	>0.0 - 1.58	0.16		(Bq/L)
Gross beta	1.54	1.350	A		14.1	0.68 - 2.03	0.15		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.

Mixed Analyte Performance Evaluation Program

Laboratory Results - Gross alpha / beta Water Standard

WVDP01

WVDP Environmental Laboratory
10282 Rock Springs Road
West Valley NY 14171

Sample ID: MAPEP-05-GrW14

Analyte	*Result*	*Ref Value*	*Flag*	*Flag Text*	*Bias (%)*	*Acceptance Range*	*Unc Value*	*Unc. Flag*	*Units*
Gross alpha	0.845	0.790	A		7.0	>0.0 - 1.58	0.0470		(Bq/L)
Gross beta	1.50	1.350	A		11.1	0.68 - 2.03	0.0501		(Bq/L)

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 100% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 100% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

A = Result acceptable, Bias <= +/- 50% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

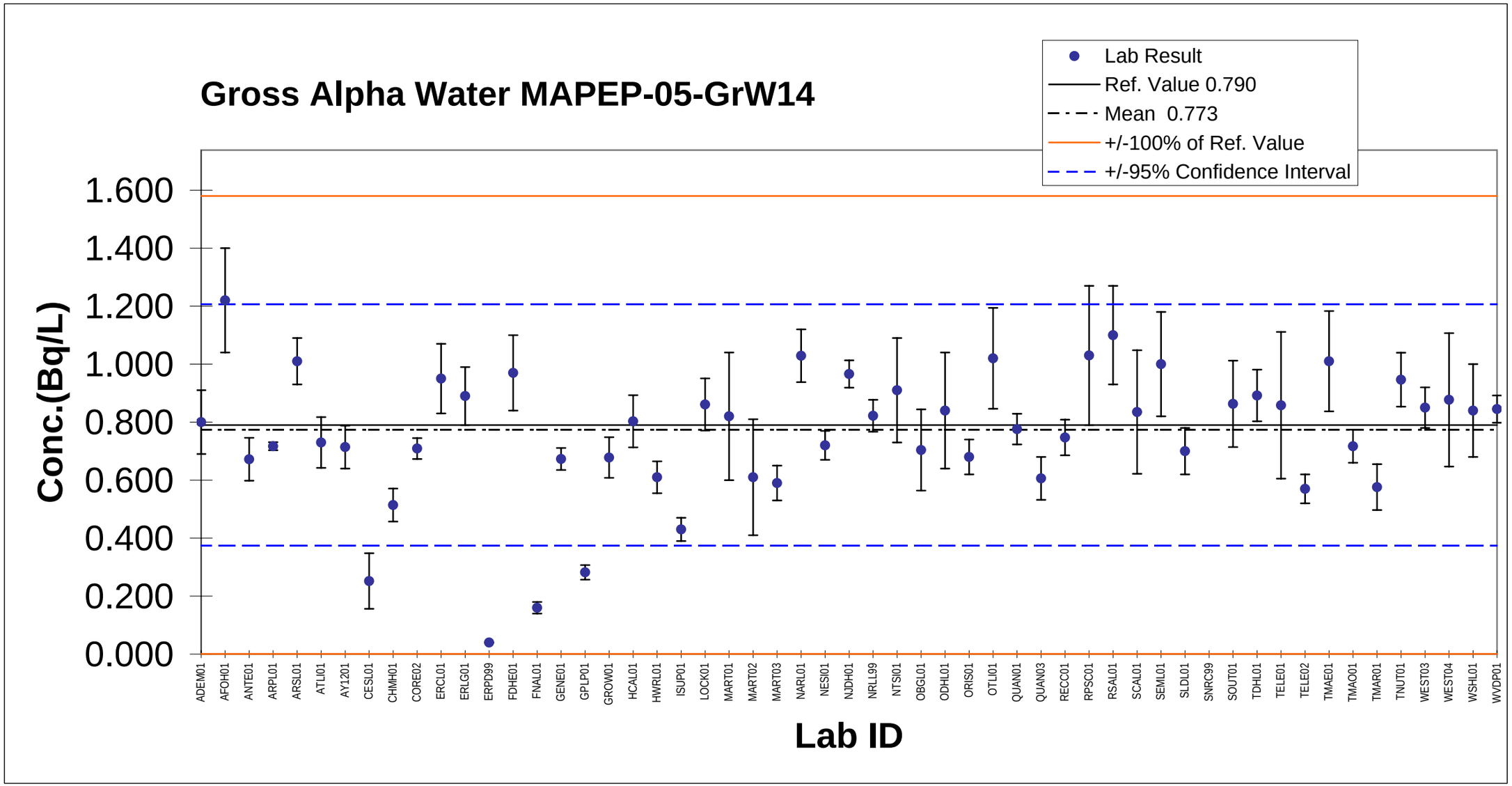
N = Result not acceptable, Bias > +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

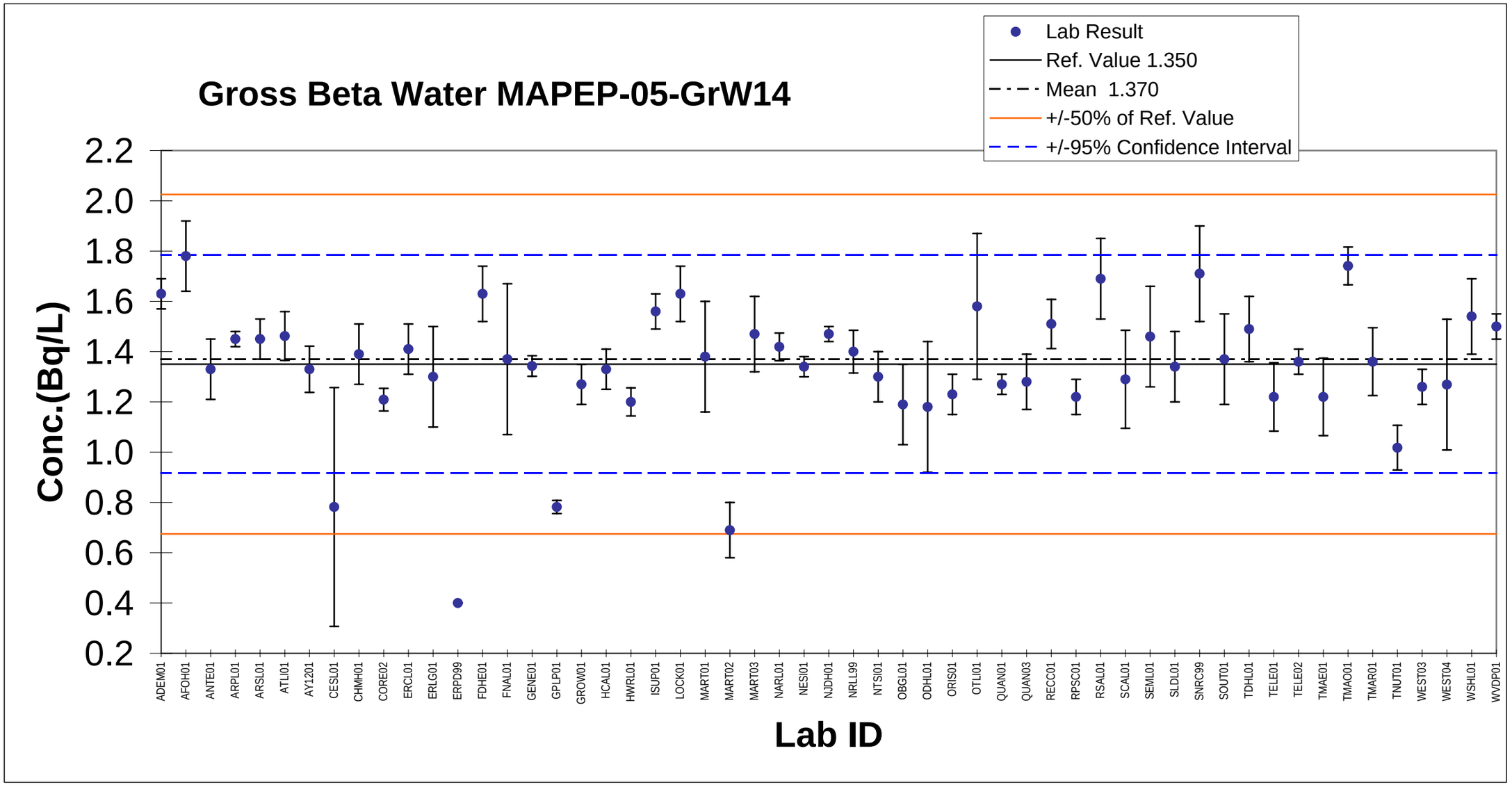
Flags:

A = Result acceptable Bias <= 20%
W = Result acceptable with warning 20% < Bias <= 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low
H = Uncertainty potentially too high
Q = Particapant should evaluate reported value
QL = Quantitation Limit
RW = Report Warning
NR = Not Reported

Flag Text

1 - False Positive
2 - False Negative
4 - Sensitivity Evaluation
5 - Total Metal
6 - Not Evaluated
7 - DL > CLP Limit
9 - Check QL
10 - Check Isomer
11 - False Positive Test, Value Not Reported
14 - Solubility Issue
15 - Refractory
16 - Reported zero uncertainty
17 - NOT DETECTED, reported a statistcially zero result.
18 - Sensitivity evaluation, value not reported.


Gross Alpha Water MAPEP-05-GrW14
Lab Result
Ref. Value 0.790
Mean 0.773
+/-100% of Ref. Value
+/-95% Confidence Interval
Conc.(Bq/L)
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
ADEM01
AFOH01
ANTE01
ARPL01
ARSL01
ATLI01
AY1201
CESL01
CHMH01
CORE02
ERCL01
ERLG01
ERPD99
FDHE01
FNAL01
GENE01
GPLP01
GROW01
HCAL01
HWRL01
ISUP01
LOCK01
MART01
MART02
MART03
NARL01
NESI01
NJDH01
NRLL99
NTSI01
OBGL01
ODHL01
ORIS01
OTLI01
QUAN01
QUAN03
RECC01
RPSC01
RSAL01
SCAL01
SEML01
SLDL01
SNRC99
SOUT01
TDHL01
TELE01
TELE02
TMAE01
TMAO01
TMAR01
TNUT01
WEST03
WEST04
WSHL01
WVDP01
Lab ID


Gross Beta Water MAPEP-05-GrW14
Lab Result
Ref. Value 1.350
Mean 1.370
+/-50% of Ref. Value
+/-95% Confidence Interval
Conc.(Bq/L)
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
ADEM01
AFOH01
ANTE01
ARPL01
ARSL01
ATLI01
AY1201
CESL01
CHMH01
CORE02
ERCL01
ERLG01
ERPD99
FDHE01
FNAL01
GENE01
GPLP01
GROW01
HCAL01
HWRL01
ISUP01
LOCK01
MART01
MART02
MART03
NARL01
NESI01
NJDH01
NRLL99
NTSI01
OBGL01
ODHL01
ORIS01
OTLI01
QUAN01
QUAN03
RECC01
RPSC01
RSAL01
SCAL01
SEML01
SLDL01
SNRC99
SOUT01
TDHL01
TELE01
TELE02
TMAE01
TMAO01
TMAR01
TNUT01
WEST03
WEST04
WSHL01
WVDP01
Lab ID