

RESL CUSTOMER EXPORT CONTROL AGREEMENT

It is the Radiological and Environmental Sciences Laboratory's (RESL) policy to conduct business in accordance with all applicable U.S. export control laws and regulations. It is also RESL's policy that its Customers comply with U.S. export control laws and regulations. Therefore, Customer agrees to the following:

1. Because products, technical data, and technical assistance (i.e., services) provided to Customer by RESL may be subject to U.S. export control laws and regulations, (i) transactions with certain persons and companies and (ii) the export or reexport of certain types and levels of products, technical data, and services are prohibited or restricted.
2. Customer acknowledges that it is responsible for its own compliance with U.S. export control laws and regulations. Customer further agrees that it assumes the responsibility to obtain all necessary U.S. export licenses or other U.S. governmental authorizations, as well as all liability for the failure to do so.
3. Customer acknowledges that export control requirements may change and that the export or reexport of RESL products, technical data, and services without an export license or other appropriate governmental authorization may result in criminal and/or civil liability.
4. The obligations and requirements described herein shall survive the expiration or termination of any agreement or contract between RESL and Customer.

RdV52 Participating Laboratories

Lab Code	Lab Name	Matrix Code
ADEM01	Alabama Department of Environmental Management	RdV
ADFC99	Abu Dhabi Quality and Conformity Council-Central Testing Lab	RdV
AMEC99	Amentum Clean Energy Ltd	RdV
ARSL01	ARS	RdV
CMRC01	Carlsbad Environmental Monitoring and Research Center	RdV
COPS99	Health Canada Radiation Protection Bureau	RdV
CSSL99	Chemistry Support Services	RdV
DINL99	Departamento Ingeniería Energética	RdV
ERCL01	Washington State Public Health Laboratories	RdV
ERHD99	National Monitoring Section, Radiation Protection Bureau, Health Canada	RdV
FDHE01	Florida Dept of Health Environmental Laboratory	RdV
FDOH01	Florida Dept. of Health, Mobile Environmental Radiological Lab	RdV
GENE01	GEL Laboratories, LLC	RdV
GPCL01	Georgia Power Company Environmental Laboratory	RdV
HECR01	SC Department of Environmental Services	RdV
HPAC99	UKHSA, RCE Glasgow	RdV
IEMA01	Illinois Emergency Management Agency Radiochemistry Laboratory	RdV
JAEC99	Research Laboratories and Information Directorate	RdV
JNRC99	Energy and Mineral Regulatory Commission	RdV
LOCK03	Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory	RdV
MDPH01	MDPH-Division of Radiation Control	RdV
NARL01	National Analytical Radiation Environmental Laboratory	RdV
NJDH01	New Jersey Dept. of Health, ECLS	RdV
NRLL99	Environmental Radioactivity - National Centre for Radiation Science	RdV
NSPH01	Nevada State Public Health Laboratory	RdV
ODHL01	Ohio Department of Health Laboratory	RdV
RAVR99	Radiactividad Ambiental y Vigilancia Radiologica	RdV
RPSC01	Radiation Protection Service	RdV
SEML01	SRS Environmental Monitoring Laboratory	RdV
SOUT01	Southwest Research Institute	RdV
SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagnostics	RdV
TDHL01	Texas Department of State Health Services Laboratory	RdV
TELE01	Teledyne Brown Engineering - Environmental Services	RdV
TMAO01	EBERLINE Analytical Corporation	RdV
UNTE01	UniTech-235	RdV
WIPH01	WI, DPH, Radiation Protection Section	RdV
WIPP01	WIPP Laboratories	RdV
WSHL01	Wisconsin State Laboratory of Hygiene	RdV
WSTP99	Cavendish Nuclear Limited	RdV

Laboratories Not Reporting

Lab Code	Lab Name	Matrix Code
ASUK99	AWE (Aldermaston)	RdV
BSCE99	Supreme Council for Environment	RdV
IAEA99	International Atomic Energy Agency	RdV
ISUE01	ISU Environmental Monitoring Laboratory	RdV
TELE02	Microbac Laboratories Inc. - Northbrook	RdV

Study Reference Values

MAPEP-25-RdV52: Radiological vegetation

Radiological Reference Date: 02/01/2025

Inorganic		Units: (ug/sample)
Analyte	Reference Value	Reference Uncertainty
Uranium-235	0.116	0.006
Uranium-238	17.2	0.7
Uranium-Total	17.3	0.7

Radiological		Units: (Bq/Sample)
Analyte	Reference Value	Reference Uncertainty
Americium-241	0.0728	0.0018
Cesium-137	0.707	0.012
Cobalt-57	3.40	0.07
Manganese-54	2.72	0.06
Plutonium-238	0.0734	0.0016
Plutonium-239/240	0.00026	0.00007
Strontium-90	0.370	0.009
Uranium-234	0.208	0.009
Uranium-238	0.214	0.009
Zinc-65	1.87	0.04

Sample Statistical Summary

MAPEP-25-RdV52: Radiological vegetation

Radiological Reference Date: 02/01/2025

Inorganic					Units: (ug/sample)		
Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Standard Deviation	Reference Value	Reference Uncertainty	Acceptance Range
Uranium-235	4	4			0.116	0.006	0.081 - 0.151
Uranium-238	4	3			17.2	0.7	12.0 - 22.4
Uranium-Total	3	3			17.3	0.7	12.1 - 22.5

Radiological					Units: (Bq/sample)		
Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Standard Deviation	Reference Value	Reference Uncertainty	Acceptance Range
Americium-241	23	17	0.0690	0.0090	0.0728	0.0018	0.0510 - 0.0946
Cesium-134	32	30					False Positive Test
Cesium-137	38	34	0.700	0.092	0.707	0.012	0.495 - 0.919
Cobalt-57	37	36	3.38	0.42	3.40	0.07	2.38 - 4.42
Cobalt-60	33	29					False Positive Test
Manganese-54	37	37	2.69	0.27	2.72	0.06	1.90 - 3.54
Plutonium-238	18	16	0.0703	0.0081	0.0734	0.0016	0.0514 - 0.0954
Plutonium-239/240	18	13	0.00098	0.00119	0.00026	0.00007	Sensitivity Evaluation
Strontium-90	18	8	0.327	0.040	0.370	0.009	0.259 - 0.481
Uranium-234	19	15	0.197	0.016	0.208	0.009	0.146 - 0.270
Uranium-238	20	16	0.201	0.020	0.214	0.009	0.150 - 0.278
Zinc-65	37	36	1.80	0.21	1.87	0.04	1.31 - 2.43

- Note:** (1) T = Total number of laboratories reporting analyte.
 (2) A = Number of laboratories with 'Acceptable' performance.
 (3) Mean excludes values derived as total metals, from large vegetation sample size and values indicated as "Not Acceptable".
 (4) Uranium Reference values shown for small vegetation sample size only.

Results Flags:

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Flag Summary Report

MAPEP-25-RdV52: Radiological vegetation

Radiological Reference Date: 02/01/2025

Inorganic				
Analyte	A	W	RW	N
Uranium-Total	3			
Uranium-235	3	1		
Uranium-238	3			1

Radiological				
Analyte	A	W	RW	N
Americium-241	15	2		6
Cesium-134	30			4
Cesium-137	30	4		4
Cobalt-57	32	4		1
Cobalt-60	29			6
Manganese-54	36	1		
Plutonium-238	15	1		2
Plutonium-239/240	13			5
Strontium-90	6	2		10
Uranium-234	14	1		4
Uranium-238	14	2		4
Zinc-65	34	2		1



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(ADEM01) Alabama Department of Environmental Management
1350 Coliseum Blvd.
Montgomery, AL 36110

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	NR		N	(11)		False Positive Test		
Cesium-137	0.7390	0.707	A		4.5	0.495 - 0.919	0.0729	A
Cobalt-57	3.7300	3.40	A		9.7	2.38 - 4.42	0.1290	A
Cobalt-60	NR		N	(11)		False Positive Test		
Manganese-54	2.9700	2.72	A		9.2	1.90 - 3.54	0.1500	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.9900	1.87	A		6.4	1.31 - 2.43	0.2100	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%
 W = Result acceptable with warning.....20% < |Bias| <= 30%
 N = Result not acceptable.....|Bias| > 30%
 RW = Report Warning
 NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%
 ACCEPTABLE.....2% <= RP <= 15%
 ACCEPTABLE WITH WARNING.....15% < RP <= 30%
 NOT ACCEPTABLE.....RP > 30%
 Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(ADFC99) Abu Dhabi Quality and Conformity Council-Central Testing Lab

Radiation Lab

Abu Dhabi, Abu Dhabi 853

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.01		A			False Positive Test	0.01	
Cesium-137	0.69	0.707	A		-2.4	0.495 - 0.919	0.07	A
Cobalt-57	3.41	3.40	A		0.3	2.38 - 4.42	0.31	A
Cobalt-60	0.01		A			False Positive Test	0.01	
Manganese-54	2.81	2.72	A		3.3	1.90 - 3.54	0.33	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.85	1.87	A		-1.1	1.31 - 2.43	0.30	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
(AMEC99) Amentum Clean Energy Ltd

612 Faraday Street
Birchwood Park, Warrington WA3 6GN

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728	N	(28)		0.0510 - 0.0946		
Cesium-134	0.45		A			False Positive Test	0.15	
Cesium-137	0.896	0.707	W		26.7	0.495 - 0.919	0.072	A
Cobalt-57	3.680	3.40	A		8.2	2.38 - 4.42	0.081	A
Cobalt-60	0.62		N	(1)		False Positive Test	0.11	
Manganese-54	3.18	2.72	A		16.9	1.90 - 3.54	0.15	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370	N	(28)		0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.60	1.87	N		39.0	1.31 - 2.43	0.26	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(ARSL01) ARS

2609 North River Road

Port Allen, LA 70767

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	-0.011	0.0728	N		-115.1	0.0510 - 0.0946	0.072	N
Cesium-134	0.012		A			False Positive Test	0.05	
Cesium-137	0.756	0.707	A		6.9	0.495 - 0.919	0.051	A
Cobalt-57	3.627	3.40	A		6.7	2.38 - 4.42	0.153	A
Cobalt-60	0.03		A			False Positive Test	0.051	
Manganese-54	2.942	2.72	A		8.2	1.90 - 3.54	0.128	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.021	1.87	A		8.1	1.31 - 2.43	0.135	A

Results Flags:

Radiological Reference Date: February 1, 2025

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N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

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ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

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Notes:

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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(CMRC01) Carlsbad Environmental Monitoring and Research Center
1400 University Dr.
Carlsbad, NM 88220

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	6.53E-02	0.0728	A		-10.3	0.0510 - 0.0946	3.70E-03	A
Cesium-134	NR					False Positive Test		
Cesium-137	8.03E-01	0.707	A		13.6	0.495 - 0.919	2.39E-02	A
Cobalt-57	NR	3.40				2.38 - 4.42		
Cobalt-60	2.66E-02		A			False Positive Test	1.08E-02	
Manganese-54	NR	2.72				1.90 - 3.54		
Plutonium-238	8.30E-02	0.0734	A		13.1	0.0514 - 0.0954	4.83E-03	A
Plutonium-239/240	7.32E-04	0.00026	A	(17)		Sensitivity Evaluation	3.05E-04	
Strontium-90	5.49E-01	0.370	N		48.4	0.259 - 0.481	1.07E-02	N
Uranium-234	2.12E-01	0.208	A		1.9	0.146 - 0.270	1.34E-02	A
Uranium-238	2.08E-01	0.214	A		-2.8	0.150 - 0.278	1.32E-02	A
Zinc-65	NR	1.87				1.31 - 2.43		

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

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Notes:

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- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(COPS99) Health Canada Radiation Protection Bureau
775 Brookfield Road
Ottawa, Ontario K1A 1C1

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.00006		A			False Positive Test	0.00005	
Cesium-137	1	0.707	N		41.4	0.495 - 0.919	0.08	A
Cobalt-57	4.19	3.40	W		23.2	2.38 - 4.42	0.33	A
Cobalt-60	0.00053		A			False Positive Test	0.00033	
Manganese-54	3.16	2.72	A		16.2	1.90 - 3.54	0.2	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.21	1.87	A		18.2	1.31 - 2.43	0.16	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(CSSL99) Chemistry Support Services

Dounreay

Thurso, Caithness KW14 7TZ

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.067955	0.0728	A		-6.7	0.0510 - 0.0946	0.0019843	A
Cesium-134	0.2083		N	(1)		False Positive Test	0.036161	
Cesium-137	0.5649	0.707	W		-20.1	0.495 - 0.919	0.098067	W
Cobalt-57	2.701	3.40	W		-20.6	2.38 - 4.42	0.46889	W
Cobalt-60	0.1733		N	(1)		False Positive Test	0.030085	
Manganese-54	2.173	2.72	W		-20.1	1.90 - 3.54	0.37723	W
Plutonium-238	0.07066	0.0734	A		-3.7	0.0514 - 0.0954	0.0021763	A
Plutonium-239/240	0.00071384	0.00026	N	(4)		Sensitivity Evaluation	0.000021558	
Strontium-90	0.323	0.370	A		-12.7	0.259 - 0.481	0.041	A
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.656	1.87	A		-11.4	1.31 - 2.43	0.28748	W

Radiological Reference Date: February 1, 2025

Results Flags:

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
(DINL99) Departamento Ingeniería Energética
Escuela de Ingeniería de Bilbao
Bilbao, Vizcaya 48013

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.07063	0.0728	A		-3.0	0.0510 - 0.0946	0.004106	A
Cesium-134	0.02935		A			False Positive Test	0.02935	
Cesium-137	0.7854	0.707	A		11.1	0.495 - 0.919	0.04910	A
Cobalt-57	3.692	3.40	A		8.6	2.38 - 4.42	0.1956	A
Cobalt-60	0.07016		A			False Positive Test	0.07016	
Manganese-54	2.610	2.72	A		-4.0	1.90 - 3.54	0.1431	A
Plutonium-238	0.06931	0.0734	A		-5.6	0.0514 - 0.0954	0.004404	A
Plutonium-239/240	0.0009162	0.00026	A	(17)		Sensitivity Evaluation	0.0009162	
Strontium-90	0.3605	0.370	A		-2.6	0.259 - 0.481	0.02408	A
Uranium-234	0.2119	0.208	A		1.9	0.146 - 0.270	0.00916	A
Uranium-238	0.2106	0.214	A		-1.6	0.150 - 0.278	0.00911	A
Zinc-65	1.929	1.87	A		3.2	1.31 - 2.43	0.1234	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
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- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(ERCL01) Washington State Public Health Laboratories
1610 N.E. 150th Street
Shoreline, WA 98155-9701

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	0.103	0.116	A		-11.2	0.081 - 0.151	0.014	A
Uranium-238	13.9	17.2	A		-19.2	12.0 - 22.4	1.8	A
Uranium-Total	14.0	17.3	A		-19.1	12.1 - 22.5	1.8	A

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0672	0.0728	A		-7.7	0.0510 - 0.0946	0.0090	A
Cesium-134	0.045		A			False Positive Test	0.030	
Cesium-137	0.748	0.707	A		5.8	0.495 - 0.919	0.068	A
Cobalt-57	3.81	3.40	A		12.1	2.38 - 4.42	0.09	A
Cobalt-60	0.018		A			False Positive Test	0.027	
Manganese-54	2.88	2.72	A		5.9	1.90 - 3.54	0.08	A
Plutonium-238	0.0648	0.0734	A		-11.7	0.0514 - 0.0954	0.0058	A
Plutonium-239/240	-0.0007	0.00026	A	(17)		Sensitivity Evaluation	0.0013	
Strontium-90	0.225	0.370	N		-39.2	0.259 - 0.481	0.040	W
Uranium-234	0.186	0.208	A		-10.6	0.146 - 0.270	0.016	A
Uranium-238	0.243	0.214	A		13.6	0.150 - 0.278	0.018	A
Zinc-65	1.73	1.87	A		-7.5	1.31 - 2.43	0.12	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
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- (11) = False Positive Test, Result Not Reported
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- (18) = Sensitivity Evaluation, Value Not Reported
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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(ERHD99) National Monitoring Section, Radiation Protection Bureau, Health Canada
775 Brookfield Road AL6302D1
Ottawa, Ontario K1A 1C1

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	0.137	0.116	A		18.1	0.081 - 0.151	0.0025	N
Uranium-238	19.263	17.2	A		12.0	12.0 - 22.4	0.28	N
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0653	0.0728	A		-10.3	0.0510 - 0.0946	0.002	A
Cesium-134	0.07		A			False Positive Test	0.14	
Cesium-137	0.66	0.707	A		-6.6	0.495 - 0.919	0.04	A
Cobalt-57	3.06	3.40	A		-10.0	2.38 - 4.42	0.15	A
Cobalt-60	0.18		A			False Positive Test	0.36	
Manganese-54	2.57	2.72	A		-5.5	1.90 - 3.54	0.13	A
Plutonium-238	0.0688	0.0734	A		-6.3	0.0514 - 0.0954	0.002	A
Plutonium-239/240	0.0004	0.00026	A	(17)		Sensitivity Evaluation	0.0004	
Strontium-90	0.391	0.370	A		5.7	0.259 - 0.481	0.021	A
Uranium-234	0.193	0.208	A		-7.2	0.146 - 0.270	0.004	A
Uranium-238	0.193	0.214	A		-9.8	0.150 - 0.278	0.004	A
Zinc-65	1.89	1.87	A		1.1	1.31 - 2.43	0.15	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(FDHE01) Florida Dept of Health Environmental Laboratory
2100 All Childrens Way
Orlando, FL 32818-5271

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.1	0.0728	N		37.4	0.0510 - 0.0946	0.3	N
Cesium-134	0.011		A			False Positive Test	0.015	
Cesium-137	0.729	0.707	A		3.1	0.495 - 0.919	0.043	A
Cobalt-57	3.6	3.40	A		5.9	2.38 - 4.42	0.105	A
Cobalt-60	0.025		A			False Positive Test	0.124	
Manganese-54	2.62	2.72	A		-3.7	1.90 - 3.54	0.089	A
Plutonium-238	0.0539	0.0734	W		-26.6	0.0514 - 0.0954	0.05	N
Plutonium-239/240	0.004	0.00026	A	(17)		Sensitivity Evaluation	0.04	
Strontium-90	NR	0.370	N	(28)		0.259 - 0.481		
Uranium-234	0.164	0.208	W		-21.2	0.146 - 0.270	0.1	N
Uranium-238	0.162	0.214	W		-24.3	0.150 - 0.278	0.1	N
Zinc-65	1.81	1.87	A		-3.2	1.31 - 2.43	0.106	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(FDOH01) Florida Dept. of Health, Mobile Environmental Radiological Lab

2100 All Childrens Way

Orlando, FL 32818-5271

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.094	0.0728	W		29.1	0.0510 - 0.0946	0.137	N
Cesium-134	0.018		A			False Positive Test	0.168	
Cesium-137	0.807	0.707	A		14.1	0.495 - 0.919	0.058	A
Cobalt-57	3.625	3.40	A		6.6	2.38 - 4.42	0.107	A
Cobalt-60	-0.013		A			False Positive Test	0.121	
Manganese-54	2.746	2.72	A		1.0	1.90 - 3.54	0.079	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	0.221	0.214	A		3.3	0.150 - 0.278	0.44	N
Zinc-65	1.992	1.87	A		6.5	1.31 - 2.43	0.077	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
 (GENE01) GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0727	0.0728	A		-0.1	0.0510 - 0.0946	0.00521	A
Cesium-134	-0.0168		A			False Positive Test	0.0327	
Cesium-137	0.593	0.707	A		-16.1	0.495 - 0.919	0.0956	W
Cobalt-57	3.41	3.40	A		0.3	2.38 - 4.42	0.19	A
Cobalt-60	0.000769		A			False Positive Test	0.0489	
Manganese-54	2.79	2.72	A		2.6	1.90 - 3.54	0.158	A
Plutonium-238	0.0714	0.0734	A		-2.7	0.0514 - 0.0954	0.00493	A
Plutonium-239/240	0.0011	0.00026	A	(17)		Sensitivity Evaluation	0.00058	
Strontium-90	0.266	0.370	W		-28.1	0.259 - 0.481	0.0234	A
Uranium-234	0.2140	0.208	A		2.9	0.146 - 0.270	0.01120	A
Uranium-238	0.2180	0.214	A		1.9	0.150 - 0.278	0.01140	A
Zinc-65	2.05	1.87	A		9.6	1.31 - 2.43	0.176	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(GPCL01) Georgia Power Company Environmental Laboratory
2480 Maner Road
Atlanta, GA 30339

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	-0.02		A			False Positive Test	0.15	
Cesium-137	0.75	0.707	A		6.1	0.495 - 0.919	0.14	W
Cobalt-57	3.70	3.40	A		8.8	2.38 - 4.42	0.32	A
Cobalt-60	0.01		A			False Positive Test	0.12	
Manganese-54	2.88	2.72	A		5.9	1.90 - 3.54	0.30	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.10	1.87	A		12.3	1.31 - 2.43	0.39	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(HECR01) SC Department of Environmental Services
8231 Parklane Road
Columbia, SC 29223

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	-0.06839		A			False Positive Test	0.1318	
Cesium-137	0.8184	0.707	A		15.8	0.495 - 0.919	0.1868	W
Cobalt-57	2.741	3.40	A		-19.4	2.38 - 4.42	0.2658	A
Cobalt-60	0.09583		A			False Positive Test	0.1489	
Manganese-54	2.405	2.72	A		-11.6	1.90 - 3.54	0.3610	W
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.540	1.87	A		-17.6	1.31 - 2.43	0.4132	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(HPAC99) UKHSA, RCE Glasgow
155 Hardgate Road
Glasgow, Scotland G51 4LS

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	.0683	0.0728	A		-6.2	0.0510 - 0.0946	.0062	A
Cesium-134	NR					False Positive Test		
Cesium-137	NR	0.707				0.495 - 0.919		
Cobalt-57	NR	3.40				2.38 - 4.42		
Cobalt-60	NR					False Positive Test		
Manganese-54	NR	2.72				1.90 - 3.54		
Plutonium-238	.066	0.0734	A		-10.1	0.0514 - 0.0954	.003	A
Plutonium-239/240	.0012	0.00026	N	(4)		Sensitivity Evaluation	.00023	
Strontium-90	.538	0.370	N	(28)	45.4	0.259 - 0.481	.033	A
Uranium-234	NR	0.208	N	(28)		0.146 - 0.270		
Uranium-238	NR	0.214	N	(28)		0.150 - 0.278		
Zinc-65	NR	1.87				1.31 - 2.43		

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

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- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
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Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(IEMA01) Illinois Emergency Management Agency Radiochemistry Laboratory
1301 Knotts St.
Springfield, IL 62703

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0636	0.0728	A		-12.6	0.0510 - 0.0946	0.0035	A
Cesium-134	0.046		A			False Positive Test	0.044	
Cesium-137	0.664	0.707	A		-6.1	0.495 - 0.919	0.061	A
Cobalt-57	2.964	3.40	A		-12.8	2.38 - 4.42	0.042	N
Cobalt-60	0.082		A			False Positive Test	0.051	
Manganese-54	2.38	2.72	A		-12.5	1.90 - 3.54	0.086	A
Plutonium-238	0.0741	0.0734	A		1.0	0.0514 - 0.0954	0.0035	A
Plutonium-239/240	0.0013	0.00026	A			Sensitivity Evaluation	0.0004	
Strontium-90	0.3182	0.370	A		-14.0	0.259 - 0.481	0.0264	A
Uranium-234	0.1937	0.208	A		-6.9	0.146 - 0.270	0.0077	A
Uranium-238	0.1940	0.214	A		-9.3	0.150 - 0.278	0.0078	A
Zinc-65	1.61	1.87	A		-13.9	1.31 - 2.43	0.162	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(JAEC99) Research Laboratories and Information Directorate
Jordan Atomic Energy Commission
Amman, Jordan 70 (11934)

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	NR					False Positive Test		
Cesium-137	0.74	0.707	A		4.7	0.495 - 0.919	0.08	A
Cobalt-57	3.67	3.40	A		7.9	2.38 - 4.42	0.18	A
Cobalt-60	NR					False Positive Test		
Manganese-54	2.80	2.72	A		2.9	1.90 - 3.54	0.14	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	0.19	0.208	A		-8.7	0.146 - 0.270	0.01	A
Uranium-238	0.20	0.214	A		-6.5	0.150 - 0.278	0.011	A
Zinc-65	1.73	1.87	A		-7.5	1.31 - 2.43	0.11	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%
 W = Result acceptable with warning.....20% < |Bias| <= 30%
 N = Result not acceptable.....|Bias| > 30%
 RW = Report Warning
 NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%
 ACCEPTABLE.....2% <= RP <= 15%
 ACCEPTABLE WITH WARNING.....15% < RP <= 30%
 NOT ACCEPTABLE.....RP > 30%
 Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(JNRC99) Energy and Mineral Regulatory Commission
Radiological laboratories directorate
Amman, Amman 11821

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	NR					False Positive Test		
Cesium-137	0.6	0.707	A		-15.1	0.495 - 0.919	0.05	A
Cobalt-57	3	3.40	A		-11.8	2.38 - 4.42	0.08	A
Cobalt-60	NR					False Positive Test		
Manganese-54	3	2.72	A		10.3	1.90 - 3.54	0.06	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2	1.87	A		7.0	1.31 - 2.43	0.08	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(LOCK03) Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory

INL/Battelle Energy Alliance, LLC

Idaho Falls, ID 83415-7111

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.12		A			False Positive Test	0.04	
Cesium-137	0.87	0.707	W		23.1	0.495 - 0.919	0.09	A
Cobalt-57	3.61	3.40	A		6.2	2.38 - 4.42	0.09	A
Cobalt-60	0.13		N	(1)		False Positive Test	0.03	
Manganese-54	3.1	2.72	A		14.0	1.90 - 3.54	0.11	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.23	1.87	A		19.3	1.31 - 2.43	0.16	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

(1) = False Positive

(4) = Sensitivity Evaluation

(11) = False Positive Test, Result Not Reported

(17) = NOT DETECTED - reported a statistically zero result

(18) = Sensitivity Evaluation, Value Not Reported

(28) = Not Reporting Previously Reported Analyte

(29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(MDPH01) MDPH-Division of Radiation Control
MERL-Room 0066
Jamaica Plain, MA 02130-3597

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	NR					False Positive Test		
Cesium-137	0.62	0.707	A		-12.3	0.495 - 0.919	0.04	A
Cobalt-57	3.06	3.40	A		-10.0	2.38 - 4.42	0.12	A
Cobalt-60	NR					False Positive Test		
Manganese-54	2.46	2.72	A		-9.6	1.90 - 3.54	0.09	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.81	1.87	A		-3.2	1.31 - 2.43	0.10	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
 (NARL01) National Analytical Radiation Environmental Laboratory
 540 S. Morris Ave.
 Montgomery, AL 36115-2601

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0676	0.0728	A		-7.1	0.0510 - 0.0946	0.00677	A
Cesium-134	-0.0333		A			False Positive Test	0.0774	
Cesium-137	0.663	0.707	A		-6.2	0.495 - 0.919	0.0763	A
Cobalt-57	3.24	3.40	A		-4.7	2.38 - 4.42	0.193	A
Cobalt-60	-0.0192		A			False Positive Test	0.0581	
Manganese-54	2.55	2.72	A		-6.3	1.90 - 3.54	0.167	A
Plutonium-238	0.0669	0.0734	A		-8.9	0.0514 - 0.0954	0.00603	A
Plutonium-239/240	0.000270	0.00026	A	(17)		Sensitivity Evaluation	0.000603	
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	0.196	0.208	A		-5.8	0.146 - 0.270	0.0129	A
Uranium-238	0.204	0.214	A		-4.7	0.150 - 0.278	0.0133	A
Zinc-65	1.81	1.87	A		-3.2	1.31 - 2.43	0.164	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(NJDH01) New Jersey Dept. of Health, ECLS
3 Schwarzkopf Drive
Ewing, NJ 08628

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.09		A			False Positive Test	0.09	
Cesium-137	0.57	0.707	A		-19.4	0.495 - 0.919	0.14	W
Cobalt-57	3.73	3.40	A		9.7	2.38 - 4.42	0.21	A
Cobalt-60	-0.158		A			False Positive Test	0.12	
Manganese-54	2.74	2.72	A		0.7	1.90 - 3.54	0.23	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.8	1.87	A		-3.7	1.31 - 2.43	0.41	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(NRLL99) Environmental Radioactivity - National Centre for Radiation Science
PO Box 29181
Christchurch, Christchurch 8540

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0814	0.0728	A		11.8	0.0510 - 0.0946	0.0094	A
Cesium-134	0.064		A			False Positive Test	0.031	
Cesium-137	0.629	0.707	A		-11.0	0.495 - 0.919	0.035	A
Cobalt-57	3.15	3.40	A		-7.4	2.38 - 4.42	0.14	A
Cobalt-60	0.078		A			False Positive Test	0.037	
Manganese-54	2.49	2.72	A		-8.5	1.90 - 3.54	0.11	A
Plutonium-238	0.0807	0.0734	A		9.9	0.0514 - 0.0954	0.0035	A
Plutonium-239/240	0.00144	0.00026	N	(4)		Sensitivity Evaluation	0.00035	
Strontium-90	0.355	0.370	A		-4.1	0.259 - 0.481	0.020	A
Uranium-234	0.2081	0.208	A		0.0	0.146 - 0.270	0.0072	A
Uranium-238	0.2114	0.214	A		-1.2	0.150 - 0.278	0.0073	A
Zinc-65	1.73	1.87	A		-7.5	1.31 - 2.43	0.10	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(NSPH01) Nevada State Public Health Laboratory
1664 North Virginia Street, MS 328
Reno, NV 89557

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	NR		N	(11)		False Positive Test		
Cesium-137	0.206	0.707	N		-70.9	0.495 - 0.919	0.007	A
Cobalt-57	3.19	3.40	A		-6.2	2.38 - 4.42	0.098	A
Cobalt-60	NR		N	(11)		False Positive Test		
Manganese-54	2.412	2.72	A		-11.3	1.90 - 3.54	0.124	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.522	1.87	A		-18.6	1.31 - 2.43	0.022	N

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
 (ODHL01) Ohio Department of Health Laboratory
 8995 E Main Street
 Reynoldsburg, OH 43068

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	-0.0628		N	(29)		False Positive Test	0.000659	
Cesium-137	0.681	0.707	A		-3.7	0.495 - 0.919	0.0755	A
Cobalt-57	3.41	3.40	A		0.3	2.38 - 4.42	0.26	A
Cobalt-60	-0.0123		N	(29)		False Positive Test	0.0000728	
Manganese-54	2.40	2.72	A		-11.8	1.90 - 3.54	0.17	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.76	1.87	A		-5.9	1.31 - 2.43	0.166	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(RAVR99) Radiactividad Ambiental y Vigilancia Radiologica
CIEMAT (Ed 70 P2 D11)
Madrid, Madrid 28040

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0578	0.0728	W		-20.6	0.0510 - 0.0946	0.0040	A
Cesium-134	0.00001		A			False Positive Test	0.1	
Cesium-137	0.712	0.707	A		0.7	0.495 - 0.919	0.020	A
Cobalt-57	3.38	3.40	A		-0.6	2.38 - 4.42	0.14	A
Cobalt-60	0.0001		A			False Positive Test	0.1	
Manganese-54	2.666	2.72	A		-2.0	1.90 - 3.54	0.075	A
Plutonium-238	0.0510	0.0734	N		-30.5	0.0514 - 0.0954	0.0035	A
Plutonium-239/240	0.0002	0.00026	A	(17)		Sensitivity Evaluation	0.0011	
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	0.188	0.208	A		-9.6	0.146 - 0.270	0.011	A
Uranium-238	0.186	0.214	A		-13.1	0.150 - 0.278	0.011	A
Zinc-65	1.780	1.87	A		-4.8	1.31 - 2.43	0.066	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(RPSC01) Radiation Protection Service

O. Ministry of Labour, Immigration, Training & Skills Development

Mississauga, Ontario L4V 1W8

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	-0.087		A			False Positive Test	0.179	
Cesium-137	0.573	0.707	A		-19.0	0.495 - 0.919	0.05	A
Cobalt-57	2.65	3.40	W		-22.1	2.38 - 4.42	0.121	A
Cobalt-60	0.15		A			False Positive Test	0.165	
Manganese-54	2.31	2.72	A		-15.1	1.90 - 3.54	0.101	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.50	1.87	A		-19.8	1.31 - 2.43	0.119	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(SEML01) SRS Environmental Monitoring Laboratory
Bldg 735-B
Aiken, SC 29808

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0660	0.0728	A		-9.3	0.0510 - 0.0946	0.0034	A
Cesium-134	-0.036		A			False Positive Test	0.064	
Cesium-137	0.63	0.707	A		-10.9	0.495 - 0.919	0.10	W
Cobalt-57	3.13	3.40	A		-7.9	2.38 - 4.42	0.27	A
Cobalt-60	0.058		A			False Positive Test	0.080	
Manganese-54	2.66	2.72	A		-2.2	1.90 - 3.54	0.32	A
Plutonium-238	0.0742	0.0734	A		1.1	0.0514 - 0.0954	0.0036	A
Plutonium-239/240	0.00057	0.00026	A	(17)		Sensitivity Evaluation	0.00024	
Strontium-90	0.294	0.370	W		-20.5	0.259 - 0.481	0.026	A
Uranium-234	0.208	0.208	A		0.0	0.146 - 0.270	0.011	A
Uranium-238	0.216	0.214	A		0.9	0.150 - 0.278	0.012	A
Zinc-65	1.66	1.87	A		-11.2	1.31 - 2.43	0.29	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(SOUT01) Southwest Research Institute
6220 Culebra Rd.
San Antonio, TX 78238-5166

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	0.118	0.116	A		1.7	0.081 - 0.151	0.0191	W
Uranium-238	16.5	17.2	A		-4.1	12.0 - 22.4	2.64	W
Uranium-Total	16.7	17.3	A		-3.5	12.1 - 22.5	2.67	W

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0659	0.0728	A		-9.5	0.0510 - 0.0946	0.00926	A
Cesium-134	0.164		A			False Positive Test	0.103	
Cesium-137	0.807	0.707	A		14.1	0.495 - 0.919	0.0881	A
Cobalt-57	3.46	3.40	A		1.8	2.38 - 4.42	0.103	A
Cobalt-60	-0.109		A			False Positive Test	0.143	
Manganese-54	2.70	2.72	A		-0.7	1.90 - 3.54	0.154	A
Plutonium-238	0.0644	0.0734	A		-12.3	0.0514 - 0.0954	0.00863	A
Plutonium-239/240	0.00264	0.00026	A	(17)		Sensitivity Evaluation	0.00177	
Strontium-90	0.143	0.370	N		-61.4	0.259 - 0.481	0.0333	W
Uranium-234	0.168	0.208	A		-19.2	0.146 - 0.270	0.0164	A
Uranium-238	0.171	0.214	W		-20.1	0.150 - 0.278	0.0166	A
Zinc-65	1.60	1.87	A		-14.4	1.31 - 2.43	0.242	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52

(SRPD01) Sandia National Laboratories, Radiation Protection Sample Diagnostics

PO Box 5800, MS1103

Albuquerque, NM 87185-1103

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	-2.03E-01		A			False Positive Test	1.23E-01	
Cesium-137	6.82E-01	0.707	A		-3.5	0.495 - 0.919	1.03E-01	W
Cobalt-57	3.89E+00	3.40	A		14.4	2.38 - 4.42	4.02E-01	A
Cobalt-60	-5.86E-04		A			False Positive Test	8.32E-02	
Manganese-54	2.99E+00	2.72	A		9.9	1.90 - 3.54	2.15E-01	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.86E+00	1.87	A		-0.5	1.31 - 2.43	2.39E-01	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
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- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(TDHL01) Texas Department of State Health Services Laboratory
1100 W 49th Street
Austin, TX 78756

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728	N	(28)		0.0510 - 0.0946		
Cesium-134	0.03		A			False Positive Test	0.24	
Cesium-137	1.168	0.707	N		65.2	0.495 - 0.919	0.094	A
Cobalt-57	4.00	3.40	A		17.6	2.38 - 4.42	0.14	A
Cobalt-60	0.046		A			False Positive Test	0.079	
Manganese-54	2.87	2.72	A		5.5	1.90 - 3.54	0.12	A
Plutonium-238	NR	0.0734	N	(28)		0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026	N	(18)		Sensitivity Evaluation		
Strontium-90	NR	0.370	N	(28)		0.259 - 0.481		
Uranium-234	NR	0.208	N	(28)		0.146 - 0.270		
Uranium-238	NR	0.214	N	(28)		0.150 - 0.278		
Zinc-65	1.80	1.87	A		-3.7	1.31 - 2.43	0.16	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(TELE01) Teledyne Brown Engineering - Environmental Services
2508 Quality Lane
Knoxville, TN 37931-6819

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.0452		A			False Positive Test	0.0849	
Cesium-137	0.558	0.707	W		-21.1	0.495 - 0.919	0.139	W
Cobalt-57	2.86	3.40	A		-15.9	2.38 - 4.42	0.135	A
Cobalt-60	0.0284		A			False Positive Test	0.0768	
Manganese-54	2.22	2.72	A		-18.4	1.90 - 3.54	0.193	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	0.222	0.370	N		-40.0	0.259 - 0.481	0.0219	A
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.50	1.87	A		-19.8	1.31 - 2.43	0.319	W

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(TMAO01) EBERLINE Analytical Corporation
601 A SCARBORO RD
OAK RIDGE, TN 37830-

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.14	0.0728	N		92.3	0.0510 - 0.0946	0.055	N
Cesium-134	-0.27		A			False Positive Test	0.35	
Cesium-137	0.71	0.707	A		0.4	0.495 - 0.919	0.48	N
Cobalt-57	0.90	3.40	N		-73.5	2.38 - 4.42	0.12	A
Cobalt-60	0.16		A			False Positive Test	0.24	
Manganese-54	2.81	2.72	A		3.3	1.90 - 3.54	0.79	W
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	0.12	0.208	N		-42.3	0.146 - 0.270	0.027	W
Uranium-238	0.12	0.214	N		-43.9	0.150 - 0.278	0.027	W
Zinc-65	1.48	1.87	W		-20.9	1.31 - 2.43	1.00	N

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%
W = Result acceptable with warning.....20% < |Bias| <= 30%
N = Result not acceptable.....|Bias| > 30%
RW = Report Warning
NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%
ACCEPTABLE.....2% <= RP <= 15%
ACCEPTABLE WITH WARNING.....15% < RP <= 30%
NOT ACCEPTABLE.....RP > 30%
Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52

(UNTE01) UniTech-235

178 Aldo Drive

Barnwell, SC 29812

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.0728				0.0510 - 0.0946		
Cesium-134	0.01		A			False Positive Test	0.02	
Cesium-137	0.03	0.707	N		-95.8	0.495 - 0.919	0.02	N
Cobalt-57	2.91	3.40	A		-14.4	2.38 - 4.42	0.38	A
Cobalt-60	0.02		A			False Positive Test	0.03	
Manganese-54	2.73	2.72	A		0.4	1.90 - 3.54	0.51	W
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	2.06	1.87	A		10.2	1.31 - 2.43	0.84	N

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Laboratory Results For MAPEP Series 52
 (WIPH01) WI, DPH, Radiation Protection Section
 1 West Wilson Street
 Madison, WI 53703

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.2458	0.0728	N		237.6	0.0510 - 0.0946	0.1333	N
Cesium-134	1.4301		A			False Positive Test	0.9015	
Cesium-137	0.64975	0.707	A		-8.1	0.495 - 0.919	0.05555	A
Cobalt-57	3.4485	3.40	A		1.4	2.38 - 4.42	0.2654	A
Cobalt-60	0.01429		A			False Positive Test	0.02597	
Manganese-54	2.6090	2.72	A		-4.1	1.90 - 3.54	0.1551	A
Plutonium-238	NR	0.0734				0.0514 - 0.0954		
Plutonium-239/240	NR	0.00026				Sensitivity Evaluation		
Strontium-90	NR	0.370				0.259 - 0.481		
Uranium-234	NR	0.208				0.146 - 0.270		
Uranium-238	NR	0.214				0.150 - 0.278		
Zinc-65	1.7049	1.87	A		-8.8	1.31 - 2.43	0.1504	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(WIPP01) WIPP Laboratories
1400 University Drive
Carlsbad, NM 88220

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	6.05E-02	0.0728	A		-16.9	0.0510 - 0.0946	3.92E-03	A
Cesium-134	-6.68E-03		A			False Positive Test	1.98E-02	
Cesium-137	6.02E-01	0.707	A		-14.9	0.495 - 0.919	3.41E-02	A
Cobalt-57	2.76E+00	3.40	A		-18.8	2.38 - 4.42	7.24E-02	A
Cobalt-60	1.93E-02		A			False Positive Test	1.62E-02	
Manganese-54	2.26E+00	2.72	A		-16.9	1.90 - 3.54	6.10E-02	A
Plutonium-238	7.18E-02	0.0734	A		-2.2	0.0514 - 0.0954	5.33E-03	A
Plutonium-239/240	9.96E-04	0.00026	A			Sensitivity Evaluation	2.58E-04	
Strontium-90	3.08E-01	0.370	A		-16.8	0.259 - 0.481	1.67E-02	A
Uranium-234	2.02E-01	0.208	A		-2.9	0.146 - 0.270	2.12E-02	A
Uranium-238	1.97E-01	0.214	A		-7.9	0.150 - 0.278	2.06E-02	A
Zinc-65	1.47E+00	1.87	W		-21.4	1.31 - 2.43	8.66E-02	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(WSHL01) Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive
Madison, WI 53718

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	NR	0.116				0.081 - 0.151		
Uranium-238	NR	17.2				12.0 - 22.4		
Uranium-Total	NR	17.3				12.1 - 22.5		

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0801	0.0728	A		10.0	0.0510 - 0.0946	0.00806	A
Cesium-134	-0.075		A			False Positive Test	0.025	
Cesium-137	0.665	0.707	A		-5.9	0.495 - 0.919	0.032	A
Cobalt-57	2.901	3.40	A		-14.7	2.38 - 4.42	0.094	A
Cobalt-60	0.0009		A			False Positive Test	0.018	
Manganese-54	2.506	2.72	A		-7.9	1.90 - 3.54	0.116	A
Plutonium-238	0.08456	0.0734	A		15.2	0.0514 - 0.0954	0.00854	A
Plutonium-239/240	0.008163	0.00026	N	(4)		Sensitivity Evaluation	0.00024	
Strontium-90	0.24	0.370	N		-35.1	0.259 - 0.481	0.011	A
Uranium-234	0.2144	0.208	A		3.1	0.146 - 0.270	0.0144	A
Uranium-238	0.1884	0.214	A		-12.0	0.150 - 0.278	0.0131	A
Zinc-65	1.754	1.87	A		-6.2	1.31 - 2.43	0.159	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations



Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP Series 52
(WSTP99) Cavendish Nuclear Limited
Greson Court
Cumbria, UK CA24 3HZ

Inorganic							Units: (ug/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Uranium-235	0.0832	0.116	W		-28.3	0.081 - 0.151	0.0028	A
Uranium-238	11.78	17.2	N		-31.5	12.0 - 22.4	0.38	A
Uranium-Total	13.95	17.3	A		-19.4	12.1 - 22.5	0.44	A

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.0584	0.0728	A		-19.8	0.0510 - 0.0946	0.0051	A
Cesium-134	0.022		A			False Positive Test	0.024	
Cesium-137	0.830	0.707	A		17.4	0.495 - 0.919	0.053	A
Cobalt-57	4.13	3.40	W		21.5	2.38 - 4.42	0.15	A
Cobalt-60	-0.005		A			False Positive Test	0.018	
Manganese-54	3.05	2.72	A		12.1	1.90 - 3.54	0.13	A
Plutonium-238	0.0601	0.0734	A		-18.1	0.0514 - 0.0954	0.0043	A
Plutonium-239/240	0.00035	0.00026	A	(17)		Sensitivity Evaluation	0.00021	
Strontium-90	0.1284	0.370	N		-65.3	0.259 - 0.481	0.0082	A
Uranium-234	0.143	0.208	N		-31.3	0.146 - 0.270	0.014	A
Uranium-238	0.1465	0.214	N		-31.5	0.150 - 0.278	0.0047	A
Zinc-65	2.014	1.87	A		7.7	1.31 - 2.43	0.081	A

Results Flags:

Radiological Reference Date: February 1, 2025

A = Result acceptable.....|Bias| <= 20%

W = Result acceptable with warning.....20% < |Bias| <= 30%

N = Result not acceptable.....|Bias| > 30%

RW = Report Warning

NR = Not Reported

Uncertainty Flags:

NOT ACCEPTABLE.....RP < 2%

ACCEPTABLE.....2% <= RP <= 15%

ACCEPTABLE WITH WARNING.....15% < RP <= 30%

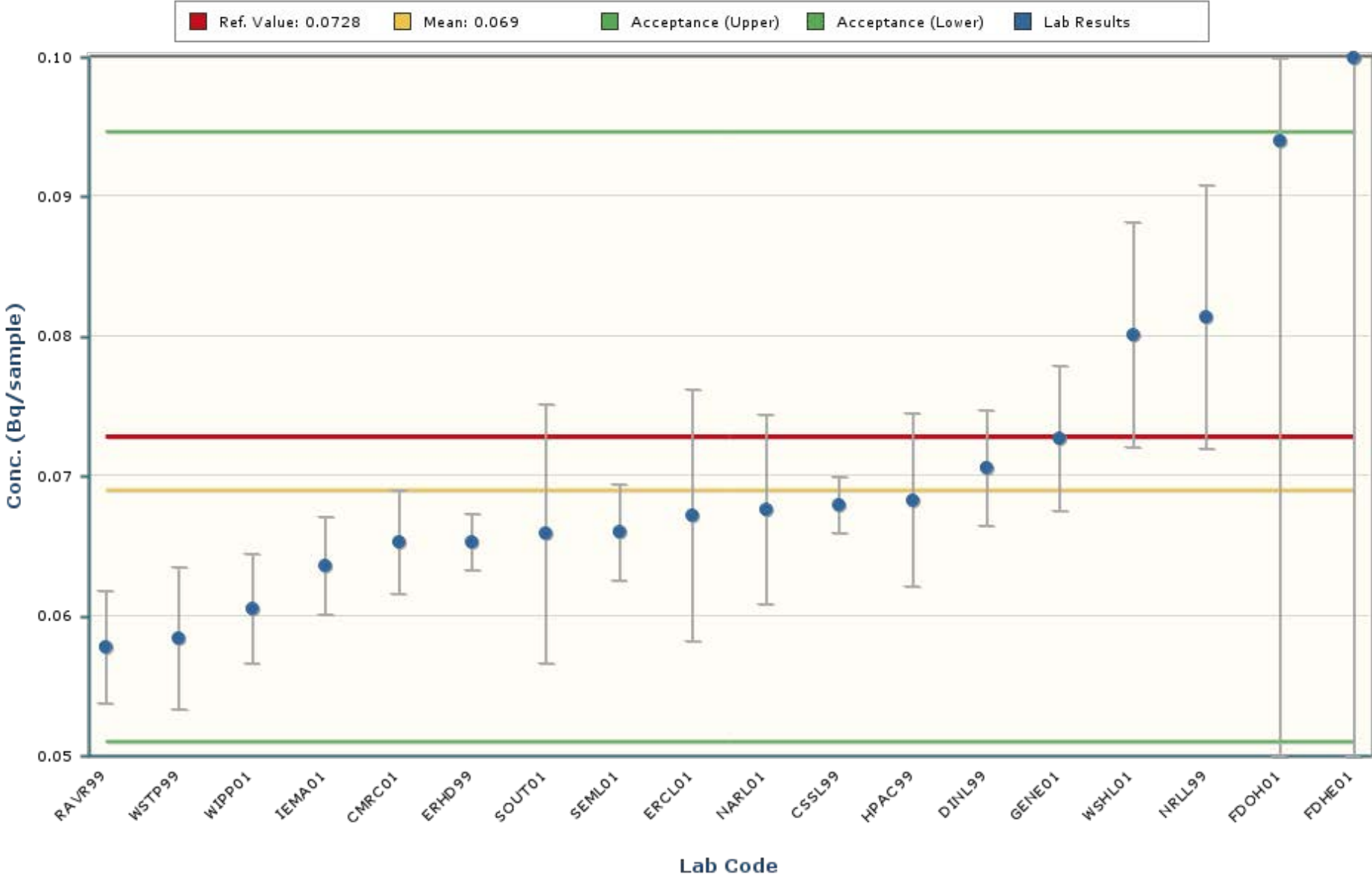
NOT ACCEPTABLE.....RP > 30%

Relative Precision (RP) = (Reported Uncertainty / Reported Result) x 100

Notes:

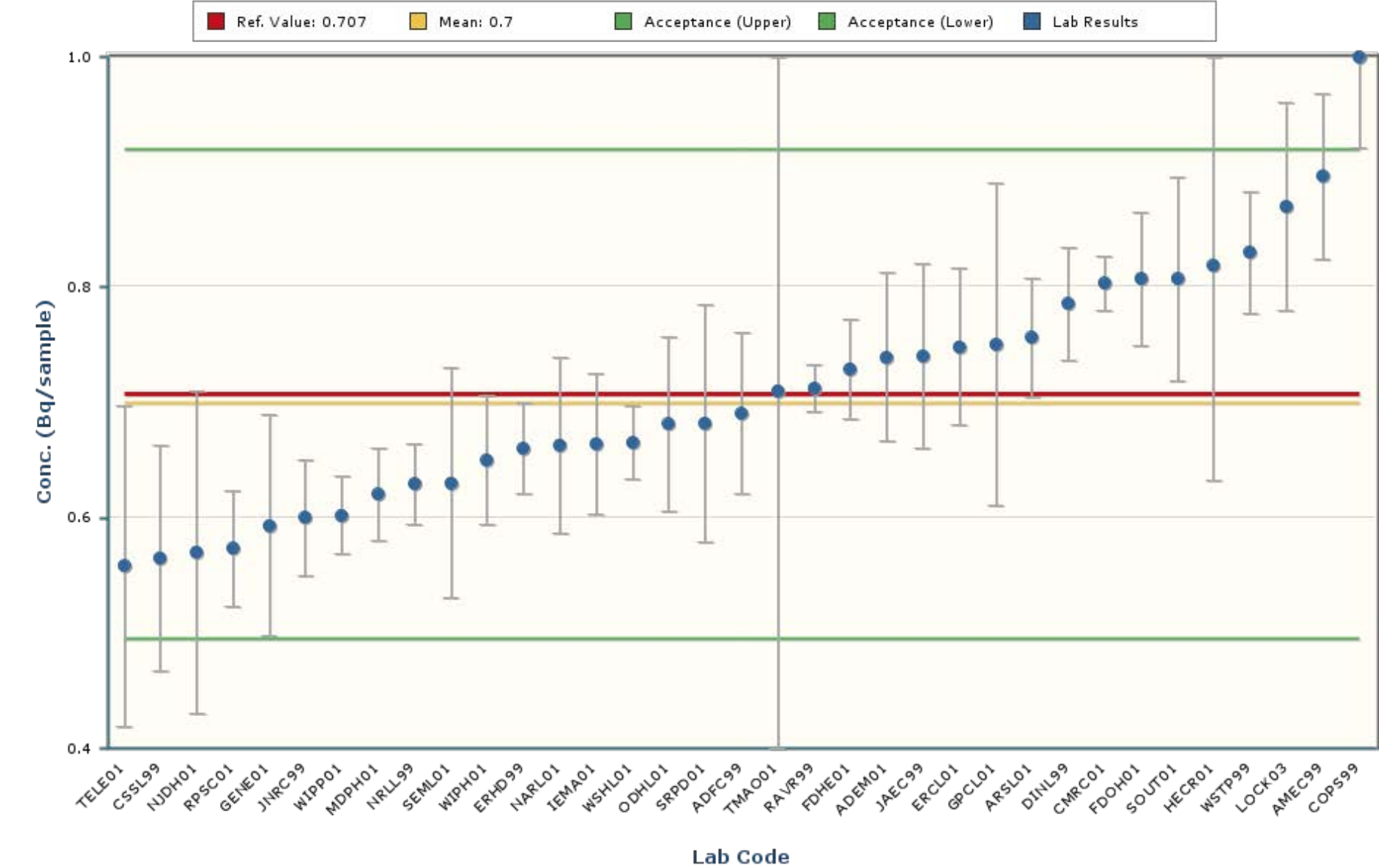
- (1) = False Positive
- (4) = Sensitivity Evaluation
- (11) = False Positive Test, Result Not Reported
- (17) = NOT DETECTED - reported a statistically zero result
- (18) = Sensitivity Evaluation, Value Not Reported
- (28) = Not Reporting Previously Reported Analyte
- (29) = Statistically Significant Negative Value at 3 Standard Deviations

Americium-241
MAPEP-25-RdV52



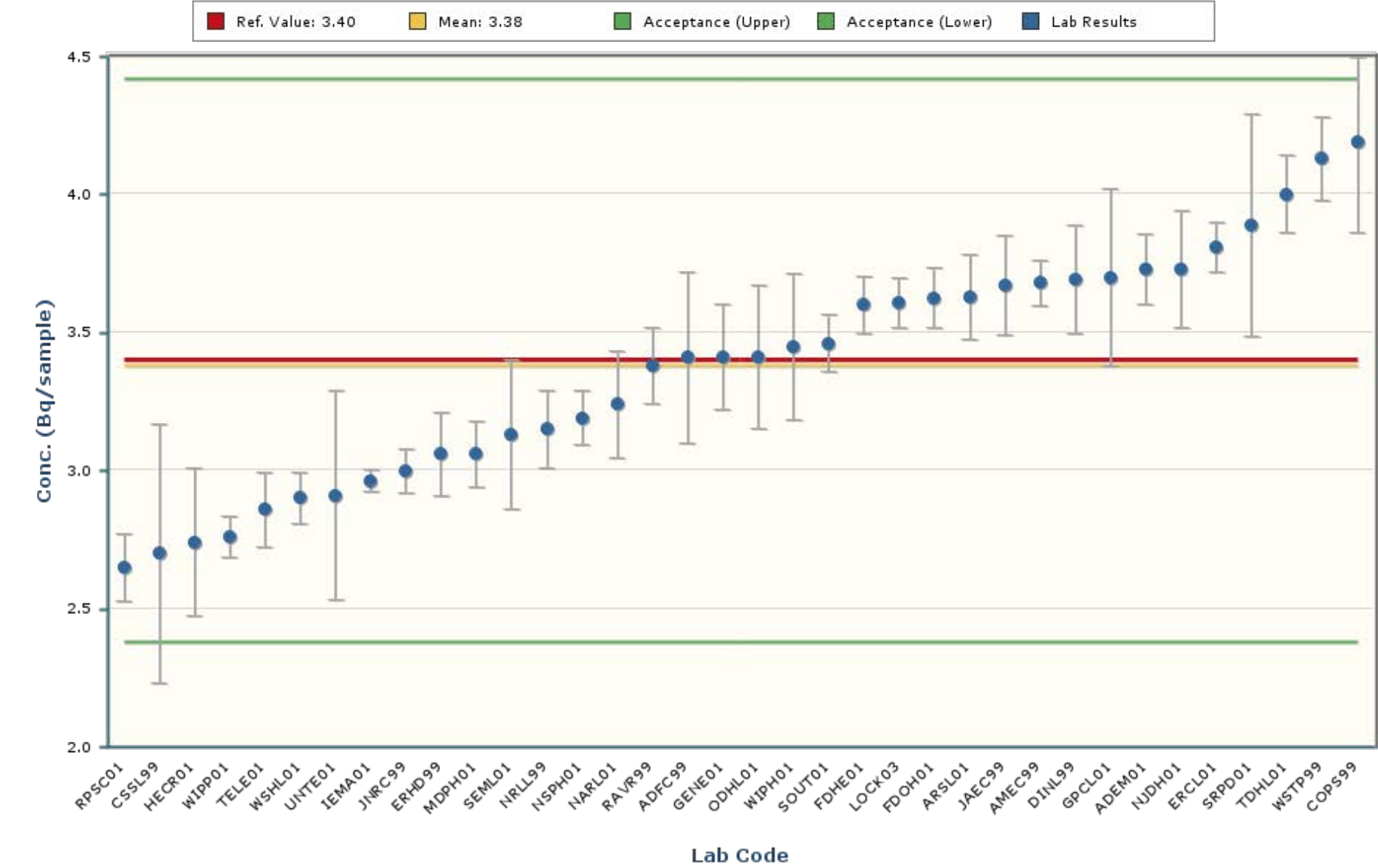
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.0237 and 0.1142 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Cesium-137
MAPEP-25-RdV52



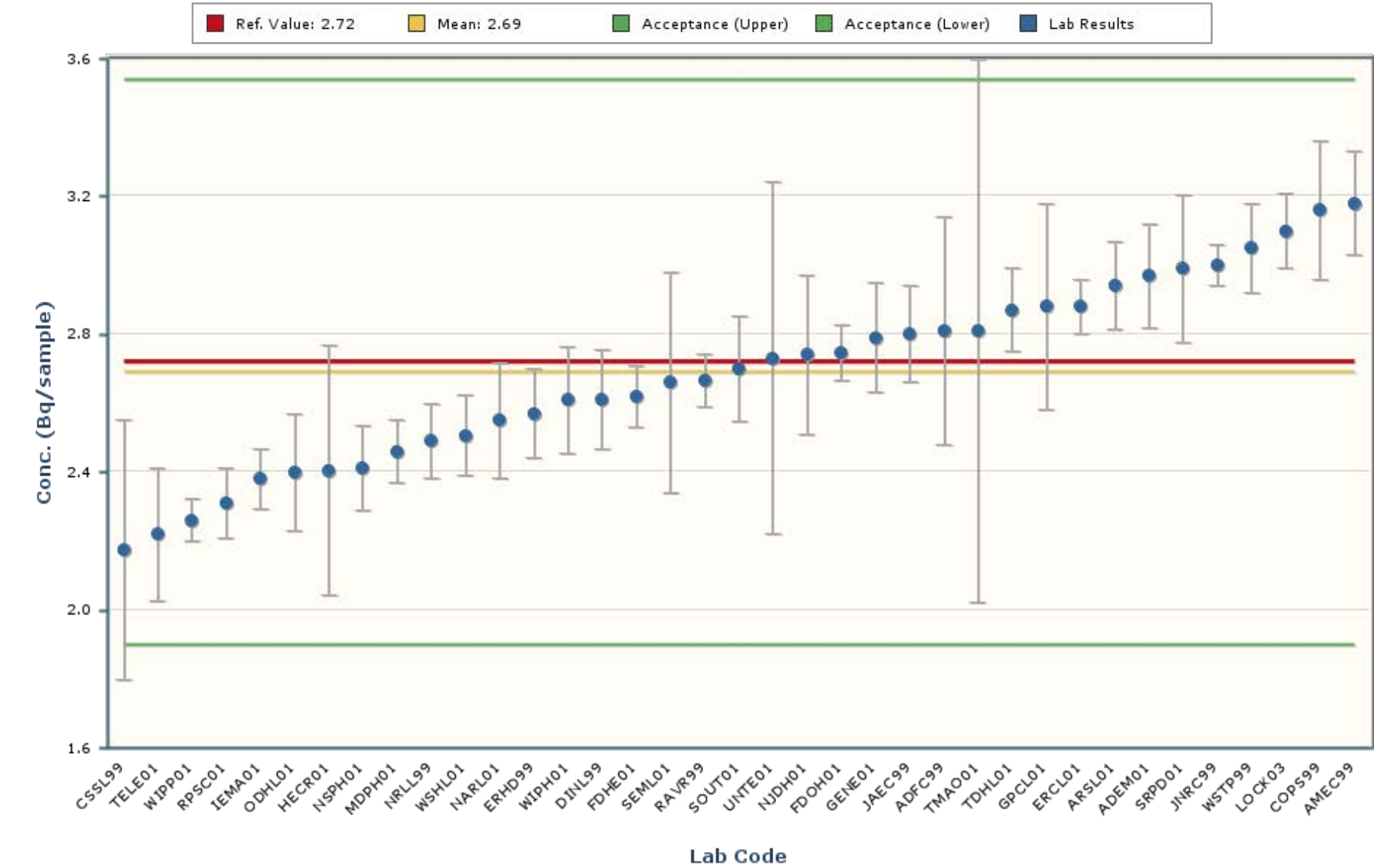
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.240 and 1.159 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Cobalt-57
MAPEP-25-RdV52



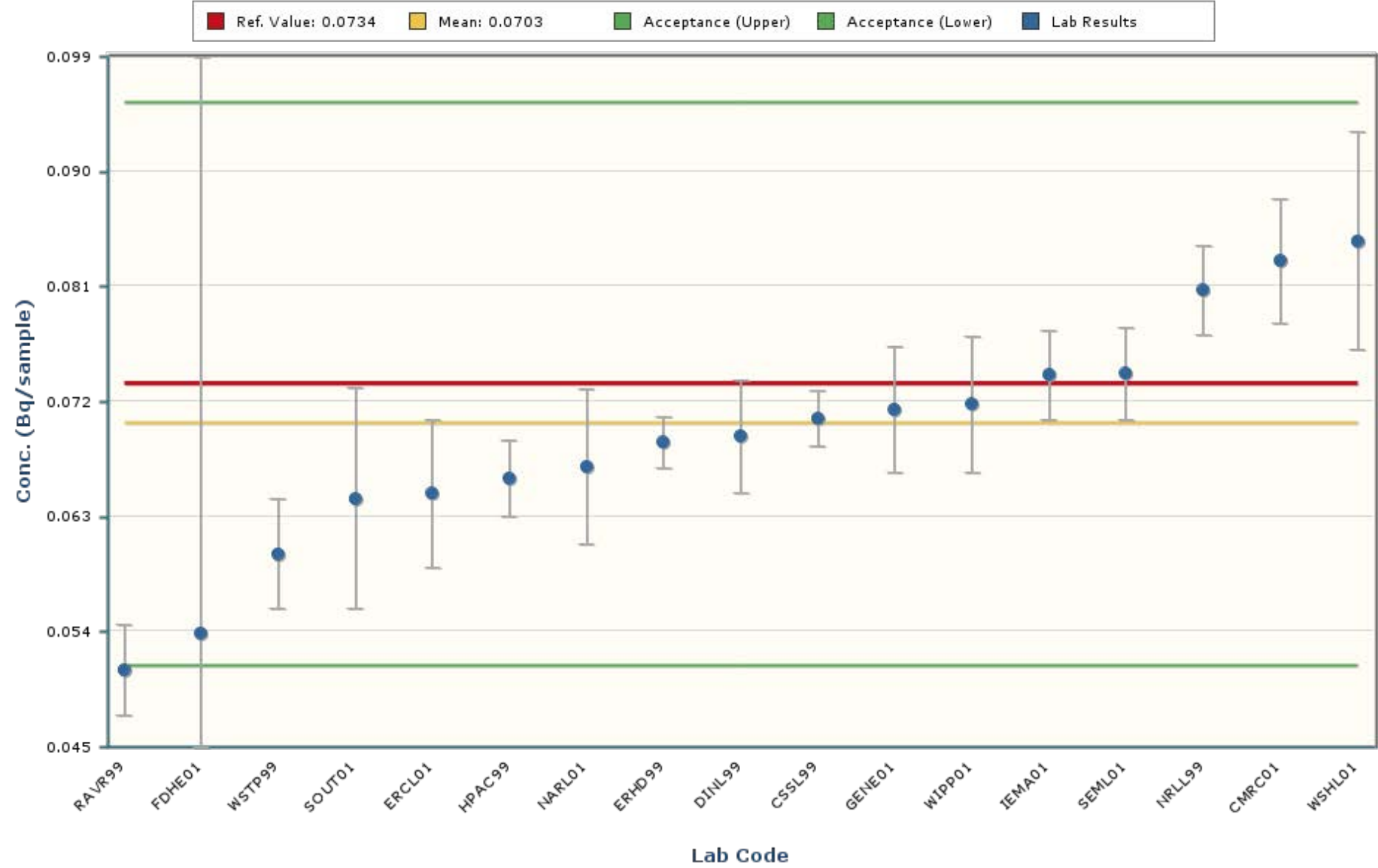
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 1.29 and 5.46 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Manganese-54
MAPEP-25-RdV52



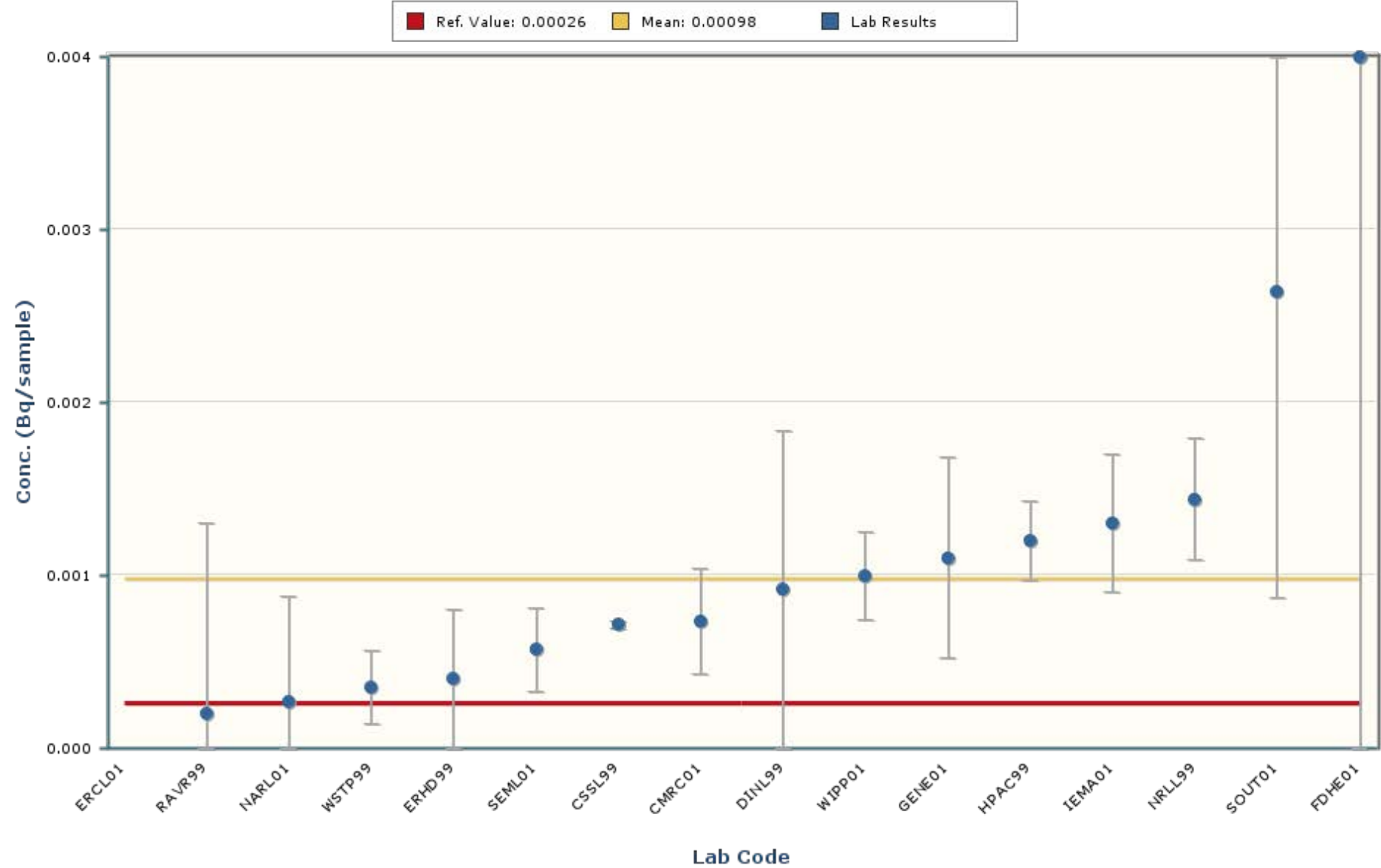
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 1.35 and 4.03 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Plutonium-238
MAPEP-25-RdV52



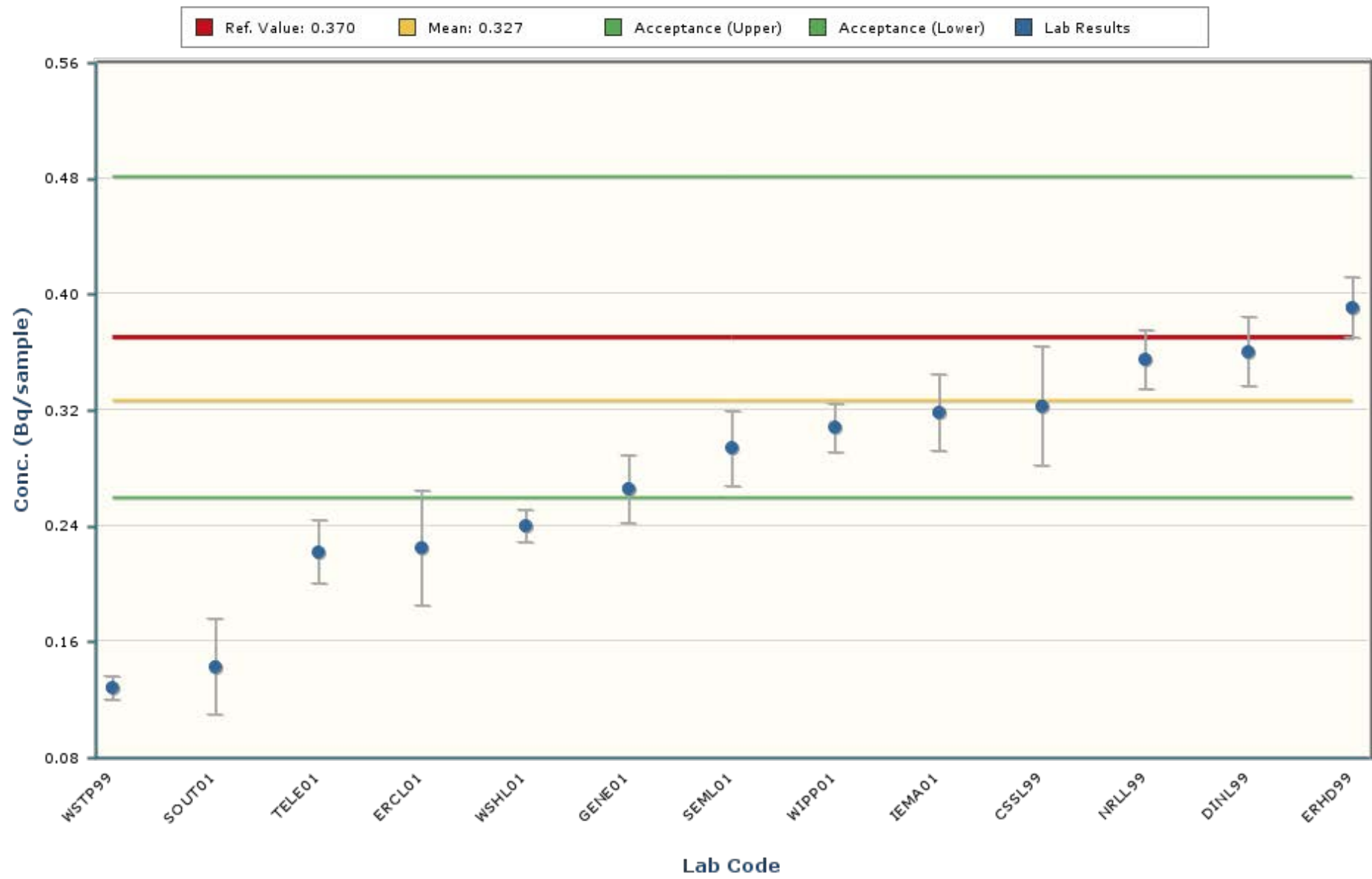
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.0299 and 0.1106 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Plutonium-239/240
MAPEP-25-RdV52



Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between -0.00495 and 0.00692 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

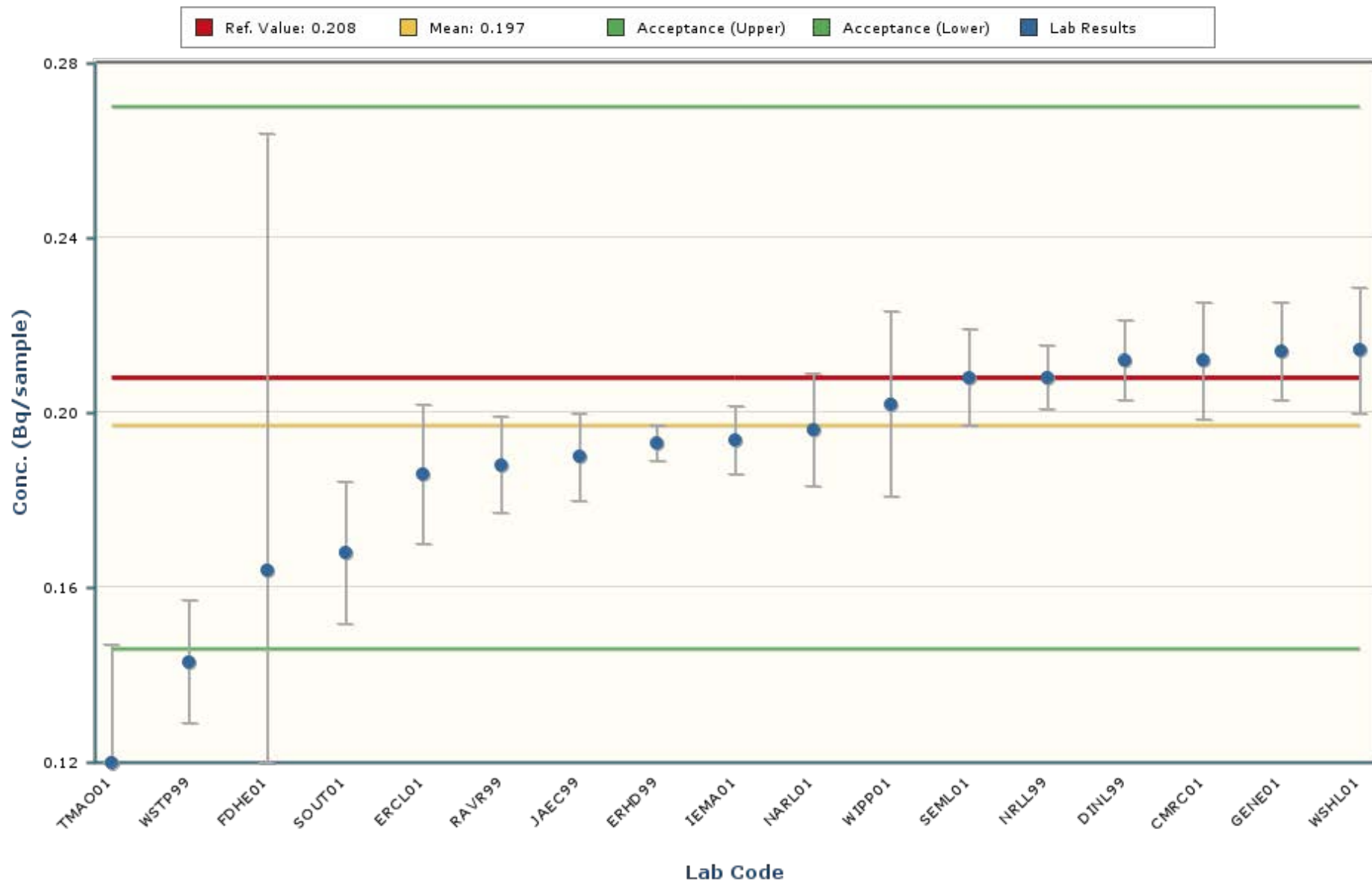
Strontium-90
MAPEP-25-RdV52



Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.126 and 0.528 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Uranium-234

MAPEP-25-RdV52



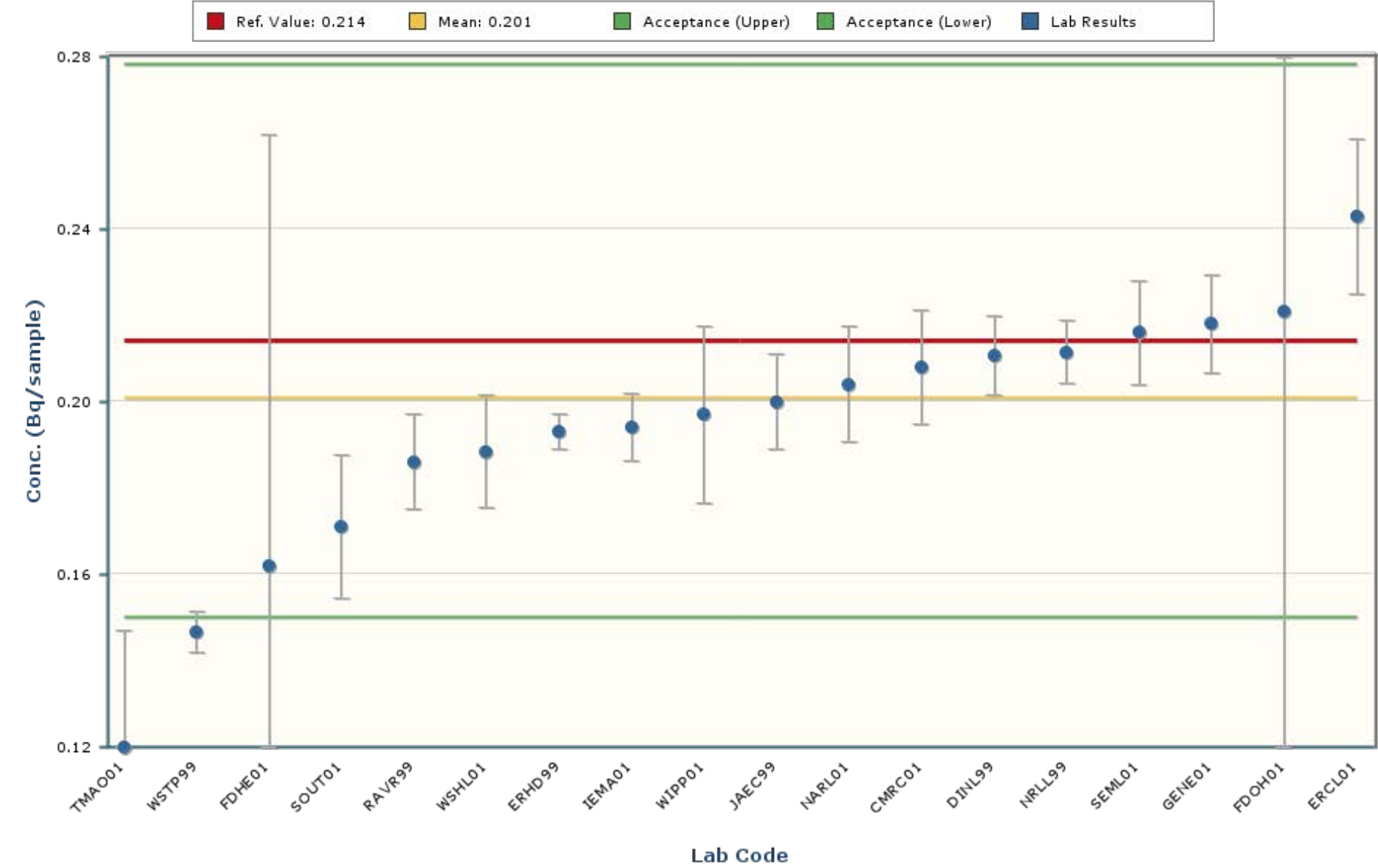
Notes:

The chart mean excludes values outside of a bias range of $\pm 30\%$.

The chart shows only data points with values between 0.117 and 0.276 (± 5 Standard Deviations).

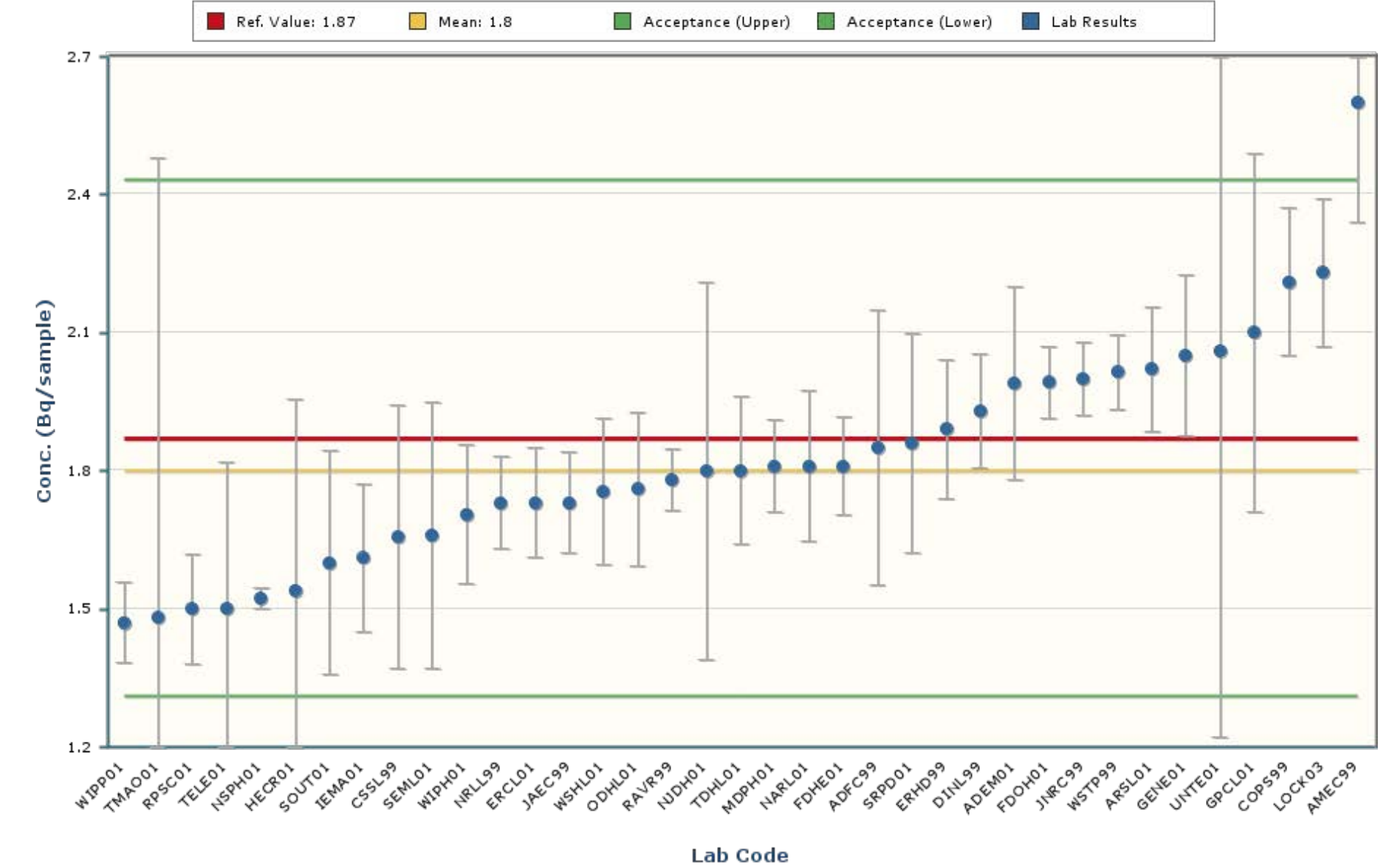
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Uranium-238
MAPEP-25-RdV52



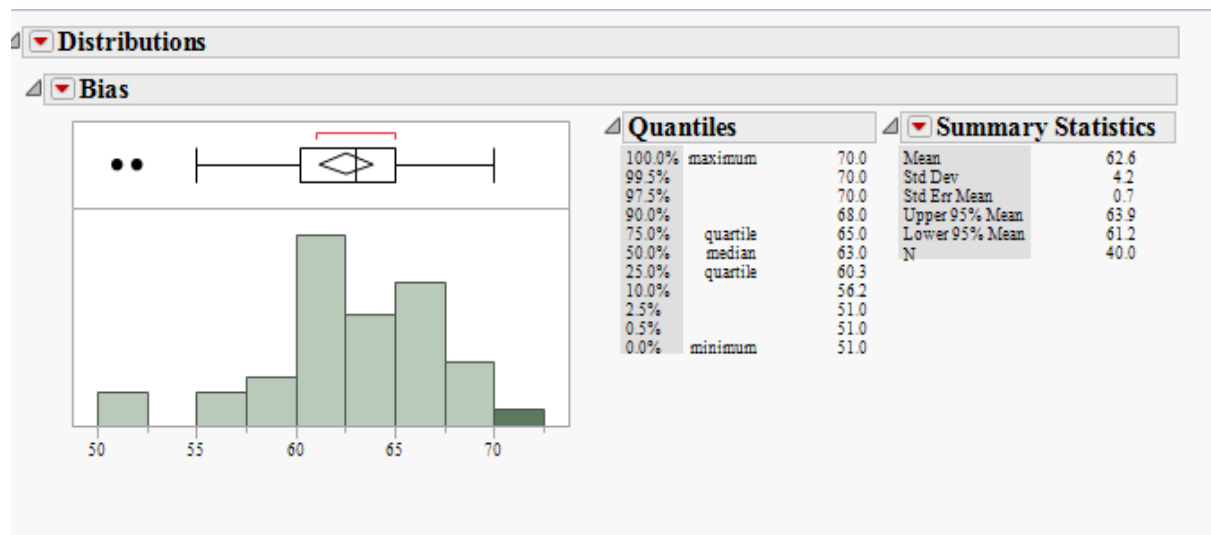
Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.103 and 0.300 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

Zinc-65
MAPEP-25-RdV52



Notes:
The chart mean excludes values outside of a bias range of $\pm 30\%$.
The chart shows only data points with values between 0.77 and 2.84 (± 5 Standard Deviations).
The error bars encompassing each result are plotted at $\pm$ one standard deviation.

The intent of the distribution graphs contained within this report is to graphically demonstrate to users how % Bias data within the current MAPEP Series appears when examined by matrix, by analyte, by method of sample preparation or by method of detection. Biases greater than +/- 100% have been screened from the data. The box plot of the bias data points and the mean visually illustrate the breadth of the distribution and where potential outliers in the distribution might lie. The statistics for the distribution plot are provided adjacent to the Bias plot. In some cases, N becomes very small and thus developed statistics may not accurately reflect estimates of the population if N were a significantly larger value.

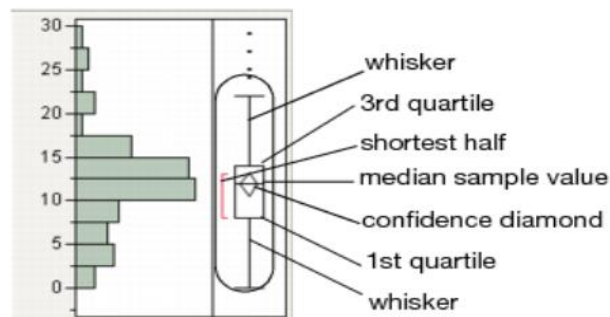


Outlier Box Plot

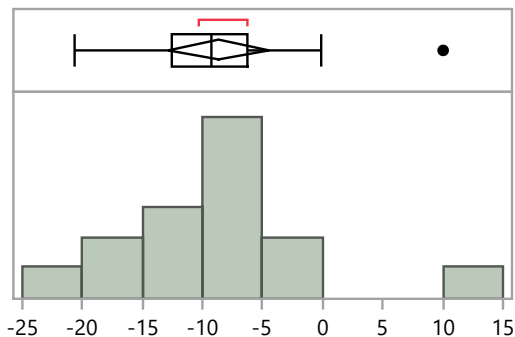
The BLACK small vertical line inside the small rectangle at the top of the data distribution graph is the median of the population of the bias shown for that analyte in the matrix. The confidence diamond contains the mean and the upper and lower 95% of the mean. If you drew a line through the middle of the diamond, you would have the mean. The top and bottom points of the diamond represent the upper and lower 95% of the mean. The ends of the box represent the 25th and 75th quantiles, also expressed as 1st and 3rd quartile. The difference between the 1st and 3rd quartiles is called the interquartile range. Each box has lines that extend from each end, sometimes called whiskers. The whiskers extend from the ends of the box to the outermost data point that falls within the distances computed as follows:

3rd quartile + 1.5*(interquartile range)

1st quartile - 1.5*(interquartile range)



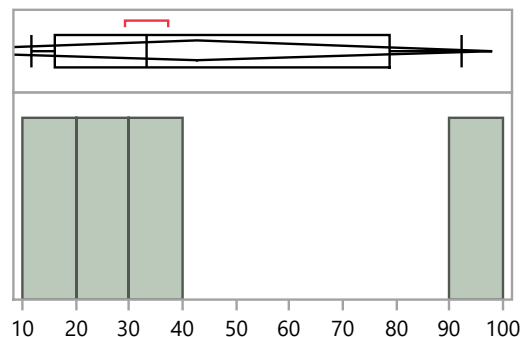
If the data points do not reach the computed ranges, then the whiskers are determined by the upper and lower data point values (not including outliers). The bracket outside of the box identifies the *shortest half*, which is the most dense 50% of the observations (Rousseuw and Leroy 1987).

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Americium-241 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	10.0
99.5%		10.0
97.5%		10.0
90.0%		3.9
75.0%	quartile	-6.2
50.0%	median	-9.3
25.0%	quartile	-12.6
10.0%		-20.1
2.5%		-20.6
0.5%		-20.6
0.0%	minimum	-20.6

Summary Statistics

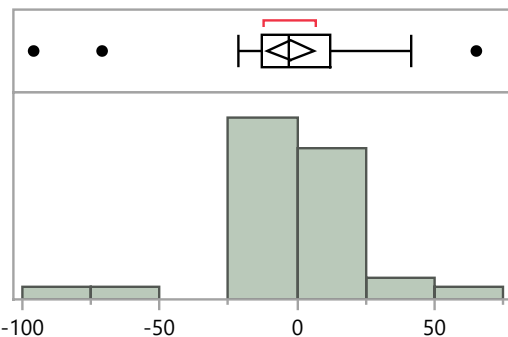
Mean	-8.7
Std Dev	7.7
Std Err Mean	2.0
Upper 95% Mean	-4.4
Lower 95% Mean	-12.9
N	15.0

Distributions Analyte_Detection=Americium-241 Gamma Spectrometry**Bias****Quantiles**

100.0%	maximum	92.3
99.5%		92.3
97.5%		92.3
90.0%		92.3
75.0%	quartile	78.6
50.0%	median	33.3
25.0%	quartile	16.1
10.0%		11.8
2.5%		11.8
0.5%		11.8
0.0%	minimum	11.8

Summary Statistics

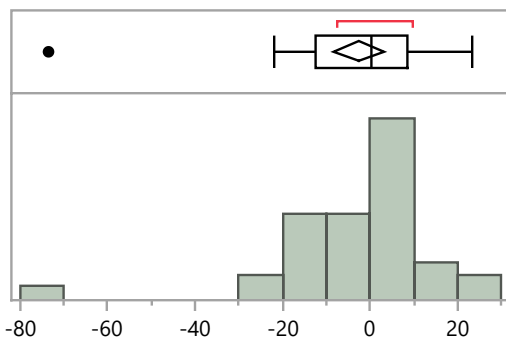
Mean	42.7
Std Dev	34.8
Std Err Mean	17.4
Upper 95% Mean	98.0
Lower 95% Mean	-12.7
N	4.0

Distributions Analyte_Detection=Cesium-137 Gamma Spectrometry**Bias****Quantiles**

100.0%	maximum	65.2
99.5%		65.2
97.5%		65.2
90.0%		23.5
75.0%	quartile	11.7
50.0%	median	-3.0
25.0%	quartile	-13.0
10.0%		-20.2
2.5%		-95.8
0.5%		-95.8
0.0%	minimum	-95.8

Summary Statistics

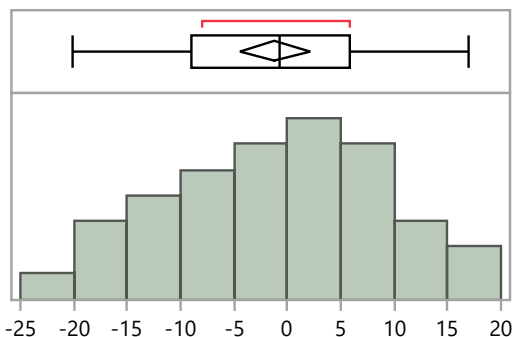
Mean	-2.5
Std Dev	26.3
Std Err Mean	4.3
Upper 95% Mean	6.2
Lower 95% Mean	-11.1
N	38.0

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-57 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	23.2
99.5%		23.2
97.5%		23.2
90.0%		15.0
75.0%	quartile	8.4
50.0%	median	0.3
25.0%	quartile	-12.3
10.0%		-19.6
2.5%		-73.5
0.5%		-73.5
0.0%	minimum	-73.5

Summary Statistics

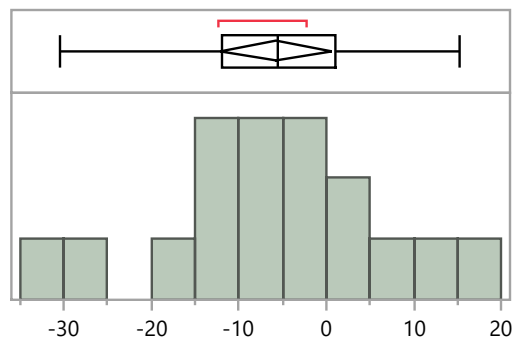
Mean	-2.7
Std Dev	17.0
Std Err Mean	2.8
Upper 95% Mean	3.0
Lower 95% Mean	-8.4
N	37.0

Distributions Analyte_Detection=Manganese-54 Gamma Spectrometry**Bias****Quantiles**

100.0%	maximum	16.9
99.5%		16.9
97.5%		16.9
90.0%		12.5
75.0%	quartile	5.9
50.0%	median	-0.7
25.0%	quartile	-9.1
10.0%		-15.5
2.5%		-20.1
0.5%		-20.1
0.0%	minimum	-20.1

Summary Statistics

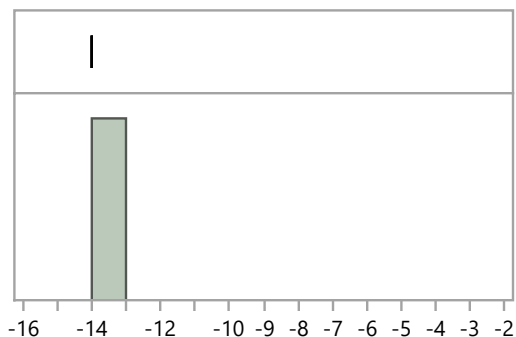
Mean	-1.2
Std Dev	9.9
Std Err Mean	1.6
Upper 95% Mean	2.1
Lower 95% Mean	-4.5
N	37.0

Distributions Analyte_Detection=Plutonium-238 Alpha Spectrometry**Bias****Quantiles**

100.0%	maximum	15.2
99.5%		15.2
97.5%		15.2
90.0%		13.5
75.0%	quartile	1.1
50.0%	median	-5.6
25.0%	quartile	-12.0
10.0%		-27.4
2.5%		-30.5
0.5%		-30.5
0.0%	minimum	-30.5

Summary Statistics

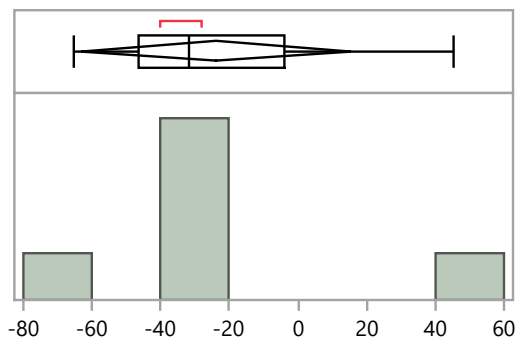
Mean	-5.8
Std Dev	12.4
Std Err Mean	3.0
Upper 95% Mean	0.6
Lower 95% Mean	-12.2
N	17.0

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Strontium-90 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	-14.0
99.5%		-14.0
97.5%		-14.0
90.0%		-14.0
75.0%	quartile	-14.0
50.0%	median	-14.0
25.0%	quartile	-14.0
10.0%		-14.0
2.5%		-14.0
0.5%		-14.0
0.0%	minimum	-14.0

Summary Statistics

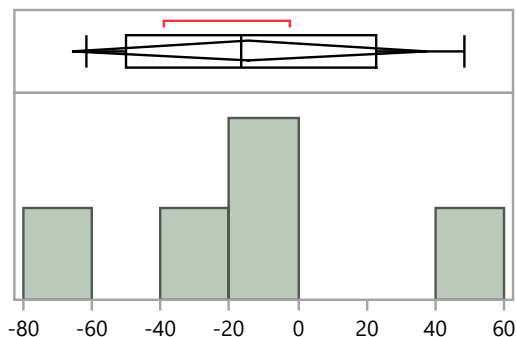
Mean	-14.0
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Detection=Strontium-90 Gas Flow Proportional Counter**Bias****Quantiles**

100.0%	maximum	45.4
99.5%		45.4
97.5%		45.4
90.0%		45.4
75.0%	quartile	-4.0
50.0%	median	-31.6
25.0%	quartile	-46.3
10.0%		-65.3
2.5%		-65.3
0.5%		-65.3
0.0%	minimum	-65.3

Summary Statistics

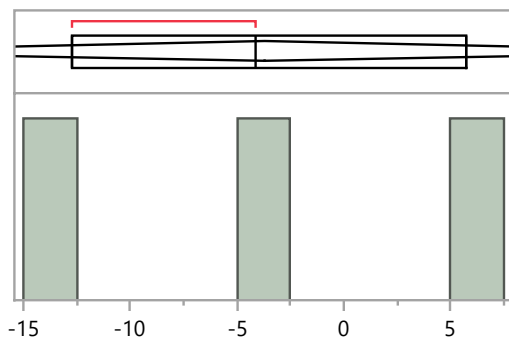
Mean	-23.9
Std Dev	37.2
Std Err Mean	15.2
Upper 95% Mean	15.1
Lower 95% Mean	-63.0
N	6.0

Distributions Analyte_Detection=Strontium-90 Gross Alpha/Beta - 2 pi gas flow proportional counter**Bias****Quantiles**

100.0%	maximum	48.4
99.5%		48.4
97.5%		48.4
90.0%		48.4
75.0%	quartile	22.9
50.0%	median	-16.8
25.0%	quartile	-50.3
10.0%		-61.4
2.5%		-61.4
0.5%		-61.4
0.0%	minimum	-61.4

Summary Statistics

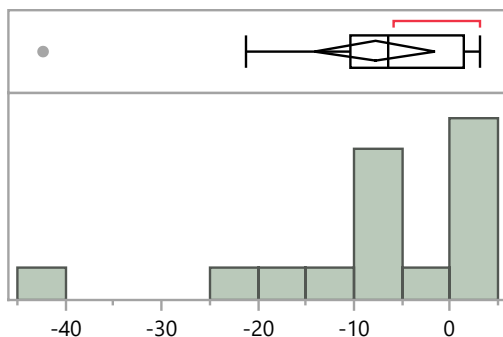
Mean	-14.3
Std Dev	41.6
Std Err Mean	18.6
Upper 95% Mean	37.3
Lower 95% Mean	-65.9
N	5.0

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Strontium-90 Liquid Scintillation Counter****Bias****Quantiles**

100.0%	maximum	5.7
99.5%		5.7
97.5%		5.7
90.0%		5.7
75.0%	quartile	5.7
50.0%	median	-4.1
25.0%	quartile	-12.7
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

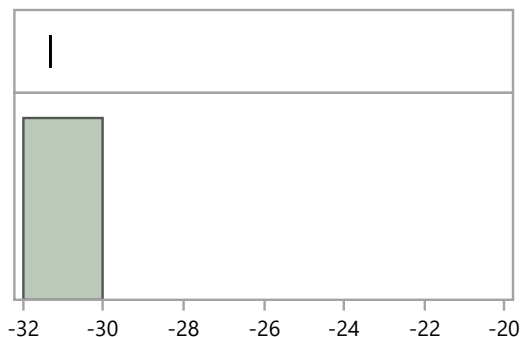
Mean	-3.7
Std Dev	9.2
Std Err Mean	5.3
Upper 95% Mean	19.2
Lower 95% Mean	-26.6
N	3.0

Distributions Analyte_Detection=Uranium-234 Alpha Spectrometry**Bias****Quantiles**

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.0
75.0%	quartile	1.4
50.0%	median	-6.4
25.0%	quartile	-10.4
10.0%		-27.5
2.5%		-42.3
0.5%		-42.3
0.0%	minimum	-42.3

Summary Statistics

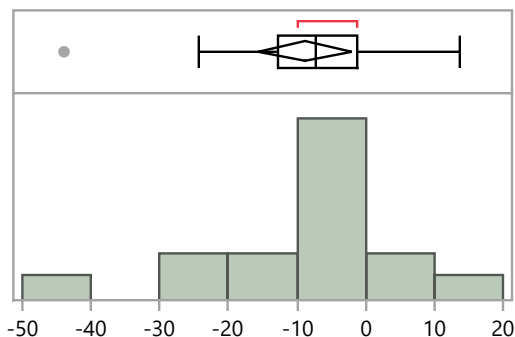
Mean	-7.8
Std Dev	11.8
Std Err Mean	2.9
Upper 95% Mean	-1.5
Lower 95% Mean	-14.1
N	16.0

Distributions Analyte_Detection=Uranium-234 Inductively Coupled Plasma Mass Spectrometry**Bias****Quantiles**

100.0%	maximum	-31.3
99.5%		-31.3
97.5%		-31.3
90.0%		-31.3
75.0%	quartile	-31.3
50.0%	median	-31.3
25.0%	quartile	-31.3
10.0%		-31.3
2.5%		-31.3
0.5%		-31.3
0.0%	minimum	-31.3

Summary Statistics

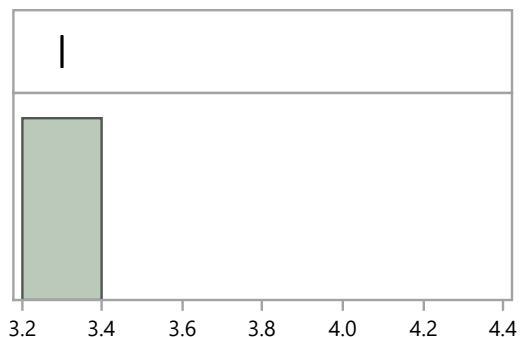
Mean	-31.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Uranium-238 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	13.6
99.5%		13.6
97.5%		13.6
90.0%		5.4
75.0%	quartile	-1.3
50.0%	median	-7.2
25.0%	quartile	-12.8
10.0%		-30.2
2.5%		-43.9
0.5%		-43.9
0.0%	minimum	-43.9

Summary Statistics

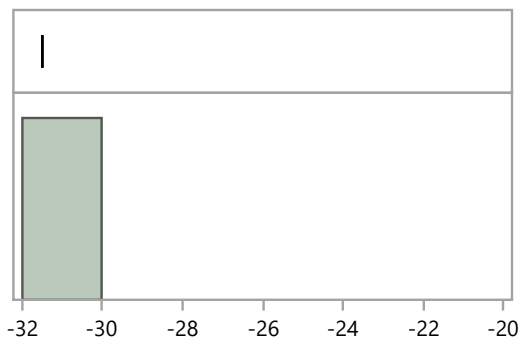
Mean	-8.8
Std Dev	12.9
Std Err Mean	3.2
Upper 95% Mean	-1.9
Lower 95% Mean	-15.7
N	16.0

Distributions Analyte_Detection=Uranium-238 Gamma Spectrometry**Bias****Quantiles**

100.0%	maximum	3.3
99.5%		3.3
97.5%		3.3
90.0%		3.3
75.0%	quartile	3.3
50.0%	median	3.3
25.0%	quartile	3.3
10.0%		3.3
2.5%		3.3
0.5%		3.3
0.0%	minimum	3.3

Summary Statistics

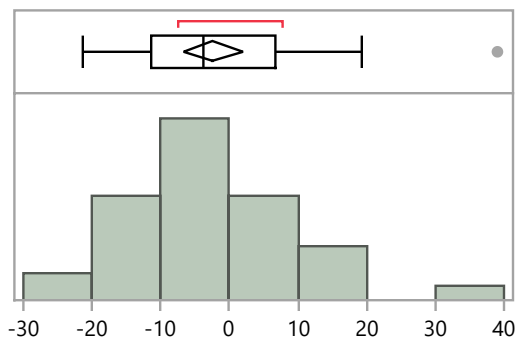
Mean	3.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Detection=Uranium-238 Inductively Coupled Plasma Mass Spectrometry**Bias****Quantiles**

100.0%	maximum	-31.5
99.5%		-31.5
97.5%		-31.5
90.0%		-31.5
75.0%	quartile	-31.5
50.0%	median	-31.5
25.0%	quartile	-31.5
10.0%		-31.5
2.5%		-31.5
0.5%		-31.5
0.0%	minimum	-31.5

Summary Statistics

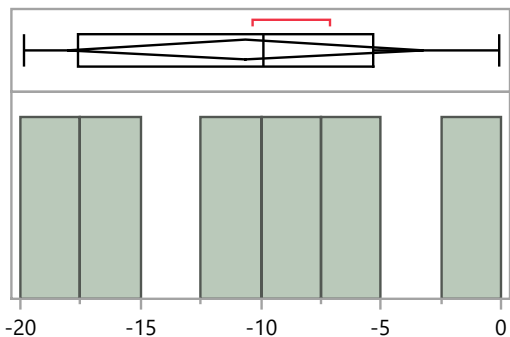
Mean	-31.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Detection Method**Distributions Analyte_Detection=Zinc-65 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	39.0
99.5%		39.0
97.5%		39.0
90.0%		13.5
75.0%	quartile	6.8
50.0%	median	-3.7
25.0%	quartile	-11.3
10.0%		-19.8
2.5%		-21.4
0.5%		-21.4
0.0%	minimum	-21.4

Summary Statistics

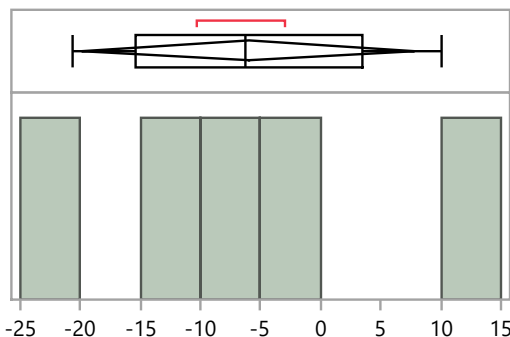
Mean	-2.4
Std Dev	12.9
Std Err Mean	2.1
Upper 95% Mean	2.0
Lower 95% Mean	-6.7
N	37.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Americium-241 Acid dissolution with hydrofluoric acid****Bias****Quantiles**

100.0%	maximum	-0.1
99.5%		-0.1
97.5%		-0.1
90.0%		-0.1
75.0%	quartile	-5.4
50.0%	median	-9.9
25.0%	quartile	-17.6
10.0%		-19.8
2.5%		-19.8
0.5%		-19.8
0.0%	minimum	-19.8

Summary Statistics

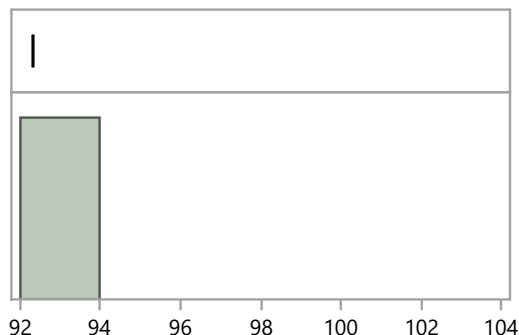
Mean	-10.6
Std Dev	7.0
Std Err Mean	2.9
Upper 95% Mean	-3.2
Lower 95% Mean	-18.0
N	6.0

Distributions Analyte_Method=Americium-241 Acid leaching without hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	10.0
99.5%		10.0
97.5%		10.0
90.0%		10.0
75.0%	quartile	3.5
50.0%	median	-6.2
25.0%	quartile	-15.5
10.0%		-20.6
2.5%		-20.6
0.5%		-20.6
0.0%	minimum	-20.6

Summary Statistics

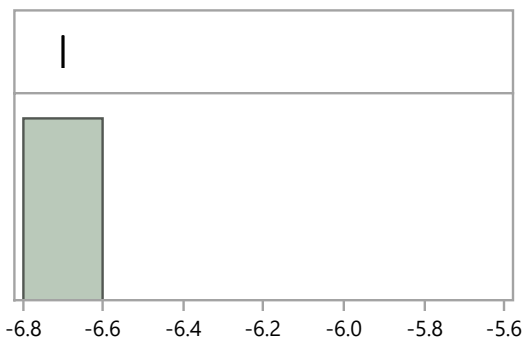
Mean	-6.0
Std Dev	11.1
Std Err Mean	5.0
Upper 95% Mean	7.8
Lower 95% Mean	-19.9
N	5.0

Distributions Analyte_Method=Americium-241 EPA 901.1, Gamma Emitting, 600/4-80-032**Bias****Quantiles**

100.0%	maximum	92.3
99.5%		92.3
97.5%		92.3
90.0%		92.3
75.0%	quartile	92.3
50.0%	median	92.3
25.0%	quartile	92.3
10.0%		92.3
2.5%		92.3
0.5%		92.3
0.0%	minimum	92.3

Summary Statistics

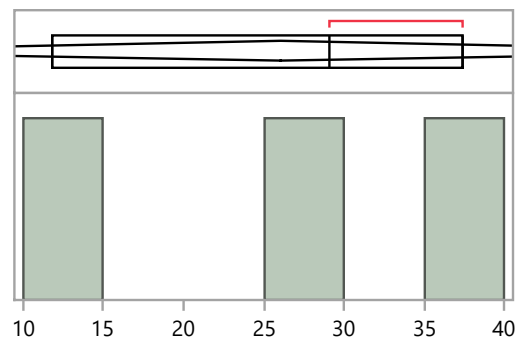
Mean	92.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Americium-241 EPA 907, Actinide Elements, 600/4/80-032****Bias****Quantiles**

100.0%	maximum	-6.7
99.5%		-6.7
97.5%		-6.7
90.0%		-6.7
75.0%	quartile	-6.7
50.0%	median	-6.7
25.0%	quartile	-6.7
10.0%		-6.7
2.5%		-6.7
0.5%		-6.7
0.0%	minimum	-6.7

Summary Statistics

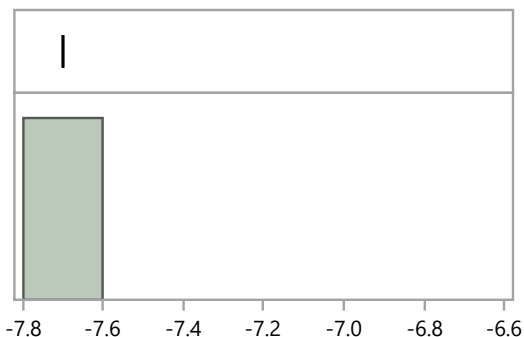
Mean	-6.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Americium-241 No preparation - analyzed as received**Bias****Quantiles**

100.0%	maximum	37.4
99.5%		37.4
97.5%		37.4
90.0%		37.4
75.0%	quartile	37.4
50.0%	median	29.1
25.0%	quartile	11.8
10.0%		11.8
2.5%		11.8
0.5%		11.8
0.0%	minimum	11.8

Summary Statistics

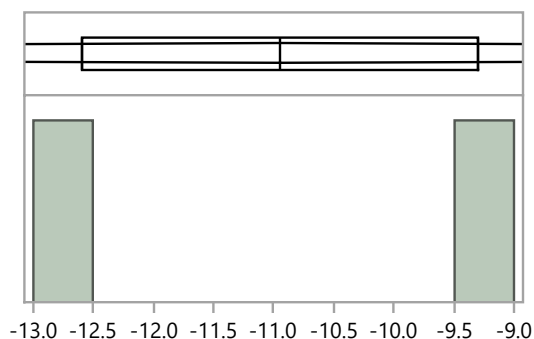
Mean	26.1
Std Dev	13.1
Std Err Mean	7.5
Upper 95% Mean	58.5
Lower 95% Mean	-6.3
N	3.0

Distributions Analyte_Method=Americium-241 Other**Bias****Quantiles**

100.0%	maximum	-7.7
99.5%		-7.7
97.5%		-7.7
90.0%		-7.7
75.0%	quartile	-7.7
50.0%	median	-7.7
25.0%	quartile	-7.7
10.0%		-7.7
2.5%		-7.7
0.5%		-7.7
0.0%	minimum	-7.7

Summary Statistics

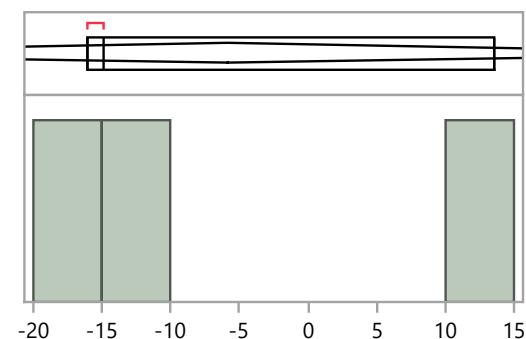
Mean	-7.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Americium-241 Total dissolution by fusion****Bias****Quantiles**

100.0%	maximum	-9.3
99.5%		-9.3
97.5%		-9.3
90.0%		-9.3
75.0%	quartile	-9.3
50.0%	median	-11.0
25.0%	quartile	-12.6
10.0%		-12.6
2.5%		-12.6
0.5%		-12.6
0.0%	minimum	-12.6

Summary Statistics

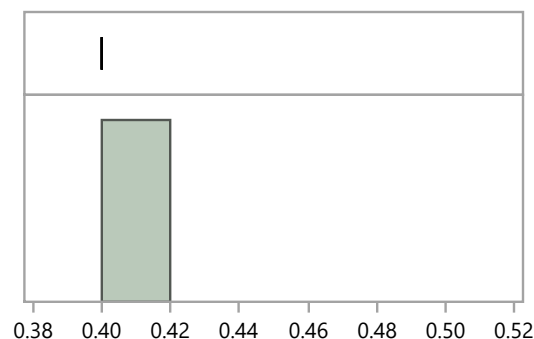
Mean	-11.0
Std Dev	2.3
Std Err Mean	1.6
Upper 95% Mean	10.0
Lower 95% Mean	-31.9
N	2.0

Distributions Analyte_Method=Cesium-137 Acid dissolution with hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	13.6
99.5%		13.6
97.5%		13.6
90.0%		13.6
75.0%	quartile	13.6
50.0%	median	-14.9
25.0%	quartile	-16.1
10.0%		-16.1
2.5%		-16.1
0.5%		-16.1
0.0%	minimum	-16.1

Summary Statistics

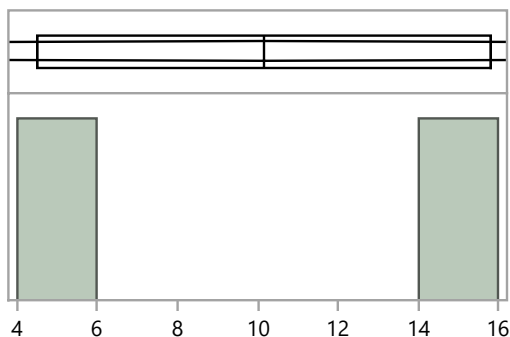
Mean	-5.8
Std Dev	16.8
Std Err Mean	9.7
Upper 95% Mean	36.0
Lower 95% Mean	-47.6
N	3.0

Distributions Analyte_Method=Cesium-137 EPA 901, Radioactive Cesium, 600/4-80-032**Bias****Quantiles**

100.0%	maximum	0.4
99.5%		0.4
97.5%		0.4
90.0%		0.4
75.0%	quartile	0.4
50.0%	median	0.4
25.0%	quartile	0.4
10.0%		0.4
2.5%		0.4
0.5%		0.4
0.0%	minimum	0.4

Summary Statistics

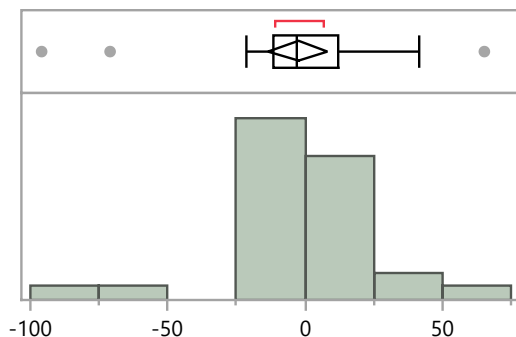
Mean	0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Cesium-137 EPA 901.1, Gamma Emitting, 600/4-80-032****Bias****Quantiles**

100.0%	maximum	15.8
99.5%		15.8
97.5%		15.8
90.0%		15.8
75.0%	quartile	15.8
50.0%	median	10.2
25.0%	quartile	4.5
10.0%		4.5
2.5%		4.5
0.5%		4.5
0.0%	minimum	4.5

Summary Statistics

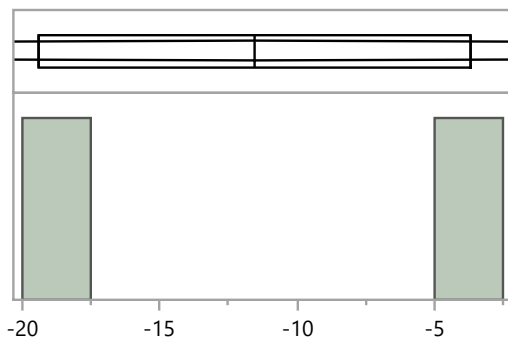
Mean	10.2
Std Dev	8.0
Std Err Mean	5.7
Upper 95% Mean	81.9
Lower 95% Mean	-61.6
N	2.0

Distributions Analyte_Method=Cesium-137 No preparation - analyzed as received**Bias****Quantiles**

100.0%	maximum	65.2
99.5%		65.2
97.5%		65.2
90.0%		26.3
75.0%	quartile	11.9
50.0%	median	-3.0
25.0%	quartile	-11.3
10.0%		-21.0
2.5%		-95.8
0.5%		-95.8
0.0%	minimum	-95.8

Summary Statistics

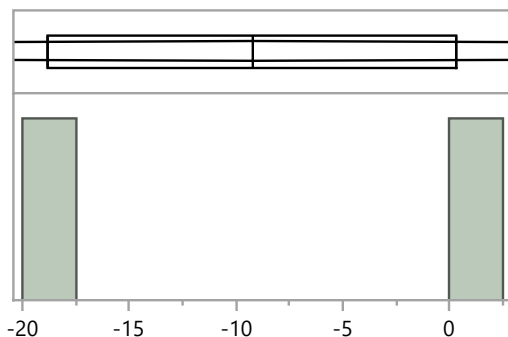
Mean	-2.5
Std Dev	28.9
Std Err Mean	5.3
Upper 95% Mean	8.3
Lower 95% Mean	-13.3
N	30.0

Distributions Analyte_Method=Cesium-137 Other**Bias****Quantiles**

100.0%	maximum	-3.7
99.5%		-3.7
97.5%		-3.7
90.0%		-3.7
75.0%	quartile	-3.7
50.0%	median	-11.6
25.0%	quartile	-19.4
10.0%		-19.4
2.5%		-19.4
0.5%		-19.4
0.0%	minimum	-19.4

Summary Statistics

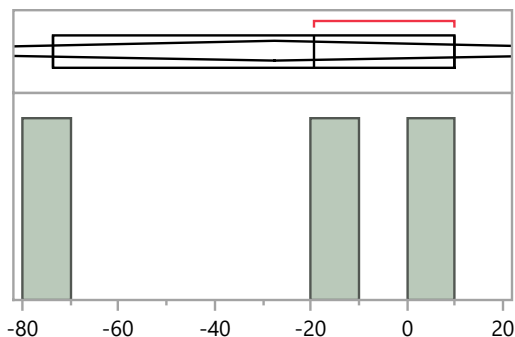
Mean	-11.6
Std Dev	11.1
Std Err Mean	7.9
Upper 95% Mean	88.2
Lower 95% Mean	-111.3
N	2.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Cobalt-57 Acid dissolution with hydrofluoric acid****Bias****Quantiles**

100.0%	maximum	0.3
99.5%		0.3
97.5%		0.3
90.0%		0.3
75.0%	quartile	0.3
50.0%	median	-9.3
25.0%	quartile	-18.8
10.0%		-18.8
2.5%		-18.8
0.5%		-18.8
0.0%	minimum	-18.8

Summary Statistics

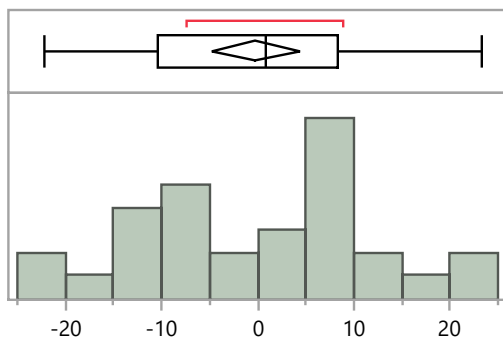
Mean	-9.3
Std Dev	13.5
Std Err Mean	9.6
Upper 95% Mean	112.1
Lower 95% Mean	-130.6
N	2.0

Distributions Analyte_Method=Cobalt-57 EPA 901.1, Gamma Emitting, 600/4-80-032**Bias****Quantiles**

100.0%	maximum	9.7
99.5%		9.7
97.5%		9.7
90.0%		9.7
75.0%	quartile	9.7
50.0%	median	-19.4
25.0%	quartile	-73.5
10.0%		-73.5
2.5%		-73.5
0.5%		-73.5
0.0%	minimum	-73.5

Summary Statistics

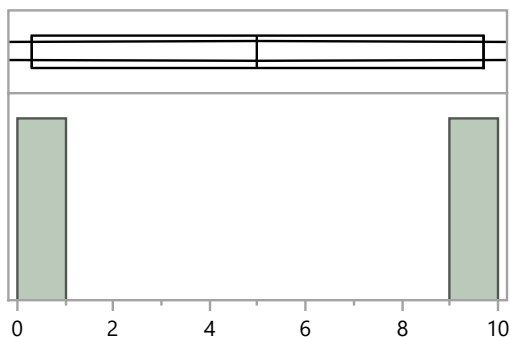
Mean	-27.7
Std Dev	42.2
Std Err Mean	24.4
Upper 95% Mean	77.2
Lower 95% Mean	-132.6
N	3.0

Distributions Analyte_Method=Cobalt-57 No preparation - analyzed as received**Bias****Quantiles**

100.0%	maximum	23.2
99.5%		23.2
97.5%		23.2
90.0%		17.3
75.0%	quartile	8.3
50.0%	median	0.9
25.0%	quartile	-10.5
10.0%		-15.8
2.5%		-22.1
0.5%		-22.1
0.0%	minimum	-22.1

Summary Statistics

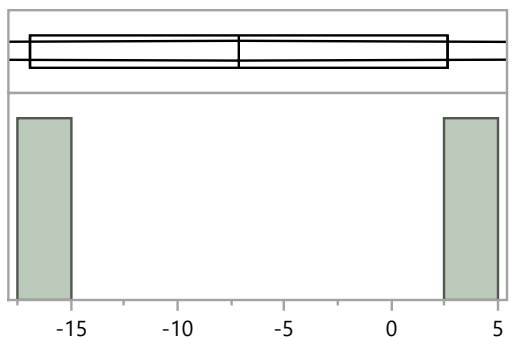
Mean	-0.3
Std Dev	12.3
Std Err Mean	2.2
Upper 95% Mean	4.3
Lower 95% Mean	-4.9
N	30.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Cobalt-57 Other****Bias****Quantiles**

100.0%	maximum	9.7
99.5%		9.7
97.5%		9.7
90.0%		9.7
75.0%	quartile	9.7
50.0%	median	5.0
25.0%	quartile	0.3
10.0%		0.3
2.5%		0.3
0.5%		0.3
0.0%	minimum	0.3

Summary Statistics

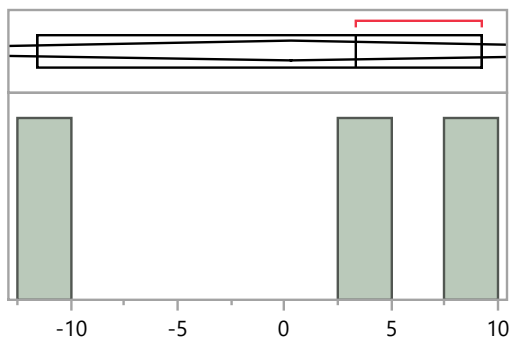
Mean	5.0
Std Dev	6.6
Std Err Mean	4.7
Upper 95% Mean	64.7
Lower 95% Mean	-54.7
N	2.0

Distributions Analyte_Method=Manganese-54 Acid dissolution with hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	2.6
99.5%		2.6
97.5%		2.6
90.0%		2.6
75.0%	quartile	2.6
50.0%	median	-7.2
25.0%	quartile	-16.9
10.0%		-16.9
2.5%		-16.9
0.5%		-16.9
0.0%	minimum	-16.9

Summary Statistics

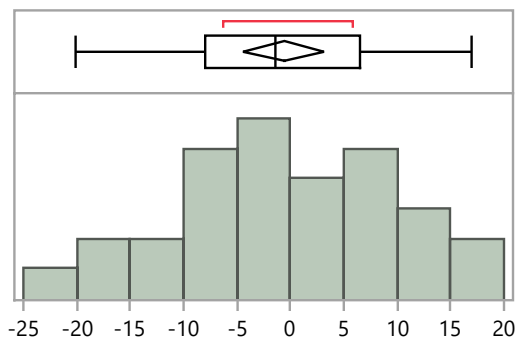
Mean	-7.2
Std Dev	13.8
Std Err Mean	9.8
Upper 95% Mean	116.7
Lower 95% Mean	-131.0
N	2.0

Distributions Analyte_Method=Manganese-54 EPA 901.1, Gamma Emitting, 600/4-80-032**Bias****Quantiles**

100.0%	maximum	9.2
99.5%		9.2
97.5%		9.2
90.0%		9.2
75.0%	quartile	9.2
50.0%	median	3.3
25.0%	quartile	-11.6
10.0%		-11.6
2.5%		-11.6
0.5%		-11.6
0.0%	minimum	-11.6

Summary Statistics

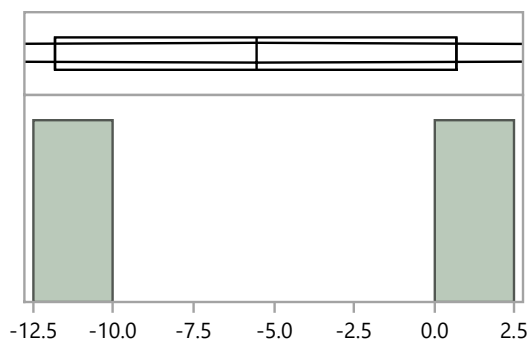
Mean	0.3
Std Dev	10.7
Std Err Mean	6.2
Upper 95% Mean	26.9
Lower 95% Mean	-26.3
N	3.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Manganese-54 No preparation - analyzed as received****Bias****Quantiles**

100.0%	maximum	16.9
99.5%		16.9
97.5%		16.9
90.0%		13.8
75.0%	quartile	6.5
50.0%	median	-1.4
25.0%	quartile	-8.1
10.0%		-14.8
2.5%		-20.1
0.5%		-20.1
0.0%	minimum	-20.1

Summary Statistics

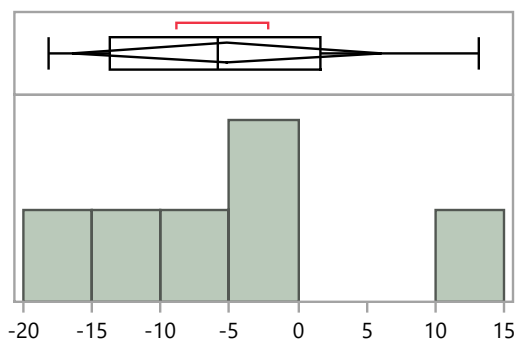
Mean	-0.6
Std Dev	10.0
Std Err Mean	1.8
Upper 95% Mean	3.1
Lower 95% Mean	-4.4
N	30.0

Distributions Analyte_Method=Manganese-54 Other**Bias****Quantiles**

100.0%	maximum	0.7
99.5%		0.7
97.5%		0.7
90.0%		0.7
75.0%	quartile	0.7
50.0%	median	-5.6
25.0%	quartile	-11.8
10.0%		-11.8
2.5%		-11.8
0.5%		-11.8
0.0%	minimum	-11.8

Summary Statistics

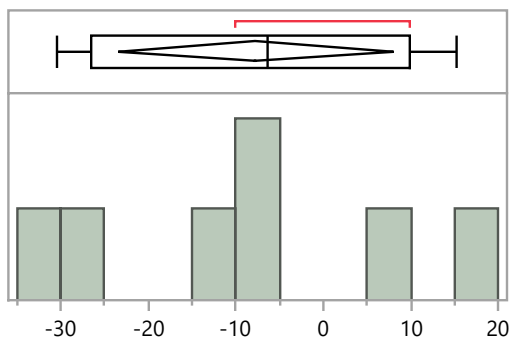
Mean	-5.6
Std Dev	8.8
Std Err Mean	6.3
Upper 95% Mean	73.9
Lower 95% Mean	-85.0
N	2.0

Distributions Analyte_Method=Plutonium-238 Acid dissolution with hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	13.1
99.5%		13.1
97.5%		13.1
90.0%		13.1
75.0%	quartile	1.6
50.0%	median	-5.8
25.0%	quartile	-13.8
10.0%		-18.1
2.5%		-18.1
0.5%		-18.1
0.0%	minimum	-18.1

Summary Statistics

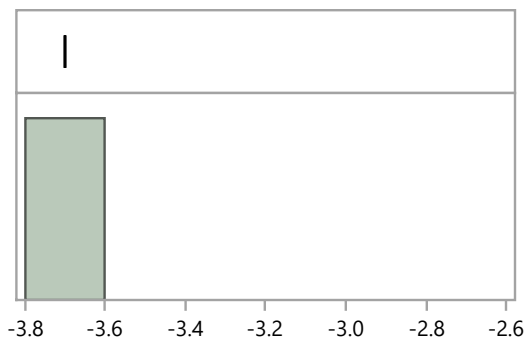
Mean	-5.2
Std Dev	10.8
Std Err Mean	4.4
Upper 95% Mean	6.1
Lower 95% Mean	-16.5
N	6.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Plutonium-238 Acid leaching without hydrofluoric acid****Bias****Quantiles**

100.0%	maximum	15.2
99.5%		15.2
97.5%		15.2
90.0%		15.2
75.0%	quartile	9.9
50.0%	median	-6.3
25.0%	quartile	-26.6
10.0%		-30.5
2.5%		-30.5
0.5%		-30.5
0.0%	minimum	-30.5

Summary Statistics

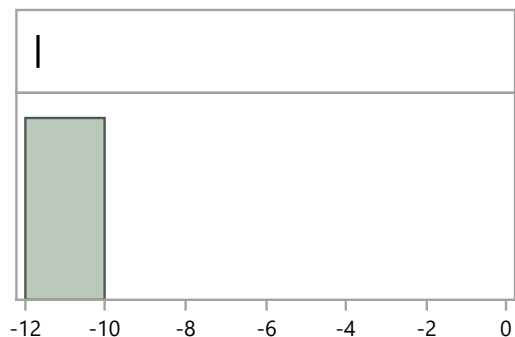
Mean	-7.7
Std Dev	16.9
Std Err Mean	6.4
Upper 95% Mean	8.0
Lower 95% Mean	-23.4
N	7.0

Distributions Analyte_Method=Plutonium-238 EPA 907, Actinide Elements, 600/4/80-032**Bias****Quantiles**

100.0%	maximum	-3.7
99.5%		-3.7
97.5%		-3.7
90.0%		-3.7
75.0%	quartile	-3.7
50.0%	median	-3.7
25.0%	quartile	-3.7
10.0%		-3.7
2.5%		-3.7
0.5%		-3.7
0.0%	minimum	-3.7

Summary Statistics

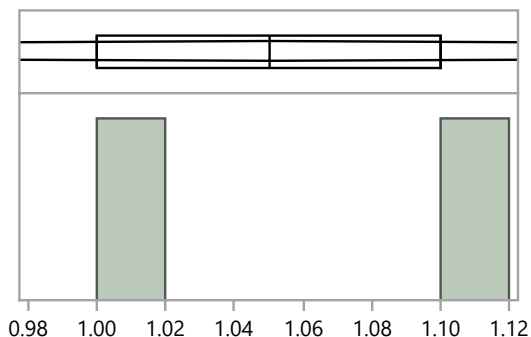
Mean	-3.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Plutonium-238 Other**Bias****Quantiles**

100.0%	maximum	-11.7
99.5%		-11.7
97.5%		-11.7
90.0%		-11.7
75.0%	quartile	-11.7
50.0%	median	-11.7
25.0%	quartile	-11.7
10.0%		-11.7
2.5%		-11.7
0.5%		-11.7
0.0%	minimum	-11.7

Summary Statistics

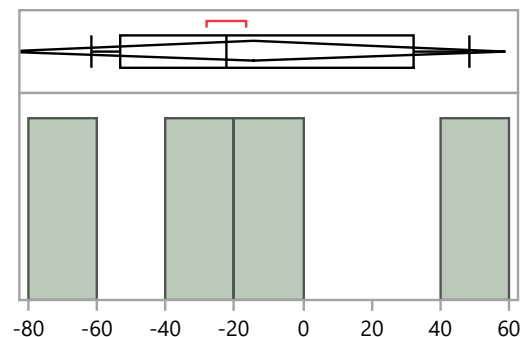
Mean	-11.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Plutonium-238 Total dissolution by fusion****Bias****Quantiles**

100.0%	maximum	1.1
99.5%		1.1
97.5%		1.1
90.0%		1.1
75.0%	quartile	1.1
50.0%	median	1.1
25.0%	quartile	1.0
10.0%		1.0
2.5%		1.0
0.5%		1.0
0.0%	minimum	1.0

Summary Statistics

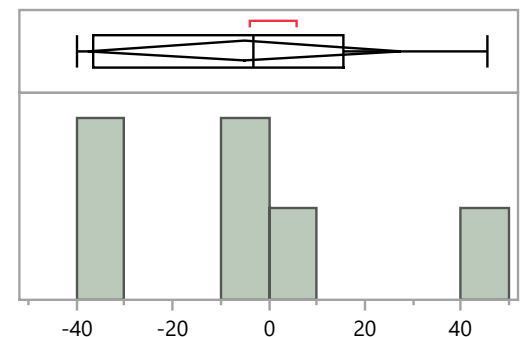
Mean	1.1
Std Dev	0.1
Std Err Mean	0.1
Upper 95% Mean	1.7
Lower 95% Mean	0.4
N	2.0

Distributions Analyte_Method=Strontium-90 Acid dissolution with hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	48.4
99.5%		48.4
97.5%		48.4
90.0%		48.4
75.0%	quartile	32.1
50.0%	median	-22.5
25.0%	quartile	-53.1
10.0%		-61.4
2.5%		-61.4
0.5%		-61.4
0.0%	minimum	-61.4

Summary Statistics

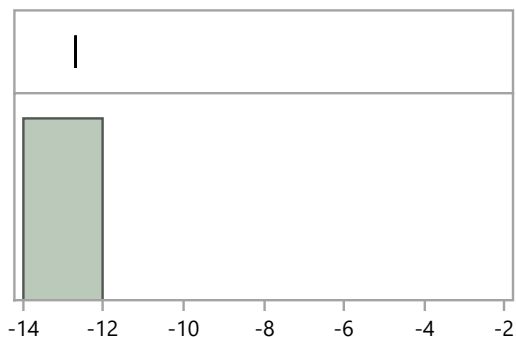
Mean	-14.5
Std Dev	46.0
Std Err Mean	23.0
Upper 95% Mean	58.7
Lower 95% Mean	-87.7
N	4.0

Distributions Analyte_Method=Strontium-90 Acid leaching without hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	45.4
99.5%		45.4
97.5%		45.4
90.0%		45.4
75.0%	quartile	15.6
50.0%	median	-3.4
25.0%	quartile	-36.3
10.0%		-40.0
2.5%		-40.0
0.5%		-40.0
0.0%	minimum	-40.0

Summary Statistics

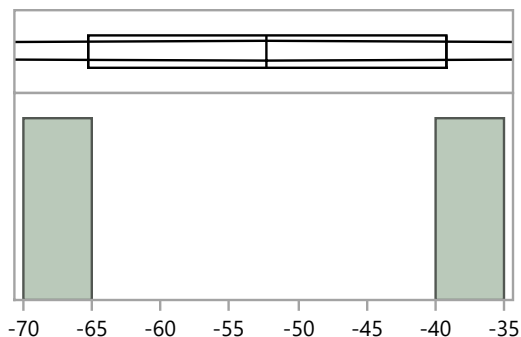
Mean	-5.1
Std Dev	31.0
Std Err Mean	12.6
Upper 95% Mean	27.4
Lower 95% Mean	-37.6
N	6.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Strontium-90 EPA 905, Radioactive Strontium, 600/4-80-032****Bias****Quantiles**

100.0%	maximum	-12.7
99.5%		-12.7
97.5%		-12.7
90.0%		-12.7
75.0%	quartile	-12.7
50.0%	median	-12.7
25.0%	quartile	-12.7
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

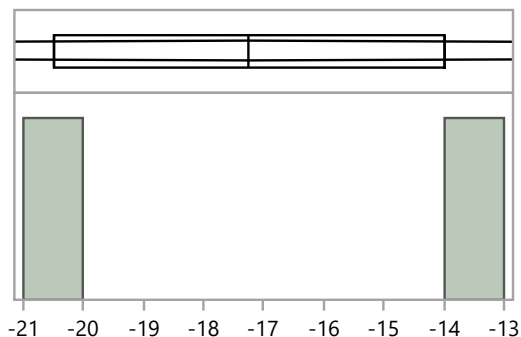
Mean	-12.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Strontium-90 Other**Bias****Quantiles**

100.0%	maximum	-39.2
99.5%		-39.2
97.5%		-39.2
90.0%		-39.2
75.0%	quartile	-39.2
50.0%	median	-52.3
25.0%	quartile	-65.3
10.0%		-65.3
2.5%		-65.3
0.5%		-65.3
0.0%	minimum	-65.3

Summary Statistics

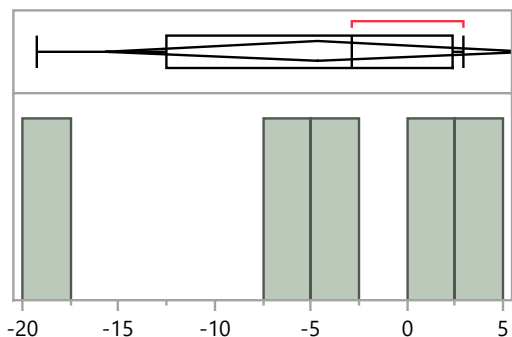
Mean	-52.3
Std Dev	18.5
Std Err Mean	13.0
Upper 95% Mean	113.6
Lower 95% Mean	-218.1
N	2.0

Distributions Analyte_Method=Strontium-90 Total dissolution by fusion**Bias****Quantiles**

100.0%	maximum	-14.0
99.5%		-14.0
97.5%		-14.0
90.0%		-14.0
75.0%	quartile	-14.0
50.0%	median	-17.3
25.0%	quartile	-20.5
10.0%		-20.5
2.5%		-20.5
0.5%		-20.5
0.0%	minimum	-20.5

Summary Statistics

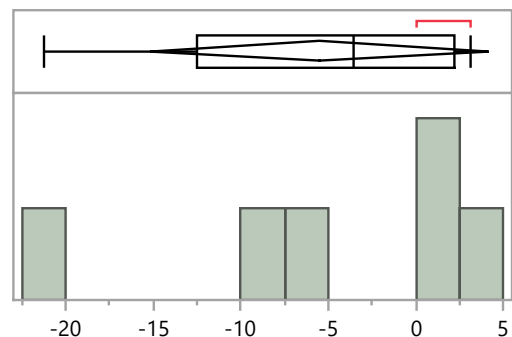
Mean	-17.3
Std Dev	4.6
Std Err Mean	3.3
Upper 95% Mean	24.0
Lower 95% Mean	-58.5
N	2.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Uranium-234 Acid dissolution with hydrofluoric acid****Bias****Quantiles**

100.0%	maximum	2.9
99.5%		2.9
97.5%		2.9
90.0%		2.9
75.0%	quartile	2.4
50.0%	median	-2.9
25.0%	quartile	-12.5
10.0%		-19.2
2.5%		-19.2
0.5%		-19.2
0.0%	minimum	-19.2

Summary Statistics

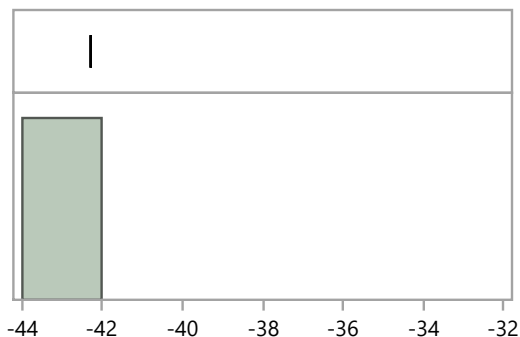
Mean	-4.6
Std Dev	8.9
Std Err Mean	4.0
Upper 95% Mean	6.4
Lower 95% Mean	-15.7
N	5.0

Distributions Analyte_Method=Uranium-234 Acid leaching without hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	2.2
50.0%	median	-3.6
25.0%	quartile	-12.5
10.0%		-21.2
2.5%		-21.2
0.5%		-21.2
0.0%	minimum	-21.2

Summary Statistics

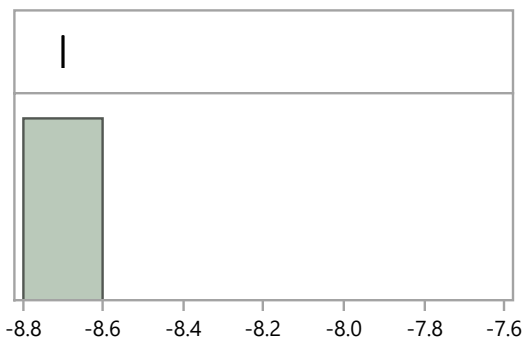
Mean	-5.5
Std Dev	9.2
Std Err Mean	3.8
Upper 95% Mean	4.2
Lower 95% Mean	-15.2
N	6.0

Distributions Analyte_Method=Uranium-234 EPA 908, Uranium-Radiochemical Method, 600/4/80-032**Bias****Quantiles**

100.0%	maximum	-42.3
99.5%		-42.3
97.5%		-42.3
90.0%		-42.3
75.0%	quartile	-42.3
50.0%	median	-42.3
25.0%	quartile	-42.3
10.0%		-42.3
2.5%		-42.3
0.5%		-42.3
0.0%	minimum	-42.3

Summary Statistics

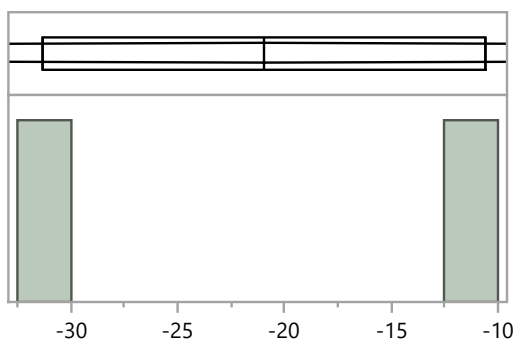
Mean	-42.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Uranium-234 Evaporation, acidified****Bias****Quantiles**

100.0%	maximum	-8.7
99.5%		-8.7
97.5%		-8.7
90.0%		-8.7
75.0%	quartile	-8.7
50.0%	median	-8.7
25.0%	quartile	-8.7
10.0%		-8.7
2.5%		-8.7
0.5%		-8.7
0.0%	minimum	-8.7

Summary Statistics

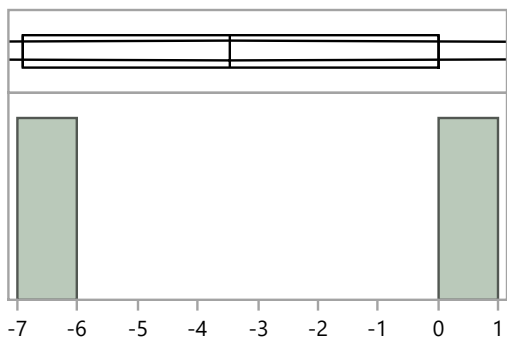
Mean	-8.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Uranium-234 Other**Bias****Quantiles**

100.0%	maximum	-10.6
99.5%		-10.6
97.5%		-10.6
90.0%		-10.6
75.0%	quartile	-10.6
50.0%	median	-21.0
25.0%	quartile	-31.3
10.0%		-31.3
2.5%		-31.3
0.5%		-31.3
0.0%	minimum	-31.3

Summary Statistics

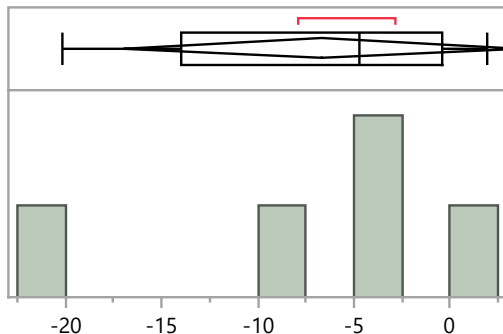
Mean	-21.0
Std Dev	14.6
Std Err Mean	10.4
Upper 95% Mean	110.6
Lower 95% Mean	-152.5
N	2.0

Distributions Analyte_Method=Uranium-234 Total dissolution by fusion**Bias****Quantiles**

100.0%	maximum	0.0
99.5%		0.0
97.5%		0.0
90.0%		0.0
75.0%	quartile	0.0
50.0%	median	-3.5
25.0%	quartile	-6.9
10.0%		-6.9
2.5%		-6.9
0.5%		-6.9
0.0%	minimum	-6.9

Summary Statistics

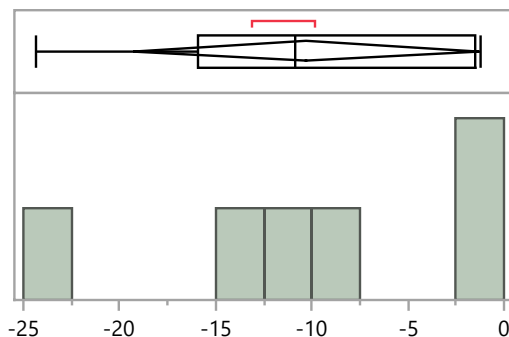
Mean	-3.5
Std Dev	4.9
Std Err Mean	3.5
Upper 95% Mean	40.4
Lower 95% Mean	-47.3
N	2.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Uranium-238 Acid dissolution with hydrofluoric acid****Bias****Quantiles**

100.0%	maximum	1.9
99.5%		1.9
97.5%		1.9
90.0%		1.9
75.0%	quartile	-0.5
50.0%	median	-4.7
25.0%	quartile	-14.0
10.0%		-20.1
2.5%		-20.1
0.5%		-20.1
0.0%	minimum	-20.1

Summary Statistics

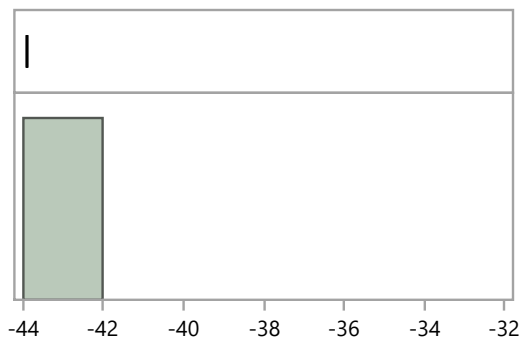
Mean	-6.7
Std Dev	8.3
Std Err Mean	3.7
Upper 95% Mean	3.6
Lower 95% Mean	-17.0
N	5.0

Distributions Analyte_Method=Uranium-238 Acid leaching without hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	-1.2
99.5%		-1.2
97.5%		-1.2
90.0%		-1.2
75.0%	quartile	-1.5
50.0%	median	-10.9
25.0%	quartile	-15.9
10.0%		-24.3
2.5%		-24.3
0.5%		-24.3
0.0%	minimum	-24.3

Summary Statistics

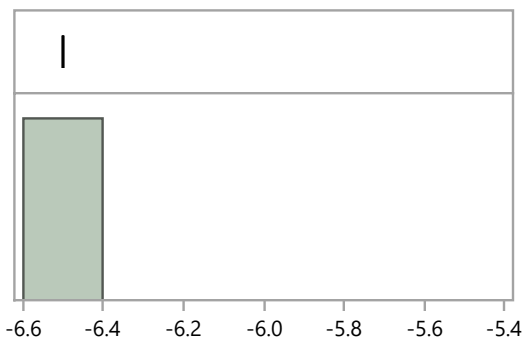
Mean	-10.3
Std Dev	8.5
Std Err Mean	3.5
Upper 95% Mean	-1.4
Lower 95% Mean	-19.3
N	6.0

Distributions Analyte_Method=Uranium-238 EPA 908, Uranium-Radiochemical Method, 600/4/80-032**Bias****Quantiles**

100.0%	maximum	-43.9
99.5%		-43.9
97.5%		-43.9
90.0%		-43.9
75.0%	quartile	-43.9
50.0%	median	-43.9
25.0%	quartile	-43.9
10.0%		-43.9
2.5%		-43.9
0.5%		-43.9
0.0%	minimum	-43.9

Summary Statistics

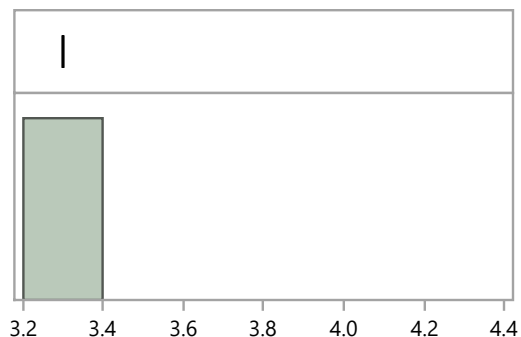
Mean	-43.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Uranium-238 Evaporation, acidified****Bias****Quantiles**

100.0%	maximum	-6.5
99.5%		-6.5
97.5%		-6.5
90.0%		-6.5
75.0%	quartile	-6.5
50.0%	median	-6.5
25.0%	quartile	-6.5
10.0%		-6.5
2.5%		-6.5
0.5%		-6.5
0.0%	minimum	-6.5

Summary Statistics

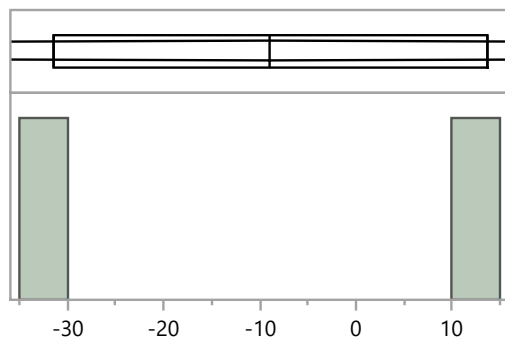
Mean	-6.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Uranium-238 No preparation - analyzed as received**Bias****Quantiles**

100.0%	maximum	3.3
99.5%		3.3
97.5%		3.3
90.0%		3.3
75.0%	quartile	3.3
50.0%	median	3.3
25.0%	quartile	3.3
10.0%		3.3
2.5%		3.3
0.5%		3.3
0.0%	minimum	3.3

Summary Statistics

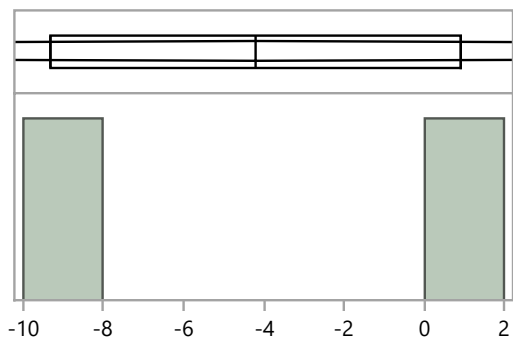
Mean	3.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1.0

Distributions Analyte_Method=Uranium-238 Other**Bias****Quantiles**

100.0%	maximum	13.6
99.5%		13.6
97.5%		13.6
90.0%		13.6
75.0%	quartile	13.6
50.0%	median	-9.0
25.0%	quartile	-31.5
10.0%		-31.5
2.5%		-31.5
0.5%		-31.5
0.0%	minimum	-31.5

Summary Statistics

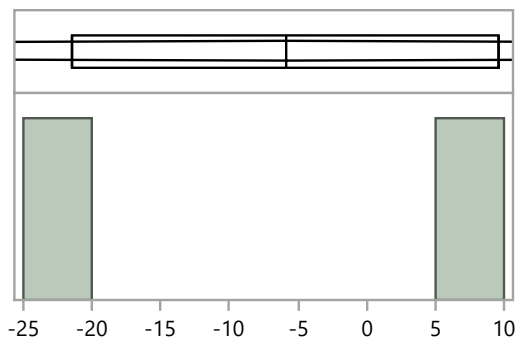
Mean	-9.0
Std Dev	31.9
Std Err Mean	22.6
Upper 95% Mean	277.6
Lower 95% Mean	-295.5
N	2.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Uranium-238 Total dissolution by fusion****Bias****Quantiles**

100.0%	maximum	0.9
99.5%		0.9
97.5%		0.9
90.0%		0.9
75.0%	quartile	0.9
50.0%	median	-4.2
25.0%	quartile	-9.3
10.0%		-9.3
2.5%		-9.3
0.5%		-9.3
0.0%	minimum	-9.3

Summary Statistics

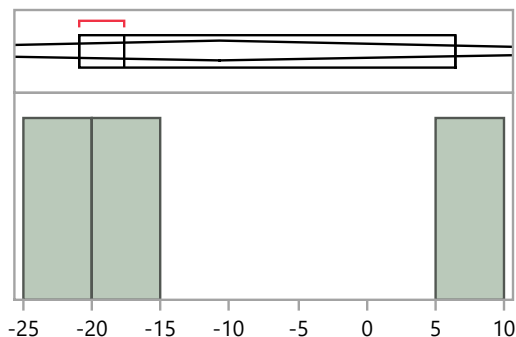
Mean	-4.2
Std Dev	7.2
Std Err Mean	5.1
Upper 95% Mean	60.6
Lower 95% Mean	-69.0
N	2.0

Distributions Analyte_Method=Zinc-65 Acid dissolution with hydrofluoric acid**Bias****Quantiles**

100.0%	maximum	9.6
99.5%		9.6
97.5%		9.6
90.0%		9.6
75.0%	quartile	9.6
50.0%	median	-5.9
25.0%	quartile	-21.4
10.0%		-21.4
2.5%		-21.4
0.5%		-21.4
0.0%	minimum	-21.4

Summary Statistics

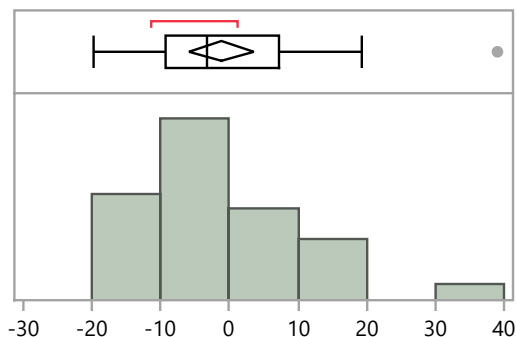
Mean	-5.9
Std Dev	21.9
Std Err Mean	15.5
Upper 95% Mean	191.0
Lower 95% Mean	-202.8
N	2.0

Distributions Analyte_Method=Zinc-65 EPA 901.1, Gamma Emitting, 600/4-80-032**Bias****Quantiles**

100.0%	maximum	6.4
99.5%		6.4
97.5%		6.4
90.0%		6.4
75.0%	quartile	6.4
50.0%	median	-17.6
25.0%	quartile	-20.9
10.0%		-20.9
2.5%		-20.9
0.5%		-20.9
0.0%	minimum	-20.9

Summary Statistics

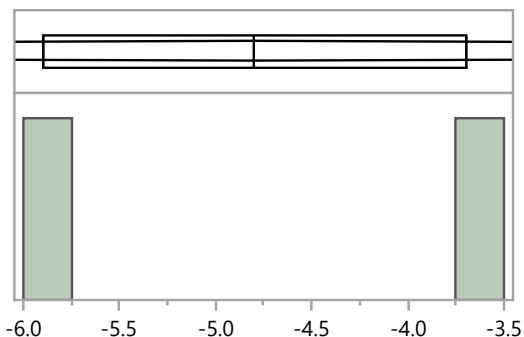
Mean	-10.7
Std Dev	14.9
Std Err Mean	8.6
Upper 95% Mean	26.3
Lower 95% Mean	-47.7
N	3.0

RdV52 Distribution by Preparation Method**Distributions Analyte_Method=Zinc-65 No preparation - analyzed as received****Bias****Quantiles**

100.0%	maximum	39.0
99.5%		39.0
97.5%		39.0
90.0%		17.6
75.0%	quartile	7.2
50.0%	median	-3.2
25.0%	quartile	-9.4
10.0%		-18.2
2.5%		-19.8
0.5%		-19.8
0.0%	minimum	-19.8

Summary Statistics

Mean	-1.1
Std Dev	12.9
Std Err Mean	2.4
Upper 95% Mean	3.7
Lower 95% Mean	-5.9
N	30.0

Distributions Analyte_Method=Zinc-65 Other**Bias****Quantiles**

100.0%	maximum	-3.7
99.5%		-3.7
97.5%		-3.7
90.0%		-3.7
75.0%	quartile	-3.7
50.0%	median	-4.8
25.0%	quartile	-5.9
10.0%		-5.9
2.5%		-5.9
0.5%		-5.9
0.0%	minimum	-5.9

Summary Statistics

Mean	-4.8
Std Dev	1.6
Std Err Mean	1.1
Upper 95% Mean	9.2
Lower 95% Mean	-18.8
N	2.0