MaW24 Samples Shipped

Lab Code	Lab Name	MaW
ADEM01	Alabama Department of Environmental Management	1
ANLA01	Argonne National Laboratory/Analytical Chemistry Lab.	1
ANLB01	Argonne National Laboratory	1
ANTE01	ALS Environmental	2
AREV01	AREVA - CMC	1
ARGO01	Idaho National Laboratory	1
ARPL01	Analytical Support Operations - Radiochemical Processing Lab	1
ARSL01	American Radiation Services Inc.	1
AY1201	B&W Y-12, Analytical Chemistry Organization Laboratory	3
CDHS01	California Department of Public Health	1
CEEA99	Laboratorio de Vigilancia Ambiental Radiactiva	1
CESL01	Lawrence Livermore National Laboratory - EMRL	1
CHMH01	222-S Laboratory	3
CHPR01	CHPRC Central Count Room	1
CMRC01	Carlsbad Environmental Monitoring and Research Center	1
CORE02	TestAmerica Denver	1
DAFI01	Davis & Floyd, Inc.	1
DEHS01	Department of Environmental Health & Safety	1
DLEA01	DLE Associates	1
DPHE01	Colorado Dept. of Public Health & Env. / Laboratory Services Div.	1
DRMG01	B&W Pantex - D&RMG	1
EMAX01	EMAX Laboratories, Inc	1
EPAL01	U. S. EPA Office of Radiation and Indoor Air	1
ERAD01	Lawrence Livermore National Laboratory ERAD	1
ERCL01	Washington State Public Health Laboratories	1
ERHD99	Radiation Protection Bureau RSD NMS	1
ERLG01	Environmental Radiation Laboratory	1
ERPD99	Ministry Of Health,Radiation Protection Department Lab	1
ESCQ99	Environmental Studies Centre (ESC)	1
ESDE01	Region 5 EQC Tritium Lab	1
ETTP01	MCL Inc, ETTP	1
EULC01	EnergySolutions, LLC	1
FDHE01	Florida Dept of Health Environmental Laboratory	1
FDOH01	Florida Dept. of Health, Mobile Environmental Radiological Lab	1
FERM01	Fernald Project	1
FMEC99	Foods and Water Laboratories Center	1
FSCL01	Lawrence Livermore Laboratory	1
GENE01	GEL Laboratories, LLC	2
GPCL01	Georgia Power Company Environmental Laboratory	1
HCAL01	Hazards Control Analytical Lab	1
HECR01	SC Dept. Health and Environmental Control Radiological Laboratory	4

HPAC99	HPA, CRCE Scotland	1
IAEA99	International Atomic Energy Agency	1
IDGR01	Oak Ridge National Laboratory-Internal Dosimetry Group	1
ISUP01	ISU - Department of Physics/Health Physics/EAL	1
JAEC99	Radiation Measurements Laboratory	2
JCAL99	Royal Scientific Society, Environmental Instrumental Analysis Laboratory	1
JLNN01	Jefferson Laboratory	1
KDHE01	Kansas Dept. of Health & Environment	1
LAEC99	Lebanese Atomic Energy Commission - Environmental Radiation	1
LANL01	Los Alamos National Laboratory	1
LAWR01	LAWRENCE BERKELEY NATIONAL LABORATORY	1
LAWR02	Lawrence Livermore National Laboratory	1
LECR99	Centre for Ecology and Hydrology	1
LGCL99	LGC Ltd	1
LOCK03	Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory	1
MAHP59	Materials Assessment and Health Physics Group	1
MART01	USEC, Inc.	2
MART02	United States Enrichment Corporation	3
MART03	Radioactive Material Analysis Laboratory	1
MDPH01	MDPH-Radiation Control Program	1
MLIL01	Microbac Laboratories, Inc	1
MSCL01	MSC	1
NARL01	National Air and Radiation Environmental Laboratory	3
NARL02	USEPA - NAREL - MERL	1
NESI01	B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory	4
NRLL99	National Radiation Laboratory	1
NTSI01	Nuclear Technology Services, Inc.	1
OBGL01	Life Science Laboratories, Inc.	1
ODHL01	Ohio Department of Health Laboratory	1
ORIS01	ORISE/IEAV	1
OTLI01	Outreach Technologies, Inc.	2
PESL01	Environmental Science Lab PNNL/ESL	1
QUAN01	TestAmerica St. Louis	1
QUAN02	TestAmerica Knoxville	1
QUAN03	TestAmerica	1
RMCL99	Royal Scientific Society - Radiation Protection Lab	1
RPSC01	Radiation Protection Service	1
RSAL01	RSA Laboratories, Inc.	1
RSIR99	Instituto de Radioprotecao e Dosimetria - IRD/CNEN	1
SAVA01	SAVANNAH RIVER NUCLEAR SOLUTIONS (SRNS)	1
SEML01	SRS Environmental Monitoring Laboratory	3
SLAC01	SLAC DOE National Accelerator Laboratory	1
SNRC99	Soreq NRC	1
SOUT01	Southwest Research Institute	2

SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagnostics	1
TDHL01	Texas Department of State Health Services Laboratory	1
TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES	1
TELE02	Environmental, Inc., Midwest Lab	1
TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY	3
TMAR01	Eberline Analytical Corp. Richmond CA Lab	1
TNUT01	FUSRAP	1
UNTE01	UniTech-235	1
UQNP99	Qatar University- Nuclear Physics Lab	2
USED99	National Center for Nuclear Energy, Sciences and Techniques	1
WEST01	Lionville Laboratory	1
WEST03	Waste Sampling and Characterization Facility, MSA/RJLG	3
WEST04	PACE ANALYTICAL SERVICES, PITTSBURGH	1
WIPH01	WI, DPH, Radiation Protection Section	1
WIPP01	WIPP Laboratories	1
WSHL01	Wisconsin State Laboratory of Hygiene	1
WSTI01	Waste Stream Technology Inc.	1
WVDP01	WVDP Environmental Laboratory	1
YPGA01	US Army Yuma Proving Ground / Material Analysis Lab	1
	Total	**131**

MaW24 Laboratories Not Reporting Data

13 of **83** labs who received samples for this study have not yet entered data.

	Lab Code	Lab Name
1	AREV01	AREVA - CMC
2	CDHS01	California Department of Public Health
3	CHPR01	CHPRC Central Count Room
4	ERAD01	Lawrence Livermore National Laboratory ERAD
5	FSCL01	Lawrence Livermore Laboratory
6	MSCL01	MSC
7	NARL01	National Air and Radiation Environmental Laboratory
8	NTSI01	Nuclear Technology Services, Inc.
9	OBGL01	Life Science Laboratories, Inc.
10	RSAL01	RSA Laboratories, Inc.
11	SAVA01	SAVANNAH RIVER NUCLEAR SOLUTIONS (SRNS)
12	WIPH01	WI, DPH, Radiation Protection Section
13	WSTI01	Waste Stream Technology Inc.

MaW24 Reference Values

Analyte Name	Reference Value	Uncertainty	False Pos	Sens Eval
Antimony	6.37	0.13		
Arsenic	3.17	0.06		
Barium	0.942	0.018		
Beryllium	0.489	0.010		
Cadmium	0.489	0.010		
Chromium	1.13	0.02		
Cobalt	2.96	0.06		
Copper	1.66	0.03		
Lead	0.694	0.014		
Mercury	0.098	0.002		
Nickel	1.66	0.03		
Selenium	0.908	0.018		
Technetium-99	1.43E-05	3.00E-07		
Thallium	2.23	0.04		
Uranium-235	0.00090	0.00002		
Uranium-238	0.124	0.004		
Uranium-Total	0.125	0.004		
Vanadium	4.60	0.09		
Zinc	7.08	0.14		
Americium-241	0.529	0.008		
Cesium-134	21.5	0.3		
Cesium-137	29.4	0.5		
Cobalt-57			✓	
Cobalt-60	24.6	0.2		
Hydrogen-3	243	5		
Iron-55	26.4	0.5		
Manganese-54	31.6	0.6		
Nickel-63	18.6	0.4		
Plutonium-238	1.064	0.017		
Plutonium-239/240	0.809	0.012		
Potassium-40	91	4		
Strontium-90	8.72	0.18		
Technetium-99	8.99	0.16		
Uranium-234/233	1.50	0.04		
Uranium-238	1.54	0.05		
Zinc-65			✓	

Radiological Reference Date: 2/1/2011 12:00

MAPEP Mixed Analyte Performance Evaluation Program

Sample Statistical Summary

MAPEP-11-MaW24

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Inorganic							Units: (mg/L)
Antimony	27	26	6.47	0.54	6.37	0.13	4.46 - 8.28
Arsenic	28	27	3.22	0.30	3.17	0.06	2.22 - 4.12
Barium	27	26	0.932	0.073	0.942	0.018	0.659 - 1.225
Beryllium	28	27	0.476	0.054	0.489	0.010	0.342 - 0.636
Cadmium	29	28	0.489	0.033	0.489	0.010	0.342 - 0.636
Chromium	28	28	1.12	0.11	1.13	0.02	0.79 - 1.47
Cobalt	28	27	2.84	0.19	2.96	0.06	2.07 - 3.85
Copper	28	26	1.60	0.16	1.66	0.03	1.16 - 2.16
Lead	29	27	0.677	0.058	0.694	0.014	0.486 - 0.902
Mercury	24	21	0.099	0.009	0.098	0.002	0.069 - 0.127
Nickel	28	26	1.58	0.11	1.66	0.03	1.16 - 2.16
Selenium	26	22	0.901	0.084	0.908	0.018	0.636 - 1.180
Technetium-99	4	2			1.43E-5	3.00E-7	1.00E-5 - 1.86E-5
Thallium	26	25	2.16	0.21	2.23	0.04	1.56 - 2.90
Uranium-235	15	12	0.00089	0.00006	0.00090	0.00002	0.00063 - 0.00117
Uranium-238	18	17	0.124	0.009	0.124	0.004	0.087 - 0.161
Uranium-Total	23	20	0.121	0.009	0.125	0.004	0.088 - 0.163
Vanadium	28	26	4.64	0.38	4.60	0.09	3.22 - 5.98
Zinc	28	26	6.95	0.67	7.08	0.14	4.96 - 9.20

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/L)
Americium-241	48	35	0.527	0.061	0.529	0.008	0.370 - 0.688
Cesium-134	72	69	19.9	1.7	21.5	0.3	15.1 - 28.0
Cesium-137	74	72	29.6	1.4	29.4	0.5	20.6 - 38.2
Cobalt-57	52	49					False Positive Test
Cobalt-60	74	73	24.5	1.3	24.6	0.2	17.2 - 32.0
Hydrogen-3	51	44	248	22	243	5	170 - 316
Iron-55	11	8	25.1	3.7	26.4	0.5	18.5 - 34.3
Manganese-54	73	72	32.0	2.1	31.6	0.6	22.1 - 41.1
Nickel-63	18	14	18.3	2.8	18.6	0.4	13.0 - 24.2
Plutonium-238	39	36	1.023	0.082	1.064	0.017	0.745 - 1.383
Plutonium-239/240	39	37	0.745	0.058	0.809	0.012	0.566 - 1.052
Potassium-40	62	59	94	9	91	4	64 - 118
Strontium-90	39	36	8.73	0.78	8.72	0.18	6.10 - 11.34
Technetium-99	24	22	8.77	1.25	8.99	0.16	6.29 - 11.69
Uranium-234/233	38	38	1.53	0.10	1.50	0.04	1.05 - 1.95
Uranium-238	40	38	1.49	0.07	1.54	0.05	1.08 - 2.00
Zinc-65	51	48					False Positive Test

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 and values indicated as "Not Acceptable".

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%

N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Flag Summary Report

MAPEP-11-MaW24

Inorganic				
Analyte	**A**	**W**	**RW**	**N**
Antimony	25	1		1
Arsenic	25	2		1
Barium	26			
Beryllium	24	3		1
Cadmium	28			1
Chromium	26	2		
Cobalt	27			1
Copper	24	2		2
Lead	26	1		2
Mercury	20	1		1
Nickel	26			2
Selenium	21	1		3
Thallium	24	1		1
Uranium-Total	20			1
Uranium-235	12			3
Uranium-238	17			1
Vanadium	26			2
Zinc	25	1		2
Technetium-99	2			1

Radiological				
Analyte	**A**	**W**	**RW**	**N**
Americium-241	31	4		13
Cesium-134	66	3		4
Cesium-137	72			2
Cobalt-57	49			25
Cobalt-60	72	1		1
Hydrogen-3	42	2		7
Iron-55	6	2		3
Manganese-54	71	1		2
Nickel-63	11	3		4
Plutonium-238	36			3
Plutonium-239/240	36	1		2
Potassium-40	55	4		4
Strontium-90	34	2		3
Technetium-99	20	2		2
Uranium-234/233	38			
Uranium-238	38			2
Zinc-65	48			26

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ADEM01) Alabama Department of Environmental Management
Montgomery Laboratory
Montgomery, AL 36110

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.79	21.5	A		-8.0	15.1 - 28.0	0.54	L
Cesium-137	29.89	29.4	A		1.7	20.6 - 38.2	0.87	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.48	24.6	A		-0.5	17.2 - 32.0	0.49	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.48	31.6	A		2.8	22.1 - 41.1	0.81	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ANLA01) Argonne National Laboratory/Analytical Chemistry Lab.
9700 S. Cass Avenue
Argonne, IL 60439-4803

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	3.14	3.17	A		-0.9	2.22 - 4.12	0.31	
Barium	0.86	0.942	A		-8.7	0.659 - 1.225	0.09	
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	0.45	0.489	A		-8.0	0.342 - 0.636	0.04	
Chromium	1.05	1.13	A		-7.1	0.79 - 1.47	0.10	
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	0.62	0.694	A		-10.7	0.486 - 0.902	0.06	
Mercury	0.0951	0.098	A		-3.0	0.069 - 0.127	0.009	
Nickel	NR	1.66				1.16 - 2.16		
Selenium	0.86	0.908	A		-5.3	0.636 - 1.180	0.09	
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.0	21.5	A		-11.6	15.1 - 28.0	0.6	
Cesium-137	28.2	29.4	A		-4.1	20.6 - 38.2	0.8	L
Cobalt-57	0.98		N	(1)		False Positive Test	0.29	
Cobalt-60	23.1	24.6	A		-6.1	17.2 - 32.0	0.7	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.8	31.6	A		0.6	22.1 - 41.1	1.0	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	103	91	A		13.2	64 - 118	3.4	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.9		A			False Positive Test	0.9	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ANLB01) Argonne National Laboratory
9700 S. Cass Ave
Argonne, IL 60439

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.51	0.529	A		-3.6	0.370 - 0.688	0.064	
Cesium-134	18.18	21.5	A		-15.4	15.1 - 28.0	0.78	
Cesium-137	29.79	29.4	A		1.3	20.6 - 38.2	0.53	L
Cobalt-57	0.19		A			False Positive Test	0.25	
Cobalt-60	26.12	24.6	A		6.2	17.2 - 32.0	0.71	L
Hydrogen-3	248.87	243	A		2.4	170 - 316	5.91	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.42	31.6	A		-0.6	22.1 - 41.1	0.78	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	0.95	1.064	A		-10.7	0.745 - 1.383	0.067	
Plutonium-239/240	0.683	0.809	A		-15.6	0.566 - 1.052	0.047	
Potassium-40	NR	91				64 - 118		
Strontium-90	8.18	8.72	A		-6.2	6.10 - 11.34	3.44	H

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.41	1.50	A		-6.0	1.05 - 1.95	0.07	
Uranium-238	1.34	1.54	A		-13.0	1.08 - 2.00	0.064	
Zinc-65	-0.74		A			False Positive Test	1.09	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
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NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ANTE01) ALS Environmental
225 Commerce Drive
Fort Collins, CO 80524-1416

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.02	6.37	A		-5.5	4.46 - 8.28		
Arsenic	2.97	3.17	A		-6.3	2.22 - 4.12		
Barium	0.789	0.942	A		-16.2	0.659 - 1.225		
Beryllium	0.374	0.489	W		-23.5	0.342 - 0.636		
Cadmium	0.459	0.489	A		-6.1	0.342 - 0.636		
Chromium	0.966	1.13	A		-14.5	0.79 - 1.47		
Cobalt	2.51	2.96	A		-15.2	2.07 - 3.85		
Copper	1.54	1.66	A		-7.2	1.16 - 2.16		
Lead	0.621	0.694	A		-10.5	0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	1.39	1.66	A		-16.3	1.16 - 2.16		
Selenium	0.866	0.908	A		-4.6	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.14	2.23	A		-4.0	1.56 - 2.90		
Uranium-235	0.000815	0.00090	A		-9.4	0.00063 - 0.00117		
Uranium-238	0.114	0.124	A		-8.1	0.087 - 0.161		
Uranium-Total	0.115	0.125	A		-8.0	0.088 - 0.163		
Vanadium	3.91	4.60	A		-15.0	3.22 - 5.98		
Zinc	6.2	7.08	A		-12.4	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.504	0.529	A		-4.7	0.370 - 0.688	0.042	
Cesium-134	20.35	21.5	A		-5.3	15.1 - 28.0	1.2	
Cesium-137	30.3	29.4	A		3.1	20.6 - 38.2	1.8	
Cobalt-57	0.1		A			False Positive Test	0.07	
Cobalt-60	24.15	24.6	A		-1.8	17.2 - 32.0	1.4	
Hydrogen-3	157	243	N		-35.4	170 - 316	12.3	
Iron-55	24.6	26.4	A		-6.8	18.5 - 34.3	2.8	
Manganese-54	32.4	31.6	A		2.5	22.1 - 41.1	1.9	
Nickel-63	30.2	18.6	N		62.4	13.0 - 24.2	3.75	
Plutonium-238	1.03	1.064	A		-3.2	0.745 - 1.383	0.082	
Plutonium-239/240	0.754	0.809	A		-6.8	0.566 - 1.052	0.061	
Potassium-40	89.2	91	A		-2.0	64 - 118	5.75	
Strontium-90	10	8.72	A		14.7	6.10 - 11.34	1.2	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.43	8.99	A		-6.2	6.29 - 11.69	0.79	
Uranium-234/233	1.53	1.50	A		2.0	1.05 - 1.95	0.12	
Uranium-238	1.5	1.54	A		-2.6	1.08 - 2.00	0.12	
Zinc-65	0.1		A			False Positive Test	0.3	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(AREV01) AREVA - CMC
1724 Mount Athos Road
Lynchburg, VA 24504

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ARGO01) Idaho National Laboratory
INL, Materials and Fuels Complex
Idaho Falls, ID 83415

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	2.0e+1	21.5	A		-7.0	15.1 - 28.0	1.5e0	
Cesium-137	2.8e+1	29.4	A		-4.8	20.6 - 38.2	3.63e+0	
Cobalt-57	1.06e-1		A			False Positive Test	7.52e-1	
Cobalt-60	2.41e+1	24.6	A		-2.0	17.2 - 32.0	1.98e0	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	3.07E+1	31.6	A		-2.8	22.1 - 41.1	3.9E+0	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	8.62E+1	91	A		-5.3	64 - 118	3.38E+1	H
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	5.33e-1		A			False Positive Test	7.50e-1	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ARSL01) American Radiation Services Inc.
2609 North River Road
Port Allen, LA 70767

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.412	0.529	W		-22.1	0.370 - 0.688	0.079	
Cesium-134	18.301	21.5	A		-14.9	15.1 - 28.0	1.193	
Cesium-137	29.780	29.4	A		1.3	20.6 - 38.2	1.283	
Cobalt-57	-0.028		A			False Positive Test	2.141	
Cobalt-60	23.783	24.6	A		-3.3	17.2 - 32.0	0.944	
Hydrogen-3	244.173	243	A		0.5	170 - 316	26.325	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.26	31.6	A		2.1	22.1 - 41.1	2.051	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.074	1.064	A		0.9	0.745 - 1.383	0.170	
Plutonium-239/240	0.731	0.809	A		-9.6	0.566 - 1.052	0.127	
Potassium-40	96.663	91	A		6.2	64 - 118	7.292	
Strontium-90	8.662	8.72	A		-0.7	6.10 - 11.34	1.374	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	13.2	8.99	N		46.8	6.29 - 11.69	3	H
Uranium-234/233	1.661	1.50	A		10.7	1.05 - 1.95	0.233	
Uranium-238	1.562	1.54	A		1.4	1.08 - 2.00	0.221	
Zinc-65	0.026		A			False Positive Test	0.474	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(AY1201) B&W Y-12, Analytical Chemistry Organization Laboratory
Y12, NSC, Bldg. 9995, Rm 142
Oak Ridge, TN 37831-8189

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.83	6.37	A		7.2	4.46 - 8.28		
Arsenic	3.35	3.17	A		5.7	2.22 - 4.12		
Barium	0.986	0.942	A		4.7	0.659 - 1.225		
Beryllium	0.512	0.489	A		4.7	0.342 - 0.636		
Cadmium	0.511	0.489	A		4.5	0.342 - 0.636		
Chromium	1.21	1.13	A		7.1	0.79 - 1.47		
Cobalt	3.01	2.96	A		1.7	2.07 - 3.85		
Copper	1.72	1.66	A		3.6	1.16 - 2.16		
Lead	0.669	0.694	A		-3.6	0.486 - 0.902		
Mercury	0.102	0.098	A		4.1	0.069 - 0.127		
Nickel	1.76	1.66	A		6.0	1.16 - 2.16		
Selenium	0.868	0.908	A		-4.4	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.43	2.23	A		9.0	1.56 - 2.90		
Uranium-235	0.00086	0.00090	A		-4.4	0.00063 - 0.00117		
Uranium-238	0.120	0.124	A		-3.2	0.087 - 0.161		
Uranium-Total	0.121	0.125	A		-3.2	0.088 - 0.163		
Vanadium	4.82	4.60	A		4.8	3.22 - 5.98		
Zinc	7.24	7.08	A		2.3	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.525	0.529	A		-0.8	0.370 - 0.688	0.072	
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	30.9	29.4	A		5.1	20.6 - 38.2	2.8	
Cobalt-57	0.20		A			False Positive Test	0.21	
Cobalt-60	25.1	24.6	A		2.0	17.2 - 32.0	1.2	
Hydrogen-3	256	243	A		5.4	170 - 316	27	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.9	31.6	A		7.3	22.1 - 41.1	2.3	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.10	1.064	A		3.4	0.745 - 1.383	0.13	
Plutonium-239/240	0.766	0.809	A		-5.3	0.566 - 1.052	0.10	
Potassium-40	120	91	N		31.9	64 - 118	14	
Strontium-90	8.40	8.72	A		-3.7	6.10 - 11.34	0.52	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	9.18	8.99	A		2.1	6.29 - 11.69	0.48	
Uranium-234/233	1.48	1.50	A		-1.3	1.05 - 1.95	0.17	
Uranium-238	1.43	1.54	A		-7.1	1.08 - 2.00	0.16	
Zinc-65	-0.03		A			False Positive Test	0.76	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CDHS01) California Department of Public Health
Drinking Water & Radiation Lab.
Richmond, CA 94804-6403

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CEEA99) Laboratorio de Vigilancia Ambiental Radiactiva
JUAN LARREA N15-36 Renovable RUC1768135980001
Quito, Pichincha EC170130

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	7.33	21.5	N		-65.9	15.1 - 28.0	1.71	H
Cesium-137	26.90	29.4	A		-8.5	20.6 - 38.2	1.88	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	47.0	24.6	N		91.1	17.2 - 32.0	5.27	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.98	31.6	A		4.4	22.1 - 41.1	2.41	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	87.27	91	A		-4.1	64 - 118	16.55	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CESL01) Lawrence Livermore National Laboratory - EMRL
7000 East Avenue
Livermore, CA 94551

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	2.76E+01	21.5	W		28.4	15.1 - 28.0	4.76E+00	
Cesium-137	NR	29.4	N	(28)		20.6 - 38.2		
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	2.36E+01	24.6	A		-4.1	17.2 - 32.0	1.67E+00	
Hydrogen-3	2.85E+02	243	A		17.3	170 - 316	1.48E+01	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	2.996E+01	31.6	A		-5.2	22.1 - 41.1	5.73E+00	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	4.33E-01	1.064	N		-59.3	0.745 - 1.383	1.81E-01	H
Plutonium-239/240	9.27E+01	0.809	N		11358.6	0.566 - 1.052	7.32E+00	
Potassium-40	1.06E+02	91	A		16.5	64 - 118	1.51E+02	H
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CHMH01) 222-S Laboratory
P.O. Box 250, MS T6-10
Richland, WA 99352

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	0.000869	0.00090	A		-3.4	0.00063 - 0.00117	0.0000040	L
Uranium-238	0.117	0.124	A		-5.6	0.087 - 0.161	0.00262	L
Uranium-Total	0.1183	0.125	A		-5.4	0.088 - 0.163	0.002616	L
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.512	0.529	A		-3.2	0.370 - 0.688	0.0462	
Cesium-134	23.2	21.5	A		7.9	15.1 - 28.0	1.60	
Cesium-137	33.8	29.4	A		15.0	20.6 - 38.2	1.90	
Cobalt-57	0.778		A			False Positive Test	1.23	
Cobalt-60	29.9	24.6	W		21.5	17.2 - 32.0	1.39	
Hydrogen-3	231	243	A		-4.9	170 - 316	24.7	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	36.6	31.6	A		15.8	22.1 - 41.1	2.03	
Nickel-63	14.8	18.6	W		-20.4	13.0 - 24.2	2.76	
Plutonium-238	0.0114	1.064	N		-98.9	0.745 - 1.383	0.000875	
Plutonium-239/240	0.802	0.809	A		-0.9	0.566 - 1.052	0.0666	
Potassium-40	66.6	91	W		-26.8	64 - 118	31.8	H
Strontium-90	7.63	8.72	A		-12.5	6.10 - 11.34	0.451	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	2.36	8.99	N		-73.7	6.29 - 11.69	1.70	H
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-12.6		N	(29)		False Positive Test	3.18	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CHPR01) CHPRC Central Count Room
2420 Stevens Center Place
Richland, WA 99352

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CMRC01) Carlsbad Environmental Monitoring and Research Center
1400 University Dr.
Carlsbad, NM 88220

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	5.08e-1	0.529	A		-4.0	0.370 - 0.688	1.75e-2	
Cesium-134	21.7	21.5	A		0.9	15.1 - 28.0	0.4	L
Cesium-137	31.6	29.4	A		7.5	20.6 - 38.2	0.6	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	23.6	24.6	A		-4.1	17.2 - 32.0	0.4	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.5	31.6	A		-0.3	22.1 - 41.1	0.6	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.01e0	1.064	A		-5.1	0.745 - 1.383	3.99e-2	
Plutonium-239/240	7.22e-1	0.809	A		-10.8	0.566 - 1.052	2.96e-2	
Potassium-40	99.9	91	A		9.8	64 - 118	3.8	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.60e0	1.50	A		6.7	1.05 - 1.95	8.33e-2	
Uranium-238	1.56e0	1.54	A		1.3	1.08 - 2.00	8.14e-2	
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(CORE02) TestAmerica Denver
4955 Yarrow St
Arvada, CO 80002

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.46	6.37	A		1.4	4.46 - 8.28		
Arsenic	3.31	3.17	A		4.4	2.22 - 4.12		
Barium	1.02	0.942	A		8.3	0.659 - 1.225		
Beryllium	0.476	0.489	A		-2.7	0.342 - 0.636		
Cadmium	0.481	0.489	A		-1.6	0.342 - 0.636		
Chromium	1.26	1.13	A		11.5	0.79 - 1.47		
Cobalt	2.98	2.96	A		0.7	2.07 - 3.85		
Copper	1.61	1.66	A		-3.0	1.16 - 2.16		
Lead	0.611	0.694	A		-12.0	0.486 - 0.902		
Mercury	0.0946	0.098	A		-3.5	0.069 - 0.127		
Nickel	1.68	1.66	A		1.2	1.16 - 2.16		
Selenium	0.913	0.908	A		0.6	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.96	2.23	A		-12.1	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.122	0.125	A		-2.4	0.088 - 0.163		
Vanadium	5.00	4.60	A		8.7	3.22 - 5.98		
Zinc	7.06	7.08	A		-0.3	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(DAFI01) Davis & Floyd, Inc.
PO Drawer 428
Greenwood, SC 29648

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	7.37	6.37	A		15.7	4.46 - 8.28		
Arsenic	3.77	3.17	A		18.9	2.22 - 4.12		
Barium	1.04	0.942	A		10.4	0.659 - 1.225		
Beryllium	0.533	0.489	A		9.0	0.342 - 0.636		
Cadmium	0.552	0.489	A		12.9	0.342 - 0.636		
Chromium	1.23	1.13	A		8.9	0.79 - 1.47		
Cobalt	2.94	2.96	A		-0.7	2.07 - 3.85		
Copper	1.76	1.66	A		6.0	1.16 - 2.16		
Lead	0.759	0.694	A		9.4	0.486 - 0.902		
Mercury	0.101	0.098	A		3.1	0.069 - 0.127		
Nickel	1.79	1.66	A		7.8	1.16 - 2.16		
Selenium	1.09	0.908	W		20.0	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.29	2.23	A		2.7	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	5.11	4.60	A		11.1	3.22 - 5.98		
Zinc	8.05	7.08	A		13.7	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(DEHS01) Department of Environmental Health & Safety
North Carolina State Univ.
Raleigh, NC 27695-8007

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.2	21.5	A		-15.3	15.1 - 28.0	1.0	
Cesium-137	30.5	29.4	A		3.7	20.6 - 38.2	2.0	
Cobalt-57	0.75		A			False Positive Test	0.85	
Cobalt-60	24.5	24.6	A		-0.4	17.2 - 32.0	1.2	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.4	31.6	A		5.7	22.1 - 41.1	2.1	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.96		A			False Positive Test	1.00	

Radiological Reference Date: February 1, 2011

Other Flags:

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L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(DLEA01) DLE Associates
730 Alfred Nobel Drive
Hercules, CA 94547

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	36.40	21.5	N		69.3	15.1 - 28.0	4.40	
Cesium-137	13.24	29.4	N		-55.0	20.6 - 38.2	1.49	
Cobalt-57	0.77		A			False Positive Test	0.51	
Cobalt-60	22.88	24.6	A		-7.0	17.2 - 32.0	3.02	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	3.37	31.6	N		-89.3	22.1 - 41.1	1.05	H
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	72.56	91	W		-20.3	64 - 118	11.22	
Strontium-90	8.71	8.72	A		-0.1	6.10 - 11.34	0.79	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	6.33		A			False Positive Test	3.21	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(DPHE01) Colorado Dept. of Public Health & Env. / Laboratory Services Div.
8100 Lowry Blvd
Denver, CO 80230

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.3	6.37	A		-1.1	4.46 - 8.28		
Arsenic	3.07	3.17	A		-3.2	2.22 - 4.12		
Barium	0.83	0.942	A		-11.9	0.659 - 1.225		
Beryllium	0.42	0.489	A		-14.1	0.342 - 0.636		
Cadmium	0.45	0.489	A		-8.0	0.342 - 0.636		
Chromium	0.98	1.13	A		-13.3	0.79 - 1.47		
Cobalt	2.58	2.96	A		-12.8	2.07 - 3.85		
Copper	1.54	1.66	A		-7.2	1.16 - 2.16		
Lead	0.60	0.694	A		-13.5	0.486 - 0.902		
Mercury	0.086	0.098	A		-12.2	0.069 - 0.127		
Nickel	1.43	1.66	A		-13.9	1.16 - 2.16		
Selenium	0.78	0.908	A		-14.1	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.9	2.23	A		-14.8	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.11	0.125	A		-12.0	0.088 - 0.163		
Vanadium	4.46	4.60	A		-3.0	3.22 - 5.98		
Zinc	6.69	7.08	A		-5.5	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.49	0.529	A		-7.4	0.370 - 0.688	0.04	
Cesium-134	19.85	21.5	A		-7.7	15.1 - 28.0	0.86	
Cesium-137	30.90	29.4	A		5.1	20.6 - 38.2	1.15	
Cobalt-57	0.36		A			False Positive Test	0.23	
Cobalt-60	23.97	24.6	A		-2.6	17.2 - 32.0	1.68	
Hydrogen-3	239.8	243	A		-1.3	170 - 316	9.7	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.02	31.6	A		7.7	22.1 - 41.1	1.35	
Nickel-63	31.1	18.6	N		67.2	13.0 - 24.2	2.7	
Plutonium-238	1.04	1.064	A		-2.3	0.745 - 1.383	0.10	
Plutonium-239/240	0.80	0.809	A		-1.1	0.566 - 1.052	0.08	
Potassium-40	116.41	91	W		27.9	64 - 118	8.41	
Strontium-90	6.1	8.72	N		-30.0	6.10 - 11.34	0.2	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.58	1.50	A		5.3	1.05 - 1.95	0.33	H
Uranium-238	1.58	1.54	A		2.6	1.08 - 2.00	0.33	H
Zinc-65	-0.33		A			False Positive Test	0.68	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(DRMG01) B&W Pantex - D&RMG
Bldg 12-122
Amarillo, TX 79120-0020

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	3.06E+01	21.5	N		42.3	15.1 - 28.0	6.81E+00	H
Cesium-137	2.97E+01	29.4	A		1.0	20.6 - 38.2	1.66E+00	
Cobalt-57	-1.09E+01		A			False Positive Test	1.21E+01	
Cobalt-60	2.51E+01	24.6	A		2.0	17.2 - 32.0	1.74E+00	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	3.21E+01	31.6	A		1.6	22.1 - 41.1	1.97E+00	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	8.69E+01	91	A		-4.5	64 - 118	1.52E+01	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(EMAX01) EMAX Laboratories, Inc
1835 W. 205th St.
Torrance, CA 90501

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	7.07	6.37	A		11.0	4.46 - 8.28		
Arsenic	3.41	3.17	A		7.6	2.22 - 4.12		
Barium	0.988	0.942	A		4.9	0.659 - 1.225		
Beryllium	0.496	0.489	A		1.4	0.342 - 0.636		
Cadmium	0.521	0.489	A		6.5	0.342 - 0.636		
Chromium	1.16	1.13	A		2.7	0.79 - 1.47		
Cobalt	2.89	2.96	A		-2.4	2.07 - 3.85		
Copper	1.78	1.66	A		7.2	1.16 - 2.16		
Lead	0.668	0.694	A		-3.7	0.486 - 0.902		
Mercury	0.1075	0.098	A		9.7	0.069 - 0.127		
Nickel	1.66	1.66	A		0.0	1.16 - 2.16		
Selenium	1.06	0.908	A		16.7	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.04	2.23	A		-8.5	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.105	0.125	A		-16.0	0.088 - 0.163		
Vanadium	4.80	4.60	A		4.3	3.22 - 5.98		
Zinc	7.96	7.08	A		12.4	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(EPAL01) U. S. EPA Office of Radiation and Indoor Air
944 E. Harmon Ave.
Las Vegas, NV 89119-6721

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.54	0.529	A		2.1	0.370 - 0.688	0.028	
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	236.7	243	A		-2.6	170 - 316	3.9	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.015	1.064	A		-4.6	0.745 - 1.383	0.034	
Plutonium-239/240	0.731	0.809	A		-9.6	0.566 - 1.052	0.026	
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.571	1.50	A		4.7	1.05 - 1.95	0.094	
Uranium-238	1.599	1.54	A		3.8	1.08 - 2.00	0.096	
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
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(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ERAD01) Lawrence Livermore National Laboratory ERAD
7000 East Ave., L-231
Livermore, CA 94551

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ERCL01) Washington State Public Health Laboratories
1610 N.E. 150 th Srteet
Shoreline, WA 98155-9701

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.57	6.37	A		3.1	4.46 - 8.28	0.66	
Arsenic	3.06	3.17	A		-3.5	2.22 - 4.12	0.31	
Barium	0.949	0.942	A		0.7	0.659 - 1.225	0.095	
Beryllium	0.540	0.489	A		10.4	0.342 - 0.636	0.054	
Cadmium	0.502	0.489	A		2.7	0.342 - 0.636	0.050	
Chromium	1.15	1.13	A		1.8	0.79 - 1.47	0.12	
Cobalt	2.86	2.96	A		-3.4	2.07 - 3.85	0.29	
Copper	1.62	1.66	A		-2.4	1.16 - 2.16	0.16	
Lead	0.736	0.694	A		6.1	0.486 - 0.902	0.074	
Mercury	NR	0.098				0.069 - 0.127		
Nickel	1.58	1.66	A		-4.8	1.16 - 2.16	0.16	
Selenium	0.907	0.908	A		-0.1	0.636 - 1.180	0.091	
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.40	2.23	A		7.6	1.56 - 2.90	0.24	
Uranium-235	0.000563	0.00090	N		-37.4	0.00063 - 0.00117	0.000056	
Uranium-238	0.140	0.124	A		12.9	0.087 - 0.161	0.014	
Uranium-Total	0.141	0.125	A		12.8	0.088 - 0.163	0.014	
Vanadium	4.98	4.60	A		8.3	3.22 - 5.98	0.50	
Zinc	7.13	7.08	A		0.7	4.96 - 9.20	0.71	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.529	0.529	A		0.0	0.370 - 0.688	0.032	
Cesium-134	17.1	21.5	W		-20.5	15.1 - 28.0	0.4	L
Cesium-137	28.9	29.4	A		-1.7	20.6 - 38.2	0.6	L
Cobalt-57	-0.28		A			False Positive Test	0.25	
Cobalt-60	26.8	24.6	A		8.9	17.2 - 32.0	0.4	L
Hydrogen-3	316	243	N		30.0	170 - 316	3	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	35.5	31.6	A		12.3	22.1 - 41.1	0.8	L
Nickel-63	20.6	18.6	A		10.8	13.0 - 24.2	1.1	
Plutonium-238	1.04	1.064	A		-2.3	0.745 - 1.383	0.06	
Plutonium-239/240	0.74	0.809	A		-8.5	0.566 - 1.052	0.043	
Potassium-40	97.3	91	A		6.9	64 - 118	5.1	
Strontium-90	9.10	8.72	A		4.4	6.10 - 11.34	0.30	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	10.4	8.99	A		15.7	6.29 - 11.69	0.3	L
Uranium-234/233	1.45	1.50	A		-3.3	1.05 - 1.95	0.08	
Uranium-238	1.45	1.54	A		-5.8	1.08 - 2.00	0.08	
Zinc-65	1.74		A			False Positive Test	0.62	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
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(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ERHD99) Radiation Protection Bureau RSD NMS
775 Brookfield Road AL6302D1
Ottawa, Ontario K1A 1C1

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.665	6.37	A		4.6	4.46 - 8.28	0.178	L
Arsenic	3.947	3.17	W		24.5	2.22 - 4.12	0.121	
Barium	0.968	0.942	A		2.8	0.659 - 1.225	.036	
Beryllium	0.376	0.489	W		-23.1	0.342 - 0.636	.059	
Cadmium	0.499	0.489	A		2.0	0.342 - 0.636	0.017	
Chromium	1.409	1.13	W		24.7	0.79 - 1.47	.031	L
Cobalt	3.093	2.96	A		4.5	2.07 - 3.85	.151	
Copper	2.178	1.66	N		31.2	1.16 - 2.16	.081	
Lead	0.786	0.694	A		13.3	0.486 - 0.902	0.027	
Mercury	NR	0.098				0.069 - 0.127		
Nickel	2.22	1.66	N		33.7	1.16 - 2.16	0.105	
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.163	2.23	A		-3.0	1.56 - 2.90	.098	
Uranium-235	0.000972	0.00090	A		8.0	0.00063 - 0.00117	.0001	
Uranium-238	.136	0.124	A		9.7	0.087 - 0.161	0.005	
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	8.018	4.60	N		74.3	3.22 - 5.98	0.234	L
Zinc	9.291	7.08	N		31.2	4.96 - 9.20	0.224	L

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.76	0.529	N		43.7	0.370 - 0.688	0.50	H
Cesium-134	19.636	21.5	A		-8.7	15.1 - 28.0	0.95	
Cesium-137	31.819	29.4	A		8.2	20.6 - 38.2	1.73	
Cobalt-57	-0.03		A			False Positive Test	0.37	
Cobalt-60	23.001	24.6	A		-6.5	17.2 - 32.0	1.23	
Hydrogen-3	272	243	A		11.9	170 - 316	9	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.639	31.6	A		6.5	22.1 - 41.1	2.01	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064	N	(28)		0.745 - 1.383		
Plutonium-239/240	NR	0.809	N	(28)		0.566 - 1.052		
Potassium-40	95.802	91	A		5.3	64 - 118	11.12	
Strontium-90	8.36	8.72	A		-4.1	6.10 - 11.34	0.65	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-1.38		A			False Positive Test	2.67	

Radiological Reference Date: February 1, 2011

Other Flags:

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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
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(25) = Result not reported with other gamma results
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(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ERLG01) Environmental Radiation Laboratory
Georgia Institute of Tech.
Atlanta, GA 30332

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	.52	0.529	A		-1.7	0.370 - 0.688	.1	
Cesium-134	21	21.5	A		-2.3	15.1 - 28.0	2	
Cesium-137	32	29.4	A		8.8	20.6 - 38.2	4	
Cobalt-57	.1		A			False Positive Test	.4	
Cobalt-60	26	24.6	A		5.7	17.2 - 32.0	2	
Hydrogen-3	244	243	A		0.4	170 - 316	10	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	35	31.6	A		10.8	22.1 - 41.1	4	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	.88	1.064	A		-17.3	0.745 - 1.383	.1	
Plutonium-239/240	.65	0.809	A		-19.7	0.566 - 1.052	.1	
Potassium-40	99	91	A		8.8	64 - 118	10	
Strontium-90	8.2	8.72	A		-6.0	6.10 - 11.34	0.5	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.65	1.50	A		10.0	1.05 - 1.95	.2	
Uranium-238	1.5	1.54	A		-2.6	1.08 - 2.00	.2	
Zinc-65	0.1		A			False Positive Test	0.4	

Radiological Reference Date: February 1, 2011

Other Flags:

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L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
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(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ERPD99) Ministry Of Health,Radiation Protection Department Lab
Al-Awqaf Complex-Tower#12
Sharq, Kuwait 656

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.14	21.5	A		-15.6	15.1 - 28.0	2.72	
Cesium-137	29.40	29.4	A		0.0	20.6 - 38.2	4.39	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	22.05	24.6	A		-10.4	17.2 - 32.0	2.86	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.36	31.6	A		-0.8	22.1 - 41.1	4.41	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

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W = Result accepatble with warning 20% < Bias < 30%
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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
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(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ESCQ99) Environmental Studies Centre (ESC)
Qatar University
Doha, Doha 2713

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	5.95	6.37	A		-6.6	4.46 - 8.28	0.18	
Arsenic	2.988	3.17	A		-5.7	2.22 - 4.12	0.059	L
Barium	NR	0.942				0.659 - 1.225		
Beryllium	0.43	0.489	A		-12.1	0.342 - 0.636	0.01	L
Cadmium	0.453	0.489	A		-7.4	0.342 - 0.636	0.008	L
Chromium	1.069	1.13	A		-5.4	0.79 - 1.47	0.019	L
Cobalt	2.58	2.96	A		-12.8	2.07 - 3.85	0.064	L
Copper	1.407	1.66	A		-15.2	1.16 - 2.16	0.038	L
Lead	0.645	0.694	A		-7.1	0.486 - 0.902	0.015	L
Mercury	0.0641	0.098	N		-34.6	0.069 - 0.127	0.003	
Nickel	1.510	1.66	A		-9.0	1.16 - 2.16	0.033	L
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.24	4.60	A		-7.8	3.22 - 5.98	0.08	L
Zinc	6.07	7.08	A		-14.3	4.96 - 9.20	0.19	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
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Notes:

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MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ESDE01) Region 5 EQC Tritium Lab
206 Beaufort NE
Aiken, SC 29801

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	245	243	A		0.8	170 - 316		9
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ETTP01) MCL Inc, ETTP
Bldg K1006
Oak Ridge, TN 37830

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.818	6.37	A		7.0	4.46 - 8.28		
Arsenic	3.556	3.17	A		12.2	2.22 - 4.12		
Barium	0.924	0.942	A		-1.9	0.659 - 1.225		
Beryllium	0.446	0.489	A		-8.8	0.342 - 0.636		
Cadmium	0.480	0.489	A		-1.8	0.342 - 0.636		
Chromium	1.045	1.13	A		-7.5	0.79 - 1.47		
Cobalt	2.885	2.96	A		-2.5	2.07 - 3.85		
Copper	1.624	1.66	A		-2.2	1.16 - 2.16		
Lead	0.693	0.694	A		-0.1	0.486 - 0.902		
Mercury	0.10366	0.098	A		5.8	0.069 - 0.127		
Nickel	1.609	1.66	A		-3.1	1.16 - 2.16		
Selenium	0.974	0.908	A		7.3	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.380	2.23	A		6.7	1.56 - 2.90		
Uranium-235	0.001018	0.00090	A		13.1	0.00063 - 0.00117		
Uranium-238	0.1392	0.124	A		12.3	0.087 - 0.161		
Uranium-Total	0.132	0.125	A		5.6	0.088 - 0.163		
Vanadium	4.538	4.60	A		-1.3	3.22 - 5.98		
Zinc	7.051	7.08	A		-0.4	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	6.6	0.529	N		1147.6	0.370 - 0.688	23.9	H
Cesium-134	24.6	21.5	A		14.4	15.1 - 28.0	4.0	
Cesium-137	28.7	29.4	A		-2.4	20.6 - 38.2	6.8	H
Cobalt-57	-1.9		N	(29)		False Positive Test	0.6	
Cobalt-60	28.8	24.6	A		17.1	17.2 - 32.0	5.2	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.1	31.6	A		7.9	22.1 - 41.1	7.7	H
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	75.1	91	A		-17.5	64 - 118	230	H
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	10.28	8.99	A		14.3	6.29 - 11.69	0.38	
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-5.6		A			False Positive Test	18.5	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(EULC01) EnergySolutions, LLC
I-80, Exit 46
Clive, UT 84029

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	.461	0.529	A		-12.9	0.370 - 0.688	.2	H
Cesium-134	18.419	21.5	A		-14.3	15.1 - 28.0	.632	
Cesium-137	28.15	29.4	A		-4.3	20.6 - 38.2	1.769	
Cobalt-57	-.296		A			False Positive Test	.1	
Cobalt-60	24.479	24.6	A		-0.5	17.2 - 32.0	.847	
Hydrogen-3	569.67	243	N		134.4	170 - 316	19.3	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	29.57	31.6	A		-6.4	22.1 - 41.1	1.484	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	96.57	91	A		6.1	64 - 118	6.93	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	.218		A			False Positive Test	.15	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(FDHE01) Florida Dept of Health Environmental Laboratory
PO Box 680069
Orlando, FL 32868-0069

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	21.84	21.5	A		1.6	15.1 - 28.0	.034	L
Cesium-137	30.21	29.4	A		2.8	20.6 - 38.2	0.68	L
Cobalt-57	0.16		A			False Positive Test	0.13	
Cobalt-60	24.82	24.6	A		0.9	17.2 - 32.0	0.44	L
Hydrogen-3	239.32	243	A		-1.5	170 - 316	4.87	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.12	31.6	A		4.8	22.1 - 41.1	0.73	L
Nickel-63	15.18	18.6	A		-18.4	13.0 - 24.2	0.59	
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	99.07	91	A		8.9	64 - 118	3.43	
Strontium-90	10.56	8.72	W		21.1	6.10 - 11.34	0.64	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.60		A			False Positive Test	0.55	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(FDOH01) Florida Dept. of Health, Mobile Environmental Radiological Lab
PO Box 680069
Orlando, FL 32868-0069

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	21.458	21.5	A		-0.2	15.1 - 28.0	0.303	L
Cesium-137	30.426	29.4	A		3.5	20.6 - 38.2	0.672	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	25.806	24.6	A		4.9	17.2 - 32.0	0.431	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.726	31.6	A		6.7	22.1 - 41.1	0.700	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	105.257	91	A		15.7	64 - 118	3.005	L
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(FERM01) Fernald Project
10995 Hamilton-Cleves Highway
Harrison, OH 45030-9728

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.1303	0.125	A		4.2	0.088 - 0.163	0.018	
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(FMEC99) Foods and Water Laboratories Center
Ministry of Regional Municpalities and Water Resources
Muscat, B.O.Box. 3094 111

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.695	0.529	N		31.4	0.370 - 0.688	0.142	H
Cesium-134	20.700	21.5	A		-3.7	15.1 - 28.0	0.500	L
Cesium-137	33.140	29.4	A		12.7	20.6 - 38.2	0.420	L
Cobalt-57	0.18		N	(1)		False Positive Test	0.01	
Cobalt-60	24.095	24.6	A		-2.1	17.2 - 32.0	0.37	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30.73	31.6	A		-2.8	22.1 - 41.1	0.43	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	91.78	91	A		0.9	64 - 118	2.09	L
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54	N	(28)		1.08 - 2.00		
Zinc-65	0.094		N	(1)		False Positive Test	0.01	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(FSCL01) Lawrence Livermore Laboratory
7000 East Ave.
Livermore, CA 94551

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(GENE01) GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.45	6.37	A		1.3	4.46 - 8.28		
Arsenic	3.36	3.17	A		6.0	2.22 - 4.12		
Barium	0.945	0.942	A		0.3	0.659 - 1.225		
Beryllium	0.477	0.489	A		-2.5	0.342 - 0.636		
Cadmium	0.478	0.489	A		-2.2	0.342 - 0.636		
Chromium	1.12	1.13	A		-0.9	0.79 - 1.47		
Cobalt	2.96	2.96	A		0.0	2.07 - 3.85		
Copper	1.84	1.66	A		10.8	1.16 - 2.16		
Lead	0.683	0.694	A		-1.6	0.486 - 0.902		
Mercury	0.0952	0.098	A		-2.9	0.069 - 0.127		
Nickel	1.55	1.66	A		-6.6	1.16 - 2.16		
Selenium	0.930	0.908	A		2.4	0.636 - 1.180		
Technetium-99	0.0000137	0.0000143	A		-4.2	0.0000100 - 0.0000186	0.0000009	
Thallium	2.26	2.23	A		1.3	1.56 - 2.90		
Uranium-235	0.000908	0.00090	A		0.9	0.00063 - 0.00117		
Uranium-238	0.121	0.124	A		-2.4	0.087 - 0.161		
Uranium-Total	0.121	0.125	A		-3.2	0.088 - 0.163		
Vanadium	4.74	4.60	A		3.0	3.22 - 5.98		
Zinc	7.03	7.08	A		-0.7	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.4877	0.529	A		-7.8	0.370 - 0.688	0.022	
Cesium-134	19.60	21.5	A		-8.8	15.1 - 28.0	0.95	
Cesium-137	29.9	29.4	A		1.7	20.6 - 38.2	1.40	
Cobalt-57	0.10		A			False Positive Test	0.07	
Cobalt-60	24.75	24.6	A		0.6	17.2 - 32.0	1.11	
Hydrogen-3	225.3	243	A		-7.3	170 - 316	4.3	L
Iron-55	14.10	26.4	N		-46.6	18.5 - 34.3	3.94	H
Manganese-54	32.9	31.6	A		4.1	22.1 - 41.1	1.55	
Nickel-63	19.2	18.6	A		3.2	13.0 - 24.2	1.8	
Plutonium-238	1.005	1.064	A		-5.5	0.745 - 1.383	0.034	
Plutonium-239/240	0.755	0.809	A		-6.7	0.566 - 1.052	0.029	
Potassium-40	99.8	91	A		9.7	64 - 118	4.94	
Strontium-90	8.05	8.72	A		-7.7	6.10 - 11.34	0.07	L

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.6	8.99	A		-4.3	6.29 - 11.69	0.6	
Uranium-234/233	1.537	1.50	A		2.5	1.05 - 1.95	0.048	
Uranium-238	1.457	1.54	A		-5.4	1.08 - 2.00	0.047	
Zinc-65	0.09		A			False Positive Test	0.25	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(GPCL01) Georgia Power Company Environmental Laboratory
5131 Maner Road
Smyrna, GA 30080

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.29	21.5	A		-10.3	15.1 - 28.0	0.2428	L
Cesium-137	29.44	29.4	A		0.1	20.6 - 38.2	0.5601	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.49	24.6	A		-0.4	17.2 - 32.0	0.6410	L
Hydrogen-3	235.84	243	A		-2.9	170 - 316	12.61	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.74	31.6	A		0.4	22.1 - 41.1	0.4718	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
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NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(HCAL01) Hazards Control Analytical Lab
Lawrence Livermore National
Livermore, CA 94551

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	236	243	A		-2.9	170 - 316	14	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(HECR01) SC Dept. Health and Environmental Control Radiological Laboratory
2600 Bull St.
Columbia, SC 29201

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	22.35	21.5	A		4.0	15.1 - 28.0	0.83	
Cesium-137	30.77	29.4	A		4.7	20.6 - 38.2	2.06	
Cobalt-57	0.1215		A			False Positive Test	0.0973	
Cobalt-60	25.31	24.6	A		2.9	17.2 - 32.0	0.99	
Hydrogen-3	246	243	A		1.2	170 - 316	10	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.69	31.6	A		6.6	22.1 - 41.1	2.03	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	96.72	91	A		6.3	64 - 118	5.56	
Strontium-90	9.52	8.72	A		9.2	6.10 - 11.34	0.30	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.0518		A			False Positive Test	0.2621	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(HPAC99) HPA, CRCE Scotland
155 Hardgate Road
Glasgow, Scotland G514LS

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	3.29	3.17	A		3.8	2.22 - 4.12	0.33	
Barium	NR	0.942				0.659 - 1.225		
Beryllium	0.539	0.489	A		10.2	0.342 - 0.636	0.054	
Cadmium	0.514	0.489	A		5.1	0.342 - 0.636	0.052	
Chromium	1.14	1.13	A		0.9	0.79 - 1.47	0.12	
Cobalt	2.93	2.96	A		-1.0	2.07 - 3.85	0.30	
Copper	1.67	1.66	A		0.6	1.16 - 2.16	0.17	
Lead	0.716	0.694	A		3.2	0.486 - 0.902	0.072	
Mercury	0.0963	0.098	A		-1.7	0.069 - 0.127	0.0097	
Nickel	1.64	1.66	A		-1.2	1.16 - 2.16	0.17	
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.30	2.23	A		3.1	1.56 - 2.90	0.23	
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	0.121	0.124	A		-2.4	0.087 - 0.161	0.013	
Uranium-Total	0.121	0.125	A		-3.2	0.088 - 0.163	0.013	
Vanadium	4.80	4.60	A		4.3	3.22 - 5.98	0.48	
Zinc	7.11	7.08	A		0.4	4.96 - 9.20	0.72	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	20.6	21.5	A		-4.2	15.1 - 28.0	1.0	
Cesium-137	29.9	29.4	A		1.7	20.6 - 38.2	1.5	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.7	24.6	A		0.4	17.2 - 32.0	1.3	
Hydrogen-3	253.0	243	A		4.1	170 - 316	8.3	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.9	31.6	A		0.9	22.1 - 41.1	1.6	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	98.9	91	A		8.7	64 - 118	6.9	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	11.6	8.99	W		29.0	6.29 - 11.69	1.6	
Uranium-234/233	1.420	1.50	A		-5.3	1.05 - 1.95	0.072	
Uranium-238	1.370	1.54	A		-11.0	1.08 - 2.00	0.069	
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(IAEA99) International Atomic Energy Agency
Agency's Laboratories Seibersdorf
Seibersdorf, Austria A-2444

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	0.00084	0.00090	A		-6.7	0.00063 - 0.00117	0.00004	
Uranium-238	0.120	0.124	A		-3.2	0.087 - 0.161	0.004	
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529	N	(28)		0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(IDGR01) Oak Ridge National Laboratory-Internal Dosimetry Group
Bethel Valley Road
Oak Ridge, TN 37831-6105

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.5888	0.529	A		11.3	0.370 - 0.688	0.0562	
Cesium-134	17.49	21.5	A		-18.7	15.1 - 28.0	0.76	
Cesium-137	28.68	29.4	A		-2.4	20.6 - 38.2	1.75	
Cobalt-57	-0.01		A			False Positive Test	0.33	
Cobalt-60	22.32	24.6	A		-9.3	17.2 - 32.0	0.93	
Hydrogen-3	263	243	A		8.2	170 - 316	18	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	27.31	31.6	A		-13.6	22.1 - 41.1	1.33	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.084	1.064	A		1.9	0.745 - 1.383	0.105	
Plutonium-239/240	0.824	0.809	A		1.9	0.566 - 1.052	0.081	
Potassium-40	100.47	91	A		10.4	64 - 118	13.65	
Strontium-90	8.67	8.72	A		-0.6	6.10 - 11.34	0.68	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.499	1.50	A		-0.1	1.05 - 1.95	0.153	
Uranium-238	1.480	1.54	A		-3.9	1.08 - 2.00	0.151	
Zinc-65	-0.22		A			False Positive Test	1.10	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ISUP01) ISU - Department of Physics/Health Physics/EAL
785 S. 8th Ave, Rm 120
Pocatello, ID 83209-8106

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.29	21.5	A		-14.9	15.1 - 28.0	0.26	L
Cesium-137	28.58	29.4	A		-2.8	20.6 - 38.2	0.65	L
Cobalt-57	0.17		A			False Positive Test	0.08	
Cobalt-60	24.39	24.6	A		-0.9	17.2 - 32.0	0.40	L
Hydrogen-3	249.27	243	A		2.6	170 - 316	2.63	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.37	31.6	A		-0.7	22.1 - 41.1	0.68	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	94.33	91	A		3.7	64 - 118	3.21	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.02		A			False Positive Test	0.20	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(25) = Result not reported with other gamma results
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(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(JAEC99) Radiation Measurements Laboratory
Jordan Atomic Energy Commission
Amman, Jordan 00962 6

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	3.95	6.37	N		-38.0	4.46 - 8.28	0.18	
Arsenic	2.08	3.17	N		-34.4	2.22 - 4.12	0.12	
Barium	NR	0.942				0.659 - 1.225		
Beryllium	0.244	0.489	N		-50.1	0.342 - 0.636	0.027	
Cadmium	0.279	0.489	N		-42.9	0.342 - 0.636	0.06	H
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	1.565	2.96	N		-47.1	2.07 - 3.85	0.108	
Copper	0.905	1.66	N		-45.5	1.16 - 2.16	0.051	
Lead	0.392	0.694	N		-43.5	0.486 - 0.902	0.006	L
Mercury	NR	0.098				0.069 - 0.127		
Nickel	0.908	1.66	N		-45.3	1.16 - 2.16	0.063	
Selenium	1.44	0.908	N		58.6	0.636 - 1.180	0.12	
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.23	2.23	N		-44.8	1.56 - 2.90	0.06	
Uranium-235	0.0003	0.00090	N		-66.7	0.00063 - 0.00117	0.000004	L
Uranium-238	0.0726	0.124	N		-41.5	0.087 - 0.161	0.0021	L
Uranium-Total	0.0729	0.125	N		-41.7	0.088 - 0.163	0.0021	L
Vanadium	2.54	4.60	N		-44.8	3.22 - 5.98	0.27	
Zinc	3.98	7.08	N		-43.8	4.96 - 9.20	0.27	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.511	0.529	A		-3.4	0.370 - 0.688	0.109	H
Cesium-134	20.99	21.5	A		-2.4	15.1 - 28.0	1.26	
Cesium-137	28.01	29.4	A		-4.7	20.6 - 38.2	2.23	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	22.06	24.6	A		-10.3	17.2 - 32.0	1.72	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	29.21	31.6	A		-7.6	22.1 - 41.1	1.92	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	0.946	1.064	A		-11.1	0.745 - 1.383	0.136	
Plutonium-239/240	0.693	0.809	A		-14.3	0.566 - 1.052	0.100	
Potassium-40	97.39	91	A		7.0	64 - 118	7.54	
Strontium-90	4.788	8.72	N		-45.1	6.10 - 11.34	0.046	L

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.395	1.50	A		-7.0	1.05 - 1.95	0.355	H
Uranium-238	1.376	1.54	A		-10.6	1.08 - 2.00	0.035	L
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
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N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(JCAL99) Royal Scientific Society, Environmental Instrumental Analysis Laboratory
Ahmed Tarawneh Street,
AL-Jubaiha, Amman 11941

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.4	6.37	A		0.5	4.46 - 8.28	20	H
Arsenic	NR	3.17				2.22 - 4.12		
Barium	1.0	0.942	A		6.2	0.659 - 1.225	20	H
Beryllium	0.518	0.489	A		5.9	0.342 - 0.636	20	H
Cadmium	0.499	0.489	A		2.0	0.342 - 0.636	20	H
Chromium	1.0	1.13	A		-11.5	0.79 - 1.47	20	H
Cobalt	2.69	2.96	A		-9.1	2.07 - 3.85	20	H
Copper	1.59	1.66	A		-4.2	1.16 - 2.16	20	H
Lead	0.70	0.694	A		0.9	0.486 - 0.902	20	H
Mercury	NR	0.098				0.069 - 0.127		
Nickel	1.57	1.66	A		-5.4	1.16 - 2.16	20	H
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	5.52	4.60	A		20.0	3.22 - 5.98	20	H
Zinc	7.09	7.08	A		0.1	4.96 - 9.20	20	H

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(JLNN01) Jefferson Laboratory
12000 Jefferson Ave
Newport News, VA 23606

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	.1	0.529	N		-81.1	0.370 - 0.688	.4	H
Cesium-134	20.5	21.5	A		-4.7	15.1 - 28.0	.5	L
Cesium-137	31.3	29.4	A		6.5	20.6 - 38.2	1.1	
Cobalt-57	.1		A			False Positive Test	.3	
Cobalt-60	25.7	24.6	A		4.5	17.2 - 32.0	.7	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.3	31.6	A		8.5	22.1 - 41.1	1.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	98.8	91	A		8.6	64 - 118	6.6	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	.3		A			False Positive Test	.5	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(KDHE01) Kansas Dept. of Health & Environment
Forbes Bldg. 740
Topeka, KS 66620

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.6	0.529	A		13.4	0.370 - 0.688	0.1	
Cesium-134	19.5	21.5	A		-9.3	15.1 - 28.0	0.3	L
Cesium-137	29.4	29.4	A		0.0	20.6 - 38.2	0.9	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	26.2	24.6	A		6.5	17.2 - 32.0	0.5	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.5	31.6	A		9.2	22.1 - 41.1	0.9	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	102.2	91	A		12.3	64 - 118	3.5	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LANL01) Los Alamos National Laboratory
Mail Stop J514
Los Alamos, NM 87545

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	21.47	21.5	A		-0.1	15.1 - 28.0	1.2	
Cesium-137	29.47	29.4	A		0.2	20.6 - 38.2	1.83	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.92	24.6	A		1.3	17.2 - 32.0	2.00	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	23.84	31.6	W		-24.6	22.1 - 41.1	1.76	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LAWR01) LAWRENCE BERKELEY NATIONAL LABORATORY
1 CYCLOTRON RD.
BERKELEY, CA 94720

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	232	243	A		-4.5	170 - 316	14.7	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

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W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LAWR02) Lawrence Livermore National Laboratory
7000 East Avenue
Livermore, CA 94551

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	20.6	21.5	A		-4.2	15.1 - 28.0	0.7	
Cesium-137	31.0	29.4	A		5.4	20.6 - 38.2	1.0	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	25.5	24.6	A		3.7	17.2 - 32.0	0.8	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.3	31.6	A		8.5	22.1 - 41.1	1.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	96.0	91	A		5.5	64 - 118	6.9	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LECR99) Centre for Ecology and Hydrology
Lancaster Environment Centre
Lancaster, Lancashire LA1 4AP

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	1.44	0.529	N		172.2	0.370 - 0.688	0.27	
Cesium-134	19.6	21.5	A		-8.8	15.1 - 28.0	0.64	
Cesium-137	27.5	29.4	A		-6.5	20.6 - 38.2	1.15	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	23.8	24.6	A		-3.3	17.2 - 32.0	3.82	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	29.4	31.6	A		-7.0	22.1 - 41.1	1.02	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.02	1.064	A		-4.1	0.745 - 1.383	0.13	
Plutonium-239/240	0.79	0.809	A		-2.3	0.566 - 1.052	0.11	
Potassium-40	82.7	91	A		-9.1	64 - 118	20.7	H
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LGCL99) LGC Ltd
Queens Road
Teddington, Middlesex TW11 0LY

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.627	0.529	A		18.5	0.370 - 0.688	0.103	
Cesium-134	21.265	21.5	A		-1.1	15.1 - 28.0	1.7	
Cesium-137	29.143	29.4	A		-0.9	20.6 - 38.2	1.64	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.258	24.6	A		-1.4	17.2 - 32.0	1.371	
Hydrogen-3	236.7	243	A		-2.6	170 - 316	11.8	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.25	31.6	A		-1.1	22.1 - 41.1	1.76	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	0.986	1.064	A		-7.3	0.745 - 1.383	0.131	
Plutonium-239/240	0.7226	0.809	A		-10.7	0.566 - 1.052	0.1056	
Potassium-40	98.07	91	A		7.8	64 - 118	6.35	
Strontium-90	8.922	8.72	A		2.3	6.10 - 11.34	0.678	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	7.355	8.99	A		-18.2	6.29 - 11.69	0.593	
Uranium-234/233	1.495	1.50	A		-0.3	1.05 - 1.95	0.146	
Uranium-238	1.484	1.54	A		-3.6	1.08 - 2.00	0.145	
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(LOCK03) Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
INL/Battelle Energy Alliance, LLC
Idaho Falls, ID 83415-7111

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.8	21.5	A		-7.9	15.1 - 28.0	1.4	
Cesium-137	30.1	29.4	A		2.4	20.6 - 38.2	2.1	
Cobalt-57	-0.035		A			False Positive Test	0.062	
Cobalt-60	24.7	24.6	A		0.4	17.2 - 32.0	1.8	
Hydrogen-3	461.23	243	N		89.8	170 - 316	35.76	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.9	31.6	A		4.1	22.1 - 41.1	2.4	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.05	1.064	A		-1.3	0.745 - 1.383	0.11	
Plutonium-239/240	0.753	0.809	A		-6.9	0.566 - 1.052	0.084	
Potassium-40	94.9	91	A		4.3	64 - 118	7.0	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.54	1.50	A		2.7	1.05 - 1.95	0.19	
Uranium-238	1.54	1.54	A		0.0	1.08 - 2.00	0.22	
Zinc-65	0.078		A			False Positive Test	0.13	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MAHP59) Materials Assessment and Health Physics Group
Imperial College Reactor Centre
Ascot, Berkshire SL5 7TE

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	20	21.5	A		-7.0	15.1 - 28.0	1	
Cesium-137	27	29.4	A		-8.2	20.6 - 38.2	1	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	25	24.6	A		1.6	17.2 - 32.0	1	
Hydrogen-3	220	243	A		-9.5	170 - 316	11	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30	31.6	A		-5.1	22.1 - 41.1	1	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	76	91	A		-16.5	64 - 118	5	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

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

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MART01) USEC, Inc.
Lab COC, Bldg. X-710, Rm 222
Piketon, OH 45661-

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	5.81	6.37	A		-8.8	4.46 - 8.28		
Arsenic	3.05	3.17	A		-3.8	2.22 - 4.12		
Barium	0.802	0.942	A		-14.9	0.659 - 1.225		
Beryllium	0.422	0.489	A		-13.7	0.342 - 0.636		
Cadmium	0.464	0.489	A		-5.1	0.342 - 0.636		
Chromium	0.981	1.13	A		-13.2	0.79 - 1.47		
Cobalt	2.47	2.96	A		-16.6	2.07 - 3.85		
Copper	1.62	1.66	A		-2.4	1.16 - 2.16		
Lead	0.606	0.694	A		-12.7	0.486 - 0.902		
Mercury	0.122	0.098	W		24.5	0.069 - 0.127		
Nickel	1.42	1.66	A		-14.5	1.16 - 2.16		
Selenium	0.804	0.908	A		-11.5	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.78	2.23	W		-20.2	1.56 - 2.90		
Uranium-235	0.000810	0.00090	A		-10.0	0.00063 - 0.00117		
Uranium-238	0.111	0.124	A		-10.5	0.087 - 0.161		
Uranium-Total	0.112	0.125	A		-10.4	0.088 - 0.163		
Vanadium	4.11	4.60	A		-10.7	3.22 - 5.98		
Zinc	6.65	7.08	A		-6.1	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.6016	0.529	A		13.7	0.370 - 0.688	0.045	
Cesium-134	20.0	21.5	A		-7.0	15.1 - 28.0	0.99	
Cesium-137	27.5	29.4	A		-6.5	20.6 - 38.2	1.39	
Cobalt-57	0.77		A			False Positive Test	0.93	
Cobalt-60	25.0	24.6	A		1.6	17.2 - 32.0	1.18	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30.8	31.6	A		-2.5	22.1 - 41.1	1.61	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.139	1.064	A		7.0	0.745 - 1.383	0.088	
Plutonium-239/240	0.7771	0.809	A		-3.9	0.566 - 1.052	0.063	
Potassium-40	0.61	91	N		-99.3	64 - 118	16.7	H
Strontium-90	3.77	8.72	N		-56.8	6.10 - 11.34	0.216	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	9.66	8.99	A		7.5	6.29 - 11.69	0.524	
Uranium-234/233	1.437	1.50	A		-4.2	1.05 - 1.95	0.103	
Uranium-238	1.387	1.54	A		-9.9	1.08 - 2.00	0.101	
Zinc-65	-30.2		N	(29)		False Positive Test	1.87	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MART02) United States Enrichment Corporation
PO Box 1410
Paducah, KY 42002

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.650	6.37	A		4.4	4.46 - 8.28		
Arsenic	3.420	3.17	A		7.9	2.22 - 4.12		
Barium	0.974	0.942	A		3.4	0.659 - 1.225		
Beryllium	0.530	0.489	A		8.4	0.342 - 0.636		
Cadmium	0.517	0.489	A		5.7	0.342 - 0.636		
Chromium	1.110	1.13	A		-1.8	0.79 - 1.47		
Cobalt	2.950	2.96	A		-0.3	2.07 - 3.85		
Copper	1.600	1.66	A		-3.6	1.16 - 2.16		
Lead	0.718	0.694	A		3.5	0.486 - 0.902		
Mercury	0.0977	0.098	A		-0.3	0.069 - 0.127		
Nickel	1.590	1.66	A		-4.2	1.16 - 2.16		
Selenium	0.971	0.908	A		6.9	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.190	2.23	A		-1.8	1.56 - 2.90		
Uranium-235	0.0009	0.00090	A		0.0	0.00063 - 0.00117		
Uranium-238	0.119	0.124	A		-4.0	0.087 - 0.161		
Uranium-Total	0.120	0.125	A		-4.0	0.088 - 0.163		
Vanadium	4.700	4.60	A		2.2	3.22 - 5.98		
Zinc	7.510	7.08	A		6.1	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.427	0.529	A		-19.3	0.370 - 0.688	0.0421	
Cesium-134	20.3	21.5	A		-5.6	15.1 - 28.0	2.174	
Cesium-137	30.4	29.4	A		3.4	20.6 - 38.2	3.336	
Cobalt-57	0.0343		A			False Positive Test	0.2992	
Cobalt-60	25.5	24.6	A		3.7	17.2 - 32.0	2.713	
Hydrogen-3	221	243	A		-9.1	170 - 316	55.9	H
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.7	31.6	A		3.5	22.1 - 41.1	3.628	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	0.922	1.064	A		-13.3	0.745 - 1.383	0.083	
Plutonium-239/240	0.711	0.809	A		-12.1	0.566 - 1.052	0.065	
Potassium-40	95.2	91	A		4.6	64 - 118	12.55	
Strontium-90	11.0	8.72	W		26.1	6.10 - 11.34	0.660	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	9.10	8.99	A		1.2	6.29 - 11.69	1.22	
Uranium-234/233	1.48	1.50	A		-1.3	1.05 - 1.95	0.152	
Uranium-238	1.45	1.54	A		-5.8	1.08 - 2.00	0.133	
Zinc-65	-0.603		A			False Positive Test	1.206	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
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Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MART03) Radioactive Material Analysis Laboratory
ORNL
Oak Ridge, TN 37831-6223

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	7.09	6.37	A		11.3	4.46 - 8.28	0.709	
Arsenic	3.23	3.17	A		1.9	2.22 - 4.12	0.323	
Barium	1.03	0.942	A		9.3	0.659 - 1.225	0.103	
Beryllium	0.454	0.489	A		-7.2	0.342 - 0.636	0.0454	
Cadmium	0.522	0.489	A		6.7	0.342 - 0.636	0.0522	
Chromium	1.09	1.13	A		-3.5	0.79 - 1.47	0.109	
Cobalt	2.95	2.96	A		-0.3	2.07 - 3.85	0.295	
Copper	1.66	1.66	A		0.0	1.16 - 2.16	0.166	
Lead	0.744	0.694	A		7.2	0.486 - 0.902	0.0744	
Mercury	0.109	0.098	A		11.2	0.069 - 0.127	0.0109	
Nickel	1.62	1.66	A		-2.4	1.16 - 2.16	0.162	
Selenium	0.777	0.908	A		-14.4	0.636 - 1.180	0.0777	
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.41	2.23	A		8.1	1.56 - 2.90	0.241	
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.47	4.60	A		-2.8	3.22 - 5.98	0.447	
Zinc	6.52	7.08	A		-7.9	4.96 - 9.20	0.652	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.58	0.529	A		9.6	0.370 - 0.688	0.08	
Cesium-134	18.65	21.5	A		-13.3	15.1 - 28.0	0.48	L
Cesium-137	29.00	29.4	A		-1.4	20.6 - 38.2	0.92	
Cobalt-57	0.21		A			False Positive Test	0.16	
Cobalt-60	24.45	24.6	A		-0.6	17.2 - 32.0	0.59	L
Hydrogen-3	3650	243	N		1402.1	170 - 316	580	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.45	31.6	A		2.7	22.1 - 41.1	1.08	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.02	1.064	A		-4.1	0.745 - 1.383	0.11	
Plutonium-239/240	0.77	0.809	A		-4.8	0.566 - 1.052	0.08	
Potassium-40	NR	91				64 - 118		
Strontium-90	7.87	8.72	A		-9.7	6.10 - 11.34	1.11	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.80	1.50	A		20.0	1.05 - 1.95	0.28	
Uranium-238	1.50	1.54	A		-2.6	1.08 - 2.00	0.14	
Zinc-65	0.24		A			False Positive Test	0.83	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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H = Uncertainty potentially too high (for information purposes only)
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NR = Not Reported

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Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MDPH01) MDPH-Radiation Control Program
MERL-Room 002
Jamaica Plain, MA 02130-3597

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.87	0.529	N		64.5	0.370 - 0.688	0.18	H
Cesium-134	19.57	21.5	A		-9.0	15.1 - 28.0	0.36	L
Cesium-137	30.48	29.4	A		3.7	20.6 - 38.2	0.85	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	25.87	24.6	A		5.2	17.2 - 32.0	0.54	L
Hydrogen-3	270.5	243	A		11.3	170 - 316	10.5	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.39	31.6	A		5.7	22.1 - 41.1	0.92	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MLIL01) Microbac Laboratories, Inc
158 Starlite Drive
Marietta, OH 45750

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.14	6.37	A		-3.6	4.46 - 8.28		
Arsenic	3.12	3.17	A		-1.6	2.22 - 4.12		
Barium	.931	0.942	A		-1.2	0.659 - 1.225		
Beryllium	.489	0.489	A		0.0	0.342 - 0.636		
Cadmium	.505	0.489	A		3.3	0.342 - 0.636		
Chromium	1.18	1.13	A		4.4	0.79 - 1.47		
Cobalt	2.85	2.96	A		-3.7	2.07 - 3.85		
Copper	1.72	1.66	A		3.6	1.16 - 2.16		
Lead	.725	0.694	A		4.5	0.486 - 0.902		
Mercury	.110	0.098	A		12.2	0.069 - 0.127		
Nickel	1.63	1.66	A		-1.8	1.16 - 2.16		
Selenium	.842	0.908	A		-7.3	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.30	2.23	A		3.1	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	.129	0.125	A		3.2	0.088 - 0.163		
Vanadium	4.73	4.60	A		2.8	3.22 - 5.98		
Zinc	7.06	7.08	A		-0.3	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR					False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(MSCL01) MSC
804 S. Illinois Ave
Oak Ridge, TN 37830

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NARL01) National Air and Radiation Environmental Laboratory
540 S. Morris Ave.
Montgomery, AL 36115-2601

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NARL02) USEPA - NAREL - MERL
540 S Morris Ave
Montgomery, AL 36115

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.655	0.529	W		23.8	0.370 - 0.688	0.182	H
Cesium-134	17.8	21.5	A		-17.2	15.1 - 28.0	0.41	L
Cesium-137	28.4	29.4	A		-3.4	20.6 - 38.2	0.95	
Cobalt-57	0.04		A			False Positive Test	0.1	
Cobalt-60	25.3	24.6	A		2.8	17.2 - 32.0	0.99	
Hydrogen-3	308	243	W		26.7	170 - 316	6.1	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.2	31.6	A		5.1	22.1 - 41.1	1.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	102	91	A		12.1	64 - 118	14	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-0.58		A			False Positive Test	0.34	

Radiological Reference Date: February 1, 2011

Other Flags:

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NR = Not Reported

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(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NCNS99) National Center for Nuclear Sciences and Technologies
Technopole Sidi
Thabet Ariana, Ariana 2020

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.90	21.5	A		-12.1	15.1 - 28.0	0.49	L
Cesium-137	32.04	29.4	A		9.0	20.6 - 38.2	0.81	L
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.47	24.6	A		-0.5	17.2 - 32.0	0.66	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	28.20	31.6	A		-10.8	22.1 - 41.1	0.67	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	98.23	91	A		7.9	64 - 118	2.05	L
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.55	1.50	A		3.3	1.05 - 1.95	0.03	L
Uranium-238	1.54	1.54	A		0.0	1.08 - 2.00	0.03	L
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
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N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NESI01) B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory
Lynchburg Technology Center
Lynchburg, VA 24504-5447

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.02	6.37	A		-5.5	4.46 - 8.28		
Arsenic	3.09	3.17	A		-2.5	2.22 - 4.12		
Barium	0.951	0.942	A		1.0	0.659 - 1.225		
Beryllium	0.449	0.489	A		-8.2	0.342 - 0.636		
Cadmium	0.441	0.489	A		-9.8	0.342 - 0.636		
Chromium	1.09	1.13	A		-3.5	0.79 - 1.47		
Cobalt	2.80	2.96	A		-5.4	2.07 - 3.85		
Copper	1.45	1.66	A		-12.7	1.16 - 2.16		
Lead	0.734	0.694	A		5.8	0.486 - 0.902		
Mercury	0.0867	0.098	A		-11.5	0.069 - 0.127		
Nickel	1.49	1.66	A		-10.2	1.16 - 2.16		
Selenium	0.862	0.908	A		-5.1	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.24	2.23	A		0.4	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.53	4.60	A		-1.5	3.22 - 5.98		
Zinc	5.68	7.08	A		-19.8	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.53	0.529	A		0.2	0.370 - 0.688	0.03	
Cesium-134	18.91	21.5	A		-12.0	15.1 - 28.0	0.36	L
Cesium-137	28.53	29.4	A		-3.0	20.6 - 38.2	0.30	L
Cobalt-57	0.09		A			False Positive Test	0.04	
Cobalt-60	24.24	24.6	A		-1.5	17.2 - 32.0	0.25	L
Hydrogen-3	310.55	243	W		27.8	170 - 316	18.69	
Iron-55	27.33	26.4	A		3.5	18.5 - 34.3	2.03	
Manganese-54	31.67	31.6	A		0.2	22.1 - 41.1	0.66	L
Nickel-63	16.48	18.6	A		-11.4	13.0 - 24.2	1.35	
Plutonium-238	0.96	1.064	A		-9.8	0.745 - 1.383	0.04	
Plutonium-239/240	0.68	0.809	A		-15.9	0.566 - 1.052	0.03	
Potassium-40	NR	91				64 - 118		
Strontium-90	7.82	8.72	A		-10.3	6.10 - 11.34	0.28	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.51	8.99	A		-5.3	6.29 - 11.69	0.22	L
Uranium-234/233	1.65	1.50	A		10.0	1.05 - 1.95	0.06	
Uranium-238	1.57	1.54	A		1.9	1.08 - 2.00	0.05	
Zinc-65	-0.06		A			False Positive Test	0.27	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NRLL99) National Radiation Laboratory
PO Box 25099
Christchurch, Christchurch 8144

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.548	0.529	A		3.6	0.370 - 0.688	0.029	
Cesium-134	20.67	21.5	A		-3.9	15.1 - 28.0	0.69	
Cesium-137	30.1	29.4	A		2.4	20.6 - 38.2	1.1	
Cobalt-57	0.15		A			False Positive Test	0.1	
Cobalt-60	24.94	24.6	A		1.4	17.2 - 32.0	0.90	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.5	31.6	A		2.8	22.1 - 41.1	1.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.116	1.064	A		4.9	0.745 - 1.383	0.058	
Plutonium-239/240	0.763	0.809	A		-5.7	0.566 - 1.052	0.045	
Potassium-40	80.3	91	A		-11.8	64 - 118	4.7	
Strontium-90	8.25	8.72	A		-5.4	6.10 - 11.34	0.60	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.491	1.50	A		-0.6	1.05 - 1.95	0.061	
Uranium-238	1.412	1.54	A		-8.3	1.08 - 2.00	0.059	
Zinc-65	-0.06		A			False Positive Test	0.59	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
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(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(NTSI01) Nuclear Technology Services, Inc.
635 Hembree Parkway
Roswell, GA 30076

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(OBGL01) Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ODHL01) Ohio Department of Health Laboratory
8995 E Main Street
Reynoldsburg, OH 43068

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.129	21.5	A		-11.0	15.1 - 28.0	0.4477	L
Cesium-137	28.527	29.4	A		-3.0	20.6 - 38.2	1.2765	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	23.162	24.6	A		-5.8	17.2 - 32.0	0.4403	L
Hydrogen-3	374.847	243	N		54.3	170 - 316	17.982	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30.673	31.6	A		-2.9	22.1 - 41.1	1.2765	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	89.91	91	A		-1.2	64 - 118	2.9822	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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NR = Not Reported

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(ORIS01) ORISE/IEAV
PO Box 117
Oak Ridge, TN 37831-0117

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.703	6.37	A		5.2	4.46 - 8.28	0.102	L
Arsenic	3.324	3.17	A		4.9	2.22 - 4.12	0.063	L
Barium	0.807	0.942	A		-14.3	0.659 - 1.225	0.018	L
Beryllium	0.509	0.489	A		4.1	0.342 - 0.636	0.009	L
Cadmium	0.552	0.489	A		12.9	0.342 - 0.636	0.006	L
Chromium	1.126	1.13	A		-0.4	0.79 - 1.47	0.029	L
Cobalt	2.962	2.96	A		0.1	2.07 - 3.85	0.122	
Copper	1.713	1.66	A		3.2	1.16 - 2.16	0.053	
Lead	1.134	0.694	N		63.4	0.486 - 0.902	0.018	L
Mercury	NR	0.098				0.069 - 0.127		
Nickel	1.681	1.66	A		1.3	1.16 - 2.16	0.062	
Selenium	0.944	0.908	A		4.0	0.636 - 1.180	0.025	L
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.946	2.23	A		-12.7	1.56 - 2.90	0.044	L
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	3.733	4.60	A		-18.8	3.22 - 5.98	0.072	L
Zinc	7.552	7.08	A		6.7	4.96 - 9.20	0.167	L

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.50	0.529	A		-5.5	0.370 - 0.688	0.03	
Cesium-134	20.70	21.5	A		-3.7	15.1 - 28.0	0.82	
Cesium-137	28.5	29.4	A		-3.1	20.6 - 38.2	1.1	
Cobalt-57	0.14		A			False Positive Test	0.08	
Cobalt-60	23.21	24.6	A		-5.7	17.2 - 32.0	0.81	
Hydrogen-3	26.69	243	N		-89.0	170 - 316	1.26	
Iron-55	25.8	26.4	A		-2.3	18.5 - 34.3	1.9	
Manganese-54	29.3	31.6	A		-7.3	22.1 - 41.1	1.1	
Nickel-63	4.45	18.6	N		-76.1	13.0 - 24.2	0.30	
Plutonium-238	0.99	1.064	A		-7.0	0.745 - 1.383	0.05	
Plutonium-239/240	0.76	0.809	A		-6.1	0.566 - 1.052	0.04	
Potassium-40	82.3	91	A		-9.6	64 - 118	3.3	
Strontium-90	9.11	8.72	A		4.5	6.10 - 11.34	0.40	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	10.01	8.99	A		11.3	6.29 - 11.69	0.80	
Uranium-234/233	1.53	1.50	A		2.0	1.05 - 1.95	0.08	
Uranium-238	1.42	1.54	A		-7.8	1.08 - 2.00	0.07	
Zinc-65	0.48		A			False Positive Test	0.36	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(OTLI01) Outreach Technologies, Inc.
311 N. Aspen
Broken Arrow, OK 74012-

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	4.98	6.37	W		-21.8	4.46 - 8.28		
Arsenic	2.38	3.17	W		-24.9	2.22 - 4.12		
Barium	.853	0.942	A		-9.4	0.659 - 1.225		
Beryllium	0.540	0.489	A		10.4	0.342 - 0.636		
Cadmium	0.488	0.489	A		-0.2	0.342 - 0.636		
Chromium	1.38	1.13	W		22.1	0.79 - 1.47		
Cobalt	2.45	2.96	A		-17.2	2.07 - 3.85		
Copper	1.18	1.66	W		-28.9	1.16 - 2.16		
Lead	0.554	0.694	W		-20.2	0.486 - 0.902		
Mercury	.083	0.098	A		-15.3	0.069 - 0.127		
Nickel	1.64	1.66	A		-1.2	1.16 - 2.16		
Selenium	0.592	0.908	N		-34.8	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.81	2.23	A		-18.8	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.108	0.125	A		-13.6	0.088 - 0.163		
Vanadium	5.16	4.60	A		12.2	3.22 - 5.98		
Zinc	7.77	7.08	A		9.7	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.4	21.5	A		-14.4	15.1 - 28.0	0.83	
Cesium-137	27.9	29.4	A		-5.1	20.6 - 38.2	1.66	
Cobalt-57	0.381		A			False Positive Test	0.277	
Cobalt-60	22.2	24.6	A		-9.8	17.2 - 32.0	1.24	
Hydrogen-3	269	243	A		10.7	170 - 316	10	
Iron-55	17.4	26.4	N		-34.1	18.5 - 34.3	4.15	H
Manganese-54	29.2	31.6	A		-7.6	22.1 - 41.1	1.77	
Nickel-63	23.5	18.6	W		26.3	13.0 - 24.2	11.4	H
Plutonium-238	0.879	1.064	A		-17.4	0.745 - 1.383	0.171	
Plutonium-239/240	0.660	0.809	A		-18.4	0.566 - 1.052	0.141	H
Potassium-40	90.8	91	A		-0.2	64 - 118	11.7	
Strontium-90	7.92	8.72	A		-9.2	6.10 - 11.34	0.41	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	9.4	8.99	A		4.6	6.29 - 11.69	0.9	
Uranium-234/233	1.39	1.50	A		-7.3	1.05 - 1.95	.123	
Uranium-238	1.45	1.54	A		-5.8	1.08 - 2.00	.125	
Zinc-65	.091		A			False Positive Test	.840	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(PBRF01) NASA Plum Brook Reactor Facility Lab
6100 Columbus Ave
Sandusky, OH 44870

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5	N	(25)		15.1 - 28.0		
Cesium-137	28.9	29.4	A		-1.7	20.6 - 38.2	1.0	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.4	24.6	A		-0.8	17.2 - 32.0	0.7	L
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6	N	(25)		22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	116.1	91	W		27.6	64 - 118	3.8	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(PESL01) Environmental Science Lab PNNL/ESL
331/170, BRM # 14005
Richland, WA 99352

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	16.6	21.5	W		-22.8	15.1 - 28.0	3.26	
Cesium-137	30.0	29.4	A		2.0	20.6 - 38.2	1.24	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	24.2	24.6	A		-1.6	17.2 - 32.0	1.64	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.8	31.6	A		0.6	22.1 - 41.1	1.17	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91	N	(25)		64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological									Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	8.99				6.29 - 11.69			
Uranium-234/233	NR	1.50				1.05 - 1.95			
Uranium-238	NR	1.54				1.08 - 2.00			
Zinc-65	NR		N	(11)		False Positive Test			

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(QUAN01) TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045-

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.02	6.37	A		-5.5	4.46 - 8.28		
Arsenic	3.03	3.17	A		-4.4	2.22 - 4.12		
Barium	1.00	0.942	A		6.2	0.659 - 1.225		
Beryllium	0.544	0.489	A		11.2	0.342 - 0.636		
Cadmium	0.45	0.489	A		-8.0	0.342 - 0.636		
Chromium	1.11	1.13	A		-1.8	0.79 - 1.47		
Cobalt	3.07	2.96	A		3.7	2.07 - 3.85		
Copper	1.31	1.66	W		-21.1	1.16 - 2.16		
Lead	0.675	0.694	A		-2.7	0.486 - 0.902		
Mercury	0.0891	0.098	A		-9.1	0.069 - 0.127		
Nickel	1.49	1.66	A		-10.2	1.16 - 2.16		
Selenium	0.775	0.908	A		-14.6	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.86	2.23	A		-16.6	1.56 - 2.90		
Uranium-235	0.936	0.00090	N		103900.	0.00063 - 0.00117		
Uranium-238	0.128	0.124	A		3.2	0.087 - 0.161		
Uranium-Total	0.125	0.125	A		0.0	0.088 - 0.163		
Vanadium	4.63	4.60	A		0.7	3.22 - 5.98		
Zinc	6.97	7.08	A		-1.6	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.398	0.529	W		-24.8	0.370 - 0.688	0.0426	
Cesium-134	17.5	21.5	A		-18.6	15.1 - 28.0	0.60	
Cesium-137	26.6	29.4	A		-9.5	20.6 - 38.2	0.931	
Cobalt-57	0.146		A			False Positive Test	0.096	
Cobalt-60	22.2	24.6	A		-9.8	17.2 - 32.0	0.727	
Hydrogen-3	210	243	A		-13.6	170 - 316	9.81	
Iron-55	19.5	26.4	W		-26.1	18.5 - 34.3	1.08	
Manganese-54	29.2	31.6	A		-7.6	22.1 - 41.1	1.03	
Nickel-63	24.1	18.6	W		29.6	13.0 - 24.2	1.18	
Plutonium-238	0.901	1.064	A		-15.3	0.745 - 1.383	0.069	
Plutonium-239/240	0.621	0.809	W		-23.2	0.566 - 1.052	0.0537	
Potassium-40	85.89	91	A		-5.6	64 - 118	4.154	
Strontium-90	9.73	8.72	A		11.6	6.10 - 11.34	0.441	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	7.27	8.99	A		-19.1	6.29 - 11.69	0.37	
Uranium-234/233	1.43	1.50	A		-4.7	1.05 - 1.95	0.0963	
Uranium-238	1.38	1.54	A		-10.4	1.08 - 2.00	0.0932	
Zinc-65	0.018		A			False Positive Test	0.507	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(QUAN02) TestAmerica Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.62	6.37	A		3.9	4.46 - 8.28		
Arsenic	3.41	3.17	A		7.6	2.22 - 4.12		
Barium	0.958	0.942	A		1.7	0.659 - 1.225		
Beryllium	0.507	0.489	A		3.7	0.342 - 0.636		
Cadmium	0.519	0.489	A		6.1	0.342 - 0.636		
Chromium	1.17	1.13	A		3.5	0.79 - 1.47		
Cobalt	3.05	2.96	A		3.0	2.07 - 3.85		
Copper	1.71	1.66	A		3.0	1.16 - 2.16		
Lead	0.724	0.694	A		4.3	0.486 - 0.902		
Mercury	0.096	0.098	A		-2.0	0.069 - 0.127		
Nickel	1.69	1.66	A		1.8	1.16 - 2.16		
Selenium	0.944	0.908	A		4.0	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.350	2.23	A		5.4	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.70	4.60	A		2.2	3.22 - 5.98		
Zinc	7.27	7.08	A		2.7	4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(QUAN03) TestAmerica
2800 GEORGE WASHINGTON WAY
RICHLAND, WA 99354-

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	.119	0.124	A		-4.0	0.087 - 0.161	.007	
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.536	0.529	A		1.3	0.370 - 0.688	0.044	
Cesium-134	17.8	21.5	A		-17.2	15.1 - 28.0	1.23	
Cesium-137	28	29.4	A		-4.8	20.6 - 38.2	2.02	
Cobalt-57	-0.586		A			False Positive Test	0.8	
Cobalt-60	22.8	24.6	A		-7.3	17.2 - 32.0	1.45	
Hydrogen-3	287	243	A		18.1	170 - 316	7.45	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	27.5	31.6	A		-13.0	22.1 - 41.1	1.78	
Nickel-63	17.5	18.6	A		-5.9	13.0 - 24.2	0.834	
Plutonium-238	0.903	1.064	A		-15.1	0.745 - 1.383	0.085	
Plutonium-239/240	0.698	0.809	A		-13.7	0.566 - 1.052	0.07	
Potassium-40	NR	91				64 - 118		
Strontium-90	8.26	8.72	A		-5.3	6.10 - 11.34	0.632	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	7.35	8.99	A		-18.2	6.29 - 11.69	0.441	
Uranium-234/233	1.54	1.50	A		2.7	1.05 - 1.95	0.115	
Uranium-238	1.58	1.54	A		2.6	1.08 - 2.00	0.118	
Zinc-65	0.037		A			False Positive Test	0.381	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(RMCL99) Royal Scientific Society - Radiation Protection Lab
70 Ahmad Al-Tarawneh Str.
Al-Jubaiha, Amman 11941

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529	N	(28)		0.370 - 0.688		
Cesium-134	20.9	21.5	A		-2.8	15.1 - 28.0	1.2	
Cesium-137	29.7	29.4	A		1.0	20.6 - 38.2	1.2	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	25	24.6	A		1.6	17.2 - 32.0	2.0	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.2	31.6	A		8.2	22.1 - 41.1	2.8	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	94.5	91	A		3.8	64 - 118	9.3	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	2.3	1.54	N		49.4	1.08 - 2.00	0.4	
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(RPSC01) Radiation Protection Service
Ontario Ministry of Labour
Weston, Ontario M9P 3T1

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	20.5	21.5	A		-4.7	15.1 - 28.0	1.2	
Cesium-137	29.0	29.4	A		-1.4	20.6 - 38.2	1.7	
Cobalt-57	0.15		A			False Positive Test	0.15	
Cobalt-60	24.6	24.6	A		0.0	17.2 - 32.0	1.6	
Hydrogen-3	243	243	A		0.0	170 - 316	24	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.1	31.6	A		-1.6	22.1 - 41.1	1.9	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	90.6	91	A		-0.4	64 - 118	7.3	
Strontium-90	8.3	8.72	A		-4.8	6.10 - 11.34	0.8	

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.24		A			False Positive Test	0.34	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(RSAL01) RSA Laboratories, Inc.
PO Box 61
Hebron, CT 06248

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(RSIR99) Instituto de Radioprotecao e Dosimetria - IRD/CNEN
Avenida Salvador Allende S/no.
RJ, Rio de Janeiro 22780-160

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	7.59	6.37	A		19.2	4.46 - 8.28	0.26	
Arsenic	2.80	3.17	A		-11.7	2.22 - 4.12	0.04	L
Barium	0.96	0.942	A		1.9	0.659 - 1.225	0.02	L
Beryllium	0.35	0.489	W		-28.4	0.342 - 0.636	0.02	
Cadmium	0.43	0.489	A		-12.1	0.342 - 0.636	0.01	L
Chromium	1.00	1.13	A		-11.5	0.79 - 1.47	0.02	L
Cobalt	2.78	2.96	A		-6.1	2.07 - 3.85	0.24	
Copper	1.35	1.66	A		-18.7	1.16 - 2.16	0.05	
Lead	0.64	0.694	A		-7.8	0.486 - 0.902	0.02	
Mercury	NR	0.098				0.069 - 0.127		
Nickel	1.41	1.66	A		-15.1	1.16 - 2.16	0.08	
Selenium	0.61	0.908	N		-32.8	0.636 - 1.180	0.01	L
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.40	2.23	A		7.6	1.56 - 2.90	0.08	
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	0.12	0.124	A		-3.2	0.087 - 0.161	0.00	
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.50	4.60	A		-2.2	3.22 - 5.98	0.08	L
Zinc	5.03	7.08	W		-29.0	4.96 - 9.20	0.06	L

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529	N	(28)		0.370 - 0.688		
Cesium-134	19.9	21.5	A		-7.4	15.1 - 28.0	0.7	
Cesium-137	29.6	29.4	A		0.7	20.6 - 38.2	1.1	
Cobalt-57	NR		N	(11)		False Positive Test		
Cobalt-60	23.8	24.6	A		-3.3	17.2 - 32.0	0.9	
Hydrogen-3	226	243	A		-7.0	170 - 316	10	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.1	31.6	A		1.6	22.1 - 41.1	1.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.2	1.064	A		12.8	0.745 - 1.383	0.1	
Plutonium-239/240	0.87	0.809	A		7.5	0.566 - 1.052	0.02	L
Potassium-40	NR	91				64 - 118		
Strontium-90	8.8	8.72	A		0.9	6.10 - 11.34	0.9	

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR		N	(11)		False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SAVA01) SAVANNAH RIVER NUCLEAR SOLUTIONS (SRNS)
Savannah River National Laboratory (SRNL)
AIKEN, SC 29808-

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SEML01) SRS Environmental Monitoring Laboratory
Bldg 735-B
Aiken, SC 29808

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.57	6.37	A		3.1	4.46 - 8.28	0.39	
Arsenic	3.40	3.17	A		7.3	2.22 - 4.12	0.27	
Barium	0.970	0.942	A		3.0	0.659 - 1.225	0.068	
Beryllium	0.495	0.489	A		1.2	0.342 - 0.636	0.035	
Cadmium	0.506	0.489	A		3.5	0.342 - 0.636	0.046	
Chromium	1.18	1.13	A		4.4	0.79 - 1.47	0.083	
Cobalt	3.04	2.96	A		2.7	2.07 - 3.85	0.24	
Copper	1.78	1.66	A		7.2	1.16 - 2.16	0.11	
Lead	0.725	0.694	A		4.5	0.486 - 0.902	0.072	
Mercury	0.101	0.098	A		3.1	0.069 - 0.127	0.013	
Nickel	1.66	1.66	A		0.0	1.16 - 2.16	0.13	
Selenium	0.979	0.908	A		7.8	0.636 - 1.180	0.07	
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	2.32	2.23	A		4.0	1.56 - 2.90	0.17	
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.84	4.60	A		5.2	3.22 - 5.98	0.29	
Zinc	7.40	7.08	A		4.5	4.96 - 9.20	0.59	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.55	0.529	A		4.0	0.370 - 0.688	0.044	
Cesium-134	21.2	21.5	A		-1.4	15.1 - 28.0	0.61	L
Cesium-137	29.8	29.4	A		1.4	20.6 - 38.2	0.93	
Cobalt-57	0.078		A			False Positive Test	0.12	
Cobalt-60	24.3	24.6	A		-1.2	17.2 - 32.0	0.53	L
Hydrogen-3	256.4	243	A		5.5	170 - 316	21	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.1	31.6	A		4.7	22.1 - 41.1	2.0	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.12	1.064	A		5.3	0.745 - 1.383	0.09	
Plutonium-239/240	0.83	0.809	A		2.6	0.566 - 1.052	0.066	
Potassium-40	94.6	91	A		4.0	64 - 118	3.9	
Strontium-90	9.15	8.72	A		4.9	6.10 - 11.34	0.68	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.42	8.99	A		-6.3	6.29 - 11.69	0.42	
Uranium-234/233	1.62	1.50	A		8.0	1.05 - 1.95	0.13	
Uranium-238	1.60	1.54	A		3.9	1.08 - 2.00	0.13	
Zinc-65	-0.10		A			False Positive Test	0.32	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SLAC01) SLAC DOE National Accelerator Laboratory
2575 Sand Hill Road
Menlo Park, CA 94025

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.5	21.5	A		-9.3	15.1 - 28.0	2.9	
Cesium-137	29.8	29.4	A		1.4	20.6 - 38.2	4.5	
Cobalt-57	0.3		A			False Positive Test	0.1	
Cobalt-60	23.2	24.6	A		-5.7	17.2 - 32.0	3.5	
Hydrogen-3	225	243	A		-7.4	170 - 316	33.8	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30.3	31.6	A		-4.1	22.1 - 41.1	4.5	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	82.6	91	A		-9.2	64 - 118	12.4	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	0.5		A			False Positive Test	0.5	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SNRC99) Soreq NRC
Radioactivity Measurement Section
Yavne, Israel 81800

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	1.6	0.529	N		202.5	0.370 - 0.688	1.6	H
Cesium-134	19.2	21.5	A		-10.7	15.1 - 28.0	0.5	L
Cesium-137	27.5	29.4	A		-6.5	20.6 - 38.2	0.7	L
Cobalt-57	0.3		A			False Positive Test	0.3	
Cobalt-60	23.8	24.6	A		-3.3	17.2 - 32.0	0.9	
Hydrogen-3	267.0	243	A		9.9	170 - 316	11.2	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	28.5	31.6	A		-9.8	22.1 - 41.1	0.7	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	85.7	91	A		-5.8	64 - 118	3.5	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.66	1.50	A		10.7	1.05 - 1.95	0.25	
Uranium-238	1.41	1.54	A		-8.4	1.08 - 2.00	0.21	
Zinc-65	0.7		A			False Positive Test	0.7	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SOUT01) Southwest Research Institute
6220 Culebra Rd.
San Antonio, TX 78228-0510

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.44	6.37	A		1.1	4.46 - 8.28	0.335	
Arsenic	3.29	3.17	A		3.8	2.22 - 4.12	0.171	
Barium	0.922	0.942	A		-2.1	0.659 - 1.225	0.0479	
Beryllium	0.471	0.489	A		-3.7	0.342 - 0.636	0.0245	
Cadmium	0.488	0.489	A		-0.2	0.342 - 0.636	0.0254	
Chromium	1.11	1.13	A		-1.8	0.79 - 1.47	0.0577	
Cobalt	2.93	2.96	A		-1.0	2.07 - 3.85	0.152	
Copper	1.75	1.66	A		5.4	1.16 - 2.16	0.0910	
Lead	0.683	0.694	A		-1.6	0.486 - 0.902	0.0355	
Mercury	0.104	0.098	A		6.1	0.069 - 0.127	0.00541	
Nickel	1.62	1.66	A		-2.4	1.16 - 2.16	0.0842	
Selenium	0.859	0.908	A		-5.4	0.636 - 1.180	0.0447	
Technetium-99	0.000885	0.0000143	N		6088.8	0.0000100 - 0.0000186	0.000092	
Thallium	2.35	2.23	A		5.4	1.56 - 2.90	0.122	
Uranium-235	0.000885	0.00090	A		-1.7	0.00063 - 0.00117	0.0000920	
Uranium-238	0.124	0.124	A		0.0	0.087 - 0.161	0.0124	
Uranium-Total	0.126	0.125	A		0.8	0.088 - 0.163	0.0126	
Vanadium	4.62	4.60	A		0.4	3.22 - 5.98	0.240	
Zinc	6.99	7.08	A		-1.3	4.96 - 9.20	0.363	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.548	0.529	A		3.6	0.370 - 0.688	0.0485	
Cesium-134	19.2	21.5	A		-10.7	15.1 - 28.0	0.419	L
Cesium-137	30.1	29.4	A		2.4	20.6 - 38.2	1.05	
Cobalt-57	0.151		A			False Positive Test	0.0744	
Cobalt-60	25.6	24.6	A		4.1	17.2 - 32.0	0.522	L
Hydrogen-3	249	243	A		2.5	170 - 316	15.1	
Iron-55	26.3	26.4	A		-0.4	18.5 - 34.3	1.13	
Manganese-54	33.1	31.6	A		4.7	22.1 - 41.1	1.23	
Nickel-63	17.6	18.6	A		-5.4	13.0 - 24.2	1.04	
Plutonium-238	1.14	1.064	A		7.1	0.745 - 1.383	0.0859	
Plutonium-239/240	0.811	0.809	A		0.2	0.566 - 1.052	0.0626	
Potassium-40	97.0	91	A		6.6	64 - 118	3.59	
Strontium-90	8.22	8.72	A		-5.7	6.10 - 11.34	0.504	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.04	8.99	A		-10.6	6.29 - 11.69	0.474	
Uranium-234/233	1.68	1.50	A		12.0	1.05 - 1.95	0.111	
Uranium-238	1.57	1.54	A		1.9	1.08 - 2.00	0.105	
Zinc-65	-0.211		A			False Positive Test	0.530	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(SRPD01) Sandia National Laboratories, Radiation Protection Sample Diagnostics
PO Box 5800, MS1103
Albuquerque, NM 87185-1103

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	9.11E-04	0.00090	A		1.2	0.00063 - 0.00117	4.56E-05	
Uranium-238	0.1240	0.124	A		0.0	0.087 - 0.161	0.0062	
Uranium-Total	0.1249	0.125	A		-0.1	0.088 - 0.163	0.0063	
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.1	0.529	N		-81.1	0.370 - 0.688	3	H
Cesium-134	20.6	21.5	A		-4.2	15.1 - 28.0	2.8	
Cesium-137	28.5	29.4	A		-3.1	20.6 - 38.2	3.6	
Cobalt-57	0.280		A			False Positive Test	0.32	
Cobalt-60	24.1	24.6	A		-2.0	17.2 - 32.0	3.2	
Hydrogen-3	243	243	A		0.0	170 - 316	38	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	32.7	31.6	A		3.5	22.1 - 41.1	4.3	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	96.9	91	A		6.5	64 - 118	13.9	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	1.51		A			False Positive Test	1.69	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TDHL01) Texas Department of State Health Services Laboratory
1100 W 49th Street
Austin, TX 78756

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.63	0.529	A		19.1	0.370 - 0.688	0.14	H
Cesium-134	21.2	21.5	A		-1.4	15.1 - 28.0	0.6	L
Cesium-137	31.0	29.4	A		5.4	20.6 - 38.2	1.2	
Cobalt-57	0.17		A			False Positive Test	0.17	
Cobalt-60	25.6	24.6	A		4.1	17.2 - 32.0	0.6	L
Hydrogen-3	253	243	A		4.1	170 - 316	17	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.7	31.6	A		6.6	22.1 - 41.1	1.4	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.09	1.064	A		2.4	0.745 - 1.383	0.21	
Plutonium-239/240	0.724	0.809	A		-10.5	0.566 - 1.052	0.145	H
Potassium-40	98.2	91	A		7.9	64 - 118	6.1	
Strontium-90	8.59	8.72	A		-1.5	6.10 - 11.34	0.39	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.48	1.50	A		-1.3	1.05 - 1.95	0.21	
Uranium-238	1.54	1.54	A		0.0	1.08 - 2.00	0.23	
Zinc-65	-0.19		A			False Positive Test	0.19	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TELE01) TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
2508 Quality Lane
Knoxville, TN 37931-6819

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.418	0.529	W		-21.0	0.370 - 0.688	0.136	H
Cesium-134	19.1	21.5	A		-11.2	15.1 - 28.0	0.368	L
Cesium-137	29.0	29.4	A		-1.4	20.6 - 38.2	0.574	L
Cobalt-57	0.139		A			False Positive Test	0.169	
Cobalt-60	23.9	24.6	A		-2.8	17.2 - 32.0	0.413	L
Hydrogen-3	265	243	A		9.1	170 - 316	27.9	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.8	31.6	A		0.6	22.1 - 41.1	0.674	L
Nickel-63	17.8	18.6	A		-4.3	13.0 - 24.2	2.45	
Plutonium-238	0.92	1.064	A		-13.5	0.745 - 1.383	0.225	H
Plutonium-239/240	0.715	0.809	A		-11.6	0.566 - 1.052	0.157	H
Potassium-40	94.8	91	A		4.2	64 - 118	4.12	
Strontium-90	9.64	8.72	A		10.6	6.10 - 11.34	.339	

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.09	8.99	A		-10.0	6.29 - 11.69	1.10	
Uranium-234/233	1.57	1.50	A		4.7	1.05 - 1.95	0.196	
Uranium-238	1.57	1.54	A		1.9	1.08 - 2.00	0.214	
Zinc-65	-0.142		A			False Positive Test	0.524	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TELE02) Environmental, Inc., Midwest Lab
700 Landwehr Road
Northbrook, IL 60062-

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.35	0.529	N		-33.8	0.370 - 0.688	0.1	H
Cesium-134	19.8	21.5	A		-7.9	15.1 - 28.0	0.4	L
Cesium-137	29.5	29.4	A		0.3	20.6 - 38.2	0.5	L
Cobalt-57	0.1		A			False Positive Test	0.1	
Cobalt-60	24.1	24.6	A		-2.0	17.2 - 32.0	0.4	L
Hydrogen-3	238.9	243	A		-1.7	170 - 316	8.8	
Iron-55	NR	26.4	N	(28)		18.5 - 34.3		
Manganese-54	32.5	31.6	A		2.8	22.1 - 41.1	0.6	L
Nickel-63	16.3	18.6	A		-12.4	13.0 - 24.2	2.1	
Plutonium-238	1.11	1.064	A		4.3	0.745 - 1.383	0.12	
Plutonium-239/240	0.88	0.809	A		8.8	0.566 - 1.052	0.12	
Potassium-40	95.4	91	A		4.8	64 - 118	3.1	
Strontium-90	8.7	8.72	A		-0.2	6.10 - 11.34	0.7	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	7.6	8.99	A		-15.5	6.29 - 11.69	0.6	
Uranium-234/233	1.56	1.50	A		4.0	1.05 - 1.95	0.10	
Uranium-238	1.53	1.54	A		-0.6	1.08 - 2.00	0.10	
Zinc-65	-0.1		A			False Positive Test	0.2	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
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L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TMAO01) EBERLINE SERVICES OAK RIDGE LABORATORY
601 SCARBORO RD
OAK RIDGE, TN 37830-

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.499	0.529	A		-5.7	0.370 - 0.688	0.146	H
Cesium-134	21.4	21.5	A		-0.5	15.1 - 28.0	1.37	
Cesium-137	31.7	29.4	A		7.8	20.6 - 38.2	3.28	
Cobalt-57	0.086		A			False Positive Test	0.205	
Cobalt-60	24.4	24.6	A		-0.8	17.2 - 32.0	1.91	
Hydrogen-3	241.	243	A		-0.8	170 - 316	9.55	
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	35.6	31.6	A		12.7	22.1 - 41.1	3.7	
Nickel-63	17.6	18.6	A		-5.4	13.0 - 24.2	0.719	
Plutonium-238	1.026	1.064	A		-3.6	0.745 - 1.383	0.229	H
Plutonium-239/240	0.718	0.809	A		-11.2	0.566 - 1.052	0.176	H
Potassium-40	91.7	91	A		0.8	64 - 118	6.16	
Strontium-90	8.91	8.72	A		2.2	6.10 - 11.34	0.325	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	8.50	8.99	A		-5.5	6.29 - 11.69	0.169	L
Uranium-234/233	1.34	1.50	A		-10.7	1.05 - 1.95	0.239	
Uranium-238	1.51	1.54	A		-1.9	1.08 - 2.00	0.236	
Zinc-65	- 0.05		A			False Positive Test	0.93	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TMAR01) Eberline Analytical Corp. Richmond CA Lab
2030 Wright Ave
Richmond, CA 94804-3849

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.542	0.529	A		2.5	0.370 - 0.688	0.049	
Cesium-134	22.8	21.5	A		6.0	15.1 - 28.0	2.0	
Cesium-137	30.1	29.4	A		2.4	20.6 - 38.2	2.2	
Cobalt-57	0.4		A			False Positive Test	0.6	
Cobalt-60	24.1	24.6	A		-2.0	17.2 - 32.0	1.6	
Hydrogen-3	240.0	243	A		-1.2	170 - 316	13	
Iron-55	23.1	26.4	A		-12.5	18.5 - 34.3	2.8	
Manganese-54	33.0	31.6	A		4.4	22.1 - 41.1	2.2	
Nickel-63	17.0	18.6	A		-8.6	13.0 - 24.2	1.4	
Plutonium-238	0.973	1.064	A		-8.6	0.745 - 1.383	0.078	
Plutonium-239/240	0.716	0.809	A		-11.5	0.566 - 1.052	0.057	
Potassium-40	94.6	91	A		4.0	64 - 118	5.7	
Strontium-90	9.08	8.72	A		4.1	6.10 - 11.34	1.00	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	10.50	8.99	A		16.8	6.29 - 11.69	0.74	
Uranium-234/233	1.57	1.50	A		4.7	1.05 - 1.95	0.13	
Uranium-238	1.50	1.54	A		-2.6	1.08 - 2.00	0.14	
Zinc-65	0.8		A			False Positive Test	1.3	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(TNUT01) FUSRAP
8945 LATTY AVE
BERKELEY, MO 63134-

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.601	0.529	A		13.6	0.370 - 0.688	0.23	H
Cesium-134	19.483	21.5	A		-9.4	15.1 - 28.0	0.50	L
Cesium-137	31.247	29.4	A		6.3	20.6 - 38.2	1.04	
Cobalt-57	0.079		A			False Positive Test	0.10	
Cobalt-60	25.703	24.6	A		4.5	17.2 - 32.0	1.02	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	34.277	31.6	A		8.5	22.1 - 41.1	1.144	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	101.227	91	A		11.2	64 - 118	5.37	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.534	1.50	A		2.3	1.05 - 1.95	0.119	
Uranium-238	1.390	1.54	A		-9.7	1.08 - 2.00	0.109	
Zinc-65	-0.159		A			False Positive Test	0.43	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(UNTE01) UniTech-235
178 Aldo Drive
Barnwell, SC 29812

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	18.4	21.5	A		-14.4	15.1 - 28.0	1.3	
Cesium-137	31.2	29.4	A		6.1	20.6 - 38.2	2.7	
Cobalt-57	0.1		A			False Positive Test	0.4	
Cobalt-60	25.8	24.6	A		4.9	17.2 - 32.0	1.8	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	30.9	31.6	A		-2.2	22.1 - 41.1	2.7	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	120	91	N		31.9	64 - 118	16	
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-0.3		A			False Positive Test	0.8	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
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Notes:

(1) = False Positive
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(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(UTSG01) UniTech Services Group
295 Parker St
Springfield, MA 01151

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WEST01) Lionville Laboratory
264 Welsh Pool Road
Exton, PA 19341-1313

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	6.62	6.37	A		3.9	4.46 - 8.28		
Arsenic	3.29	3.17	A		3.8	2.22 - 4.12		
Barium	0.918	0.942	A		-2.5	0.659 - 1.225		
Beryllium	0.471	0.489	A		-3.7	0.342 - 0.636		
Cadmium	0.502	0.489	A		2.7	0.342 - 0.636		
Chromium	1.12	1.13	A		-0.9	0.79 - 1.47		
Cobalt	2.79	2.96	A		-5.7	2.07 - 3.85		
Copper	1.63	1.66	A		-1.8	1.16 - 2.16		
Lead	0.631	0.694	A		-9.1	0.486 - 0.902		
Mercury	0.0987	0.098	A		0.7	0.069 - 0.127		
Nickel	1.56	1.66	A		-6.0	1.16 - 2.16		
Selenium	0.912	0.908	A		0.4	0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	1.92	2.23	A		-13.9	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	4.66	4.60	A		1.3	3.22 - 5.98		
Zinc	7.03	7.08	A		-0.7	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WEST03) Waste Sampling and Characterization Facility, MSA/RJLG
PO Box 650, S3-30
Richland, WA 99352

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	5.98	6.37	A		-6.1	4.46 - 8.28		
Arsenic	2.98	3.17	A		-6.0	2.22 - 4.12		
Barium	0.86	0.942	A		-8.7	0.659 - 1.225		
Beryllium	0.471	0.489	A		-3.7	0.342 - 0.636		
Cadmium	0.447	0.489	A		-8.6	0.342 - 0.636		
Chromium	1.01	1.13	A		-10.6	0.79 - 1.47		
Cobalt	2.7	2.96	A		-8.8	2.07 - 3.85		
Copper	1.51	1.66	A		-9.0	1.16 - 2.16		
Lead	0.604	0.694	A		-13.0	0.486 - 0.902		
Mercury	0.108	0.098	A		10.2	0.069 - 0.127		
Nickel	1.44	1.66	A		-13.3	1.16 - 2.16		
Selenium	0.914	0.908	A		0.7	0.636 - 1.180		
Technetium-99	0.0000153	0.0000143	A		7.0	0.0000100 - 0.0000186		
Thallium	1.98	2.23	A		-11.2	1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	0.115	0.125	A		-8.0	0.088 - 0.163		
Vanadium	4.26	4.60	A		-7.4	3.22 - 5.98		
Zinc	6.54	7.08	A		-7.6	4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.52	0.529	A		-1.7	0.370 - 0.688	0.06	
Cesium-134	19.5	21.5	A		-9.3	15.1 - 28.0	1.3	
Cesium-137	31.0	29.4	A		5.4	20.6 - 38.2	1.9	
Cobalt-57	0.2		A			False Positive Test	0.08	
Cobalt-60	25.3	24.6	A		2.8	17.2 - 32.0	1.1	
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	33.3	31.6	A		5.4	22.1 - 41.1	2.2	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	1.08	1.064	A		1.5	0.745 - 1.383	0.12	
Plutonium-239/240	0.75	0.809	A		-7.3	0.566 - 1.052	0.09	
Potassium-40	99.0	91	A		8.8	64 - 118	6.2	
Strontium-90	7.98	8.72	A		-8.5	6.10 - 11.34	0.56	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	6.73	8.99	W		-25.1	6.29 - 11.69	0.76	
Uranium-234/233	1.47	1.50	A		-2.0	1.05 - 1.95	0.20	
Uranium-238	1.48	1.54	A		-3.9	1.08 - 2.00	0.20	
Zinc-65	-0.2		A			False Positive Test	0.2	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WEST04) PACE ANALYTICAL SERVICES, PITTSBURGH
1638 Roseytown Road
Greensburg, PA 15601

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.4681	0.529	A		-11.5	0.370 - 0.688	0.0836	
Cesium-134	18.72	21.5	A		-12.9	15.1 - 28.0	0.8992	
Cesium-137	29.69	29.4	A		1.0	20.6 - 38.2	2.471	
Cobalt-57	0.0479		A			False Positive Test	0.0999	
Cobalt-60	24.55	24.6	A		-0.2	17.2 - 32.0	1.159	
Hydrogen-3	228.8	243	A		-5.8	170 - 316	31.88	
Iron-55	22.08	26.4	A		-16.4	18.5 - 34.3	2.431	
Manganese-54	32.22	31.6	A		2.0	22.1 - 41.1	2.279	
Nickel-63	19.23	18.6	A		3.4	13.0 - 24.2	2.653	
Plutonium-238	0.9861	1.064	A		-7.3	0.745 - 1.383	0.1519	
Plutonium-239/240	0.7197	0.809	A		-11.0	0.566 - 1.052	0.1132	
Potassium-40	92.40	91	A		1.5	64 - 118	7.254	
Strontium-90	7.581	8.72	A		-13.1	6.10 - 11.34	1.214	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.584	1.50	A		5.6	1.05 - 1.95	0.2479	
Uranium-238	1.447	1.54	A		-6.0	1.08 - 2.00	0.2283	
Zinc-65	0.1433		A			False Positive Test	0.3572	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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H = Uncertainty potentially too high (for information purposes only)
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MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WIPH01) WI, DPH, Radiation Protection Section
1 West Wilson
Madison, WI 53703

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WIPP01) WIPP Laboratories
1400 University Drive
Carlsbad, NM 88220

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	5.53E-01	0.529	A		4.5	0.370 - 0.688	3.98E-02	
Cesium-134	1.94E+01	21.5	A		-9.8	15.1 - 28.0	1.34E+00	
Cesium-137	2.86E+01	29.4	A		-2.7	20.6 - 38.2	1.94E+00	
Cobalt-57	1.21E-01		A			False Positive Test	1.65E-01	
Cobalt-60	2.46E+01	24.6	A		0.0	17.2 - 32.0	1.68E+00	
Hydrogen-3	2.49E+02	243	A		2.5	170 - 316	3.00E+00	L
Iron-55	3.18E+01	26.4	W		20.5	18.5 - 34.3	3.63E+00	
Manganese-54	3.25E+01	31.6	A		2.8	22.1 - 41.1	2.20E+00	
Nickel-63	2.49E+01	18.6	N		33.9	13.0 - 24.2	4.08E+00	
Plutonium-238	1.15E+00	1.064	A		8.1	0.745 - 1.383	7.83E-02	
Plutonium-239/240	8.07E-01	0.809	A		-0.2	0.566 - 1.052	6.83E-02	
Potassium-40	9.37E+01	91	A		3.0	64 - 118	7.03E+00	
Strontium-90	9.41E-00	8.72	A		7.9	6.10 - 11.34	5.52E-01	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	7.97E+00	8.99	A		-11.3	6.29 - 11.69	1.87E+00	H
Uranium-234/233	1.64E+00	1.50	A		9.3	1.05 - 1.95	1.41E-01	
Uranium-238	1.59E+00	1.54	A		3.2	1.08 - 2.00	1.46E-01	
Zinc-65	8.01E-01		A			False Positive Test	6.83E-01	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WSHL01) Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive
Madison, WI 53718

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	0.7878	0.529	N		48.9	0.370 - 0.688	0.05658	
Cesium-134	20.2	21.5	A		-6.0	15.1 - 28.0	0.734	
Cesium-137	29.4	29.4	A		0.0	20.6 - 38.2	1.46	
Cobalt-57	0.0726		A			False Positive Test	0.117	
Cobalt-60	24.5	24.6	A		-0.4	17.2 - 32.0	2.51	
Hydrogen-3	221.8276	243	A		-8.7	170 - 316	0.0721	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.2	31.6	A		-1.3	22.1 - 41.1	2.63	
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	0.9779	1.064	A		-8.1	0.745 - 1.383	0.07971	
Plutonium-239/240	0.684	0.809	A		-15.5	0.566 - 1.052	0.05133	
Potassium-40	89.2	91	A		-2.0	64 - 118	13.8	
Strontium-90	8.65	8.72	A		-0.8	6.10 - 11.34	0.35	

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	1.451	1.50	A		-3.3	1.05 - 1.95	0.08407	
Uranium-238	1.447	1.54	A		-6.0	1.08 - 2.00	0.08341	
Zinc-65	-0.177		A			False Positive Test	0.446	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
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H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WSTI01) Waste Stream Technology Inc.
302 Grote Ave
Buffalo, NY 14207

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(WVDP01) WVDP Environmental Laboratory
10282 Rock Springs Road
West Valley, NY 14171

Inorganic

Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	NR	0.00090				0.00063 - 0.00117		
Uranium-238	NR	0.124				0.087 - 0.161		
Uranium-Total	NR	0.125				0.088 - 0.163		
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	19.5	21.5	A		-9.3	15.1 - 28.0	0.258	L
Cesium-137	29.7	29.4	A		1.0	20.6 - 38.2	0.416	L
Cobalt-57	0.0886		A			False Positive Test	0.0579	
Cobalt-60	24.6	24.6	A		0.0	17.2 - 32.0	0.304	L
Hydrogen-3	254	243	A		4.5	170 - 316	4.29	L
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	31.6	31.6	A		0.0	22.1 - 41.1	0.467	L
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	93.2	91	A		2.4	64 - 118	2.87	
Strontium-90	8.36	8.72	A		-4.1	6.10 - 11.34	0.449	

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	-0.0398		A			False Positive Test	0.312	

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

(1) = False Positive
(11) = False Positive Test, Result Not Reported
(25) = Result not reported with other gamma results
(28) = Not Reporting Previously Reported Analyte
(29) = Statistically significant negative value at 3 standard deviations

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-11-MaW24
(YPGA01) US Army Yuma Proving Ground / Material Analysis Lab
301 C. Street
Yuma, AZ 85365

Inorganic — Units: (mg/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	6.37				4.46 - 8.28		
Arsenic	NR	3.17				2.22 - 4.12		
Barium	NR	0.942				0.659 - 1.225		
Beryllium	NR	0.489				0.342 - 0.636		
Cadmium	NR	0.489				0.342 - 0.636		
Chromium	NR	1.13				0.79 - 1.47		
Cobalt	NR	2.96				2.07 - 3.85		
Copper	NR	1.66				1.16 - 2.16		
Lead	NR	0.694				0.486 - 0.902		
Mercury	NR	0.098				0.069 - 0.127		
Nickel	NR	1.66				1.16 - 2.16		
Selenium	NR	0.908				0.636 - 1.180		
Technetium-99	NR	0.0000143				0.0000100 - 0.0000186		
Thallium	NR	2.23				1.56 - 2.90		
Uranium-235	0.000938	0.00090	A		4.2	0.00063 - 0.00117	0.000006	L
Uranium-238	0.129	0.124	A		4.0	0.087 - 0.161	0.005	
Uranium-Total	0.130	0.125	A		4.0	0.088 - 0.163	0.005	
Vanadium	NR	4.60				3.22 - 5.98		
Zinc	NR	7.08				4.96 - 9.20		

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.529				0.370 - 0.688		
Cesium-134	NR	21.5				15.1 - 28.0		
Cesium-137	NR	29.4				20.6 - 38.2		
Cobalt-57	NR					False Positive Test		
Cobalt-60	NR	24.6				17.2 - 32.0		
Hydrogen-3	NR	243				170 - 316		
Iron-55	NR	26.4				18.5 - 34.3		
Manganese-54	NR	31.6				22.1 - 41.1		
Nickel-63	NR	18.6				13.0 - 24.2		
Plutonium-238	NR	1.064				0.745 - 1.383		
Plutonium-239/240	NR	0.809				0.566 - 1.052		
Potassium-40	NR	91				64 - 118		
Strontium-90	NR	8.72				6.10 - 11.34		

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	8.99				6.29 - 11.69		
Uranium-234/233	NR	1.50				1.05 - 1.95		
Uranium-238	NR	1.54				1.08 - 2.00		
Zinc-65	NR					False Positive Test		

Radiological Reference Date: February 1, 2011

Other Flags:

A = Result acceptable Bias <=20%
W = Result accepatble with warning 20% < Bias < 30%
N = Result not acceptable Bias > 30%
L = Uncertainty potentially too low (for information purposes only)
H = Uncertainty potentially too high (for information purposes only)
RW = Report Warning
NR = Not Reported

Notes:

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(25) = Result not reported with other gamma results
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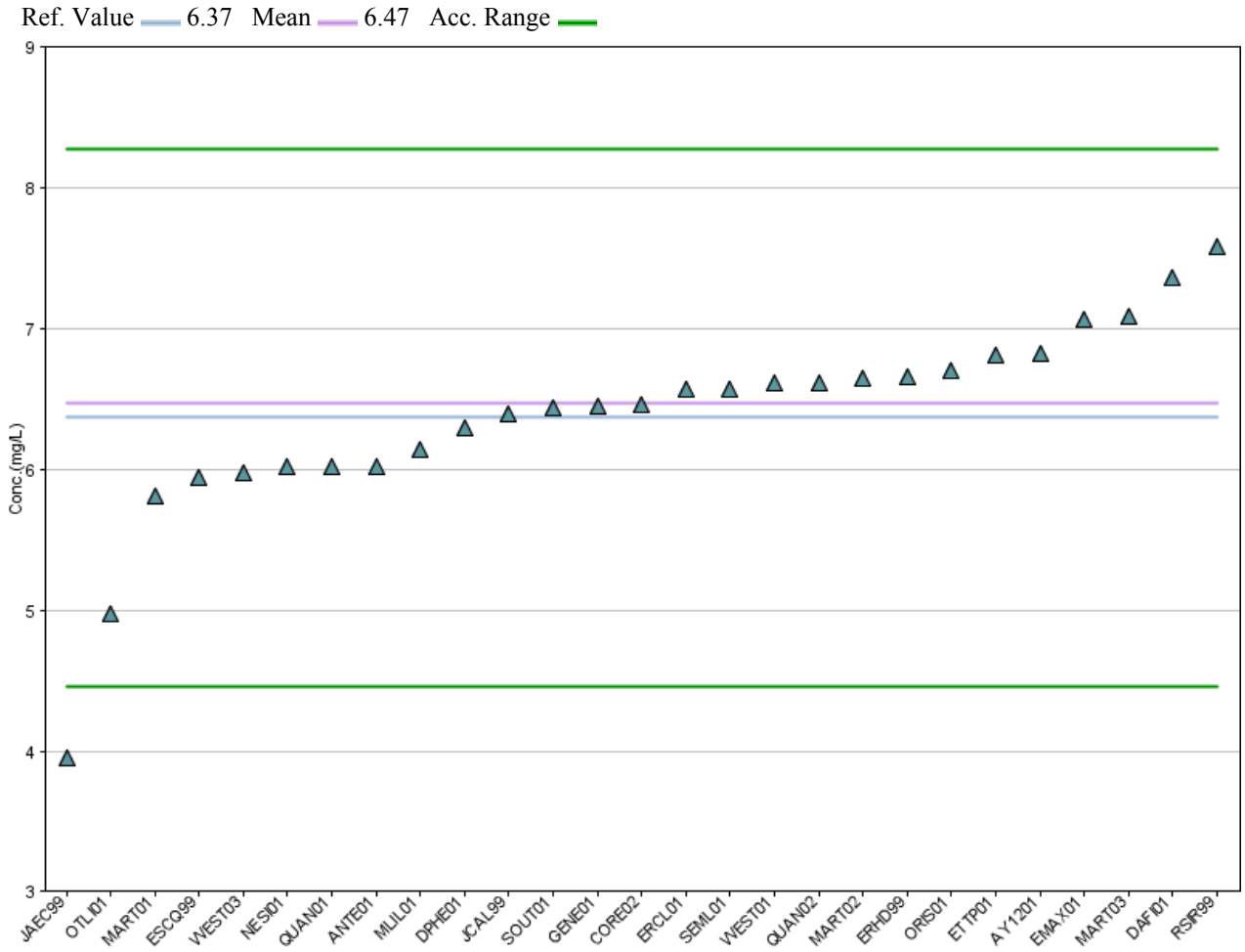
(29) = Statistically significant negative value at 3 standard deviations

Antimony

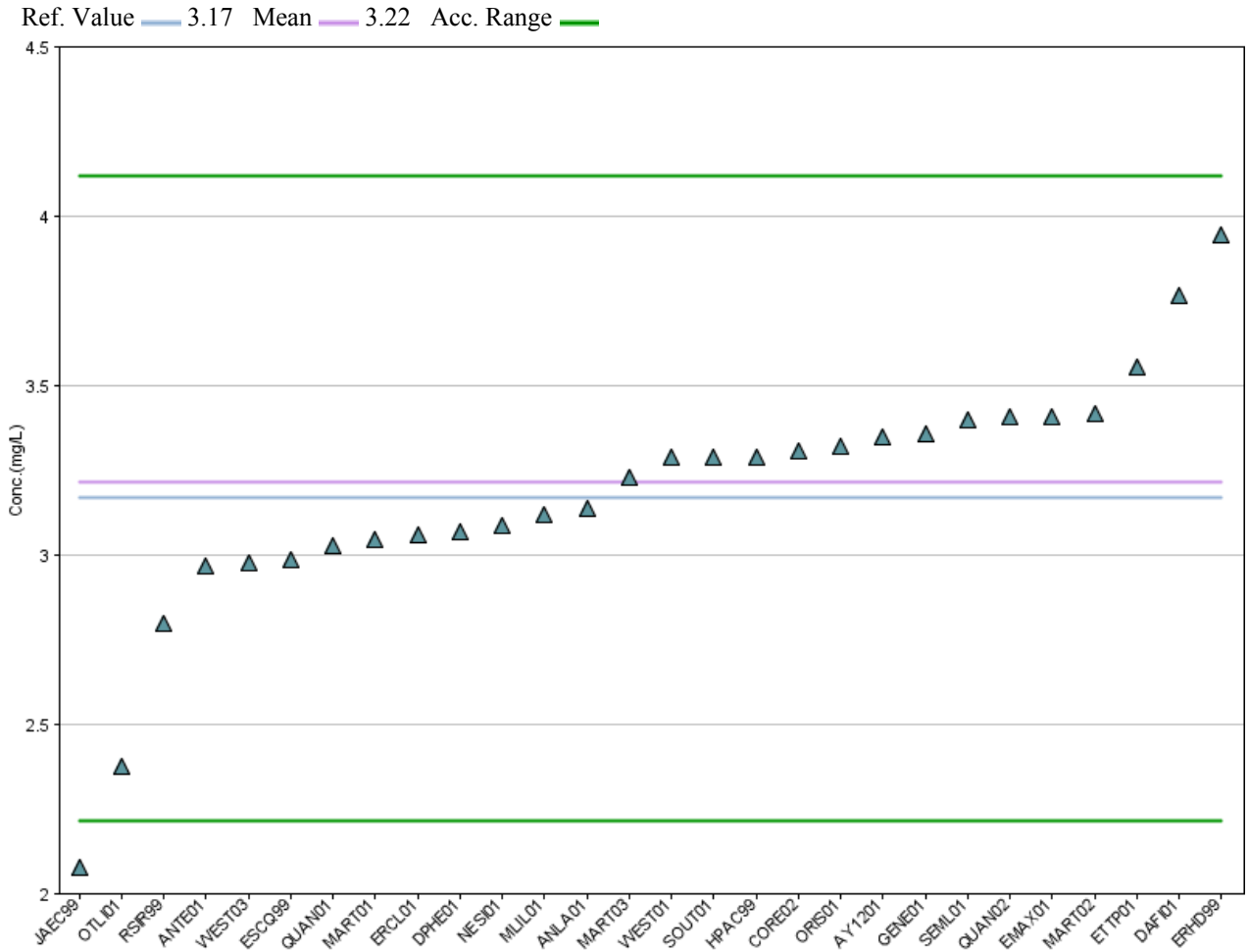
MAPEP-11-MaW24



Note: This chart shows only data points with values between 3.77 and 9.17 (±5 Standard Deviations)

Arsenic

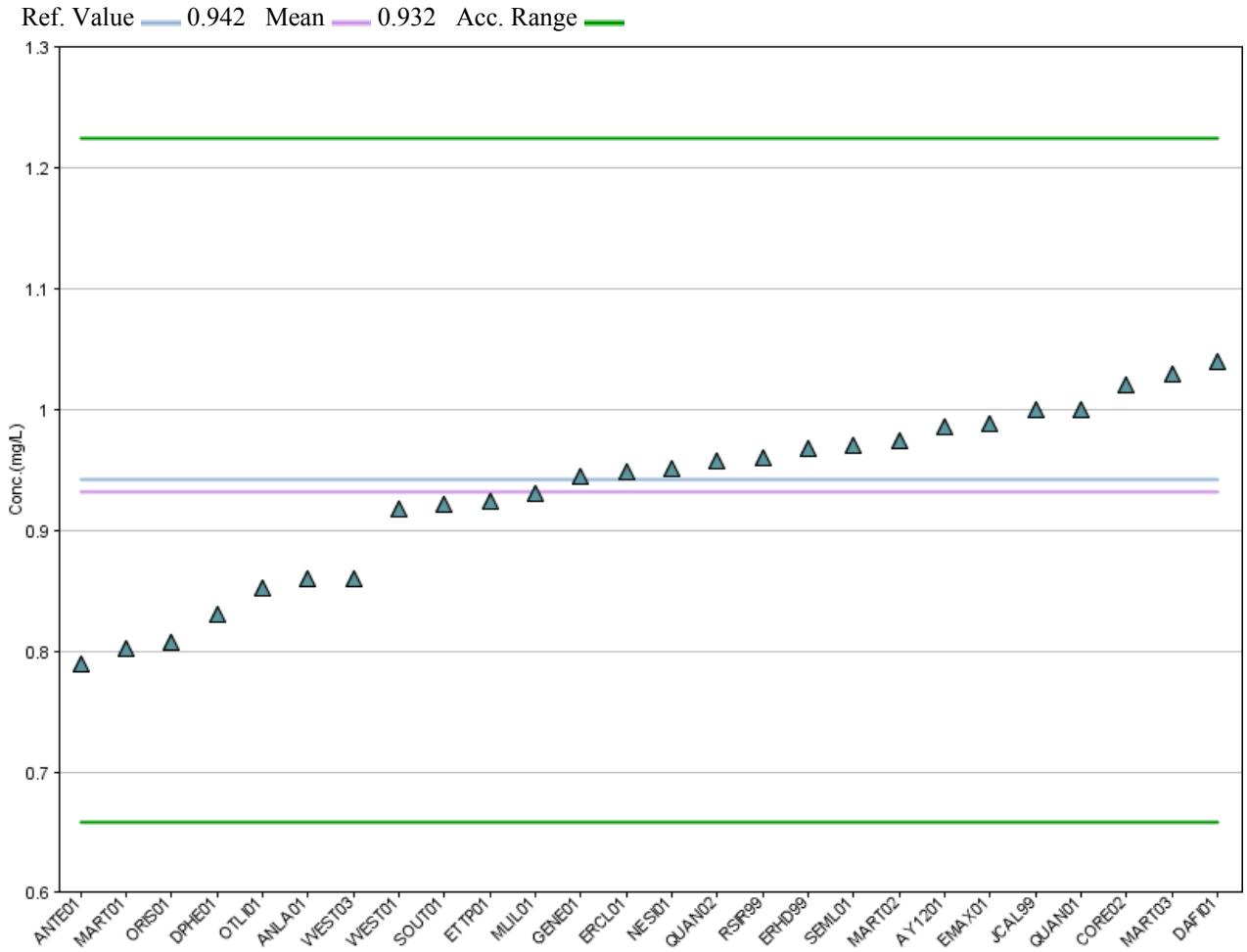
MAPEP-11-MaW24



Note: This chart shows only data points with values between 1.72 and 4.72 (±5 Standard Deviations)

Barium

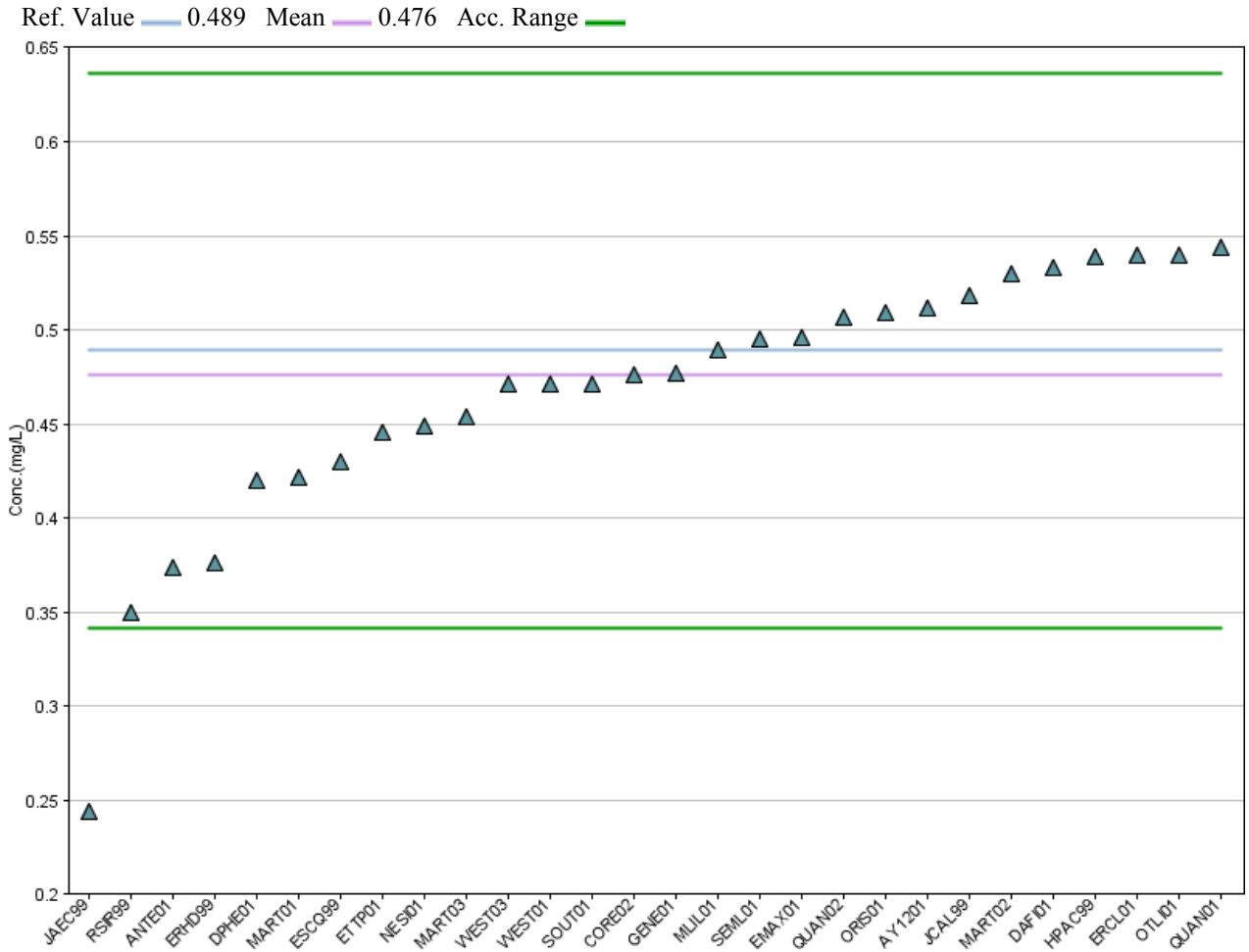
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.57 and 1.30 (±5 Standard Deviations)

Beryllium

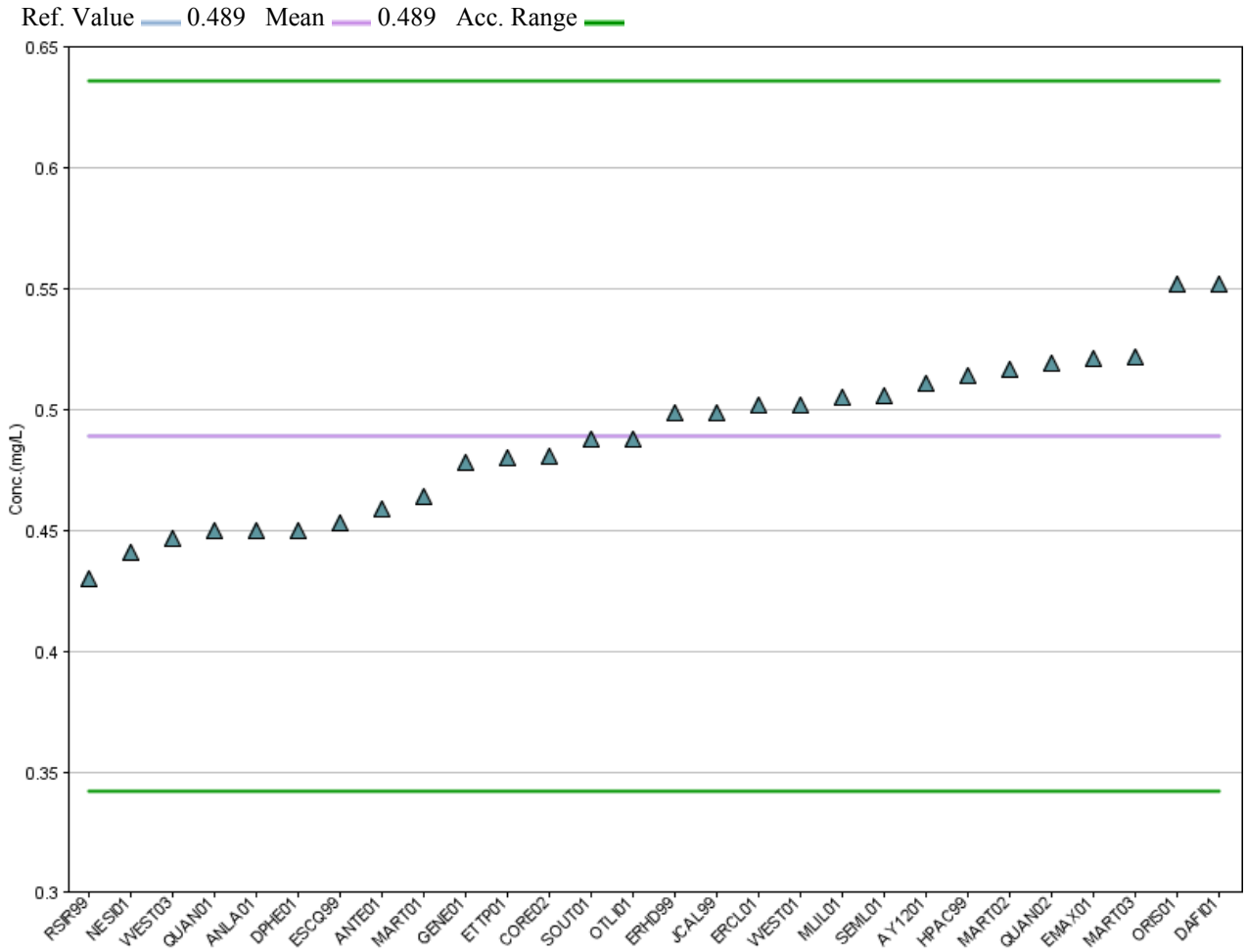
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.21 and 0.75 (±5 Standard Deviations)

Cadmium

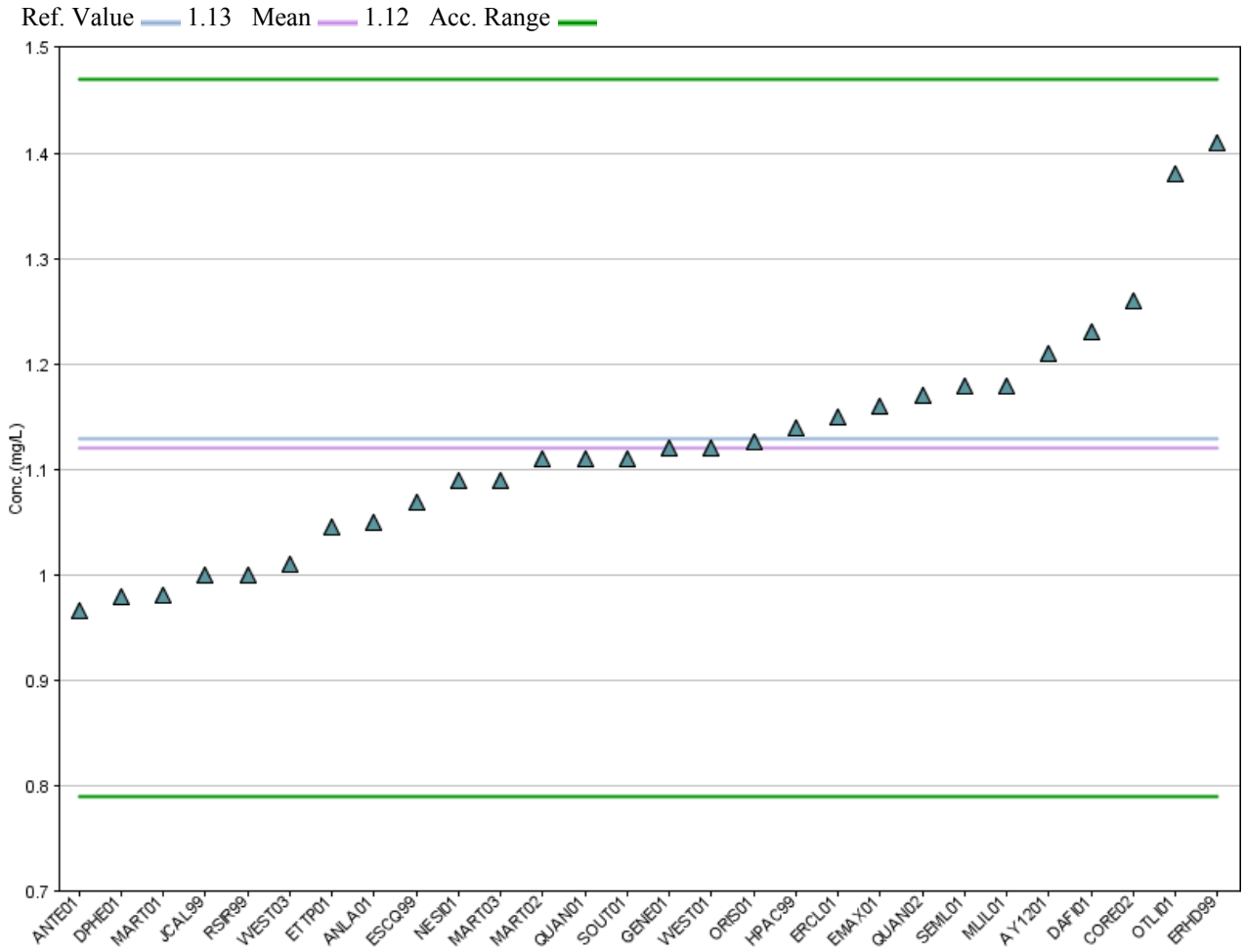
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.32 and 0.65 (±5 Standard Deviations)

Chromium

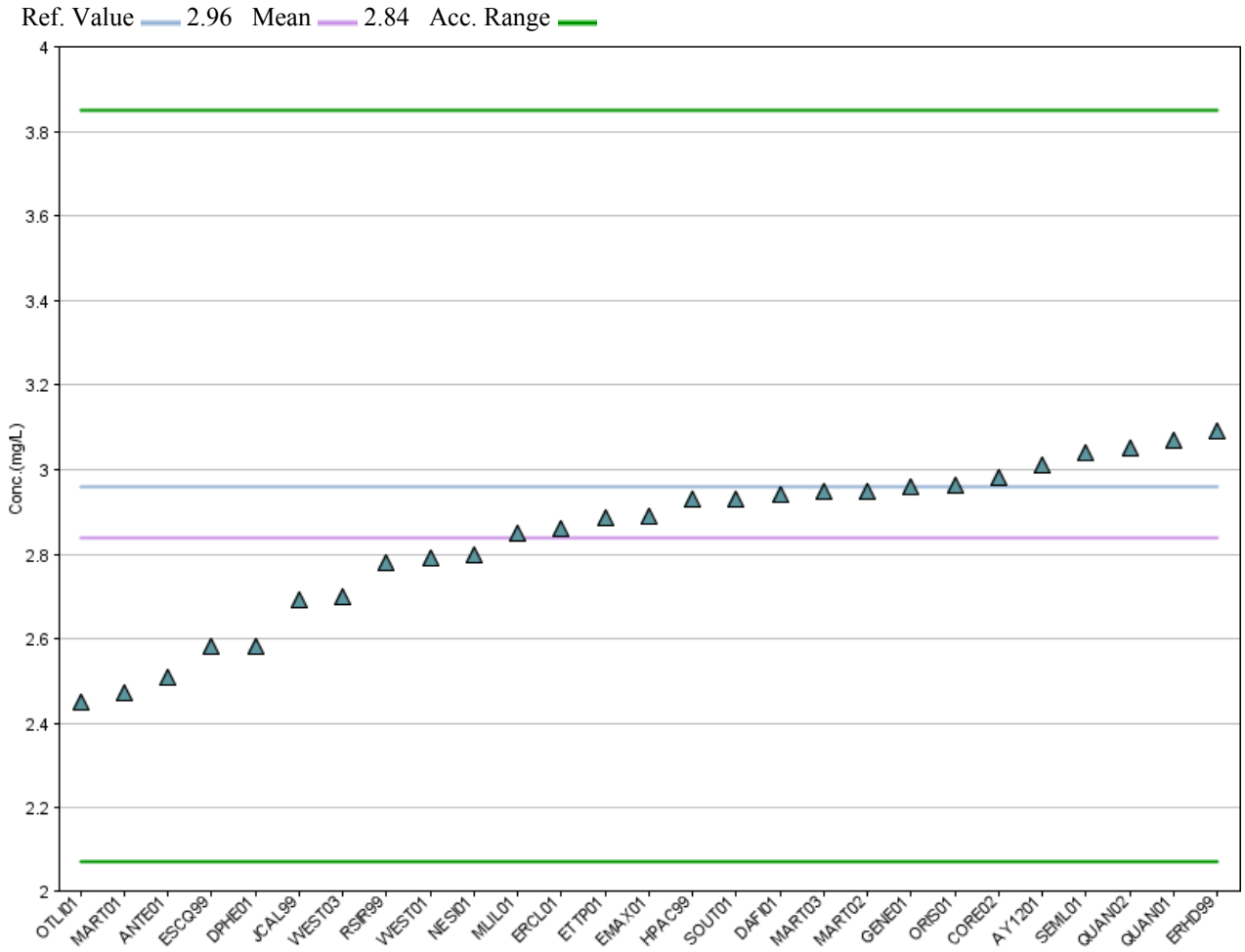
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.57 and 1.67 (±5 Standard Deviations)

Cobalt

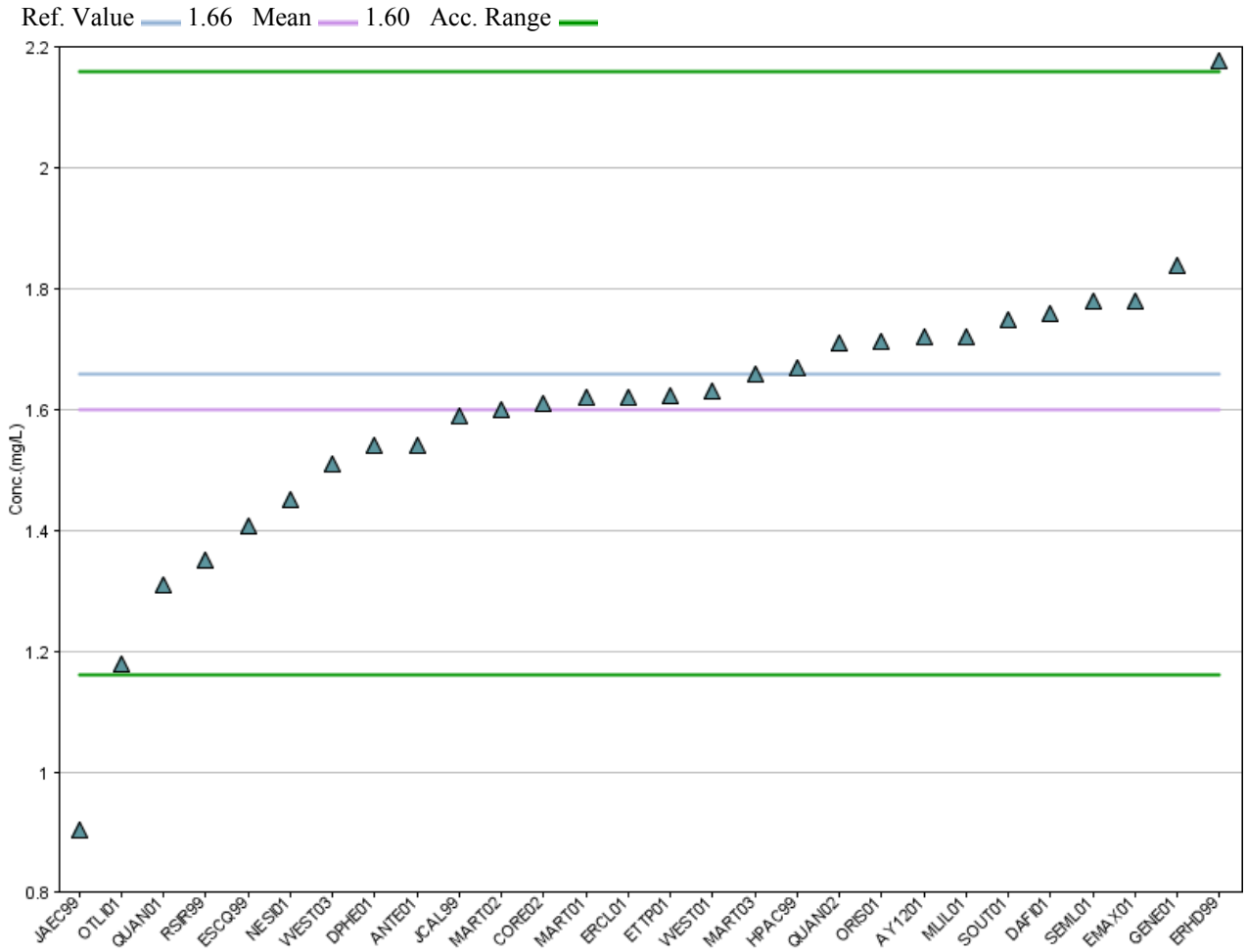
MAPEP-11-MaW24



Note: This chart shows only data points with values between 1.89 and 3.79 (±5 Standard Deviations)

Copper

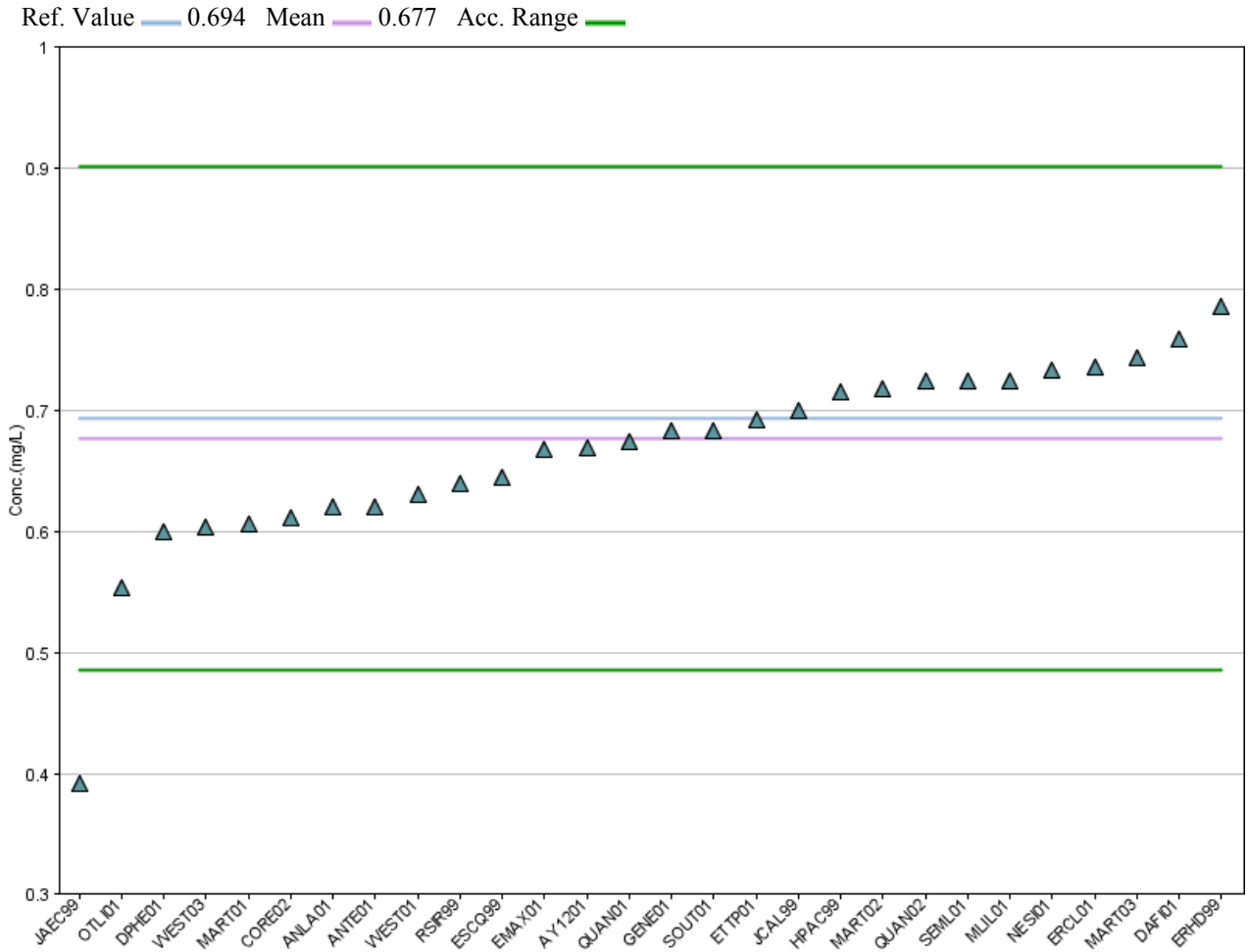
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.80 and 2.40 (±5 Standard Deviations)

Lead

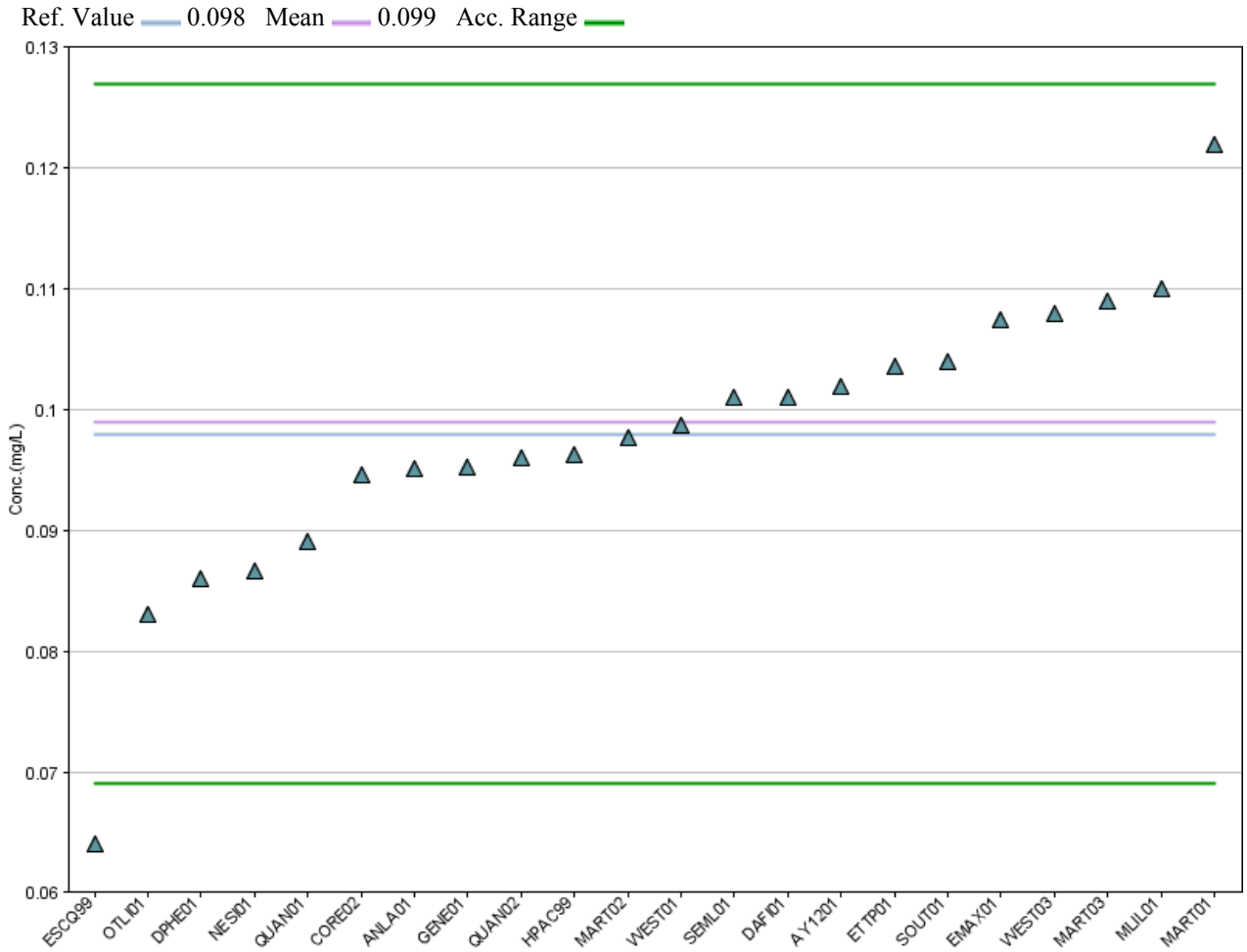
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.39 and 0.97 (±5 Standard Deviations)

Mercury

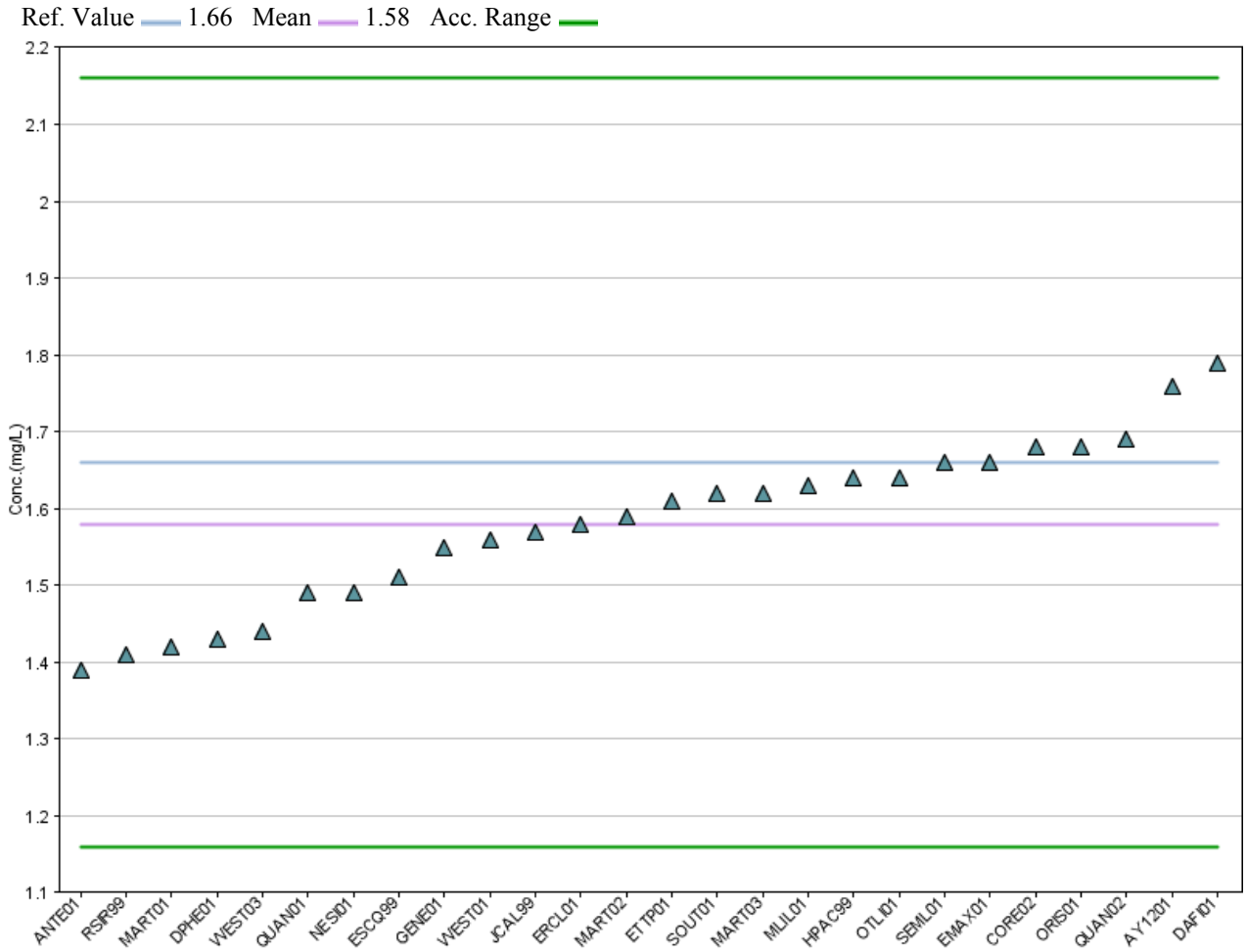
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.05 and 0.14 (±5 Standard Deviations)

Nickel

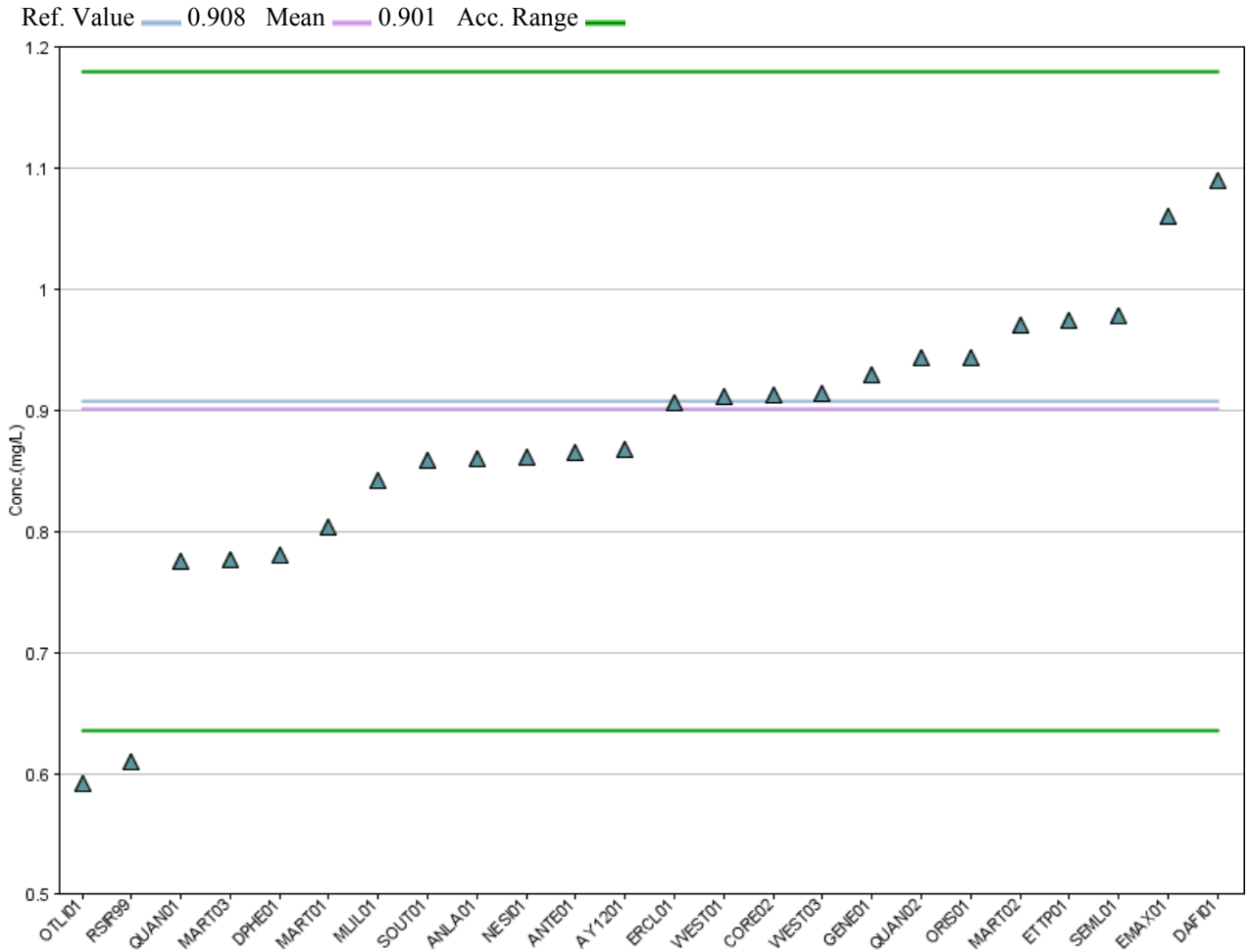
MAPEP-11-MaW24



Note: This chart shows only data points with values between 1.03 and 2.13 (±5 Standard Deviations)

Selenium

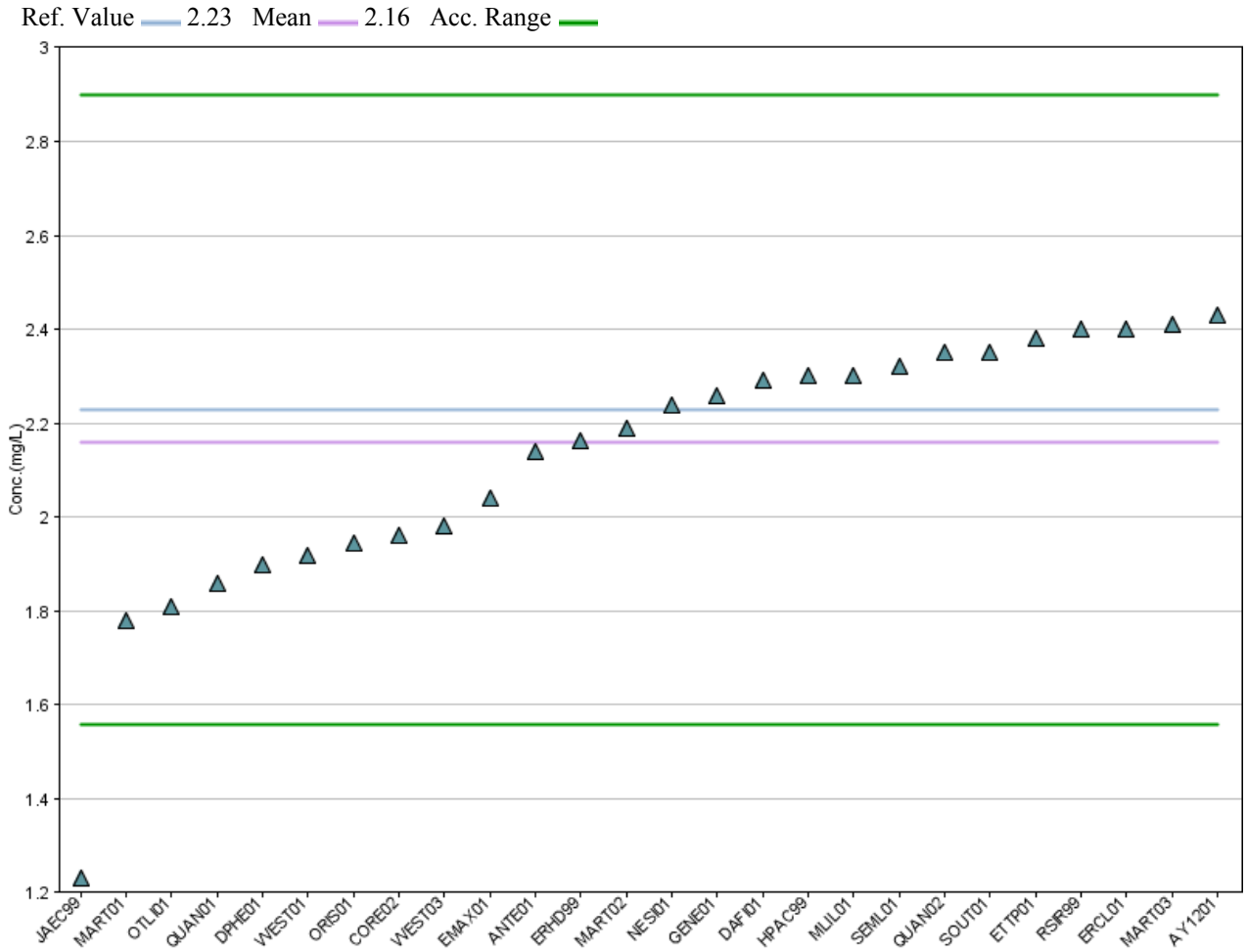
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.48 and 1.32 (±5 Standard Deviations)

Thallium

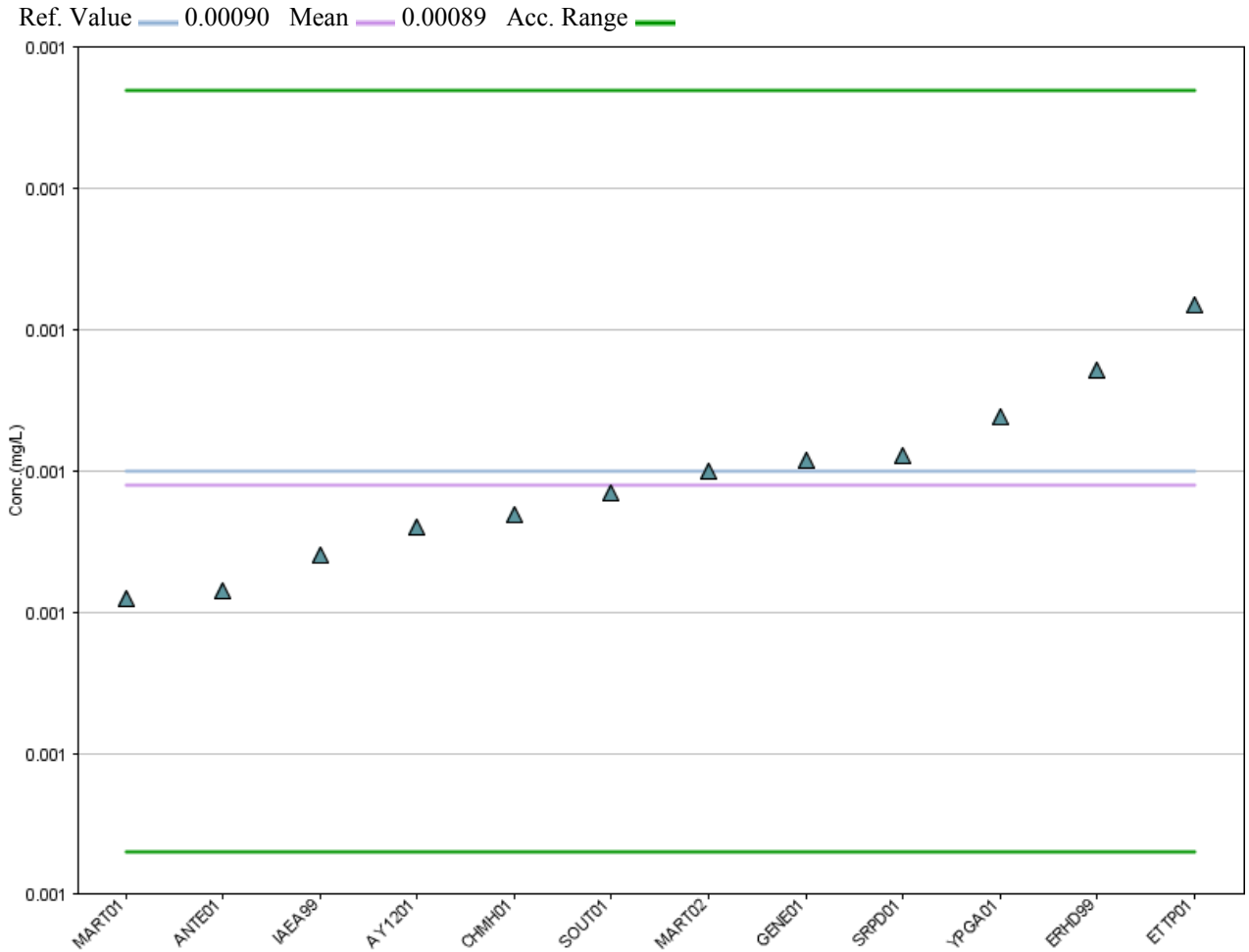
MAPEP-11-MaW24



Note: This chart shows only data points with values between 1.11 and 3.21 (±5 Standard Deviations)

Uranium-235

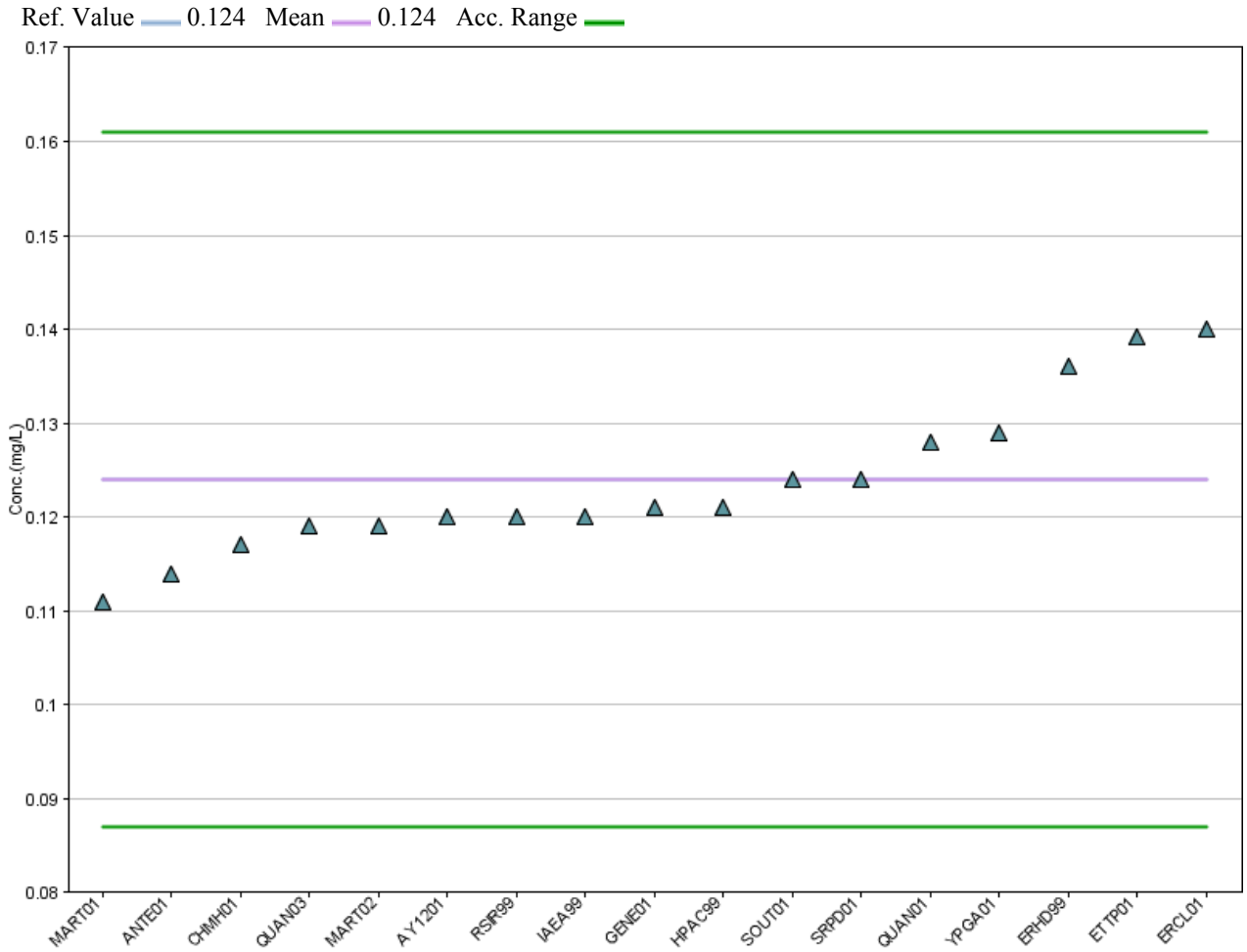
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.00 and 0.00 (±5 Standard Deviations)

Uranium-238

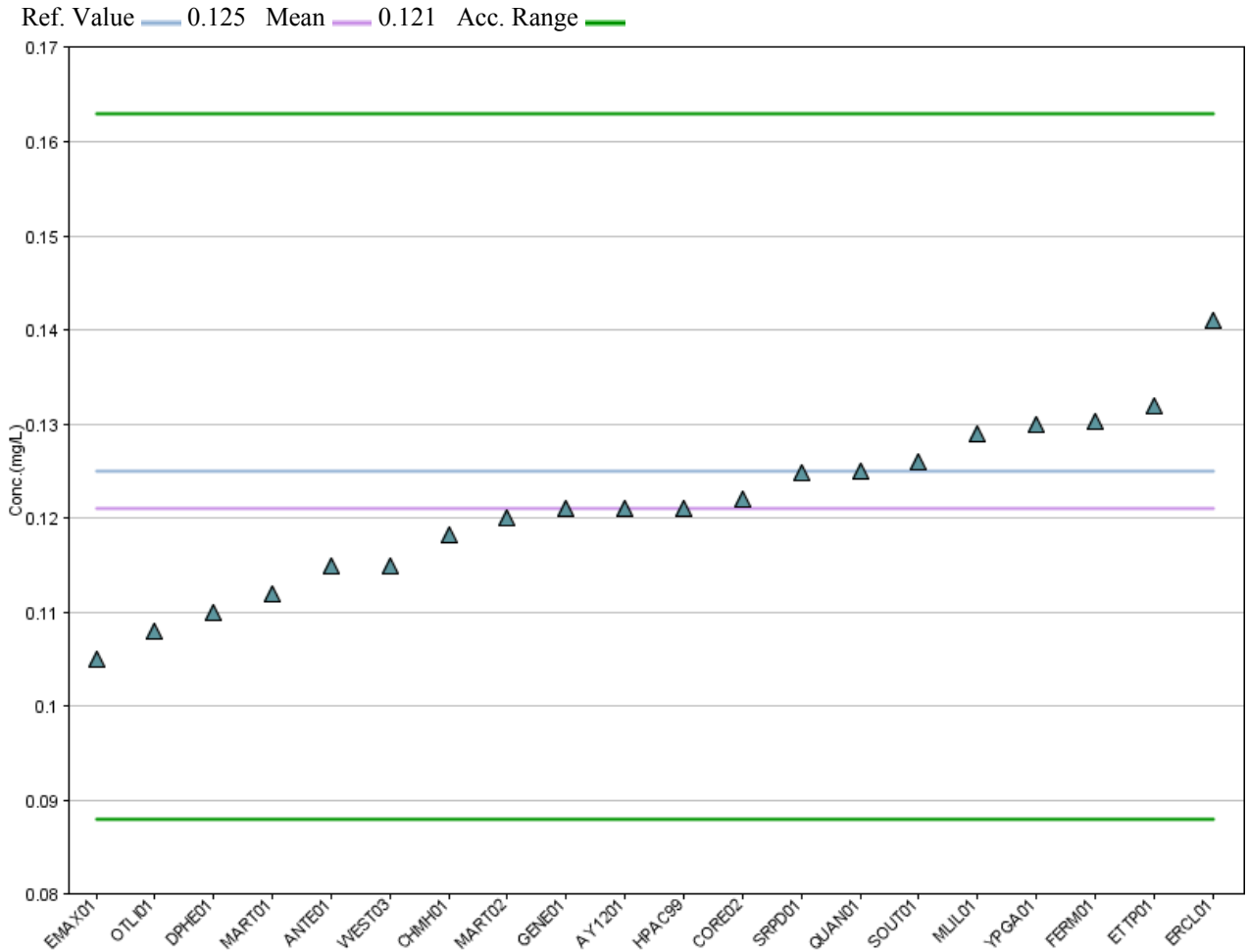
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.08 and 0.17 (±5 Standard Deviations)

Uranium-Total

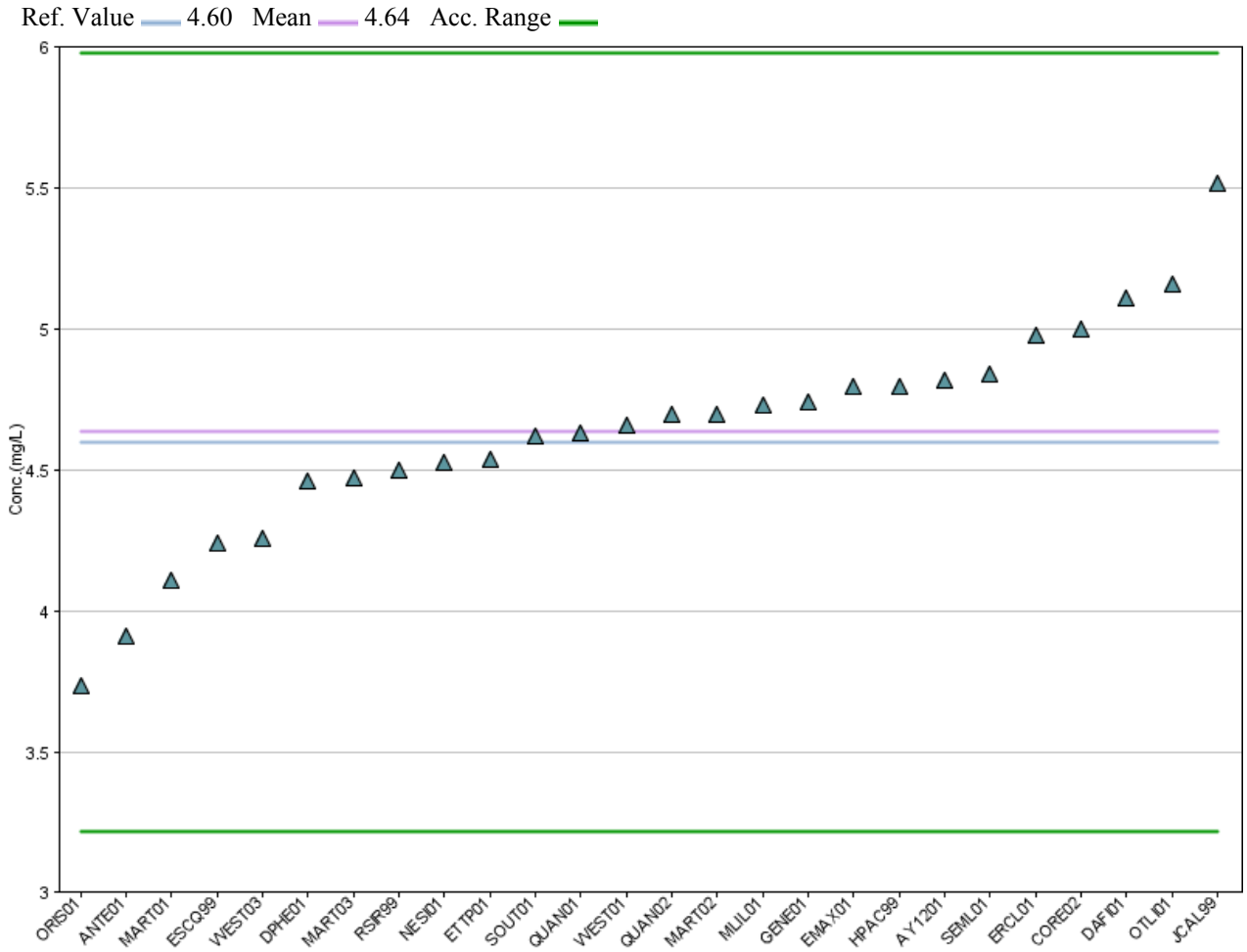
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.08 and 0.17 (±5 Standard Deviations)

Vanadium

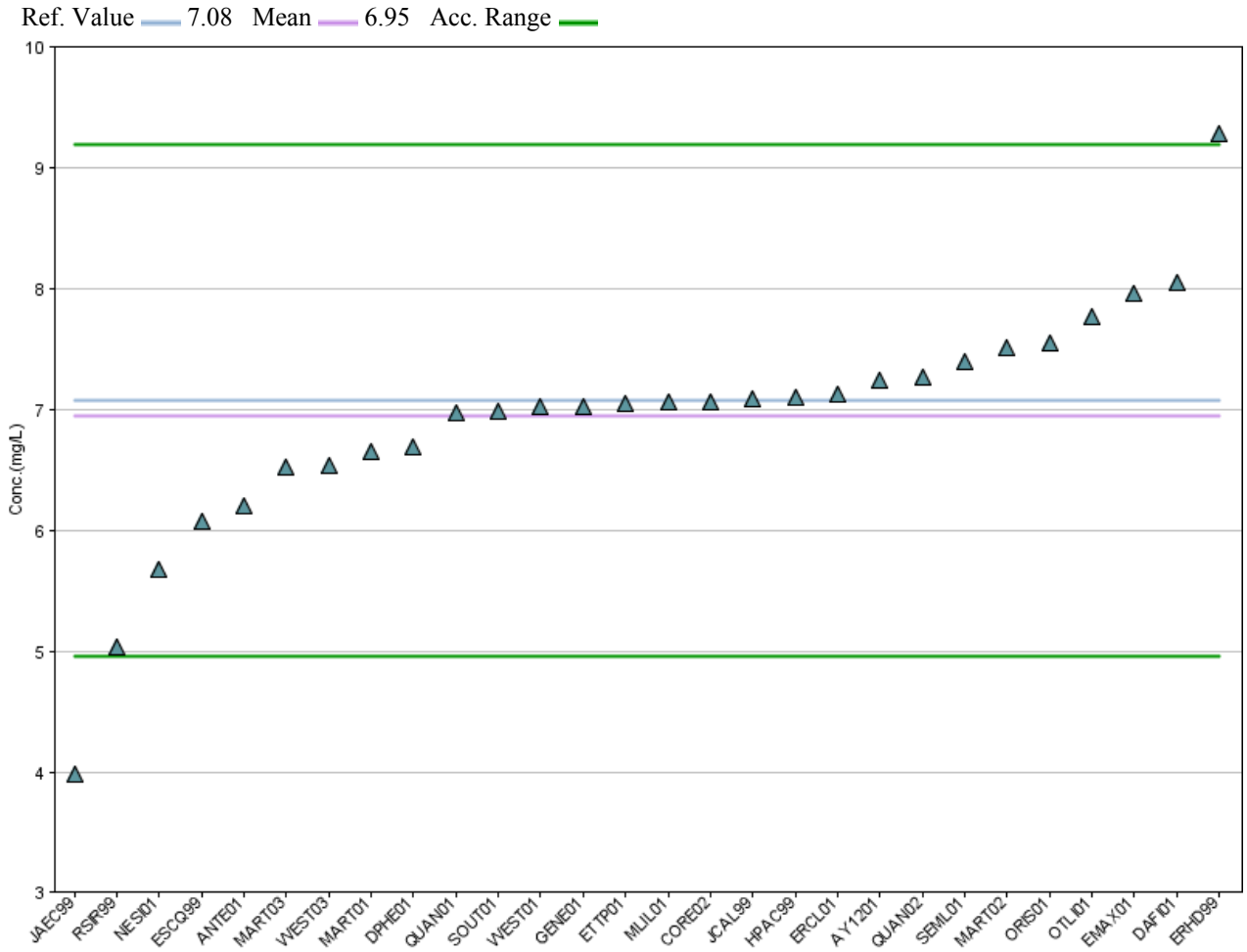
MAPEP-11-MaW24



Note: This chart shows only data points with values between 2.74 and 6.54 (±5 Standard Deviations)

Zinc

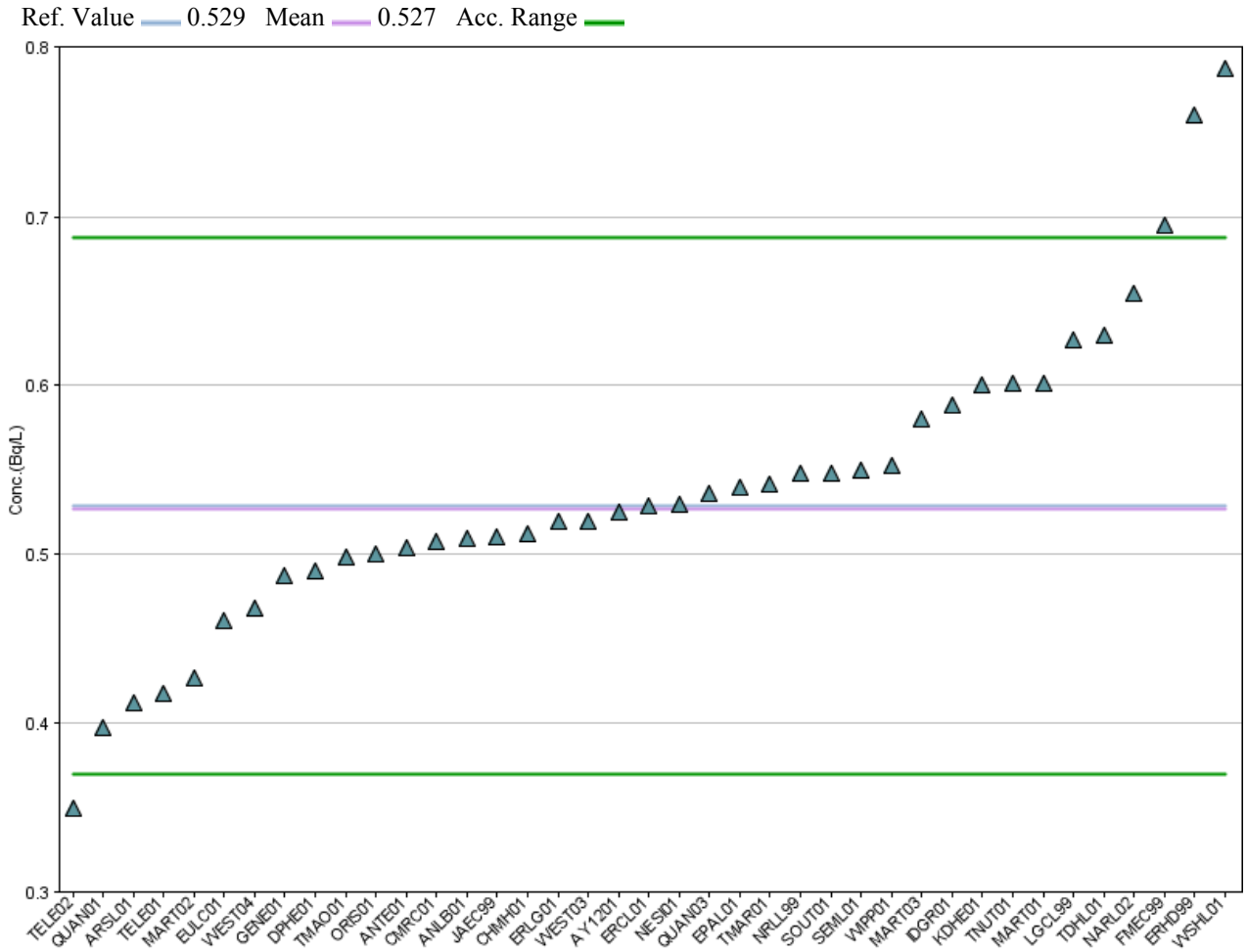
MAPEP-11-MaW24



Note: This chart shows only data points with values between 3.60 and 10.30 (±5 Standard Deviations)

Americium-241

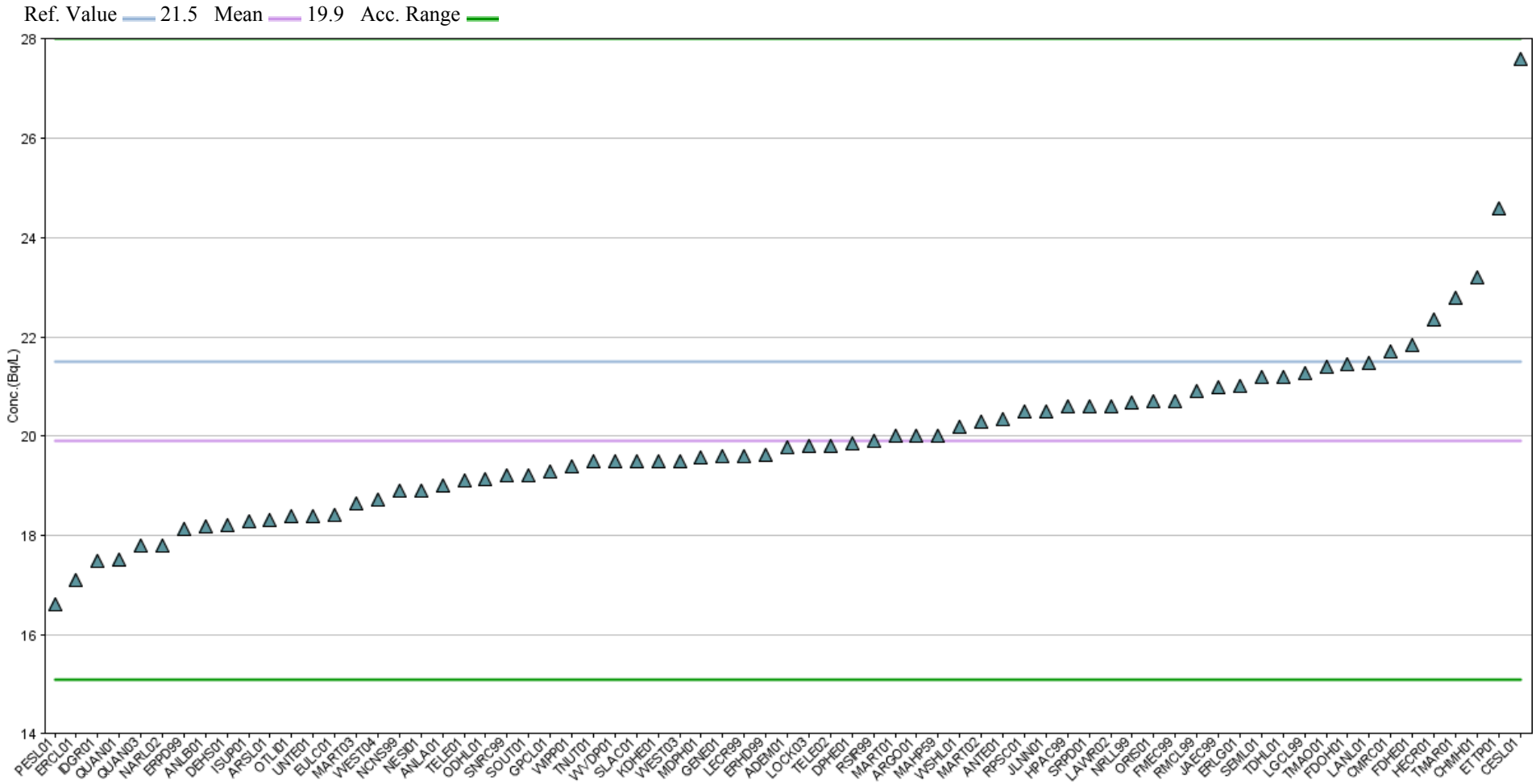
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.22 and 0.83 (±5 Standard Deviations)

Cesium-134

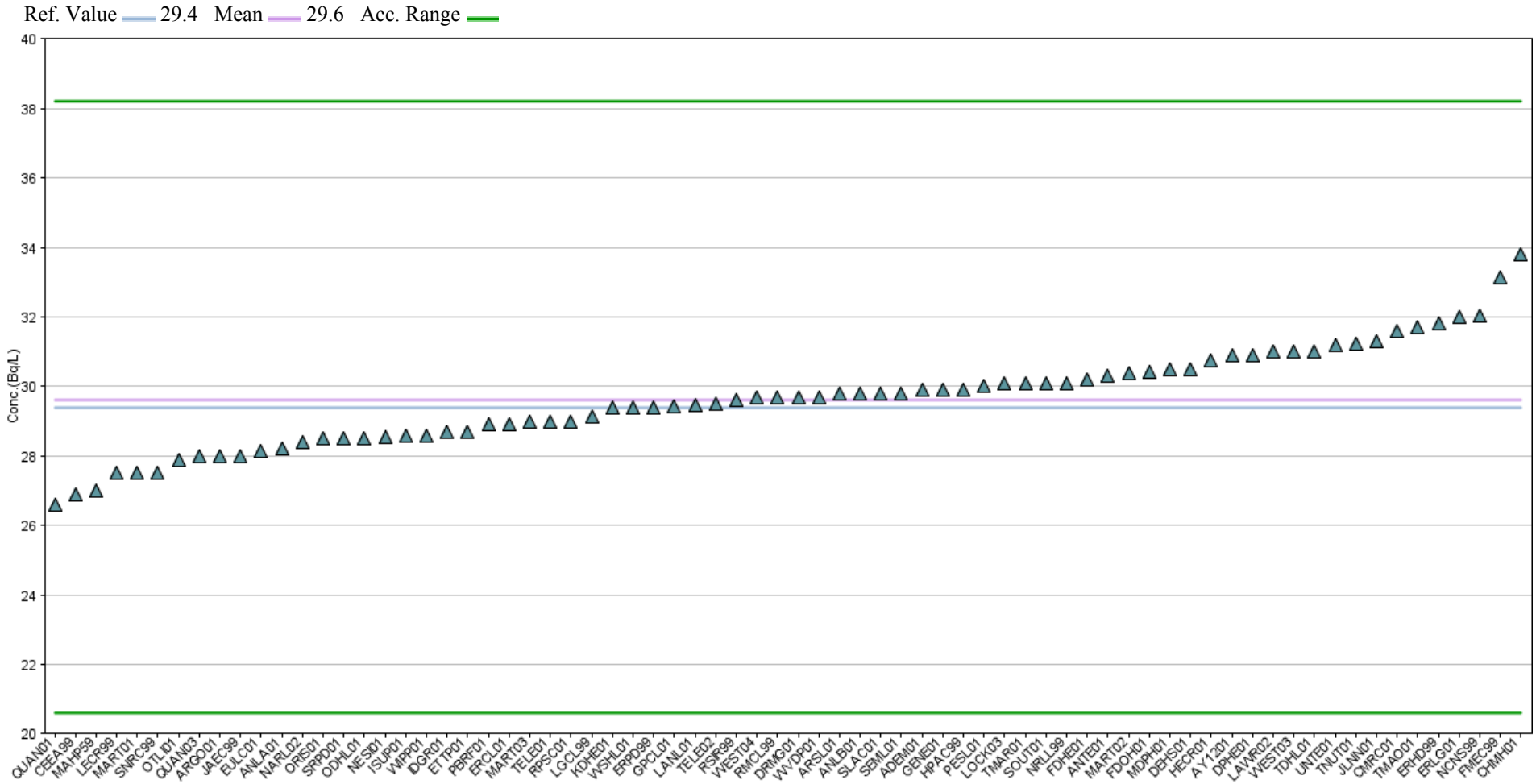
MAPEP-11-MaW24



Note: This chart shows only data points with values between 11.40 and 28.40 (±5 Standard Deviations)

Cesium-137

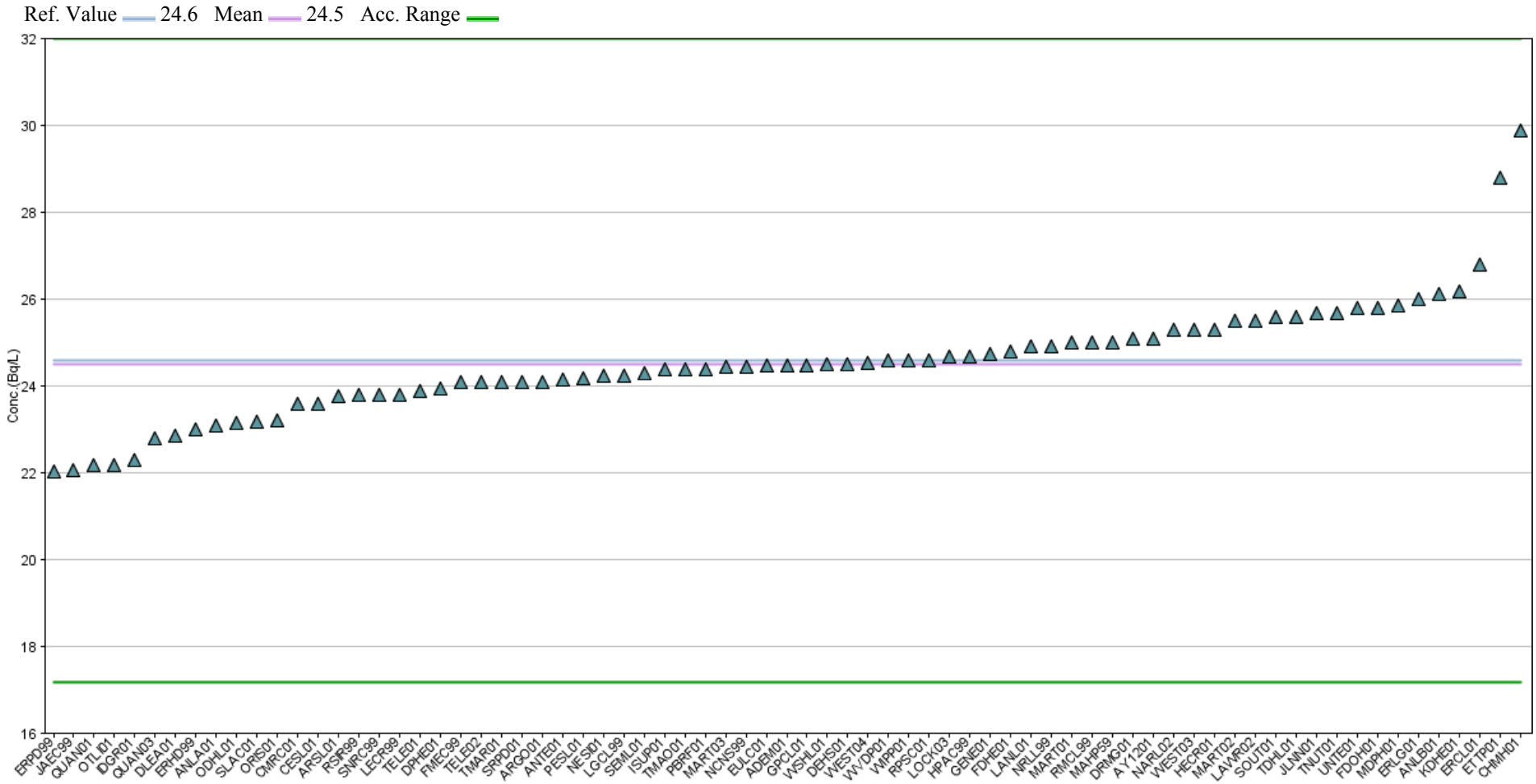
MAPEP-11-MaW24



Note: This chart shows only data points with values between 22.60 and 36.60 (±5 Standard Deviations)

Cobalt-60

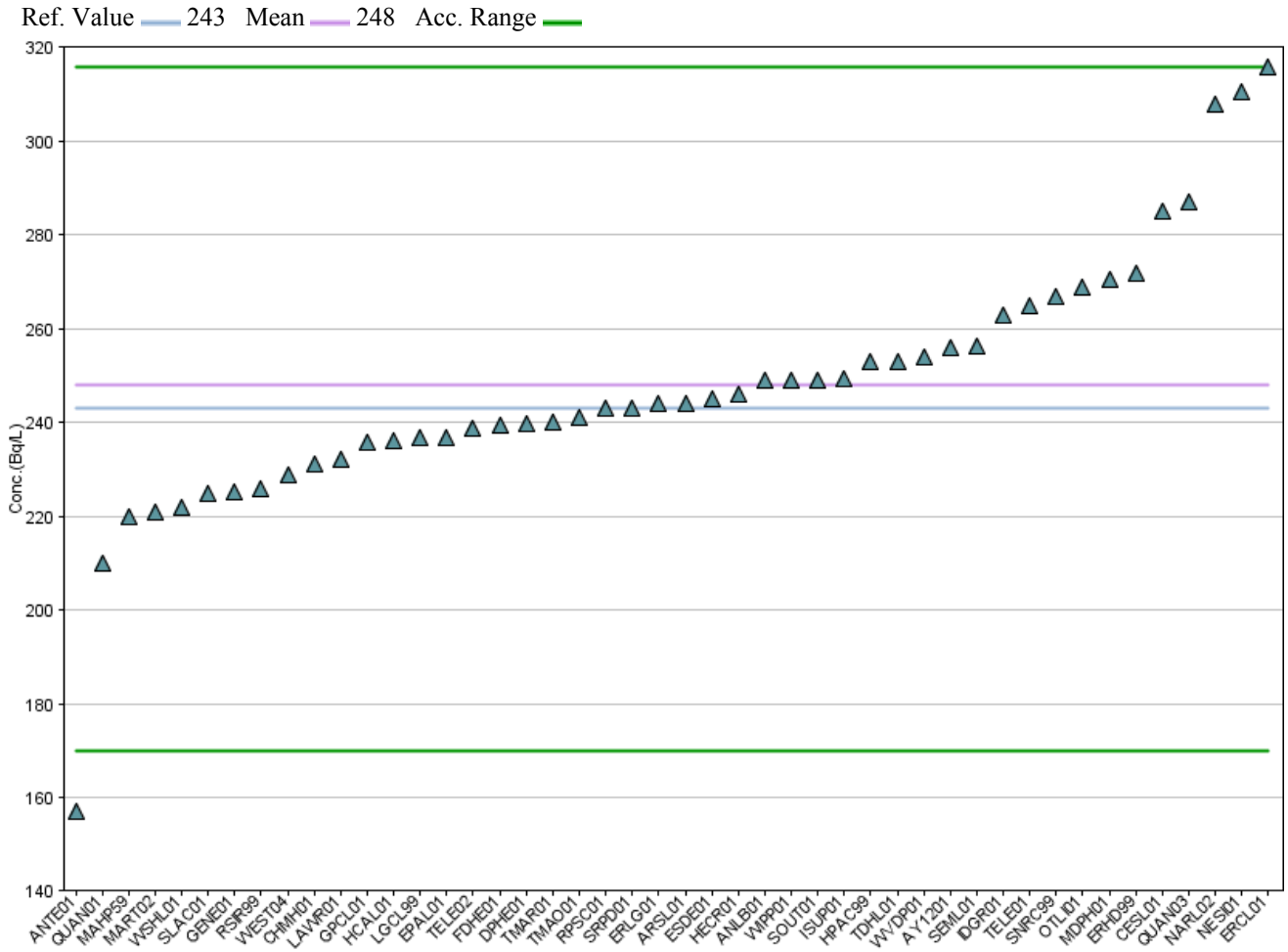
MAPEP-11-MaW24



Note: This chart shows only data points with values between 18.00 and 31.00 (±5 Standard Deviations)

Hydrogen-3

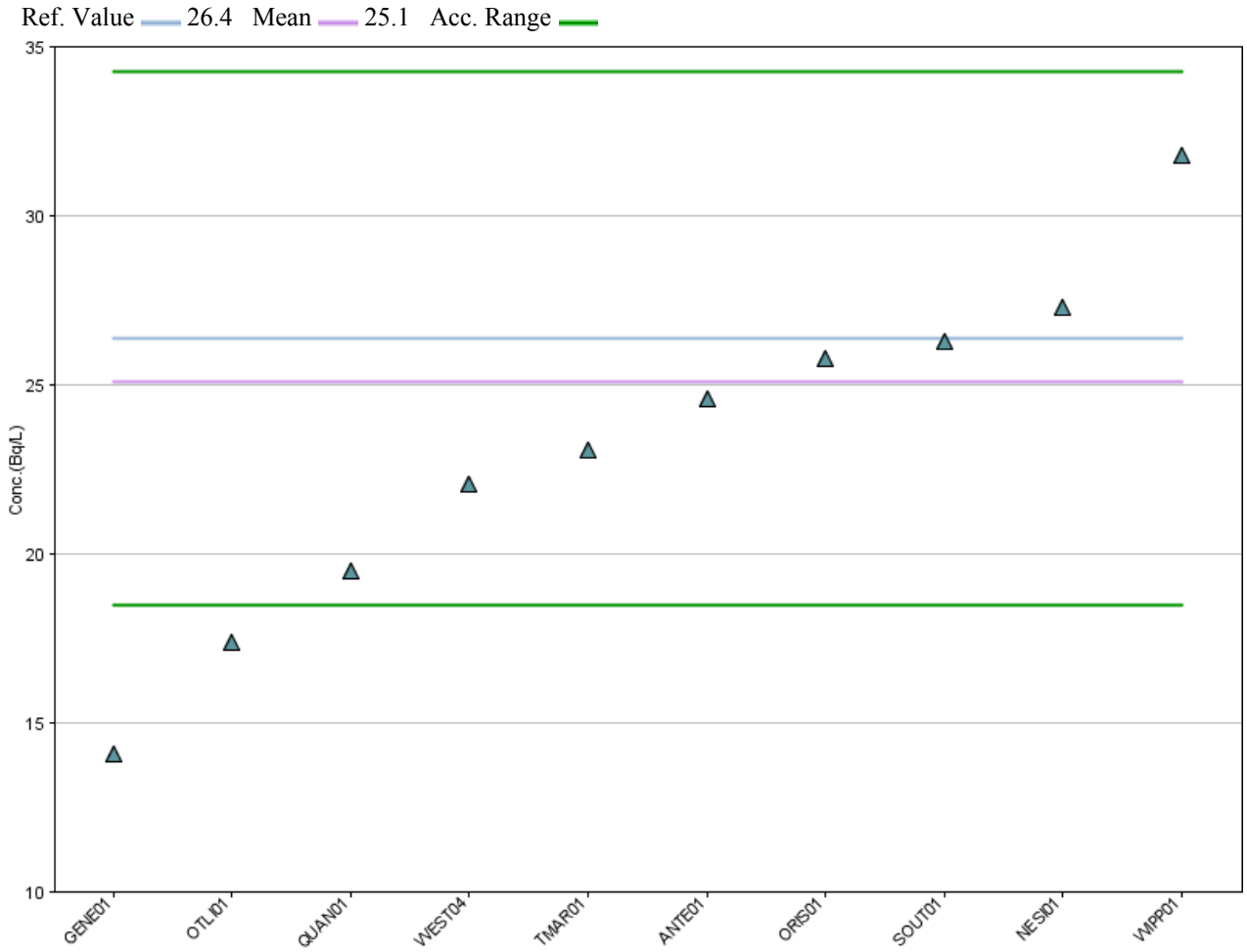
MAPEP-11-MaW24



Note: This chart shows only data points with values between 138.00 and 358.00 (±5 Standard Deviations)

Iron-55

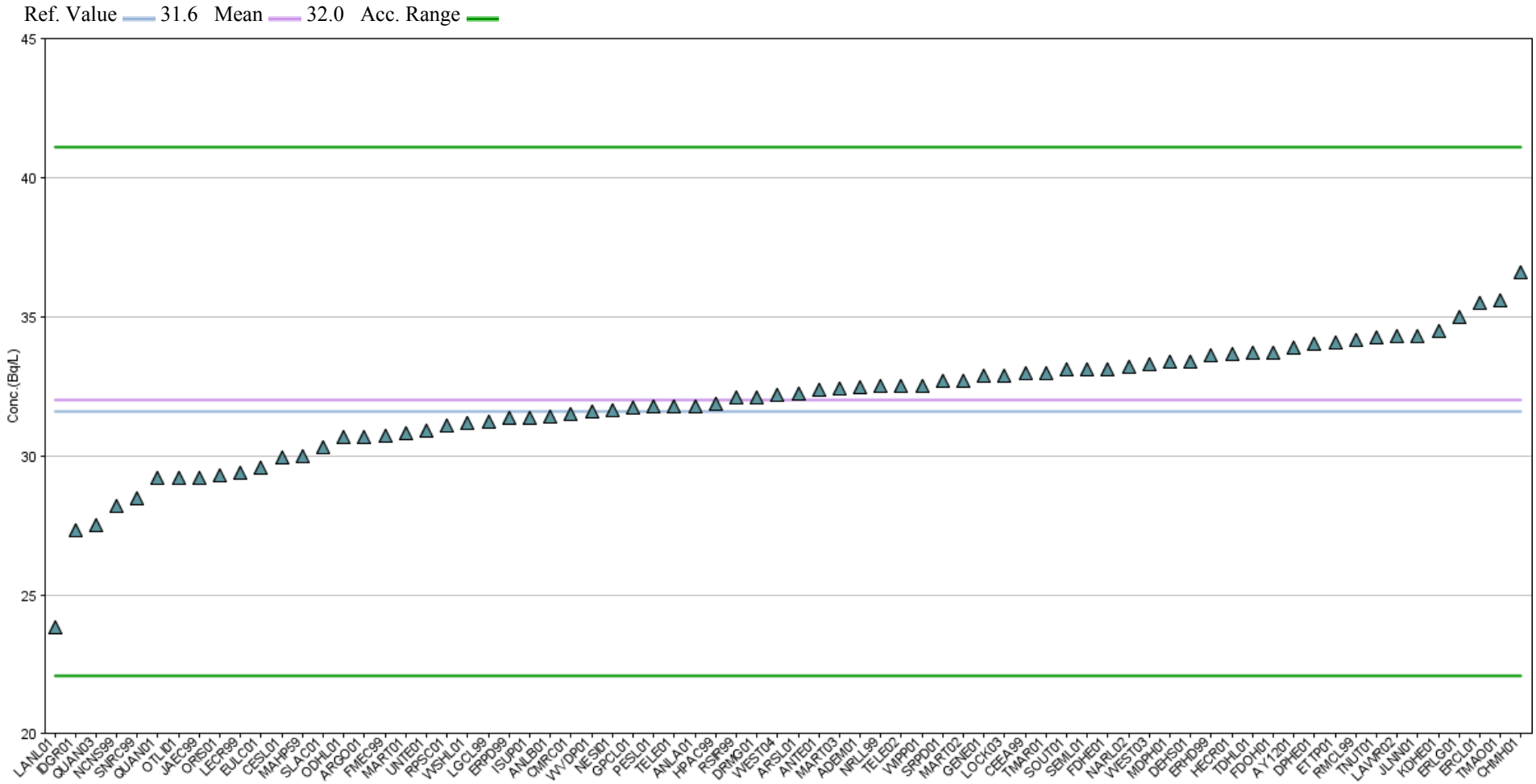
MAPEP-11-MaW24



Note: This chart shows only data points with values between 6.60 and 43.60 (±5 Standard Deviations)

Manganese-54

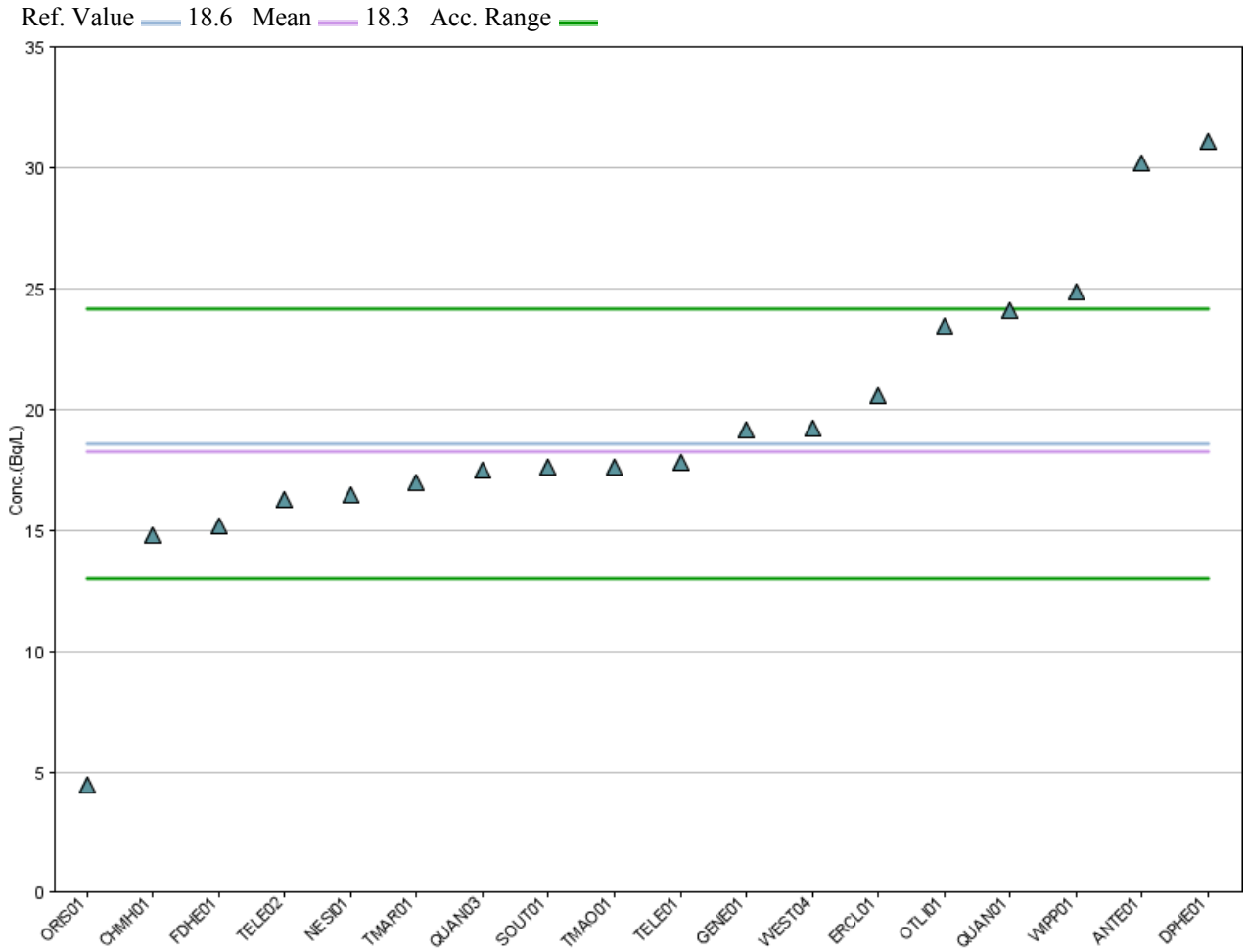
MAPEP-11-MaW24



Note: This chart shows only data points with values between 21.50 and 42.50 (±5 Standard Deviations)

Nickel-63

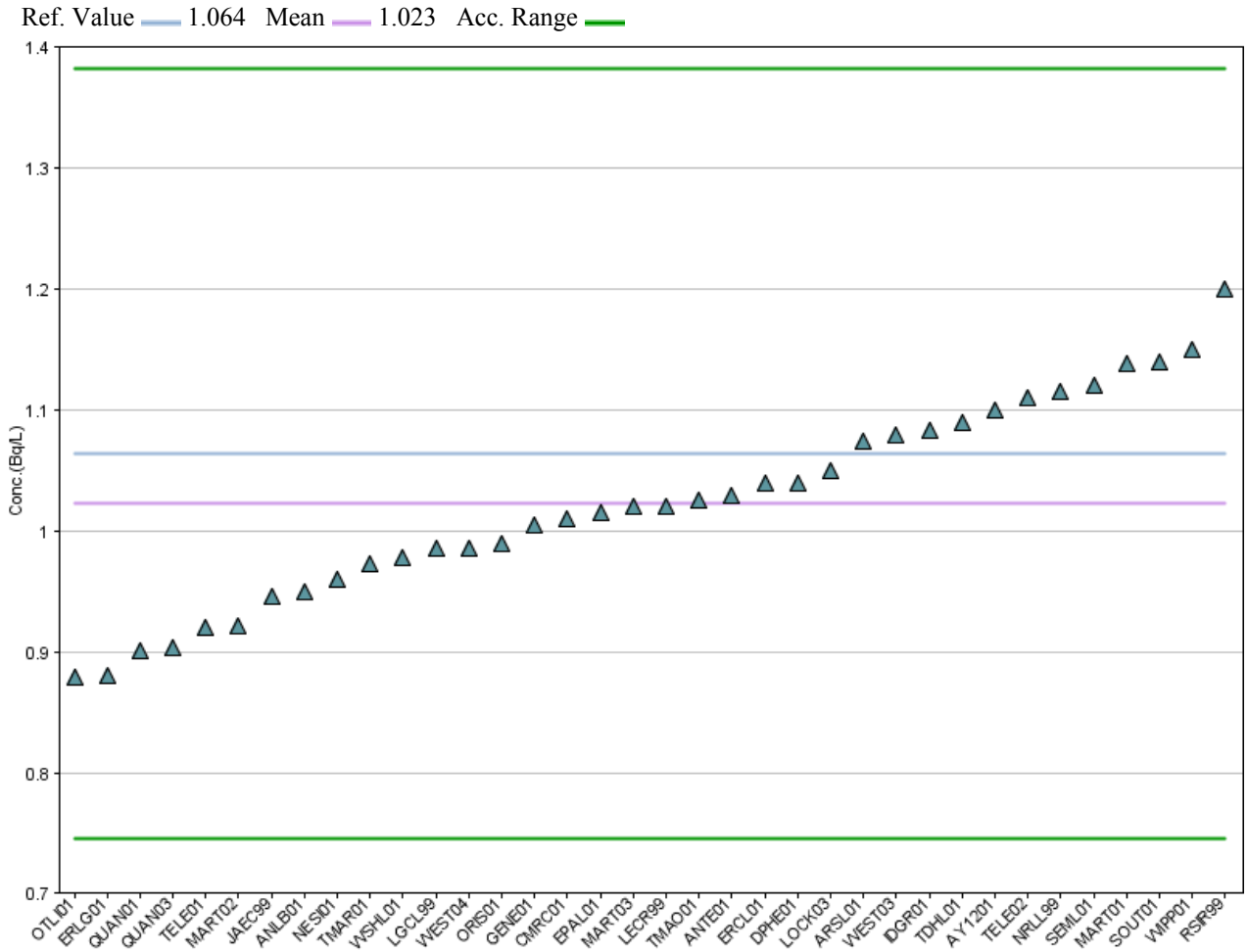
MAPEP-11-MaW24



Note: This chart shows only data points with values between 4.30 and 32.30 (±5 Standard Deviations)

Plutonium-238

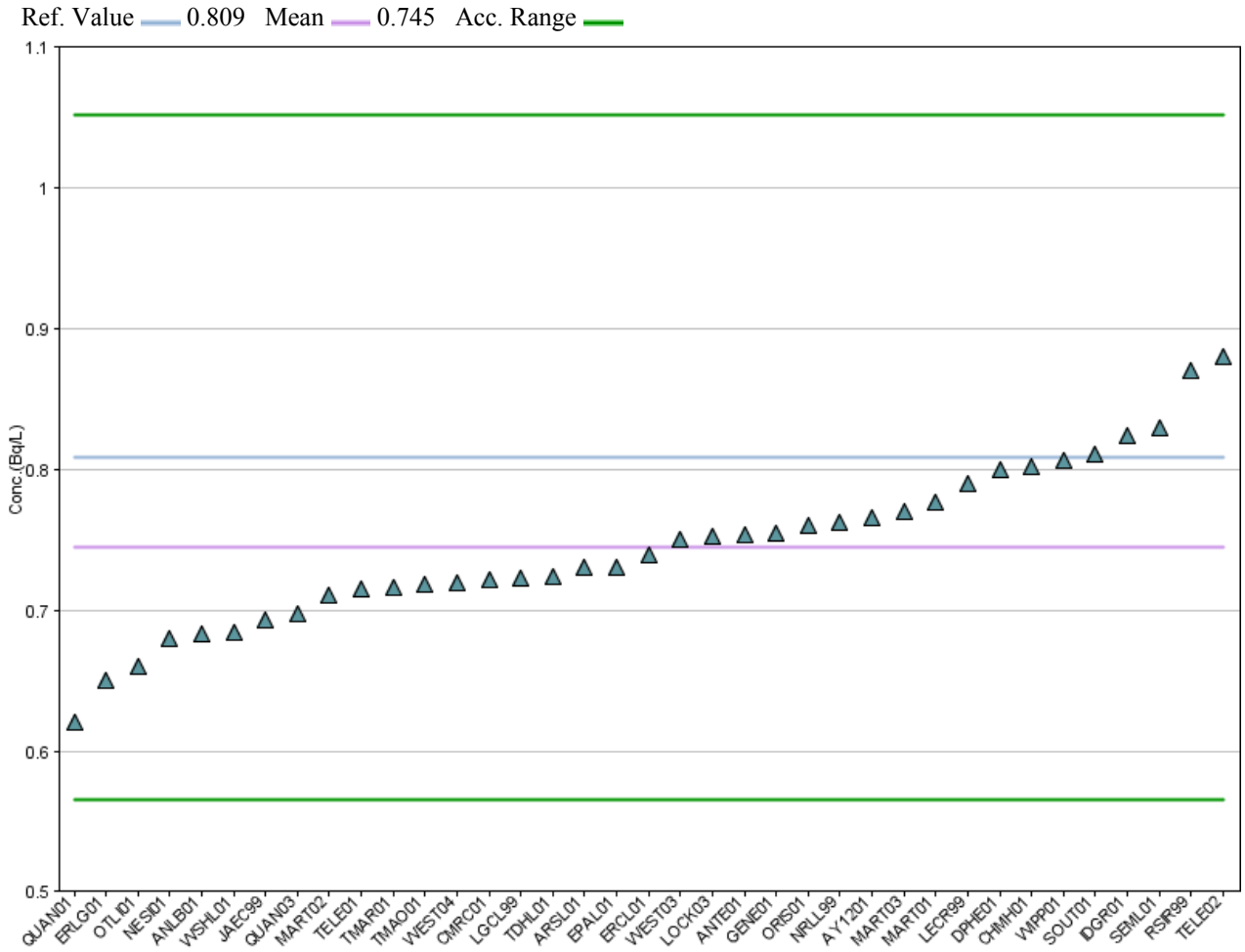
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.61 and 1.43 (±5 Standard Deviations)

Plutonium-239/240

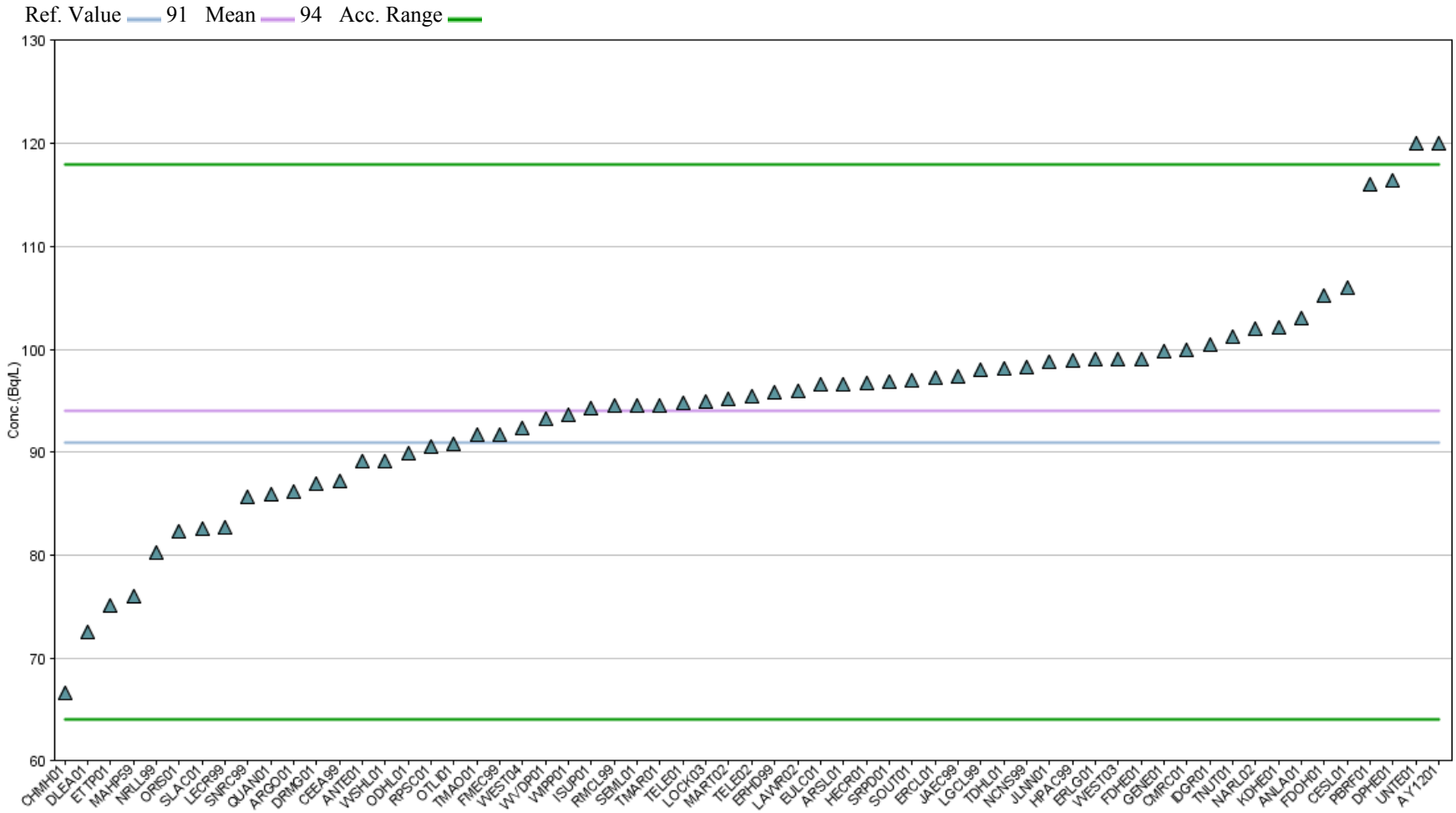
MAPEP-11-MaW24



Note: This chart shows only data points with values between 0.45 and 1.04 (±5 Standard Deviations)

Potassium-40

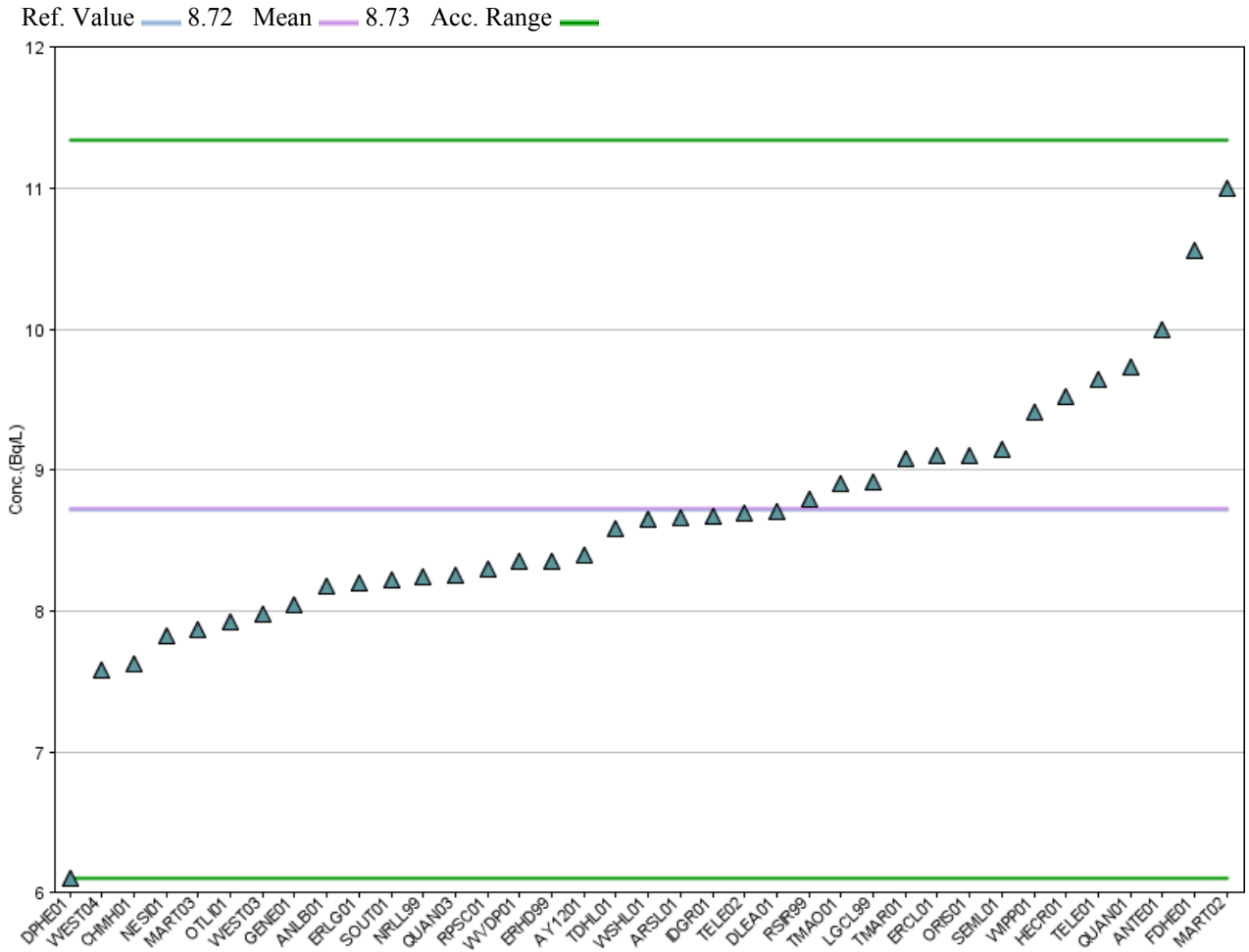
MAPEP-11-MaW24



Note: This chart shows only data points with values between 49.00 and 139.00 (±5 Standard Deviations)

Strontium-90

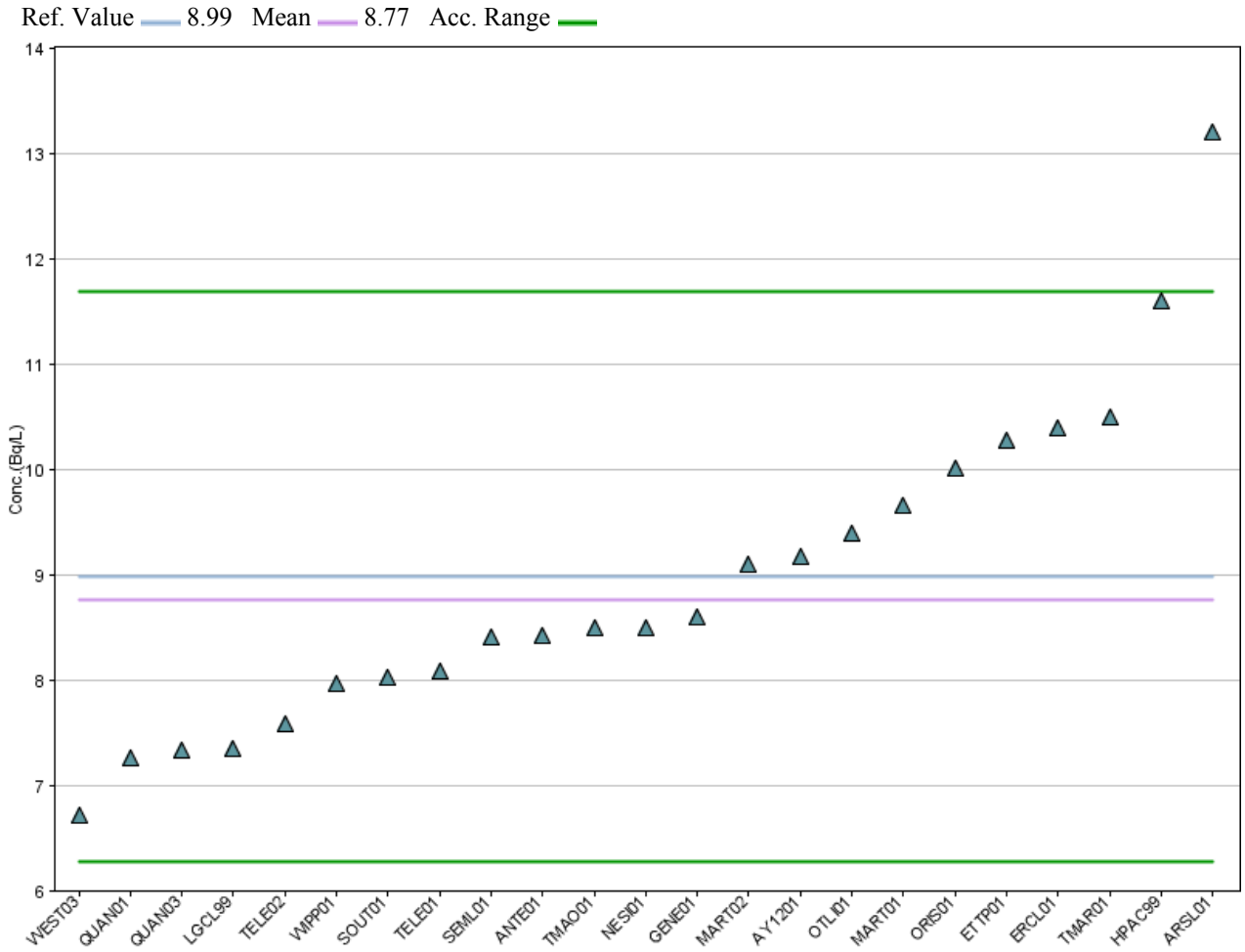
MAPEP-11-MaW24



Note: This chart shows only data points with values between 4.83 and 12.63 (±5 Standard Deviations)

Technetium-99

MAPEP-11-MaW24

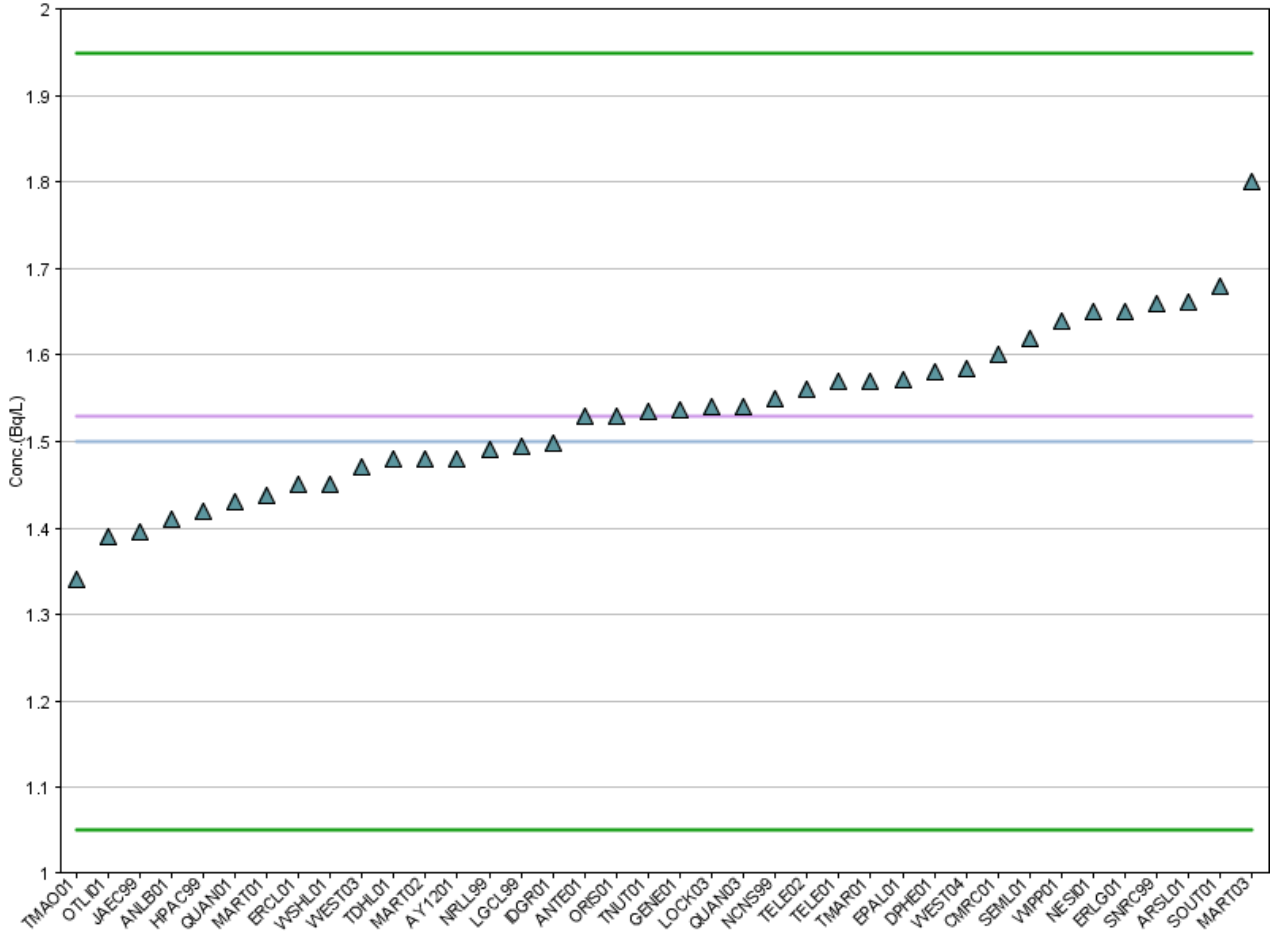


Note: This chart shows only data points with values between 2.52 and 15.02 (±5 Standard Deviations)

Uranium-234/233

MAPEP-11-MaW24

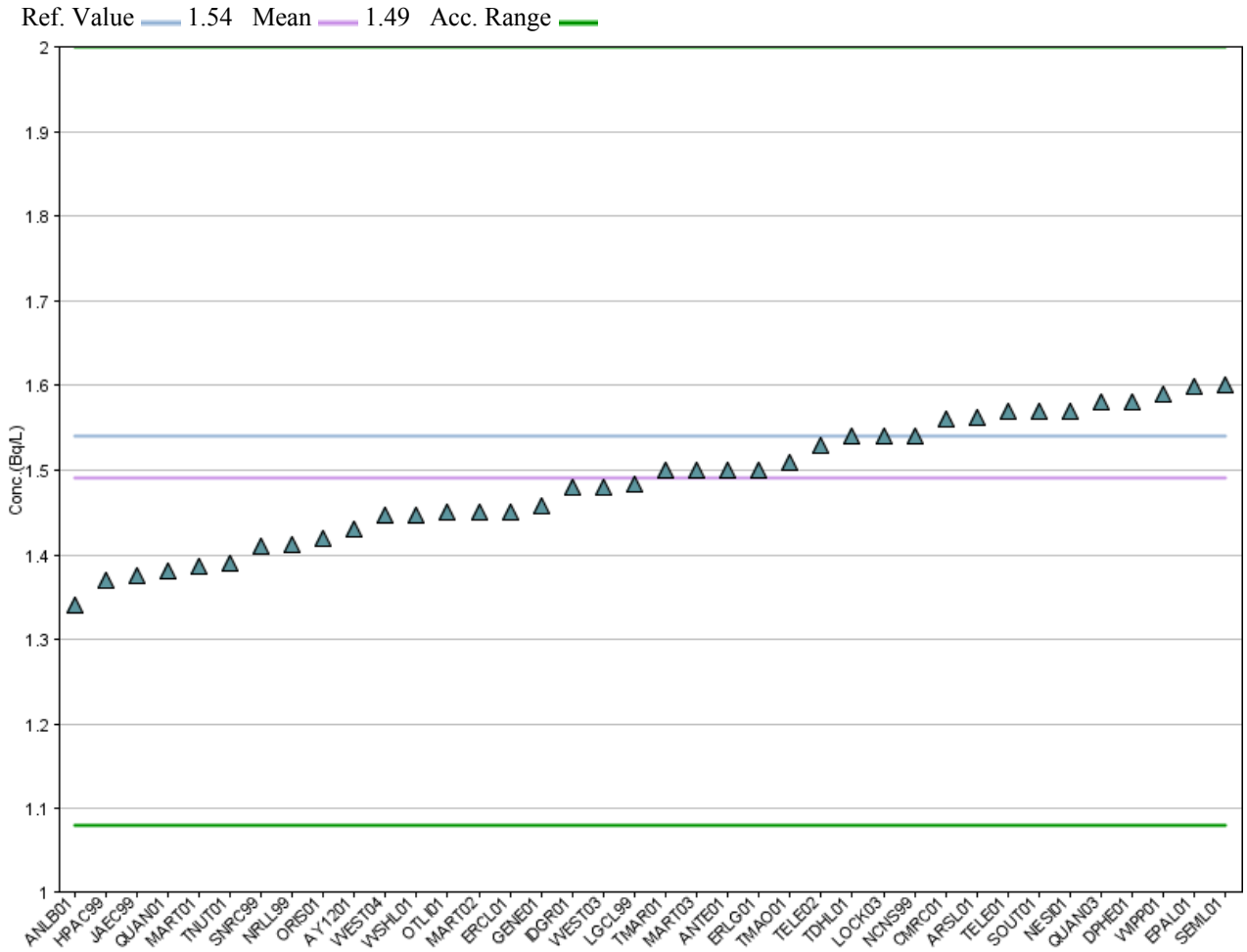
Ref. Value 1.50 Mean 1.53 Acc. Range



Note: This chart shows only data points with values between 1.03 and 2.03 (±5 Standard Deviations)

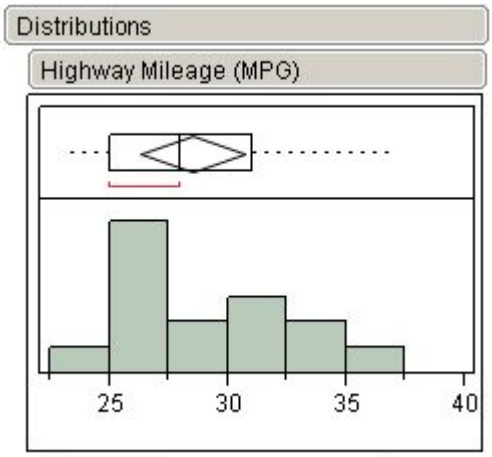
Uranium-238

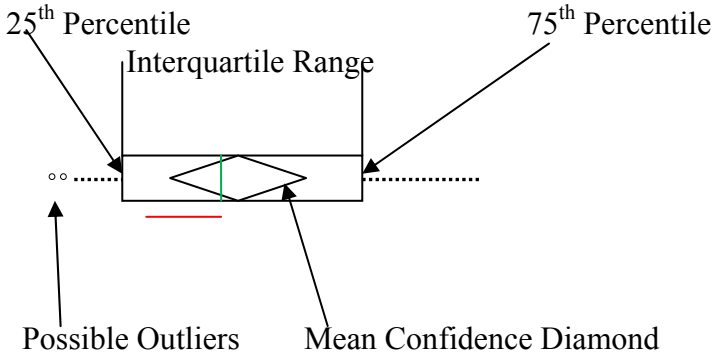
MAPEP-11-MaW24



Note: This chart shows only data points with values between 1.14 and 1.84 (±5 Standard Deviations)

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. The data points (small 'dots') plot the bias (or z-score for organic constituents) of each of the analytes in each of the matrices. The BLACK small vertical line inside the small rectangle at the top of the data distribution graph is the mean of the population of the bias shown for that analyte in the matrix.





Moments

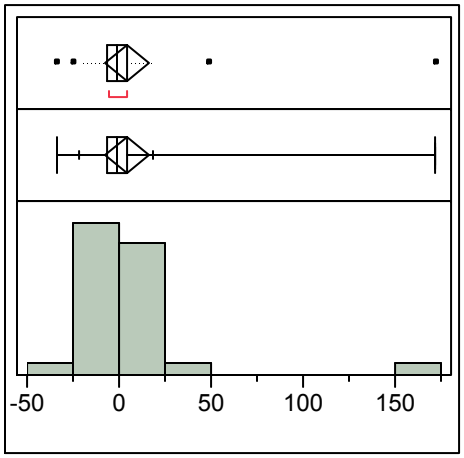
Mean	28.466667
Std Dev	3.9797104
Std Err Mean	1.0275568
Upper 95% Mean	30.670557
Lower 95% Mean	26.262776
N	15
Sum Wgt	15
Sum	427
Variance	15.838095
Skewness	0.7309964
Kurtosis	-0.165153
CV	13.980247
N Missing	0

The box plots summarize the distribution of points for each analyte. The ends of the box are the 25th and 75th quantiles. The difference between the quartiles is the interquartile range. The line across the middle of the box identifies the median bias value. Each box has lines, sometimes called whiskers, which extend from each end. The whiskers extend from the ends of the small box to the outermost data point that falls within the distances computed. Any potential outliers are represented as small black dots.

The box plot of the bias data points and the mean visually illustrate the breadth of the distribution and where any potential outliers in the distribution might lie. The moments for the distribution plot are provided below 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.

Distributions Analyte Name=Americium-241, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	172.2
99.5%		172.2
97.5%		172.2
90.0%		18.86
75.0%	quartile	4.25
50.0%	median	-0.8
25.0%	quartile	-6.55
10.0%		-21.66
2.5%		-33.8
0.5%		-33.8
0.0%	minimum	-33.8

Moments

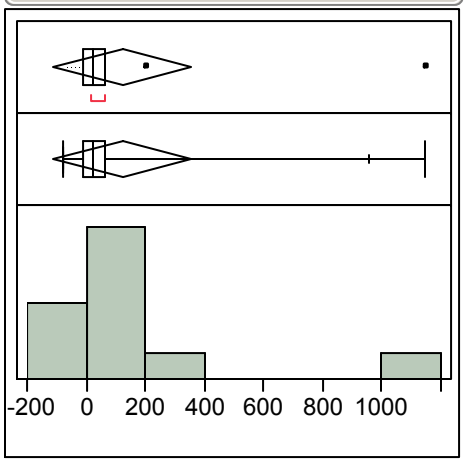
Mean	4.130303
Std Dev	33.591875
Std Err Mean	5.8475948
Upper 95% Mean	16.041464
Lower 95% Mean	-7.780858
N	33
Sum Wgt	33
Sum	136.3
Variance	1128.4141
Skewness	4.1315438
Kurtosis	20.565118
CV	813.30291
N Missing	0

Distributions Analyte Name=Americium-241, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Americium-241, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	1147.6
99.5%		1147.6
97.5%		1147.6
90.0%		958.58
75.0%	quartile	64.5
50.0%	median	23.8
25.0%	quartile	-12.9
10.0%		-81.1
2.5%		-81.1
0.5%		-81.1
0.0%	minimum	-81.1

Moments

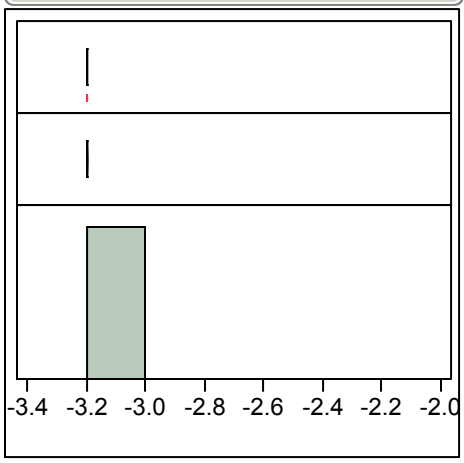
Mean	124.12727
Std Dev	347.82414
Std Err Mean	104.87292
Upper 95% Mean	357.79871
Lower 95% Mean	-109.5442
N	11
Sum Wgt	11
Sum	1365.4
Variance	120981.63
Skewness	3.0423383
Kurtosis	9.6331177
CV	280.21573
N Missing	0

Distributions Analyte Name=Americium-241, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Americium-241, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	-3.2
99.5%		-3.2
97.5%		-3.2
90.0%		-3.2
75.0%	quartile	-3.2
50.0%	median	-3.2
25.0%	quartile	-3.2
10.0%		-3.2
2.5%		-3.2
0.5%		-3.2
0.0%	minimum	-3.2

Moments

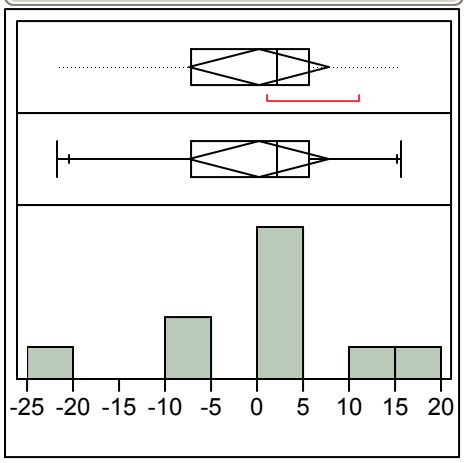
Mean	-3.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-3.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Antimony, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Antimony, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	15.7
99.5%		15.7
97.5%		15.7
90.0%		15.23
75.0%	quartile	5.675
50.0%	median	2.2
25.0%	quartile	-7.15
10.0%		-20.5
2.5%		-21.8
0.5%		-21.8
0.0%	minimum	-21.8

Moments

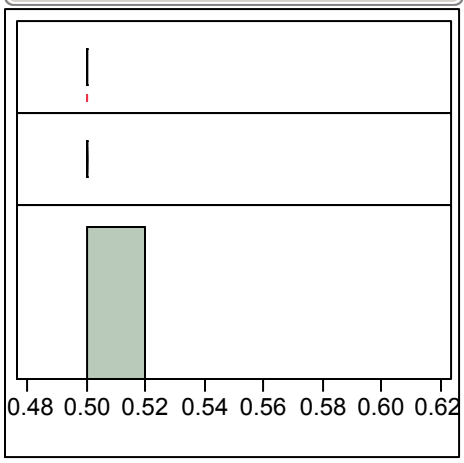
Mean	0.28
Std Dev	10.571849
Std Err Mean	3.3431123
Upper 95% Mean	7.8426455
Lower 95% Mean	-7.282645
N	10
Sum Wgt	10
Sum	2.8
Variance	111.764
Skewness	-0.801853
Kurtosis	1.1973019
CV	3775.6605
N Missing	0

Distributions Analyte Name=Antimony, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Antimony, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

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

Moments

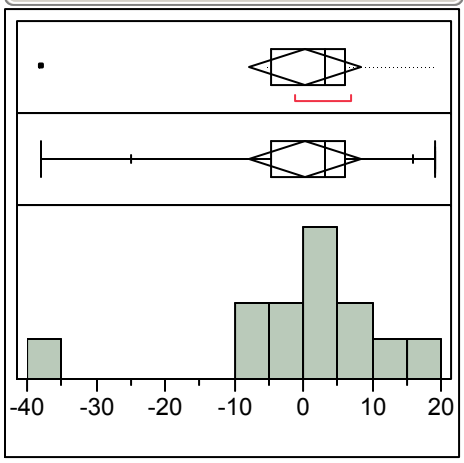
Mean	0.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Antimony, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Antimony, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	19.2
99.5%		19.2
97.5%		19.2
90.0%		16.04
75.0%	quartile	6.1
50.0%	median	3.1
25.0%	quartile	-4.55
10.0%		-25
2.5%		-38
0.5%		-38
0.0%	minimum	-38

Moments

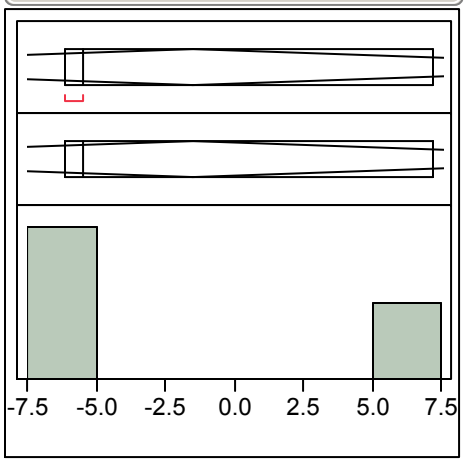
Mean	0.1923077
Std Dev	13.362414
Std Err Mean	3.7060668
Upper 95% Mean	8.2671335
Lower 95% Mean	-7.882518
N	13
Sum Wgt	13
Sum	2.5
Variance	178.5541
Skewness	-1.951174
Kurtosis	5.9299374
CV	6948.4552
N Missing	0

Distributions Analyte Name=Antimony, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Antimony, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	7.2
99.5%		7.2
97.5%		7.2
90.0%		7.2
75.0%	quartile	7.2
50.0%	median	-5.5
25.0%	quartile	-6.1
10.0%		-6.1
2.5%		-6.1
0.5%		-6.1
0.0%	minimum	-6.1

Moments

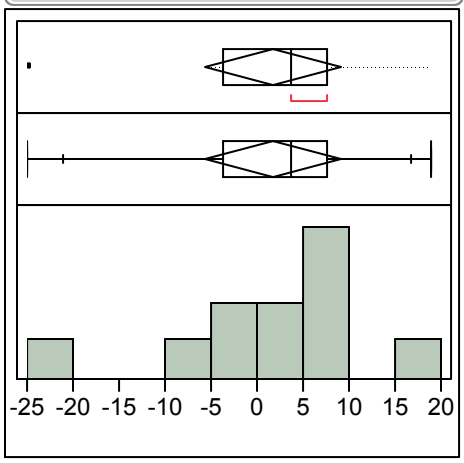
Mean	-1.466667
Std Dev	7.5115467
Std Err Mean	4.3367935
Upper 95% Mean	17.19305
Lower 95% Mean	-20.12638
N	3
Sum Wgt	3
Sum	-4.4
Variance	56.423333
Skewness	1.7196266
Kurtosis	.
CV	-512.1509
N Missing	0

Distributions Analyte Name=Arsenic, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Arsenic, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	18.9
99.5%		18.9
97.5%		18.9
90.0%		16.64
75.0%	quartile	7.6
50.0%	median	3.8
25.0%	quartile	-3.8
10.0%		-21.06
2.5%		-24.9
0.5%		-24.9
0.0%	minimum	-24.9

Moments

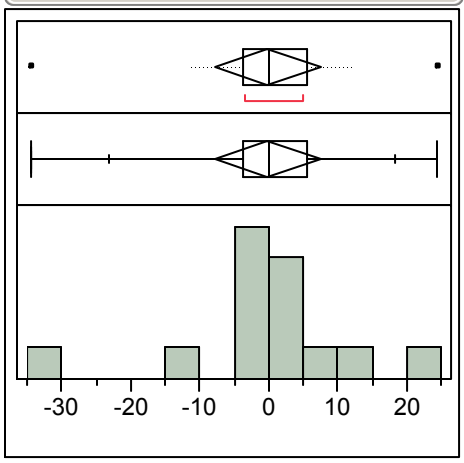
Mean	1.7909091
Std Dev	11.060602
Std Err Mean	3.3348969
Upper 95% Mean	9.2215224
Lower 95% Mean	-5.639704
N	11
Sum Wgt	11
Sum	19.7
Variance	122.33691
Skewness	-1.261955
Kurtosis	3.1945535
CV	617.59705
N Missing	0

Distributions Analyte Name=Arsenic, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Arsenic, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	24.5
99.5%		24.5
97.5%		24.5
90.0%		18.35
75.0%	quartile	5.65
50.0%	median	0.15
25.0%	quartile	-3.725
10.0%		-23.05
2.5%		-34.4
0.5%		-34.4
0.0%	minimum	-34.4

Moments

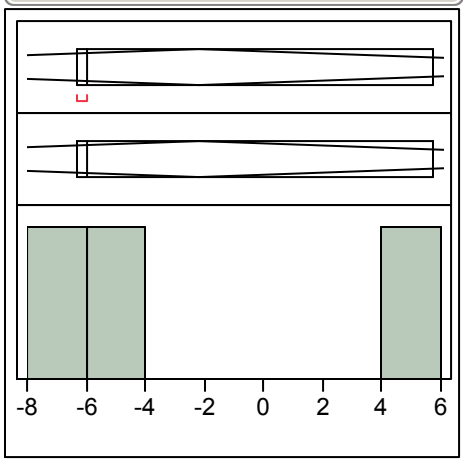
Mean	-0.121429
Std Dev	13.137215
Std Err Mean	3.5110685
Upper 95% Mean	7.4637738
Lower 95% Mean	-7.706631
N	14
Sum Wgt	14
Sum	-1.7
Variance	172.58643
Skewness	-0.965507
Kurtosis	3.5348854
CV	-10818.88
N Missing	0

Distributions Analyte Name=Arsenic, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Arsenic, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

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	-6
25.0%	quartile	-6.3
10.0%		-6.3
2.5%		-6.3
0.5%		-6.3
0.0%	minimum	-6.3

Moments

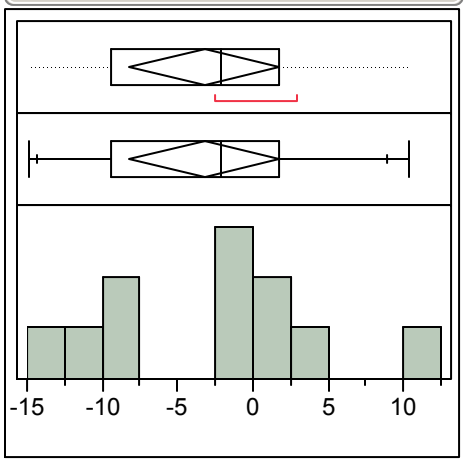
Mean	-2.2
Std Dev	6.8432448
Std Err Mean	3.9509493
Upper 95% Mean	14.799563
Lower 95% Mean	-19.19956
N	3
Sum Wgt	3
Sum	-6.6
Variance	46.83
Skewness	1.7283067
Kurtosis	.
CV	-311.0566
N Missing	0

Distributions Analyte Name=Barium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Barium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		8.92
75.0%	quartile	1.7
50.0%	median	-2.1
25.0%	quartile	-9.4
10.0%		-14.3
2.5%		-14.9
0.5%		-14.9
0.0%	minimum	-14.9

Moments

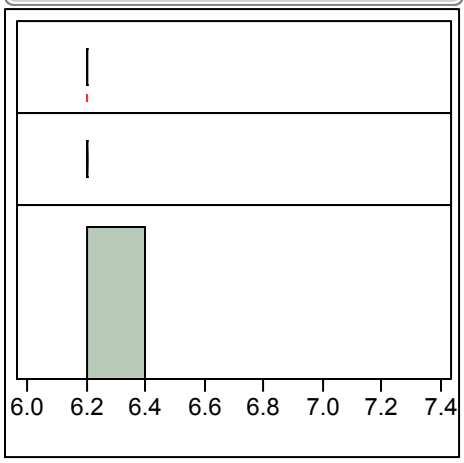
Mean	-3.209091
Std Dev	7.3934369
Std Err Mean	2.2292051
Upper 95% Mean	1.7578876
Lower 95% Mean	-8.176069
N	11
Sum Wgt	11
Sum	-35.3
Variance	54.662909
Skewness	0.0828847
Kurtosis	-0.282699
CV	-230.3904
N Missing	0

Distributions Analyte Name=Barium, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Barium, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

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

Moments

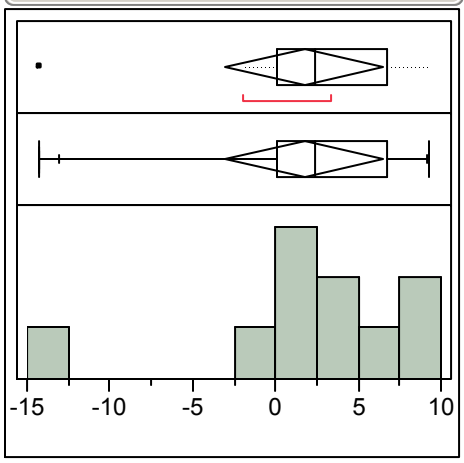
Mean	6.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	6.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Barium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Barium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	9.3
99.5%		9.3
97.5%		9.3
90.0%		9.2
75.0%	quartile	6.725
50.0%	median	2.35
25.0%	quartile	0.05
10.0%		-13.06
2.5%		-14.3
0.5%		-14.3
0.0%	minimum	-14.3

Moments

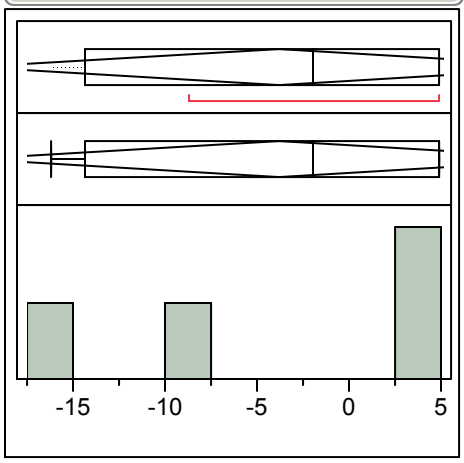
Mean	1.74
Std Dev	6.6344555
Std Err Mean	2.097999
Upper 95% Mean	6.4860036
Lower 95% Mean	-3.006004
N	10
Sum Wgt	10
Sum	17.4
Variance	44.016
Skewness	-1.601709
Kurtosis	3.7597338
CV	381.29055
N Missing	0

Distributions Analyte Name=Barium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Barium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	4.9
99.5%		4.9
97.5%		4.9
90.0%		4.9
75.0%	quartile	4.85
50.0%	median	-2
25.0%	quartile	-14.325
10.0%		-16.2
2.5%		-16.2
0.5%		-16.2
0.0%	minimum	-16.2

Moments

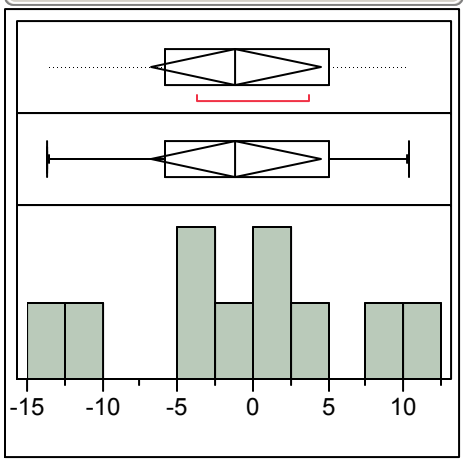
Mean	-3.825
Std Dev	10.419653
Std Err Mean	5.2098265
Upper 95% Mean	12.754993
Lower 95% Mean	-20.40499
N	4
Sum Wgt	4
Sum	-15.3
Variance	108.56917
Skewness	-0.428561
Kurtosis	-3.57581
CV	-272.4092
N Missing	0

Distributions Analyte Name=Beryllium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Beryllium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		10.26
75.0%	quartile	5.025
50.0%	median	-1.25
25.0%	quartile	-5.8
10.0%		-13.54
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Moments

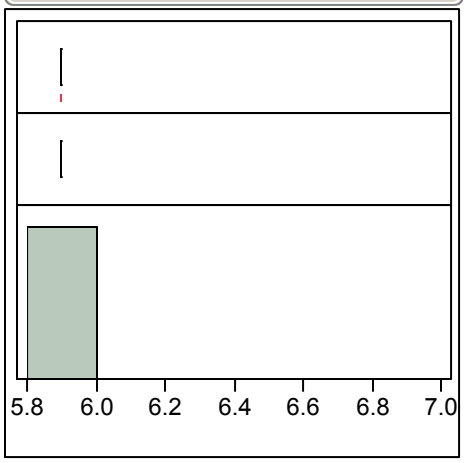
Mean	-1.14
Std Dev	7.8812295
Std Err Mean	2.4922636
Upper 95% Mean	4.4978919
Lower 95% Mean	-6.777892
N	10
Sum Wgt	10
Sum	-11.4
Variance	62.113778
Skewness	-0.177869
Kurtosis	-0.476024
CV	-691.3359
N Missing	0

Distributions Analyte Name=Beryllium, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Beryllium, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

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

Moments

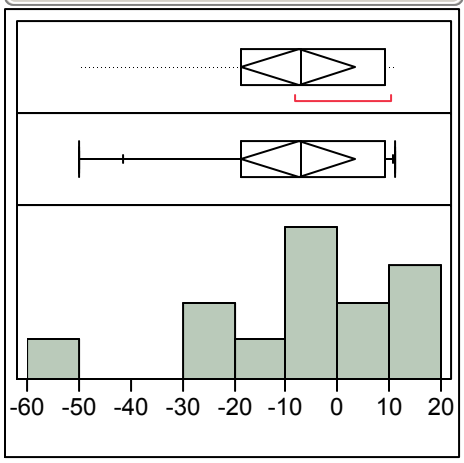
Mean	5.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	5.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Beryllium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Beryllium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	11.2
99.5%		11.2
97.5%		11.2
90.0%		10.88
75.0%	quartile	9.3
50.0%	median	-7.2
25.0%	quartile	-18.6
10.0%		-41.42
2.5%		-50.1
0.5%		-50.1
0.0%	minimum	-50.1

Moments

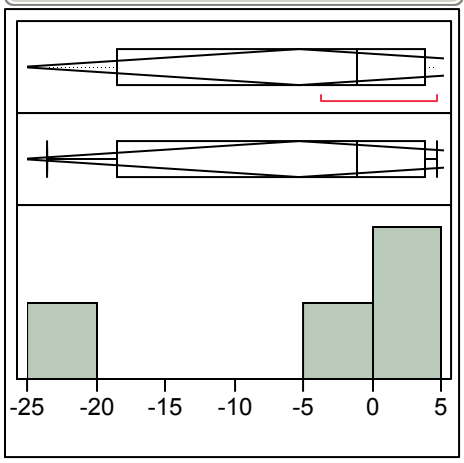
Mean	-7.561538
Std Dev	18.107344
Std Err Mean	5.0220736
Upper 95% Mean	3.3806199
Lower 95% Mean	-18.5037
N	13
Sum Wgt	13
Sum	-98.3
Variance	327.8759
Skewness	-1.099601
Kurtosis	1.1189965
CV	-239.4664
N Missing	0

Distributions Analyte Name=Beryllium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Beryllium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	4.7
99.5%		4.7
97.5%		4.7
90.0%		4.7
75.0%	quartile	3.875
50.0%	median	-1.15
25.0%	quartile	-18.55
10.0%		-23.5
2.5%		-23.5
0.5%		-23.5
0.0%	minimum	-23.5

Moments

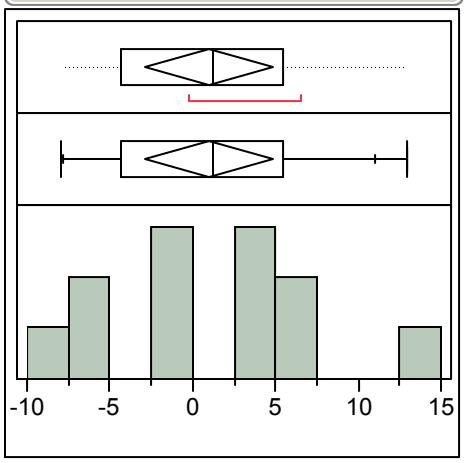
Mean	-5.275
Std Dev	12.631805
Std Err Mean	6.3159025
Upper 95% Mean	14.825021
Lower 95% Mean	-25.37502
N	4
Sum Wgt	4
Sum	-21.1
Variance	159.5625
Skewness	-1.574287
Kurtosis	2.5008969
CV	-239.4655
N Missing	0

Distributions Analyte Name=Cadmium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Cadmium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		10.98
75.0%	quartile	5.45
50.0%	median	1.25
25.0%	quartile	-4.375
10.0%		-7.82
2.5%		-8
0.5%		-8
0.0%	minimum	-8

Moments

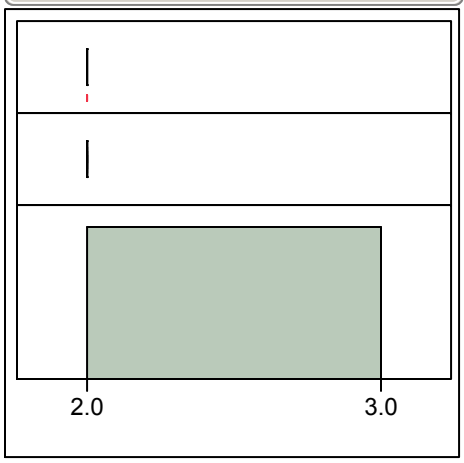
Mean	0.9916667
Std Dev	6.1362497
Std Err Mean	1.7713827
Upper 95% Mean	4.8904537
Lower 95% Mean	-2.90712
N	12
Sum Wgt	12
Sum	11.9
Variance	37.653561
Skewness	0.2088486
Kurtosis	-0.169129
CV	618.78148
N Missing	0

Distributions Analyte Name=Cadmium, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Cadmium, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	2
99.5%		2
97.5%		2
90.0%		2
75.0%	quartile	2
50.0%	median	2
25.0%	quartile	2
10.0%		2
2.5%		2
0.5%		2
0.0%	minimum	2

Moments

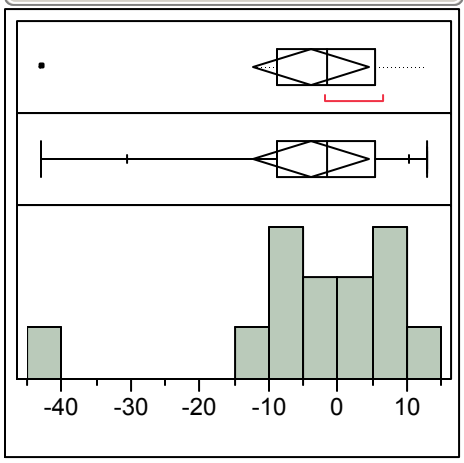
Mean	2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cadmium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Cadmium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		10.42
75.0%	quartile	5.4
50.0%	median	-1.6
25.0%	quartile	-8.9
10.0%		-30.58
2.5%		-42.9
0.5%		-42.9
0.0%	minimum	-42.9

Moments

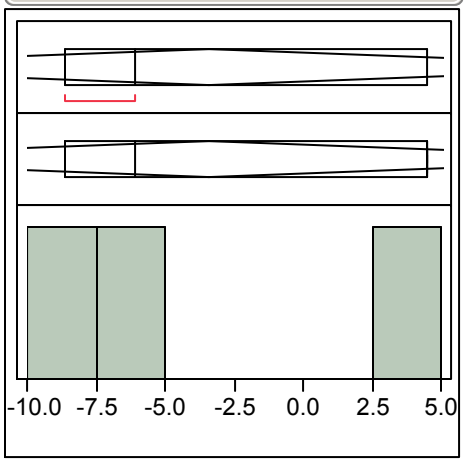
Mean	-3.776923
Std Dev	13.881352
Std Err Mean	3.8499942
Upper 95% Mean	4.6114938
Lower 95% Mean	-12.16534
N	13
Sum Wgt	13
Sum	-49.1
Variance	192.69192
Skewness	-1.951663
Kurtosis	5.1932554
CV	-367.5307
N Missing	0

Distributions Analyte Name=Cadmium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Cadmium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	4.5
99.5%		4.5
97.5%		4.5
90.0%		4.5
75.0%	quartile	4.5
50.0%	median	-6.1
25.0%	quartile	-8.6
10.0%		-8.6
2.5%		-8.6
0.5%		-8.6
0.0%	minimum	-8.6

Moments

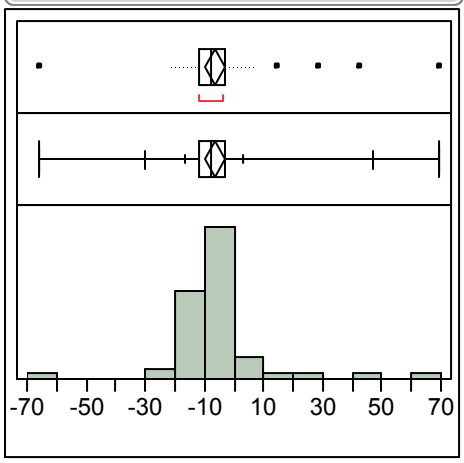
Mean	-3.4
Std Dev	6.9548544
Std Err Mean	4.0153871
Upper 95% Mean	13.876816
Lower 95% Mean	-20.67682
N	3
Sum Wgt	3
Sum	-10.2
Variance	48.37
Skewness	1.483688
Kurtosis	.
CV	-204.5545
N Missing	0

Distributions Analyte Name=Cesium-134, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Cesium-134, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	69.3
99.5%		69.3
97.5%		47.025
90.0%		3.28
75.0%	quartile	-3.025
50.0%	median	-7.95
25.0%	quartile	-12.075
10.0%		-16.72
2.5%		-30.342
0.5%		-65.9
0.0%	minimum	-65.9

Moments

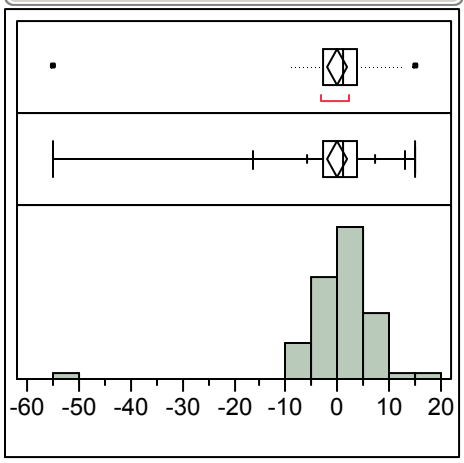
Mean	-6.320833
Std Dev	15.05669
Std Err Mean	1.774448
Upper 95% Mean	-2.782685
Lower 95% Mean	-9.858982
N	72
Sum Wgt	72
Sum	-455.1
Variance	226.70393
Skewness	1.5875864
Kurtosis	12.632341
CV	-238.2074
N Missing	0

Distributions Analyte Name=Cesium-137, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Cesium-137, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	15
99.5%		15
97.5%		13.045
90.0%		7.1
75.0%	quartile	3.6
50.0%	median	1
25.0%	quartile	-2.9
10.0%		-5.94
2.5%		-16.325
0.5%		-55
0.0%	minimum	-55

Moments

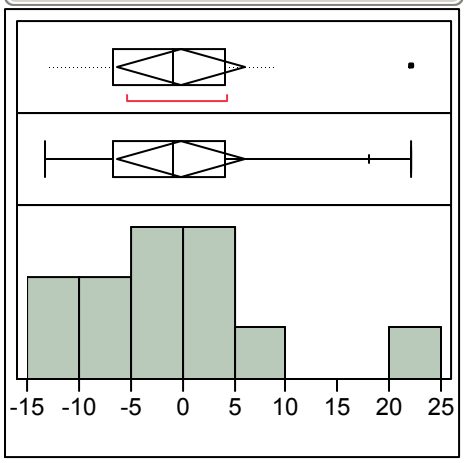
Mean	0.0506849
Std Dev	8.1007222
Std Err Mean	0.9481178
Upper 95% Mean	1.9407233
Lower 95% Mean	-1.839353
N	73
Sum Wgt	73
Sum	3.7
Variance	65.621701
Skewness	-4.313854
Kurtosis	29.545807
CV	15982.506
N Missing	0

Distributions Analyte Name=Chromium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Chromium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	22.1
99.5%		22.1
97.5%		22.1
90.0%		18.14
75.0%	quartile	4.175
50.0%	median	-0.9
25.0%	quartile	-6.675
10.0%		-13.27
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Moments

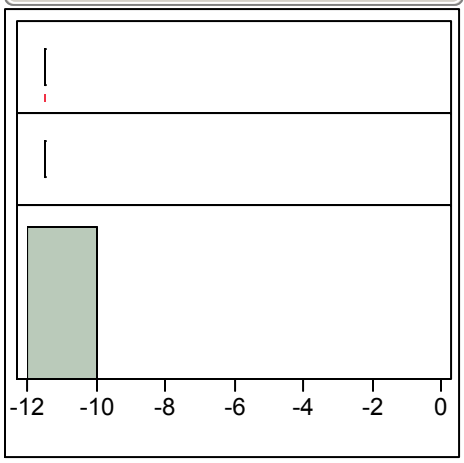
Mean	-0.083333
Std Dev	9.7327781
Std Err Mean	2.809611
Upper 95% Mean	6.1005788
Lower 95% Mean	-6.267246
N	12
Sum Wgt	12
Sum	-1
Variance	94.72697
Skewness	0.7965441
Kurtosis	1.4570236
CV	-11679.33
N Missing	0

Distributions Analyte Name=Chromium, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Chromium, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	-11.5
99.5%		-11.5
97.5%		-11.5
90.0%		-11.5
75.0%	quartile	-11.5
50.0%	median	-11.5
25.0%	quartile	-11.5
10.0%		-11.5
2.5%		-11.5
0.5%		-11.5
0.0%	minimum	-11.5

Moments

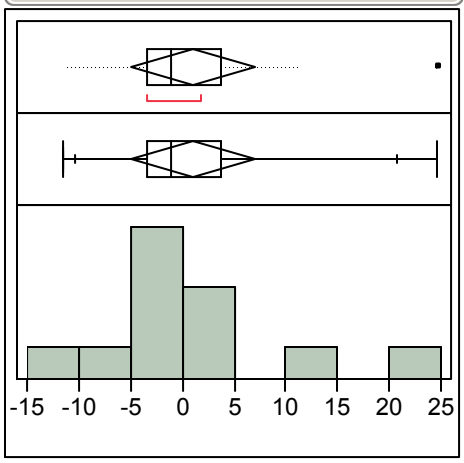
Mean	-11.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-11.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Chromium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Chromium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	24.7
99.5%		24.7
97.5%		24.7
90.0%		20.74
75.0%	quartile	3.75
50.0%	median	-1.1
25.0%	quartile	-3.5
10.0%		-10.3
2.5%		-11.5
0.5%		-11.5
0.0%	minimum	-11.5

Moments

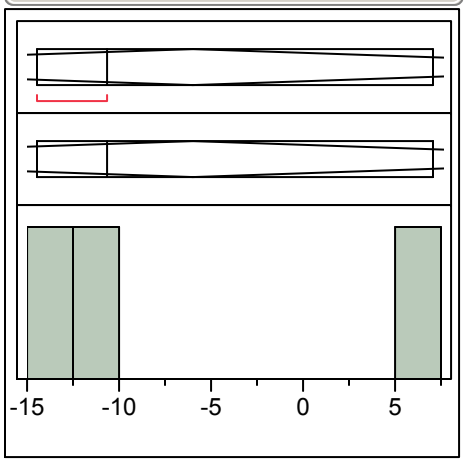
Mean	1.1083333
Std Dev	9.3936592
Std Err Mean	2.7117158
Upper 95% Mean	7.0767796
Lower 95% Mean	-4.860113
N	12
Sum Wgt	12
Sum	13.3
Variance	88.240833
Skewness	1.5000572
Kurtosis	3.1176468
CV	847.5482
N Missing	0

Distributions Analyte Name=Chromium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Chromium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	7.1
99.5%		7.1
97.5%		7.1
90.0%		7.1
75.0%	quartile	7.1
50.0%	median	-10.6
25.0%	quartile	-14.5
10.0%		-14.5
2.5%		-14.5
0.5%		-14.5
0.0%	minimum	-14.5

Moments

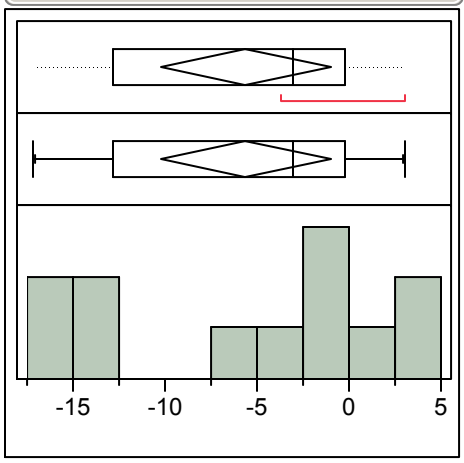
Mean	-6
Std Dev	11.511299
Std Err Mean	6.6460515
Upper 95% Mean	22.595651
Lower 95% Mean	-34.59565
N	3
Sum Wgt	3
Sum	-18
Variance	132.51
Skewness	1.5110804
Kurtosis	.
CV	-191.855
N Missing	0

Distributions Analyte Name=Cobalt, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Cobalt, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	3
99.5%		3
97.5%		3
90.0%		2.91
75.0%	quartile	-0.175
50.0%	median	-3.05
25.0%	quartile	-12.8
10.0%		-17.02
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Moments

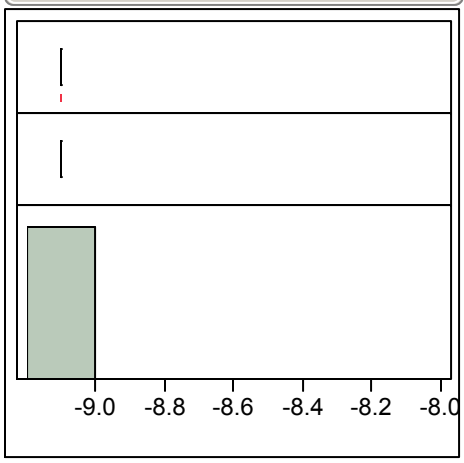
Mean	-5.6
Std Dev	7.3390611
Std Err Mean	2.1186045
Upper 95% Mean	-0.936983
Lower 95% Mean	-10.26302
N	12
Sum Wgt	12
Sum	-67.2
Variance	53.861818
Skewness	-0.552035
Kurtosis	-1.292353
CV	-131.0547
N Missing	0

Distributions Analyte Name=Cobalt, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Cobalt, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	-9.1
99.5%		-9.1
97.5%		-9.1
90.0%		-9.1
75.0%	quartile	-9.1
50.0%	median	-9.1
25.0%	quartile	-9.1
10.0%		-9.1
2.5%		-9.1
0.5%		-9.1
0.0%	minimum	-9.1

Moments

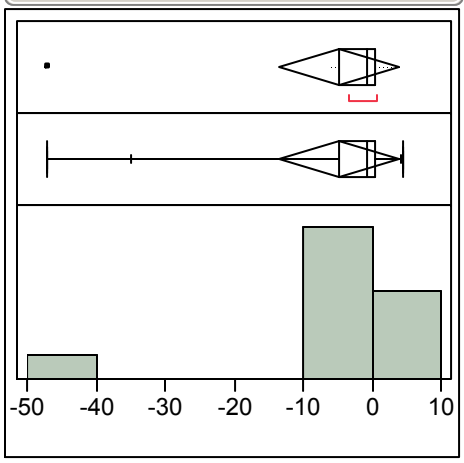
Mean	-9.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-9.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cobalt, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Cobalt, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	4.5
99.5%		4.5
97.5%		4.5
90.0%		4.26
75.0%	quartile	0.55
50.0%	median	-0.65
25.0%	quartile	-4.9
10.0%		-34.8
2.5%		-47.1
0.5%		-47.1
0.0%	minimum	-47.1

Moments

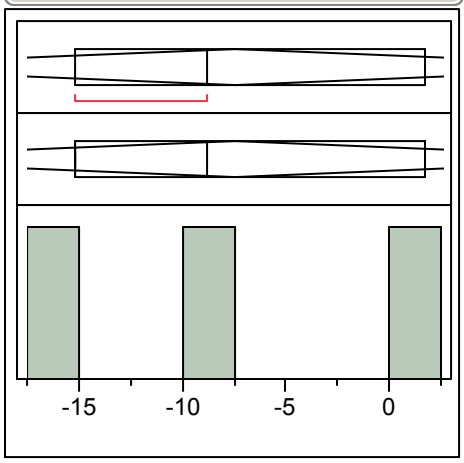
Mean	-4.758333
Std Dev	13.706366
Std Err Mean	3.9566871
Upper 95% Mean	3.9502762
Lower 95% Mean	-13.46694
N	12
Sum Wgt	12
Sum	-57.1
Variance	187.86447
Skewness	-3.134824
Kurtosis	10.384
CV	-288.0497
N Missing	0

Distributions Analyte Name=Cobalt, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Cobalt, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	1.7
99.5%		1.7
97.5%		1.7
90.0%		1.7
75.0%	quartile	1.7
50.0%	median	-8.8
25.0%	quartile	-15.2
10.0%		-15.2
2.5%		-15.2
0.5%		-15.2
0.0%	minimum	-15.2

Moments

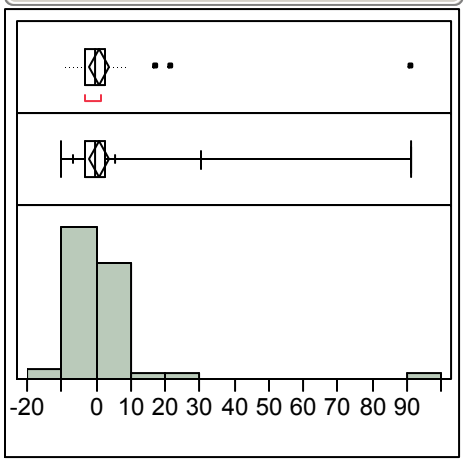
Mean	-7.433333
Std Dev	8.5324869
Std Err Mean	4.9262336
Upper 95% Mean	13.762539
Lower 95% Mean	-28.62921
N	3
Sum Wgt	3
Sum	-22.3
Variance	72.803333
Skewness	0.7022831
Kurtosis	.
CV	-114.7868
N Missing	0

Distributions Analyte Name=Cobalt-60, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Cobalt-60, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	91.1
99.5%		91.1
97.5%		30.2
90.0%		5.45
75.0%	quartile	2.8
50.0%	median	-0.45
25.0%	quartile	-2.925
10.0%		-6.75
2.5%		-10.313
0.5%		-10.4
0.0%	minimum	-10.4

Moments

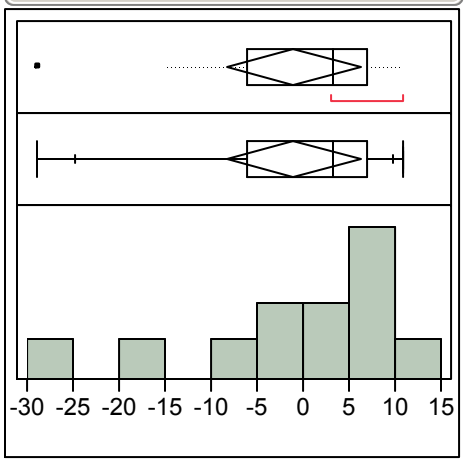
Mean	1.0108108
Std Dev	11.874153
Std Err Mean	1.3803422
Upper 95% Mean	3.7618288
Lower 95% Mean	-1.740207
N	74
Sum Wgt	74
Sum	74.8
Variance	140.9955
Skewness	6.1803298
Kurtosis	46.41115
CV	1174.7156
N Missing	0

Distributions Analyte Name=Copper, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Copper, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	10.8
99.5%		10.8
97.5%		10.8
90.0%		9.72
75.0%	quartile	6.9
50.0%	median	3.3
25.0%	quartile	-6
10.0%		-24.79
2.5%		-28.9
0.5%		-28.9
0.0%	minimum	-28.9

Moments

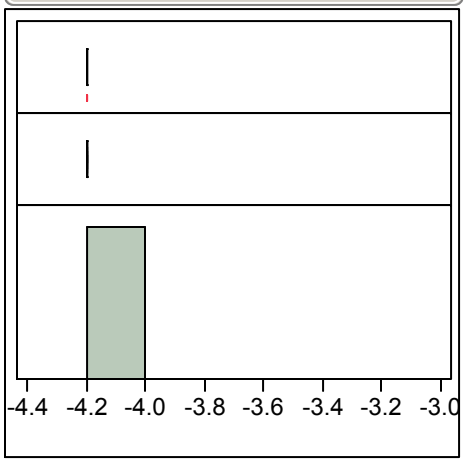
Mean	-1.025
Std Dev	11.369507
Std Err Mean	3.2820939
Upper 95% Mean	6.1988399
Lower 95% Mean	-8.24884
N	12
Sum Wgt	12
Sum	-12.3
Variance	129.26568
Skewness	-1.573887
Kurtosis	2.3712138
CV	-1109.22
N Missing	0

Distributions Analyte Name=Copper, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Copper, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

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

Moments

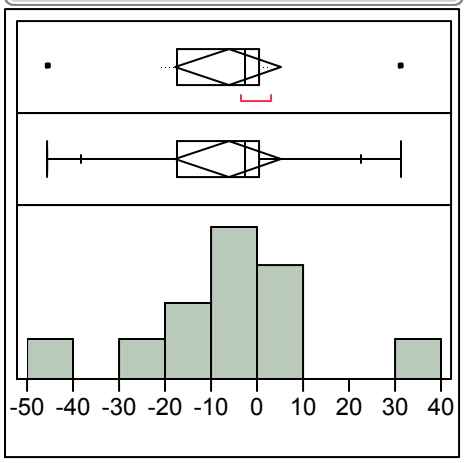
Mean	-4.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-4.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Copper, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Copper, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	31.2
99.5%		31.2
97.5%		31.2
90.0%		22.8
75.0%	quartile	0.45
50.0%	median	-2.7
25.0%	quartile	-17.2
10.0%		-38.18
2.5%		-45.5
0.5%		-45.5
0.0%	minimum	-45.5

Moments

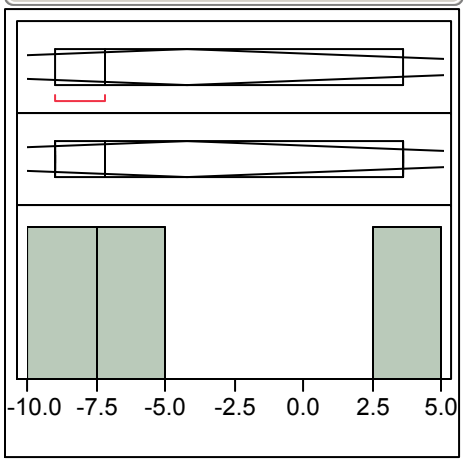
Mean	-6.183333
Std Dev	18.05103
Std Err Mean	5.2108836
Upper 95% Mean	5.2857442
Lower 95% Mean	-17.65241
N	12
Sum Wgt	12
Sum	-74.2
Variance	325.8397
Skewness	-0.232717
Kurtosis	2.5420036
CV	-291.9304
N Missing	0

Distributions Analyte Name=Copper, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Copper, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	3.6
99.5%		3.6
97.5%		3.6
90.0%		3.6
75.0%	quartile	3.6
50.0%	median	-7.2
25.0%	quartile	-9
10.0%		-9
2.5%		-9
0.5%		-9
0.0%	minimum	-9

Moments

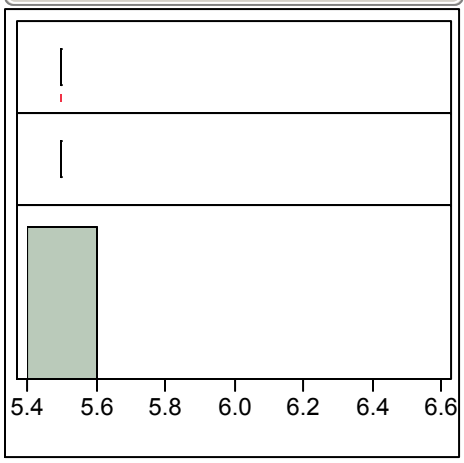
Mean	-4.2
Std Dev	6.81469
Std Err Mean	3.9344631
Upper 95% Mean	12.728628
Lower 95% Mean	-21.12863
N	3
Sum Wgt	3
Sum	-12.6
Variance	46.44
Skewness	1.597097
Kurtosis	.
CV	-162.2545
N Missing	0

Distributions Analyte Name=Hydrogen-3, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Hydrogen-3, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	5.5
99.5%		5.5
97.5%		5.5
90.0%		5.5
75.0%	quartile	5.5
50.0%	median	5.5
25.0%	quartile	5.5
10.0%		5.5
2.5%		5.5
0.5%		5.5
0.0%	minimum	5.5

Moments

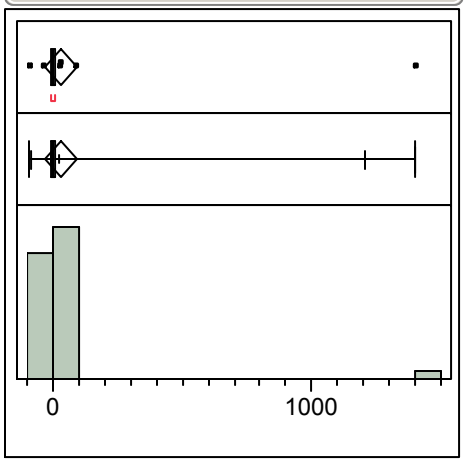
Mean	5.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	5.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Hydrogen-3, Detection Method=Beta Counting - liquid scintillation counter

Bias

Distributions Analyte Name=Hydrogen-3, Detection Method=Beta Counting - liquid scintillation counter

Bias



Quantiles

100.0%	maximum	1402.1
99.5%		1402.1
97.5%		1205.26
90.0%		21.98
75.0%	quartile	6.8
50.0%	median	0.4
25.0%	quartile	-4.7
10.0%		-9.26
2.5%		-80.96
0.5%		-89
0.0%	minimum	-89

Moments

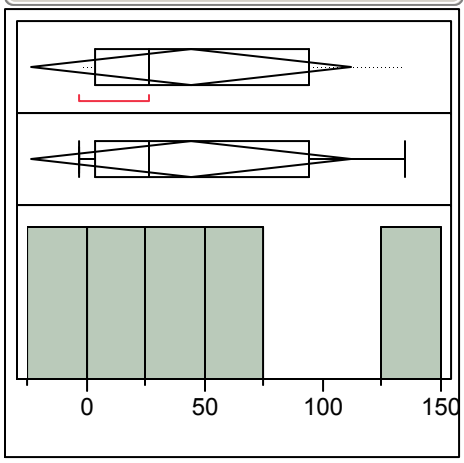
Mean	32.233333
Std Dev	209.97899
Std Err Mean	31.30182
Upper 95% Mean	95.318006
Lower 95% Mean	-30.85134
N	45
Sum Wgt	45
Sum	1450.5
Variance	44091.177
Skewness	6.5953756
Kurtosis	43.973672
CV	651.43431
N Missing	0

Distributions Analyte Name=Hydrogen-3, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Hydrogen-3, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	134.4
99.5%		134.4
97.5%		134.4
90.0%		134.4
75.0%	quartile	94.35
50.0%	median	26.7
25.0%	quartile	3.5
10.0%		-2.9
2.5%		-2.9
0.5%		-2.9
0.0%	minimum	-2.9

Moments

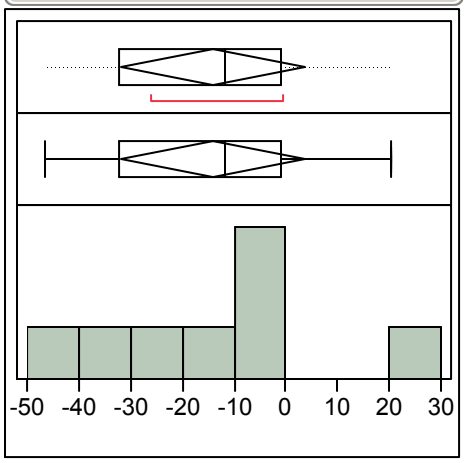
Mean	44.48
Std Dev	54.632426
Std Err Mean	24.432364
Upper 95% Mean	112.31512
Lower 95% Mean	-23.35512
N	5
Sum Wgt	5
Sum	222.4
Variance	2984.702
Skewness	1.4684446
Kurtosis	2.0965371
CV	122.8247
N Missing	0

Distributions Analyte Name=Iron-55, Detection Method=Beta Counting - liquid scintillation counter

Bias

Distributions Analyte Name=Iron-55, Detection Method=Beta Counting - liquid scintillation counter

Bias



Quantiles

100.0%	maximum	20.5
99.5%		20.5
97.5%		20.5
90.0%		20.5
75.0%	quartile	-0.875
50.0%	median	-11.6
25.0%	quartile	-32.1
10.0%		-46.6
2.5%		-46.6
0.5%		-46.6
0.0%	minimum	-46.6

Moments

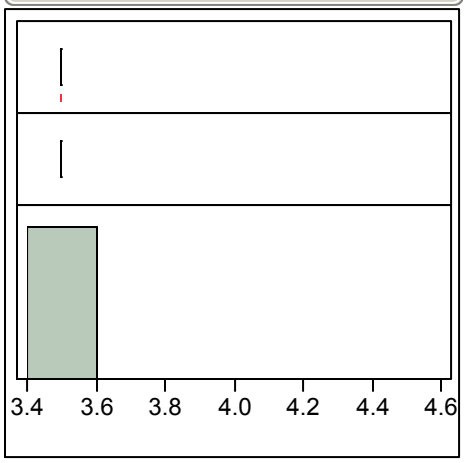
Mean	-14.025
Std Dev	21.323612
Std Err Mean	7.5390353
Upper 95% Mean	3.8019858
Lower 95% Mean	-31.85199
N	8
Sum Wgt	8
Sum	-112.2
Variance	454.69643
Skewness	0.0243738
Kurtosis	-0.278914
CV	-152.04
N Missing	0

Distributions Analyte Name=Iron-55, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Iron-55, Detection Method=Gamma Spectrometry

Bias



Quantiles

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

Moments

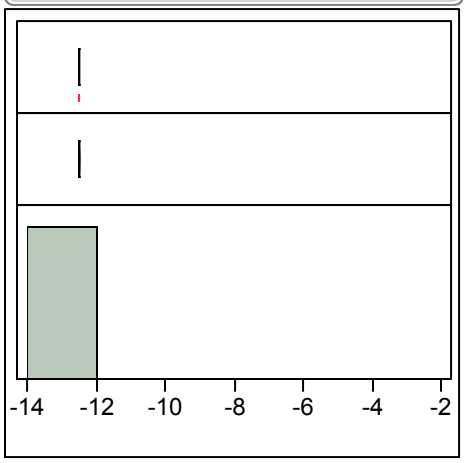
Mean	3.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	3.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Iron-55, Detection Method=Other

Bias

Distributions Analyte Name=Iron-55, Detection Method=Other

Bias



Quantiles

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

Moments

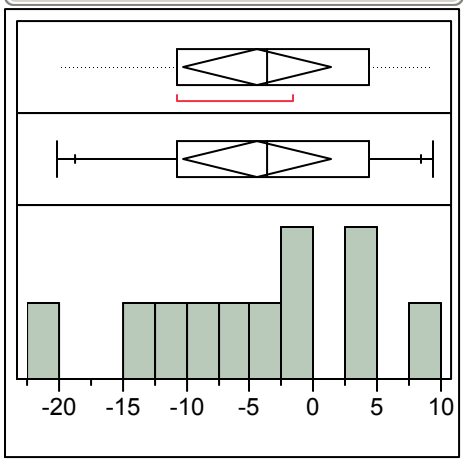
Mean	-12.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-12.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Lead, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Lead, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	9.4
99.5%		9.4
97.5%		9.4
90.0%		8.42
75.0%	quartile	4.3
50.0%	median	-3.7
25.0%	quartile	-10.7
10.0%		-18.7
2.5%		-20.2
0.5%		-20.2
0.0%	minimum	-20.2

Moments

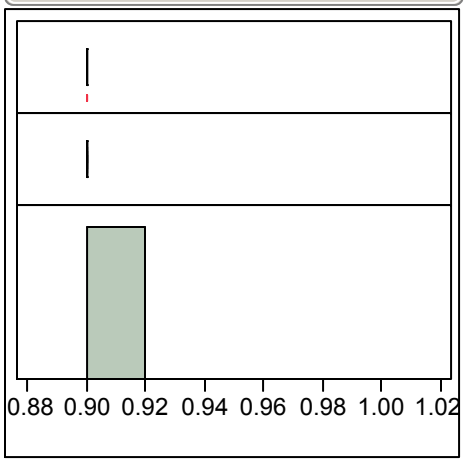
Mean	-4.409091
Std Dev	8.6551088
Std Err Mean	2.6096135
Upper 95% Mean	1.4054903
Lower 95% Mean	-10.22367
N	11
Sum Wgt	11
Sum	-48.5
Variance	74.910909
Skewness	-0.157109
Kurtosis	-0.326437
CV	-196.3014
N Missing	0

Distributions Analyte Name=Lead, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Lead, Detection Method=Flame Atomic Absorption Spectrometry

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	0.9
25.0%	quartile	0.9
10.0%		0.9
2.5%		0.9
0.5%		0.9
0.0%	minimum	0.9

Moments

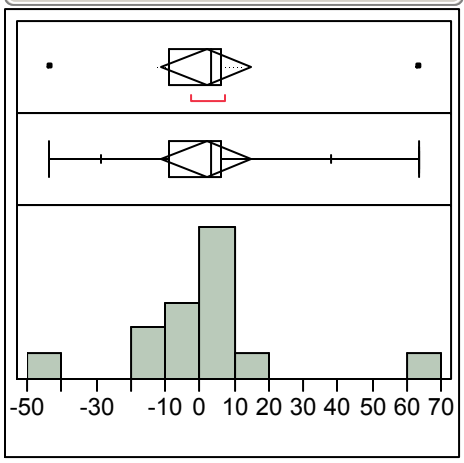
Mean	0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Lead, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Lead, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	63.4
99.5%		63.4
97.5%		63.4
90.0%		38.35
75.0%	quartile	6.375
50.0%	median	3.35
25.0%	quartile	-8.85
10.0%		-28.5
2.5%		-43.5
0.5%		-43.5
0.0%	minimum	-43.5

Moments

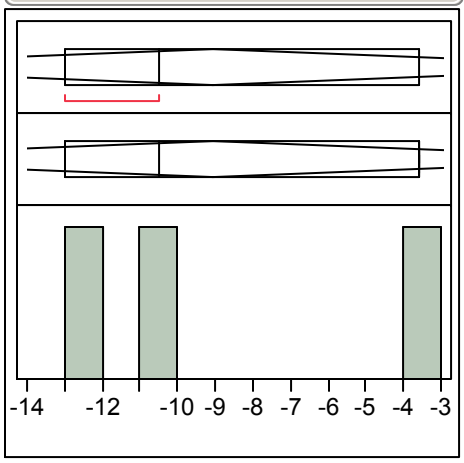
Mean	1.9571429
Std Dev	22.523311
Std Err Mean	6.0196082
Upper 95% Mean	14.961716
Lower 95% Mean	-11.04743
N	14
Sum Wgt	14
Sum	27.4
Variance	507.29956
Skewness	1.0393809
Kurtosis	5.0250516
CV	1150.8261
N Missing	0

Distributions Analyte Name=Lead, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Lead, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	-3.6
99.5%		-3.6
97.5%		-3.6
90.0%		-3.6
75.0%	quartile	-3.6
50.0%	median	-10.5
25.0%	quartile	-13
10.0%		-13
2.5%		-13
0.5%		-13
0.0%	minimum	-13

Moments

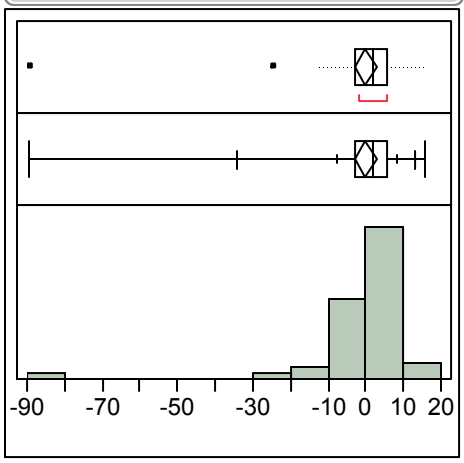
Mean	-9.033333
Std Dev	4.8686069
Std Err Mean	2.8108915
Upper 95% Mean	3.0609567
Lower 95% Mean	-21.12762
N	3
Sum Wgt	3
Sum	-27.1
Variance	23.703333
Skewness	1.2325991
Kurtosis	.
CV	-53.89602
N Missing	0

Distributions Analyte Name=Manganese-54, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Manganese-54, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	15.8
99.5%		15.8
97.5%		13.165
90.0%		8.5
75.0%	quartile	5.55
50.0%	median	2
25.0%	quartile	-2.65
10.0%		-7.6
2.5%		-34.305
0.5%		-89.3
0.0%	minimum	-89.3

Moments

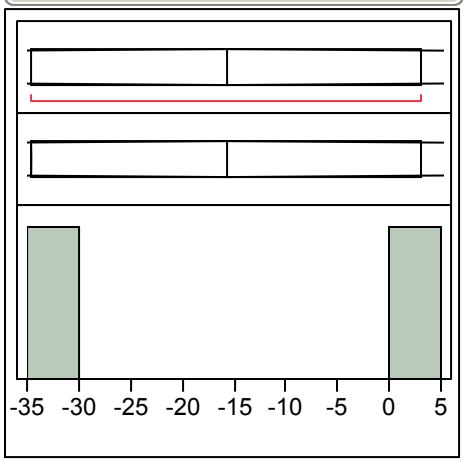
Mean	-0.105479
Std Dev	12.536368
Std Err Mean	1.4672709
Upper 95% Mean	2.8194716
Lower 95% Mean	-3.030431
N	73
Sum Wgt	73
Sum	-7.7
Variance	157.16053
Skewness	-5.195355
Kurtosis	35.948813
CV	-11885.13
N Missing	0

Distributions Analyte Name=Mercury, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Mercury, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	3.1
50.0%	median	-15.75
25.0%	quartile	-34.6
10.0%		-34.6
2.5%		-34.6
0.5%		-34.6
0.0%	minimum	-34.6

Moments

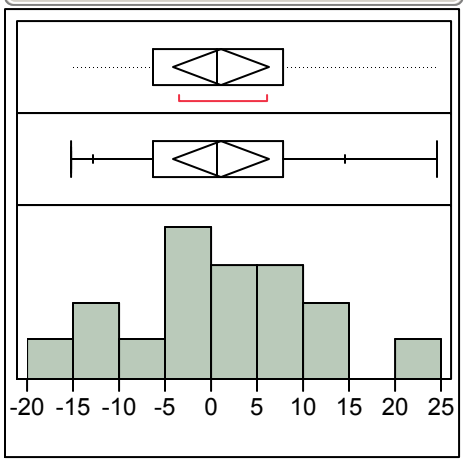
Mean	-15.75
Std Dev	26.657926
Std Err Mean	18.85
Upper 95% Mean	223.76196
Lower 95% Mean	-255.262
N	2
Sum Wgt	2
Sum	-31.5
Variance	710.645
Skewness	.
Kurtosis	.
CV	-169.2567
N Missing	0

Distributions Analyte Name=Mercury, Detection Method=Cold Vapor Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Mercury, Detection Method=Cold Vapor Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	24.5
99.5%		24.5
97.5%		24.5
90.0%		14.66
75.0%	quartile	7.9
50.0%	median	0.7
25.0%	quartile	-6.3
10.0%		-12.82
2.5%		-15.3
0.5%		-15.3
0.0%	minimum	-15.3

Moments

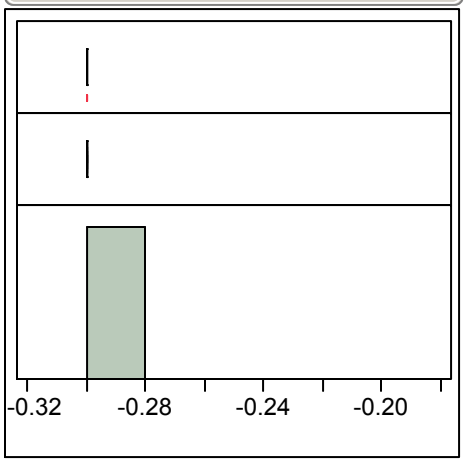
Mean	1.0529412
Std Dev	10.244457
Std Err Mean	2.4846458
Upper 95% Mean	6.3201549
Lower 95% Mean	-4.214273
N	17
Sum Wgt	17
Sum	17.9
Variance	104.9489
Skewness	0.41259
Kurtosis	0.261979
CV	972.93725
N Missing	0

Distributions Analyte Name=Mercury, Detection Method=Hydride Generation (AAS, ICP/OES, ICP-MS)

Bias

Distributions Analyte Name=Mercury, Detection Method=Hydride Generation (AAS, ICP/OES, ICP-MS)

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	-0.3
25.0%	quartile	-0.3
10.0%		-0.3
2.5%		-0.3
0.5%		-0.3
0.0%	minimum	-0.3

Moments

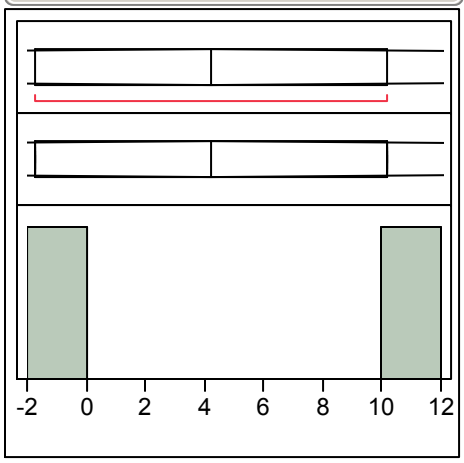
Mean	-0.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-0.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Mercury, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Mercury, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	10.2
99.5%		10.2
97.5%		10.2
90.0%		10.2
75.0%	quartile	10.2
50.0%	median	4.25
25.0%	quartile	-1.7
10.0%		-1.7
2.5%		-1.7
0.5%		-1.7
0.0%	minimum	-1.7

Moments

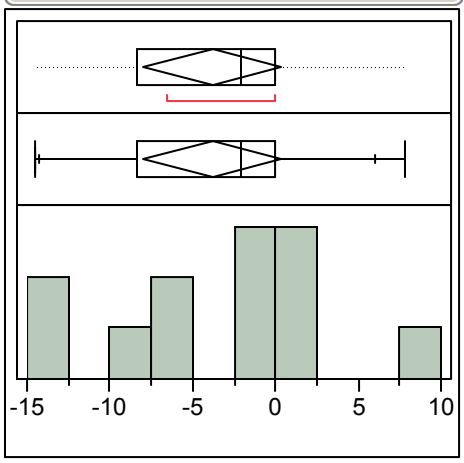
Mean	4.25
Std Dev	8.4145707
Std Err Mean	5.95
Upper 95% Mean	79.851918
Lower 95% Mean	-71.35192
N	2
Sum Wgt	2
Sum	8.5
Variance	70.805
Skewness	.
Kurtosis	.
CV	197.9899
N Missing	0

Distributions Analyte Name=Nickel, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Nickel, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	7.8
99.5%		7.8
97.5%		7.8
90.0%		6
75.0%	quartile	0
50.0%	median	-2.1
25.0%	quartile	-8.4
10.0%		-14.32
2.5%		-14.5
0.5%		-14.5
0.0%	minimum	-14.5

Moments

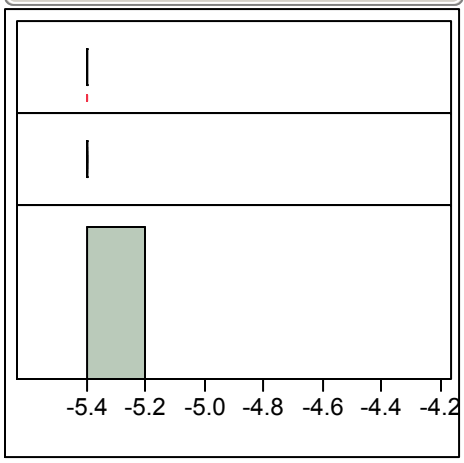
Mean	-3.816667
Std Dev	6.4929099
Std Err Mean	1.8743416
Upper 95% Mean	0.3087315
Lower 95% Mean	-7.942065
N	12
Sum Wgt	12
Sum	-45.8
Variance	42.157879
Skewness	-0.21154
Kurtosis	-0.144109
CV	-170.1199
N Missing	0

Distributions Analyte Name=Nickel, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Nickel, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

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

Moments

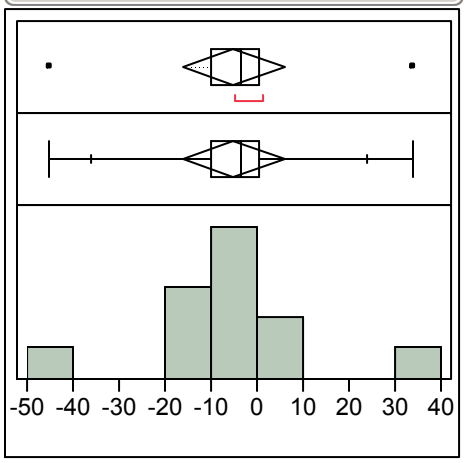
Mean	-5.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-5.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Nickel, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Nickel, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	33.7
99.5%		33.7
97.5%		33.7
90.0%		23.98
75.0%	quartile	0.6
50.0%	median	-3.65
25.0%	quartile	-10.2
10.0%		-36.24
2.5%		-45.3
0.5%		-45.3
0.0%	minimum	-45.3

Moments

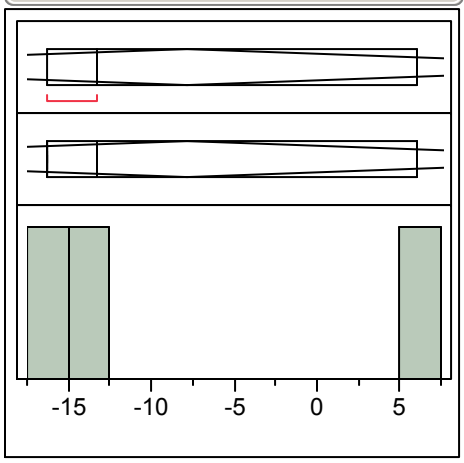
Mean	-5.025
Std Dev	17.53304
Std Err Mean	5.0613528
Upper 95% Mean	6.1149623
Lower 95% Mean	-16.16496
N	12
Sum Wgt	12
Sum	-60.3
Variance	307.4075
Skewness	-0.161516
Kurtosis	4.1291818
CV	-348.9162
N Missing	0

Distributions Analyte Name=Nickel, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Nickel, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	6
99.5%		6
97.5%		6
90.0%		6
75.0%	quartile	6
50.0%	median	-13.3
25.0%	quartile	-16.3
10.0%		-16.3
2.5%		-16.3
0.5%		-16.3
0.0%	minimum	-16.3

Moments

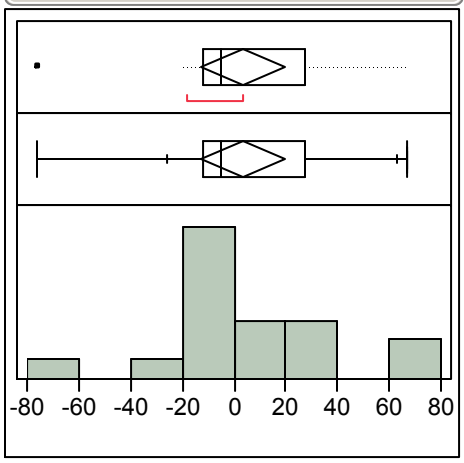
Mean	-7.866667
Std Dev	12.102204
Std Err Mean	6.9872105
Upper 95% Mean	22.196874
Lower 95% Mean	-37.93021
N	3
Sum Wgt	3
Sum	-23.6
Variance	146.46333
Skewness	1.6130834
Kurtosis	.
CV	-153.8416
N Missing	0

Distributions Analyte Name=Nickel-63, Detection Method=Beta Counting - liquid scintillation counter

Bias

Distributions Analyte Name=Nickel-63, Detection Method=Beta Counting - liquid scintillation counter

Bias



Quantiles

100.0%	maximum	67.2
99.5%		67.2
97.5%		67.2
90.0%		62.88
75.0%	quartile	27.125
50.0%	median	-4.85
25.0%	quartile	-11.65
10.0%		-25.97
2.5%		-76.1
0.5%		-76.1
0.0%	minimum	-76.1

Moments

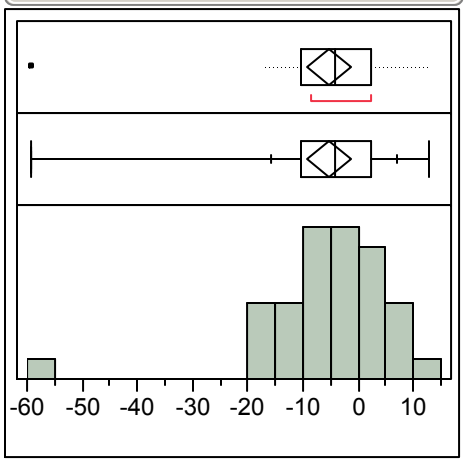
Mean	3.8055556
Std Dev	32.557325
Std Err Mean	7.673835
Upper 95% Mean	19.995932
Lower 95% Mean	-12.38482
N	18
Sum Wgt	18
Sum	68.5
Variance	1059.9794
Skewness	-0.06888
Kurtosis	1.6835381
CV	855.52094
N Missing	0

Distributions Analyte Name=Plutonium-238, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Plutonium-238, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	12.8
99.5%		12.8
97.5%		12.8
90.0%		7.02
75.0%	quartile	2.15
50.0%	median	-4.1
25.0%	quartile	-10.25
10.0%		-15.7
2.5%		-59.3
0.5%		-59.3
0.0%	minimum	-59.3

Moments

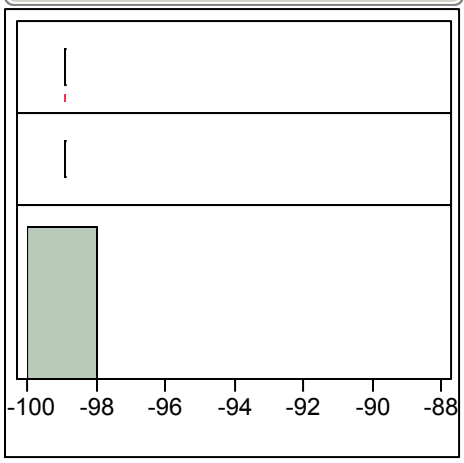
Mean	-5.340541
Std Dev	11.882912
Std Err Mean	1.9535386
Upper 95% Mean	-1.378581
Lower 95% Mean	-9.302501
N	37
Sum Wgt	37
Sum	-197.6
Variance	141.20359
Skewness	-2.563108
Kurtosis	11.194887
CV	-222.5039
N Missing	0

Distributions Analyte Name=Plutonium-238, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Plutonium-238, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	-98.9
99.5%		-98.9
97.5%		-98.9
90.0%		-98.9
75.0%	quartile	-98.9
50.0%	median	-98.9
25.0%	quartile	-98.9
10.0%		-98.9
2.5%		-98.9
0.5%		-98.9
0.0%	minimum	-98.9

Moments

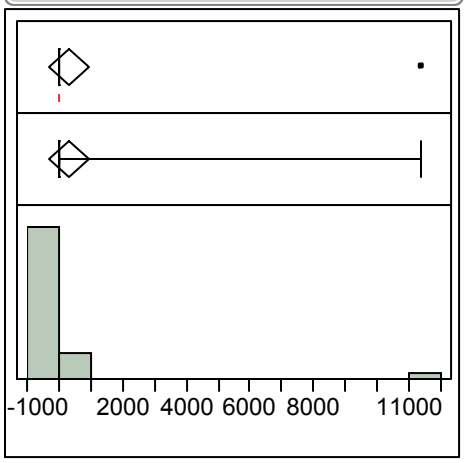
Mean	-98.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-98.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Plutonium-239/240, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	11358.6
99.5%		11358.6
97.5%		11358.6
90.0%		3.58
75.0%	quartile	-3.1
50.0%	median	-8.5
25.0%	quartile	-11.85
10.0%		-16.4
2.5%		-23.2
0.5%		-23.2
0.0%	minimum	-23.2

Moments

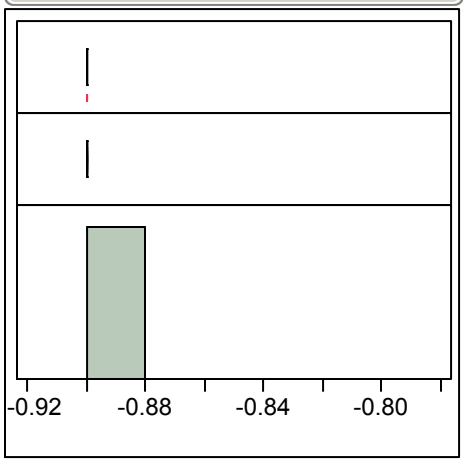
Mean	299.16486
Std Dev	1868.6778
Std Err Mean	307.20873
Upper 95% Mean	922.21305
Lower 95% Mean	-323.8833
N	37
Sum Wgt	37
Sum	11069.1
Variance	3491956.6
Skewness	6.0826243
Kurtosis	36.998848
CV	624.63143
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Plutonium-239/240, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

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	-0.9
25.0%	quartile	-0.9
10.0%		-0.9
2.5%		-0.9
0.5%		-0.9
0.0%	minimum	-0.9

Moments

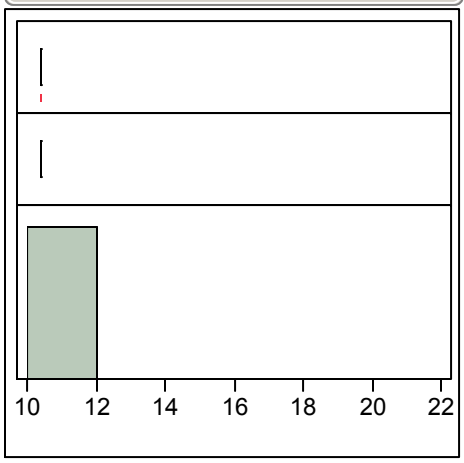
Mean	-0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-0.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Potassium-40, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Potassium-40, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		10.4
75.0%	quartile	10.4
50.0%	median	10.4
25.0%	quartile	10.4
10.0%		10.4
2.5%		10.4
0.5%		10.4
0.0%	minimum	10.4

Moments

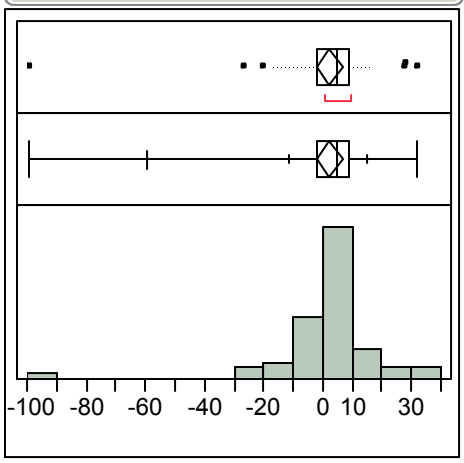
Mean	10.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	10.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Potassium-40, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Potassium-40, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	31.9
99.5%		31.9
97.5%		31.9
90.0%		15.2
75.0%	quartile	8.75
50.0%	median	4.6
25.0%	quartile	-2
10.0%		-11.36
2.5%		-59.425
0.5%		-99.3
0.0%	minimum	-99.3

Moments

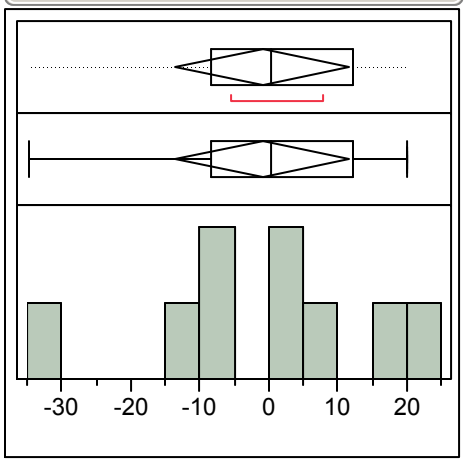
Mean	2.2032787
Std Dev	17.213318
Std Err Mean	2.2039396
Upper 95% Mean	6.6118142
Lower 95% Mean	-2.205257
N	61
Sum Wgt	61
Sum	134.4
Variance	296.29832
Skewness	-3.400815
Kurtosis	19.931544
CV	781.25923
N Missing	0

Distributions Analyte Name=Selenium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Selenium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	20
99.5%		20
97.5%		20
90.0%		20
75.0%	quartile	12.25
50.0%	median	0.4
25.0%	quartile	-8.45
10.0%		-34.8
2.5%		-34.8
0.5%		-34.8
0.0%	minimum	-34.8

Moments

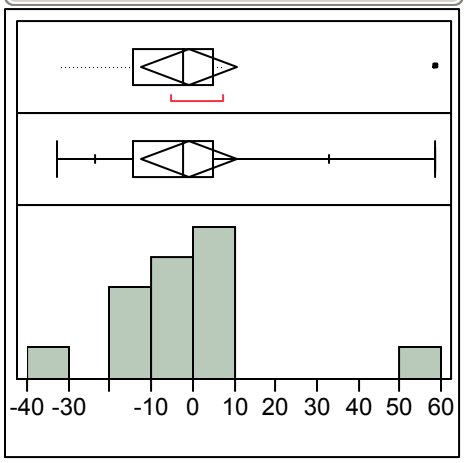
Mean	-0.9
Std Dev	16.390317
Std Err Mean	5.4634391
Upper 95% Mean	11.698713
Lower 95% Mean	-13.49871
N	9
Sum Wgt	9
Sum	-8.1
Variance	268.6425
Skewness	-0.911261
Kurtosis	1.4678204
CV	-1821.146
N Missing	0

Distributions Analyte Name=Selenium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Selenium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	58.6
99.5%		58.6
97.5%		58.6
90.0%		32.95
75.0%	quartile	4.725
50.0%	median	-2.25
25.0%	quartile	-14.175
10.0%		-23.7
2.5%		-32.8
0.5%		-32.8
0.0%	minimum	-32.8

Moments

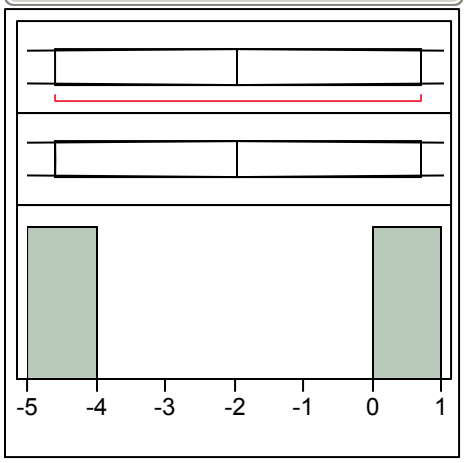
Mean	-0.928571
Std Dev	20.265068
Std Err Mean	5.4160671
Upper 95% Mean	10.77213
Lower 95% Mean	-12.62927
N	14
Sum Wgt	14
Sum	-13
Variance	410.67297
Skewness	1.8559819
Kurtosis	6.0989423
CV	-2182.392
N Missing	0

Distributions Analyte Name=Selenium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Selenium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

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	-1.95
25.0%	quartile	-4.6
10.0%		-4.6
2.5%		-4.6
0.5%		-4.6
0.0%	minimum	-4.6

Moments

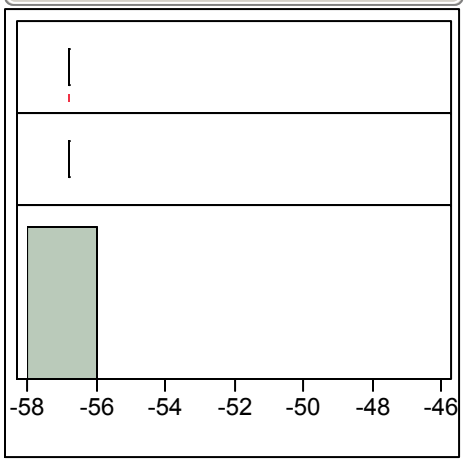
Mean	-1.95
Std Dev	3.7476659
Std Err Mean	2.65
Upper 95% Mean	31.721443
Lower 95% Mean	-35.62144
N	2
Sum Wgt	2
Sum	-3.9
Variance	14.045
Skewness	.
Kurtosis	.
CV	-192.188
N Missing	0

Distributions Analyte Name=Strontium-90, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Strontium-90, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	-56.8
99.5%		-56.8
97.5%		-56.8
90.0%		-56.8
75.0%	quartile	-56.8
50.0%	median	-56.8
25.0%	quartile	-56.8
10.0%		-56.8
2.5%		-56.8
0.5%		-56.8
0.0%	minimum	-56.8

Moments

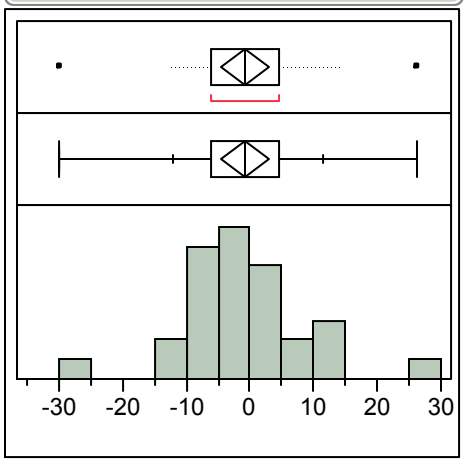
Mean	-56.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-56.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Strontium-90, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Strontium-90, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	26.1
99.5%		26.1
97.5%		26.1
90.0%		11.5
75.0%	quartile	4.6
50.0%	median	-0.65
25.0%	quartile	-6.05
10.0%		-12.22
2.5%		-30
0.5%		-30
0.0%	minimum	-30

Moments

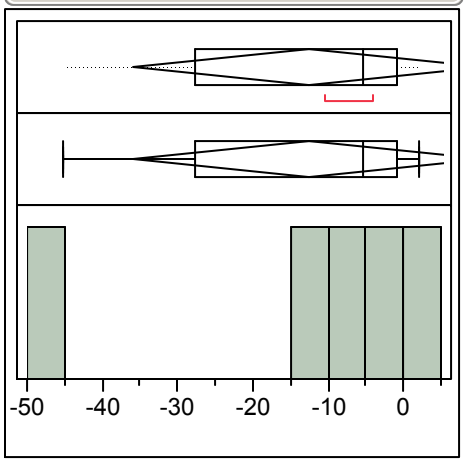
Mean	-0.663333
Std Dev	10.208498
Std Err Mean	1.8638083
Upper 95% Mean	3.1485826
Lower 95% Mean	-4.475249
N	30
Sum Wgt	30
Sum	-19.9
Variance	104.21344
Skewness	-0.103947
Kurtosis	2.2375158
CV	-1538.97
N Missing	0

Distributions Analyte Name=Strontium-90, Detection Method=Beta Counting - liquid scintillation counter

Bias

Distributions Analyte Name=Strontium-90, Detection Method=Beta Counting - liquid scintillation counter

Bias



Quantiles

100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		2.2
75.0%	quartile	-0.95
50.0%	median	-5.4
25.0%	quartile	-27.7
10.0%		-45.1
2.5%		-45.1
0.5%		-45.1
0.0%	minimum	-45.1

Moments

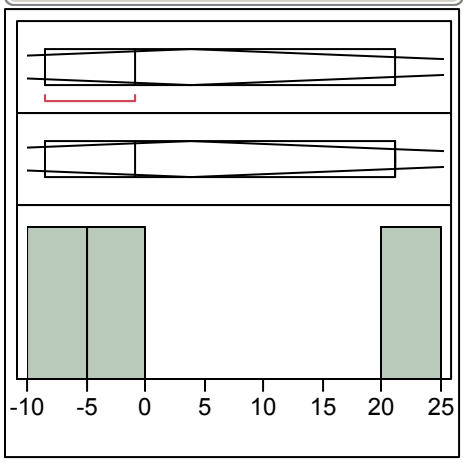
Mean	-12.54
Std Dev	18.739344
Std Err Mean	8.3804892
Upper 95% Mean	10.727968
Lower 95% Mean	-35.80797
N	5
Sum Wgt	5
Sum	-62.7
Variance	351.163
Skewness	-1.921038
Kurtosis	3.9493255
CV	-149.4366
N Missing	0

Distributions Analyte Name=Strontium-90, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Strontium-90, Detection Method=Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	21.1
99.5%		21.1
97.5%		21.1
90.0%		21.1
75.0%	quartile	21.1
50.0%	median	-0.8
25.0%	quartile	-8.5
10.0%		-8.5
2.5%		-8.5
0.5%		-8.5
0.0%	minimum	-8.5

Moments

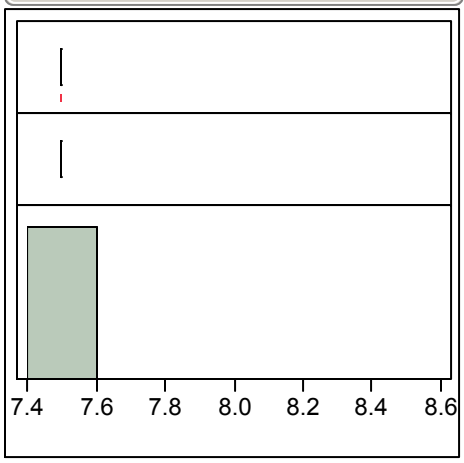
Mean	3.9333333
Std Dev	15.357192
Std Err Mean	8.8664787
Upper 95% Mean	42.082712
Lower 95% Mean	-34.21605
N	3
Sum Wgt	3
Sum	11.8
Variance	235.84333
Skewness	1.2552139
Kurtosis	.
CV	390.43707
N Missing	0

Distributions Analyte Name=Technetium-99, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Technetium-99, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	7.5
99.5%		7.5
97.5%		7.5
90.0%		7.5
75.0%	quartile	7.5
50.0%	median	7.5
25.0%	quartile	7.5
10.0%		7.5
2.5%		7.5
0.5%		7.5
0.0%	minimum	7.5

Moments

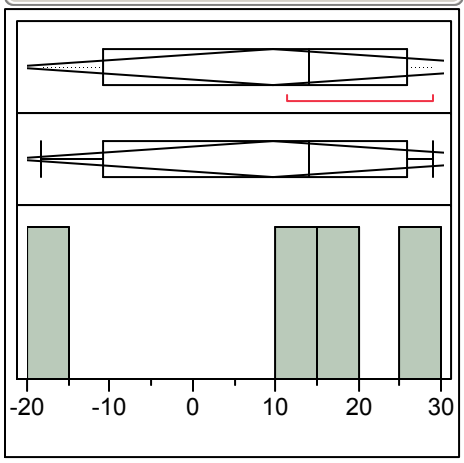
Mean	7.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	7.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias

Distributions Analyte Name=Technetium-99, Detection Method=Beta Counting - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	29
99.5%		29
97.5%		29
90.0%		29
75.0%	quartile	25.95
50.0%	median	14.05
25.0%	quartile	-10.825
10.0%		-18.2
2.5%		-18.2
0.5%		-18.2
0.0%	minimum	-18.2

Moments

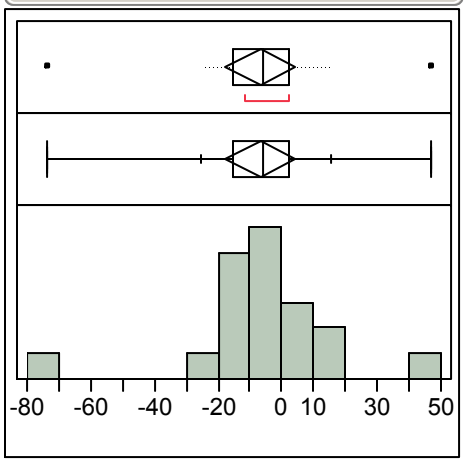
Mean	9.725
Std Dev	20.032203
Std Err Mean	10.016102
Upper 95% Mean	41.600706
Lower 95% Mean	-22.15071
N	4
Sum Wgt	4
Sum	38.9
Variance	401.28917
Skewness	-1.182352
Kurtosis	1.9966134
CV	205.98667
N Missing	0

Distributions Analyte Name=Technetium-99, Detection Method=Beta Counting - liquid scintillation counter

Bias

Distributions Analyte Name=Technetium-99, Detection Method=Beta Counting - liquid scintillation counter

Bias



Quantiles

100.0%	maximum	46.8
99.5%		46.8
97.5%		46.8
90.0%		15.7
75.0%	quartile	2.1
50.0%	median	-6.2
25.0%	quartile	-15.5
10.0%		-25.1
2.5%		-73.7
0.5%		-73.7
0.0%	minimum	-73.7

Moments

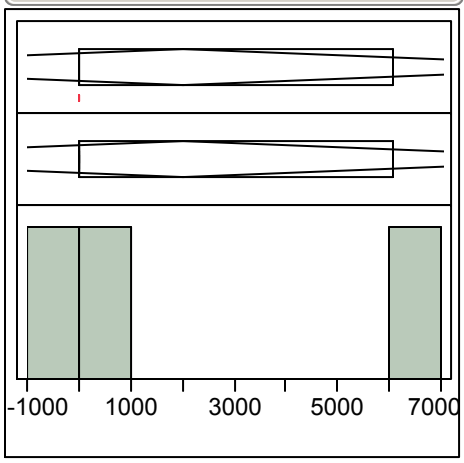
Mean	-6.652632
Std Dev	22.755155
Std Err Mean	5.2203906
Upper 95% Mean	4.315002
Lower 95% Mean	-17.62027
N	19
Sum Wgt	19
Sum	-126.4
Variance	517.79708
Skewness	-0.718545
Kurtosis	4.8227314
CV	-342.0474
N Missing	0

Distributions Analyte Name=Technetium-99, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Technetium-99, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	6088.8
99.5%		6088.8
97.5%		6088.8
90.0%		6088.8
75.0%	quartile	6088.8
50.0%	median	7
25.0%	quartile	-4.2
10.0%		-4.2
2.5%		-4.2
0.5%		-4.2
0.0%	minimum	-4.2

Moments

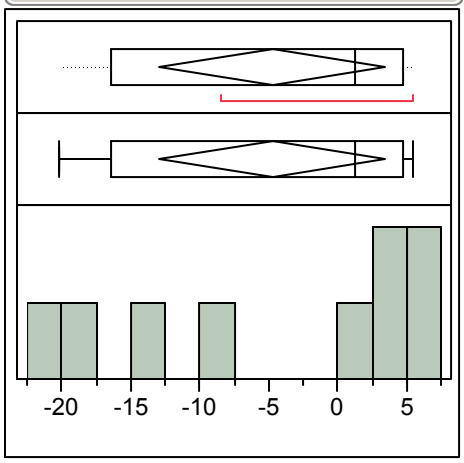
Mean	2030.5333
Std Dev	3514.5665
Std Err Mean	2029.1359
Upper 95% Mean	10761.2
Lower 95% Mean	-6700.134
N	3
Sum Wgt	3
Sum	6091.6
Variance	12352178
Skewness	1.732031
Kurtosis	.
CV	173.08588
N Missing	0

Distributions Analyte Name=Thallium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Thallium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	5.4
99.5%		5.4
97.5%		5.4
90.0%		5.4
75.0%	quartile	4.7
50.0%	median	1.3
25.0%	quartile	-16.35
10.0%		-20.2
2.5%		-20.2
0.5%		-20.2
0.0%	minimum	-20.2

Moments

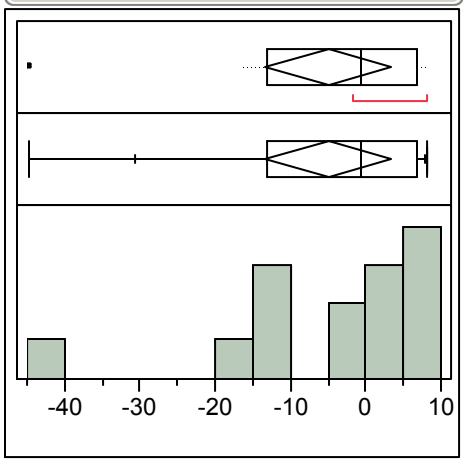
Mean	-4.733333
Std Dev	10.657157
Std Err Mean	3.5523857
Upper 95% Mean	3.4584829
Lower 95% Mean	-12.92515
N	9
Sum Wgt	9
Sum	-42.6
Variance	113.575
Skewness	-0.521752
Kurtosis	-1.769702
CV	-225.1512
N Missing	0

Distributions Analyte Name=Thallium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Thallium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		7.85
75.0%	quartile	6.925
50.0%	median	-0.7
25.0%	quartile	-13.225
10.0%		-30.7
2.5%		-44.8
0.5%		-44.8
0.0%	minimum	-44.8

Moments

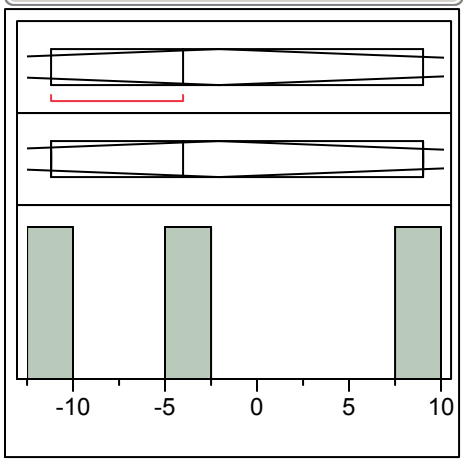
Mean	-4.942857
Std Dev	14.477926
Std Err Mean	3.8693884
Upper 95% Mean	3.4164482
Lower 95% Mean	-13.30216
N	14
Sum Wgt	14
Sum	-69.2
Variance	209.61033
Skewness	-1.706818
Kurtosis	3.5788956
CV	-292.906
N Missing	0

Distributions Analyte Name=Thallium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Thallium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	9
99.5%		9
97.5%		9
90.0%		9
75.0%	quartile	9
50.0%	median	-4
25.0%	quartile	-11.2
10.0%		-11.2
2.5%		-11.2
0.5%		-11.2
0.0%	minimum	-11.2

Moments

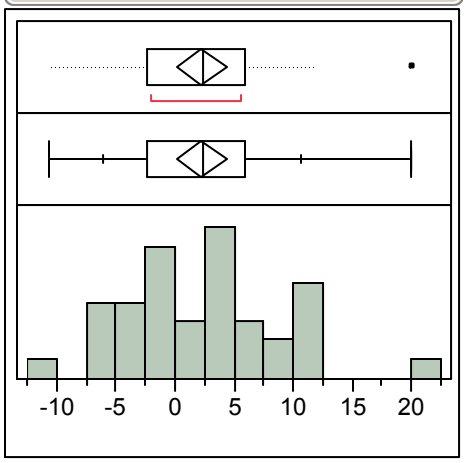
Mean	-2.066667
Std Dev	10.237838
Std Err Mean	5.9108187
Upper 95% Mean	23.365534
Lower 95% Mean	-27.49887
N	3
Sum Wgt	3
Sum	-6.2
Variance	104.81333
Skewness	0.8194842
Kurtosis	.
CV	-495.3793
N Missing	0

Distributions Analyte Name=Uranium-234/233, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Uranium-234/233, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	20
99.5%		20
97.5%		20
90.0%		10.7
75.0%	quartile	5.875
50.0%	median	2.4
25.0%	quartile	-2.325
10.0%		-6.1
2.5%		-10.7
0.5%		-10.7
0.0%	minimum	-10.7

Moments

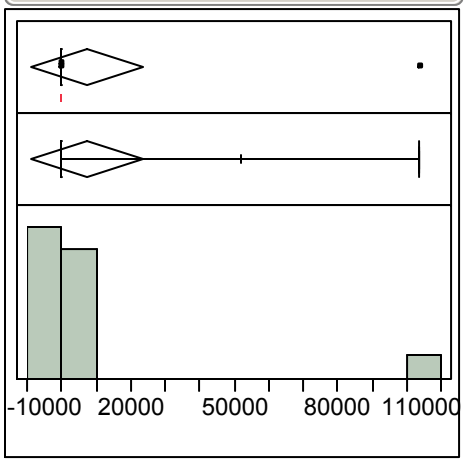
Mean	2.2421053
Std Dev	6.4009557
Std Err Mean	1.0383721
Upper 95% Mean	4.346047
Lower 95% Mean	0.1381635
N	38
Sum Wgt	38
Sum	85.2
Variance	40.972233
Skewness	0.3701195
Kurtosis	0.3129045
CV	285.48863
N Missing	0

Distributions Analyte Name=Uranium-235, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-235, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	103900
99.5%		103900
97.5%		103900
90.0%		51956.6
75.0%	quartile	5.15
50.0%	median	-0.85
25.0%	quartile	-9.55
10.0%		-52.05
2.5%		-66.7
0.5%		-66.7
0.0%	minimum	-66.7

Moments

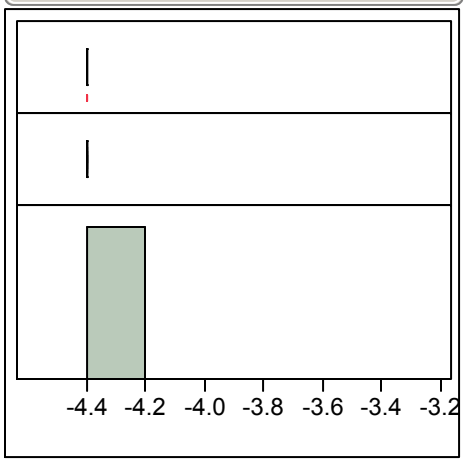
Mean	7413.7214
Std Dev	27770.669
Std Err Mean	7422.0234
Upper 95% Mean	23448.028
Lower 95% Mean	-8620.585
N	14
Sum Wgt	14
Sum	103792.1
Variance	771210049
Skewness	3.7416538
Kurtosis	13.999981
CV	374.58474
N Missing	0

Distributions Analyte Name=Uranium-235, Detection Method=Thermal Ionization Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-235, Detection Method=Thermal Ionization Mass Spectrometry

Bias



Quantiles

100.0%	maximum	-4.4
99.5%		-4.4
97.5%		-4.4
90.0%		-4.4
75.0%	quartile	-4.4
50.0%	median	-4.4
25.0%	quartile	-4.4
10.0%		-4.4
2.5%		-4.4
0.5%		-4.4
0.0%	minimum	-4.4

Moments

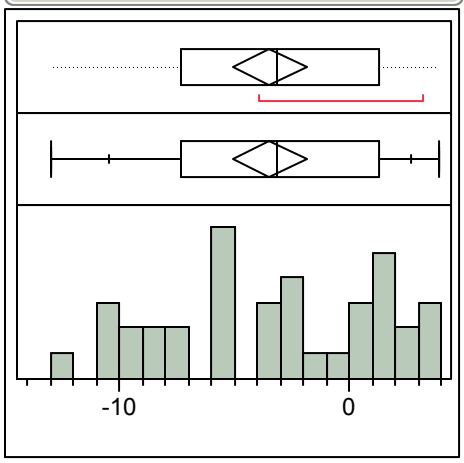
Mean	-4.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-4.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Detection Method=Alpha Spectrometry

Bias

Distributions Analyte Name=Uranium-238, Detection Method=Alpha Spectrometry

Bias



Quantiles

100.0%	maximum	3.9
99.5%		3.9
97.5%		3.9
90.0%		2.66
75.0%	quartile	1.325
50.0%	median	-3.1
25.0%	quartile	-7.275
10.0%		-10.42
2.5%		-13
0.5%		-13
0.0%	minimum	-13

Moments

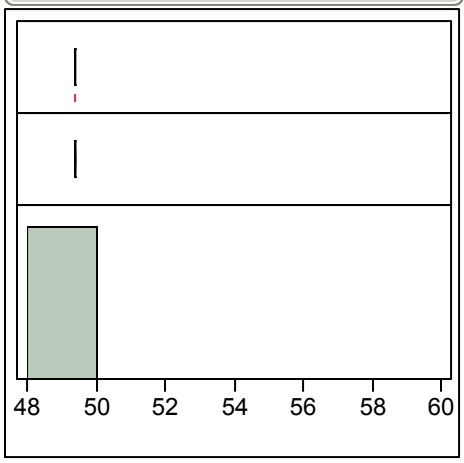
Mean	-3.442105
Std Dev	4.7858254
Std Err Mean	0.7763634
Upper 95% Mean	-1.869044
Lower 95% Mean	-5.015167
N	38
Sum Wgt	38
Sum	-130.8
Variance	22.904125
Skewness	-0.164708
Kurtosis	-1.077724
CV	-139.0377
N Missing	0

Distributions Analyte Name=Uranium-238, Detection Method=Gamma Spectrometry

Bias

Distributions Analyte Name=Uranium-238, Detection Method=Gamma Spectrometry

Bias



Quantiles

100.0%	maximum	49.4
99.5%		49.4
97.5%		49.4
90.0%		49.4
75.0%	quartile	49.4
50.0%	median	49.4
25.0%	quartile	49.4
10.0%		49.4
2.5%		49.4
0.5%		49.4
0.0%	minimum	49.4

Moments

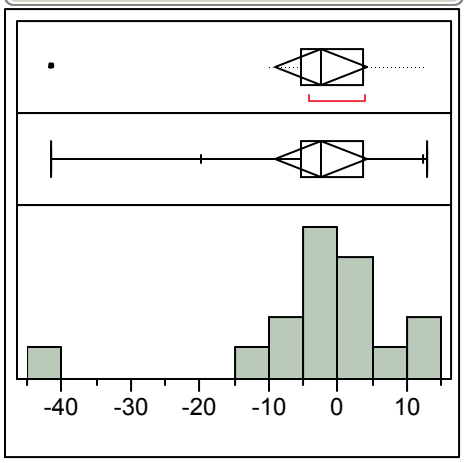
Mean	49.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	49.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-238, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		12.48
75.0%	quartile	3.8
50.0%	median	-2.4
25.0%	quartile	-5.2
10.0%		-19.8
2.5%		-41.5
0.5%		-41.5
0.0%	minimum	-41.5

Moments

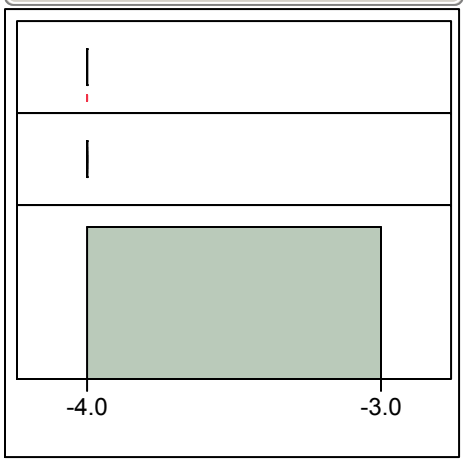
Mean	-2.425
Std Dev	12.440284
Std Err Mean	3.110071
Upper 95% Mean	4.2039594
Lower 95% Mean	-9.053959
N	16
Sum Wgt	16
Sum	-38.8
Variance	154.76067
Skewness	-2.032592
Kurtosis	6.5381093
CV	-513.0014
N Missing	0

Distributions Analyte Name=Uranium-238, Detection Method=Kinetic Phosphorescence Analyzer (KPA)

Bias

Distributions Analyte Name=Uranium-238, Detection Method=Kinetic Phosphorescence Analyzer (KPA)

Bias



Quantiles

100.0%	maximum	-4
99.5%		-4
97.5%		-4
90.0%		-4
75.0%	quartile	-4
50.0%	median	-4
25.0%	quartile	-4
10.0%		-4
2.5%		-4
0.5%		-4
0.0%	minimum	-4

Moments

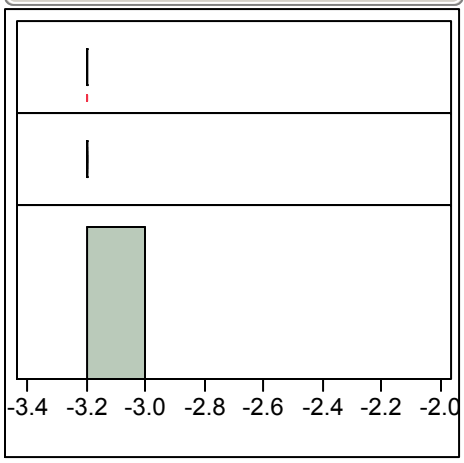
Mean	-4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Detection Method=Thermal Ionization Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-238, Detection Method=Thermal Ionization Mass Spectrometry

Bias



Quantiles

100.0%	maximum	-3.2
99.5%		-3.2
97.5%		-3.2
90.0%		-3.2
75.0%	quartile	-3.2
50.0%	median	-3.2
25.0%	quartile	-3.2
10.0%		-3.2
2.5%		-3.2
0.5%		-3.2
0.0%	minimum	-3.2

Moments

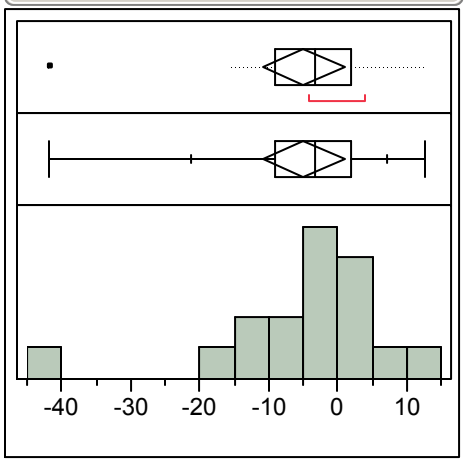
Mean	-3.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-3.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-Total, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-Total, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	12.8
99.5%		12.8
97.5%		12.8
90.0%		7.04
75.0%	quartile	2
50.0%	median	-3.2
25.0%	quartile	-9.2
10.0%		-21.14
2.5%		-41.7
0.5%		-41.7
0.0%	minimum	-41.7

Moments

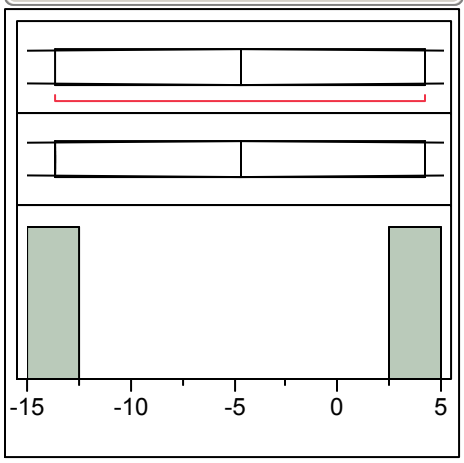
Mean	-4.858824
Std Dev	11.826985
Std Err Mean	2.8684652
Upper 95% Mean	1.222051
Lower 95% Mean	-10.9397
N	17
Sum Wgt	17
Sum	-82.6
Variance	139.87757
Skewness	-1.870463
Kurtosis	5.5733033
CV	-243.4125
N Missing	0

Distributions Analyte Name=Uranium-Total, Detection Method=Kinetic Phosphorescence Analyzer (KPA)

Bias

Distributions Analyte Name=Uranium-Total, Detection Method=Kinetic Phosphorescence Analyzer (KPA)

Bias



Quantiles

100.0%	maximum	4.2
99.5%		4.2
97.5%		4.2
90.0%		4.2
75.0%	quartile	4.2
50.0%	median	-4.7
25.0%	quartile	-13.6
10.0%		-13.6
2.5%		-13.6
0.5%		-13.6
0.0%	minimum	-13.6

Moments

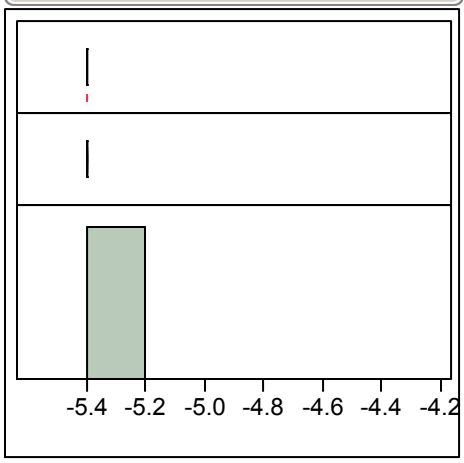
Mean	-4.7
Std Dev	12.586501
Std Err Mean	8.9
Upper 95% Mean	108.38522
Lower 95% Mean	-117.7852
N	2
Sum Wgt	2
Sum	-9.4
Variance	158.42
Skewness	.
Kurtosis	.
CV	-267.7979
N Missing	0

Distributions Analyte Name=Uranium-Total, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Uranium-Total, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

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

Moments

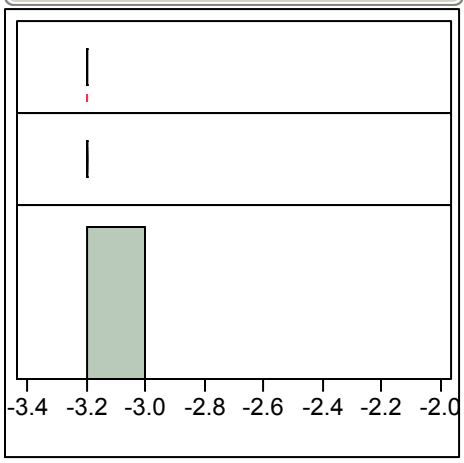
Mean	-5.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-5.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-Total, Detection Method=Thermal Ionization Mass Spectrometry

Bias

Distributions Analyte Name=Uranium-Total, Detection Method=Thermal Ionization Mass Spectrometry

Bias



Quantiles

100.0%	maximum	-3.2
99.5%		-3.2
97.5%		-3.2
90.0%		-3.2
75.0%	quartile	-3.2
50.0%	median	-3.2
25.0%	quartile	-3.2
10.0%		-3.2
2.5%		-3.2
0.5%		-3.2
0.0%	minimum	-3.2

Moments

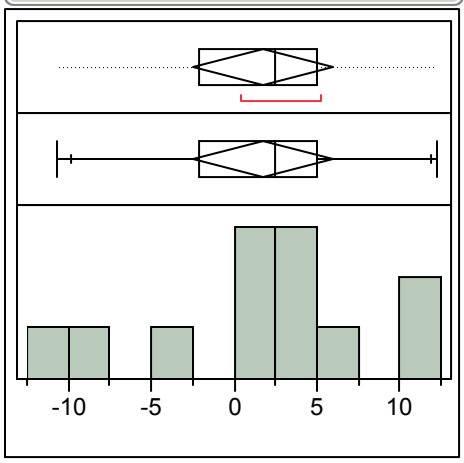
Mean	-3.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-3.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Vanadium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Vanadium, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	12.2
99.5%		12.2
97.5%		12.2
90.0%		11.87
75.0%	quartile	4.975
50.0%	median	2.5
25.0%	quartile	-2.15
10.0%		-9.83
2.5%		-10.7
0.5%		-10.7
0.0%	minimum	-10.7

Moments

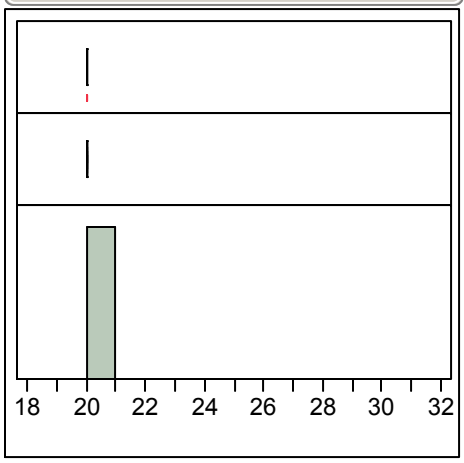
Mean	1.75
Std Dev	6.6653105
Std Err Mean	1.9241094
Upper 95% Mean	5.9849362
Lower 95% Mean	-2.484936
N	12
Sum Wgt	12
Sum	21
Variance	44.426364
Skewness	-0.328278
Kurtosis	0.1670567
CV	380.87488
N Missing	0

Distributions Analyte Name=Vanadium, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Vanadium, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	20
99.5%		20
97.5%		20
90.0%		20
75.0%	quartile	20
50.0%	median	20
25.0%	quartile	20
10.0%		20
2.5%		20
0.5%		20
0.0%	minimum	20

Moments

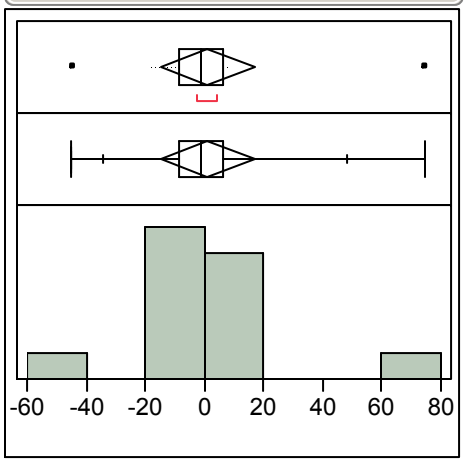
Mean	20
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	20
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Vanadium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Vanadium, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	74.3
99.5%		74.3
97.5%		74.3
90.0%		48.06
75.0%	quartile	6.3
50.0%	median	-1.3
25.0%	quartile	-8.9
10.0%		-34.4
2.5%		-44.8
0.5%		-44.8
0.0%	minimum	-44.8

Moments

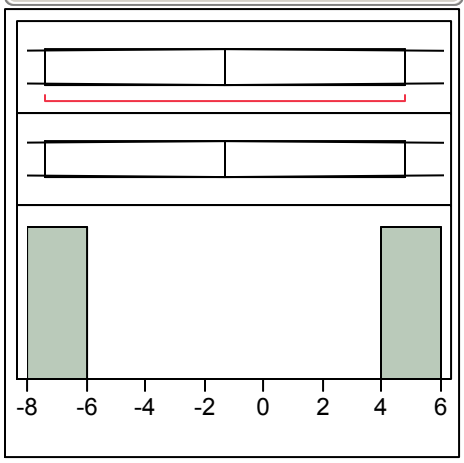
Mean	0.9307692
Std Dev	26.267419
Std Err Mean	7.2852713
Upper 95% Mean	16.804012
Lower 95% Mean	-14.94247
N	13
Sum Wgt	13
Sum	12.1
Variance	689.97731
Skewness	1.5671021
Kurtosis	5.7963414
CV	2822.1194
N Missing	0

Distributions Analyte Name=Vanadium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Vanadium, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	4.8
99.5%		4.8
97.5%		4.8
90.0%		4.8
75.0%	quartile	4.8
50.0%	median	-1.3
25.0%	quartile	-7.4
10.0%		-7.4
2.5%		-7.4
0.5%		-7.4
0.0%	minimum	-7.4

Moments

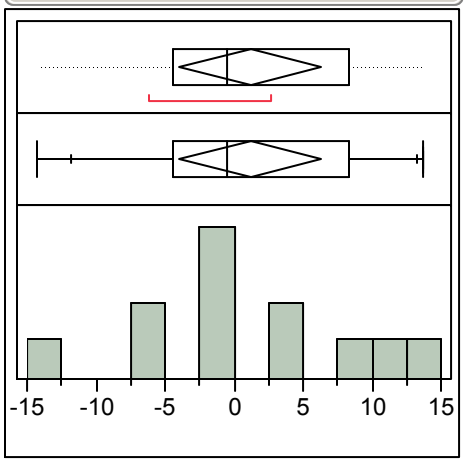
Mean	-1.3
Std Dev	8.6267027
Std Err Mean	6.1
Upper 95% Mean	76.207849
Lower 95% Mean	-78.80785
N	2
Sum Wgt	2
Sum	-2.6
Variance	74.42
Skewness	.
Kurtosis	.
CV	-663.5925
N Missing	0

Distributions Analyte Name=Zinc, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Zinc, Detection Method=Axial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

100.0%	maximum	13.7
99.5%		13.7
97.5%		13.7
90.0%		13.31
75.0%	quartile	8.4
50.0%	median	-0.5
25.0%	quartile	-4.45
10.0%		-11.84
2.5%		-14.3
0.5%		-14.3
0.0%	minimum	-14.3

Moments

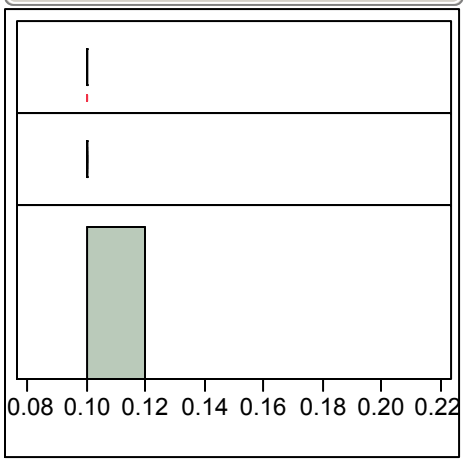
Mean	1.175
Std Dev	8.0972638
Std Err Mean	2.3374787
Upper 95% Mean	6.319756
Lower 95% Mean	-3.969756
N	12
Sum Wgt	12
Sum	14.1
Variance	65.565682
Skewness	-0.078246
Kurtosis	-0.070996
CV	689.12884
N Missing	0

Distributions Analyte Name=Zinc, Detection Method=Flame Atomic Absorption Spectrometry

Bias

Distributions Analyte Name=Zinc, Detection Method=Flame Atomic Absorption Spectrometry

Bias



Quantiles

100.0%	maximum	0.1
99.5%		0.1
97.5%		0.1
90.0%		0.1
75.0%	quartile	0.1
50.0%	median	0.1
25.0%	quartile	0.1
10.0%		0.1
2.5%		0.1
0.5%		0.1
0.0%	minimum	0.1

Moments

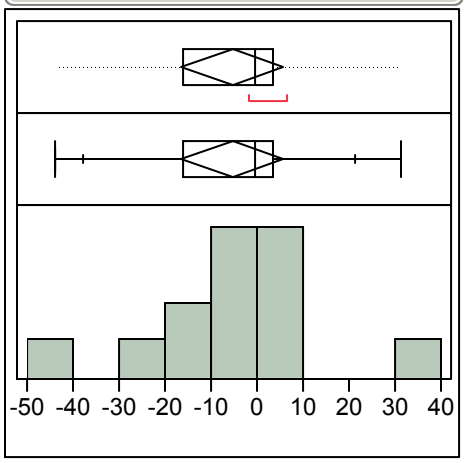
Mean	0.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Zinc, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias

Distributions Analyte Name=Zinc, Detection Method=Inductively Coupled Plasma Mass Spectrometry

Bias



Quantiles

100.0%	maximum	31.2
99.5%		31.2
97.5%		31.2
90.0%		21.4
75.0%	quartile	3.4
50.0%	median	-0.4
25.0%	quartile	-16.1
10.0%		-37.88
2.5%		-43.8
0.5%		-43.8
0.0%	minimum	-43.8

Moments

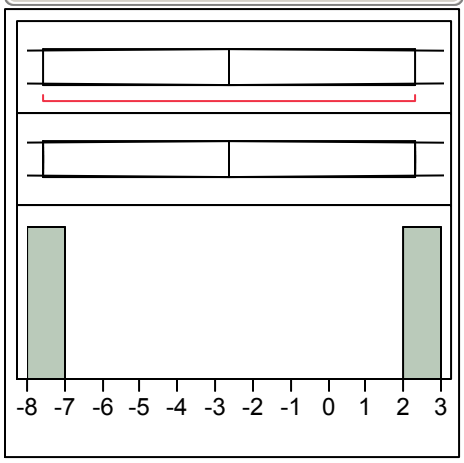
Mean	-5.392308
Std Dev	18.368109
Std Err Mean	5.0943969
Upper 95% Mean	5.7074296
Lower 95% Mean	-16.49204
N	13
Sum Wgt	13
Sum	-70.1
Variance	337.38744
Skewness	-0.320229
Kurtosis	1.3634922
CV	-340.6354
N Missing	0

Distributions Analyte Name=Zinc, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias

Distributions Analyte Name=Zinc, Detection Method=Radial - Inductively Coupled Plasma Emission Spectrometry

Bias



Quantiles

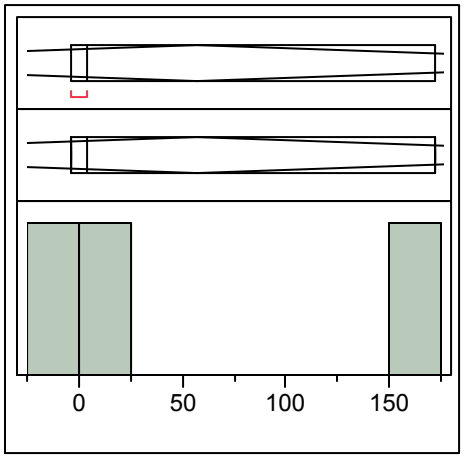
100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	-2.65
25.0%	quartile	-7.6
10.0%		-7.6
2.5%		-7.6
0.5%		-7.6
0.0%	minimum	-7.6

Moments

Mean	-2.65
Std Dev	7.0003571
Std Err Mean	4.95
Upper 95% Mean	60.245713
Lower 95% Mean	-65.54571
N	2
Sum Wgt	2
Sum	-5.3
Variance	49.005
Skewness	.
Kurtosis	.
CV	-264.1644
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	172.2
99.5%		172.2
97.5%		172.2
90.0%		172.2
75.0%	quartile	172.2
50.0%	median	3.6
25.0%	quartile	-4
10.0%		-4
2.5%		-4
0.5%		-4
0.0%	minimum	-4

Moments

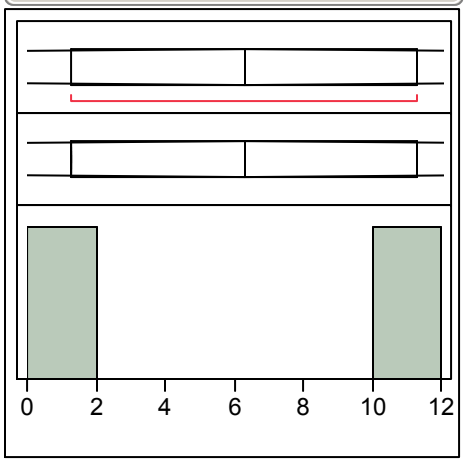
Mean	57.266667
Std Dev	99.607697
Std Err Mean	57.508531
Upper 95% Mean	304.7059
Lower 95% Mean	-190.1726
N	3
Sum Wgt	3
Sum	171.8
Variance	9921.6933
Skewness	1.720714
Kurtosis	.
CV	173.93661
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	11.3
99.5%		11.3
97.5%		11.3
90.0%		11.3
75.0%	quartile	11.3
50.0%	median	6.3
25.0%	quartile	1.3
10.0%		1.3
2.5%		1.3
0.5%		1.3
0.0%	minimum	1.3

Moments

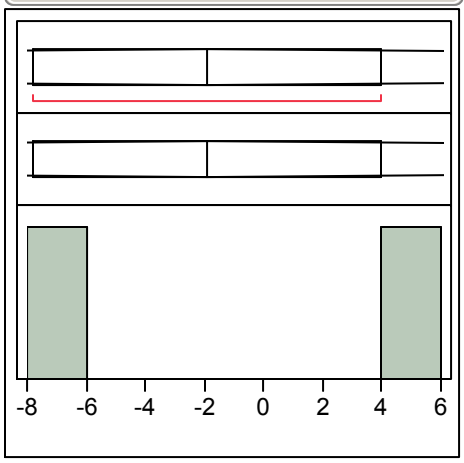
Mean	6.3
Std Dev	7.0710678
Std Err Mean	5
Upper 95% Mean	69.831024
Lower 95% Mean	-57.23102
N	2
Sum Wgt	2
Sum	12.6
Variance	50
Skewness	.
Kurtosis	.
CV	112.23917
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		4
75.0%	quartile	4
50.0%	median	-1.9
25.0%	quartile	-7.8
10.0%		-7.8
2.5%		-7.8
0.5%		-7.8
0.0%	minimum	-7.8

Moments

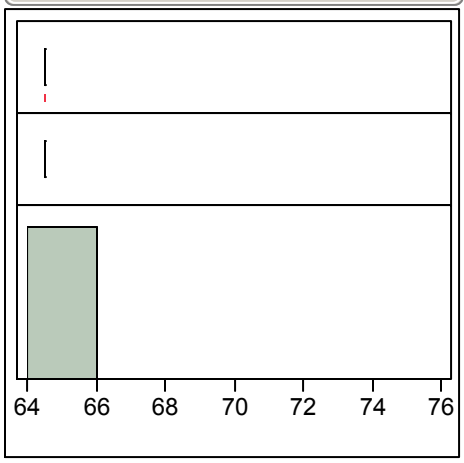
Mean	-1.9
Std Dev	8.34386
Std Err Mean	5.9
Upper 95% Mean	73.066608
Lower 95% Mean	-76.86661
N	2
Sum Wgt	2
Sum	-3.8
Variance	69.62
Skewness	.
Kurtosis	.
CV	-439.1505
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Americium-241, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	64.5
99.5%		64.5
97.5%		64.5
90.0%		64.5
75.0%	quartile	64.5
50.0%	median	64.5
25.0%	quartile	64.5
10.0%		64.5
2.5%		64.5
0.5%		64.5
0.0%	minimum	64.5

Moments

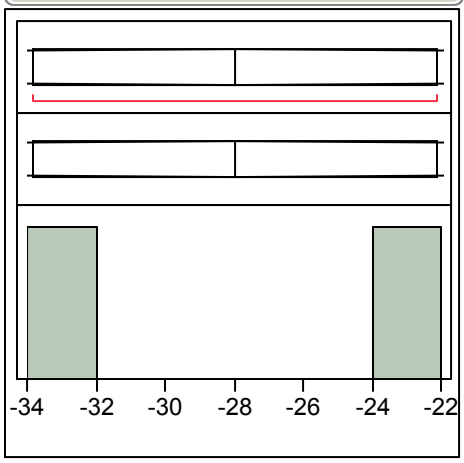
Mean	64.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	64.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	-22.1
99.5%		-22.1
97.5%		-22.1
90.0%		-22.1
75.0%	quartile	-22.1
50.0%	median	-27.95
25.0%	quartile	-33.8
10.0%		-33.8
2.5%		-33.8
0.5%		-33.8
0.0%	minimum	-33.8

Moments

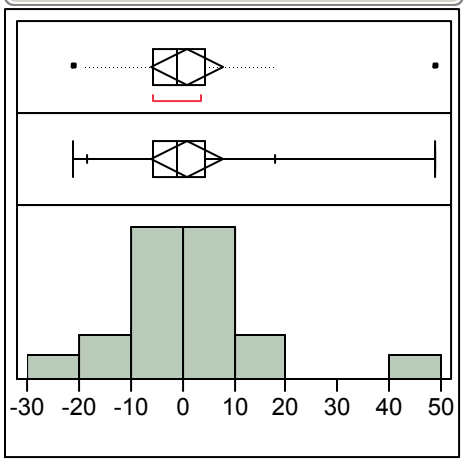
Mean	-27.95
Std Dev	8.2731493
Std Err Mean	5.85
Upper 95% Mean	46.381298
Lower 95% Mean	-102.2813
N	2
Sum Wgt	2
Sum	-55.9
Variance	68.445
Skewness	.
Kurtosis	.
CV	-29.59982
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	48.9
99.5%		48.9
97.5%		48.9
90.0%		18.02
75.0%	quartile	4.275
50.0%	median	-0.85
25.0%	quartile	-5.65
10.0%		-18.52
2.5%		-21
0.5%		-21
0.0%	minimum	-21

Moments

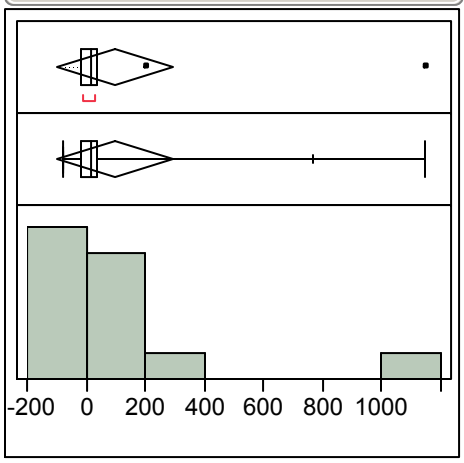
Mean	0.99
Std Dev	14.779712
Std Err Mean	3.3048441
Upper 95% Mean	7.9071183
Lower 95% Mean	-5.927118
N	20
Sum Wgt	20
Sum	19.8
Variance	218.43989
Skewness	1.7318853
Kurtosis	5.2913504
CV	1492.9002
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Americium-241, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	1147.6
99.5%		1147.6
97.5%		1147.6
90.0%		769.56
75.0%	quartile	37.55
50.0%	median	13.4
25.0%	quartile	-18.85
10.0%		-81.1
2.5%		-81.1
0.5%		-81.1
0.0%	minimum	-81.1

Moments

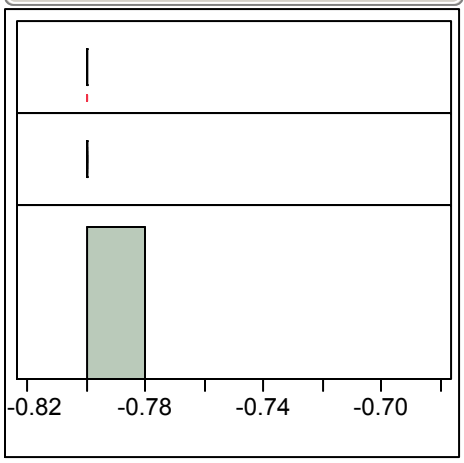
Mean	97.784615
Std Dev	322.93753
Std Err Mean	89.566757
Upper 95% Mean	292.93381
Lower 95% Mean	-97.36458
N	13
Sum Wgt	13
Sum	1271.2
Variance	104288.65
Skewness	3.3320271
Kurtosis	11.507935
CV	330.25393
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Other

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	-0.8
99.5%		-0.8
97.5%		-0.8
90.0%		-0.8
75.0%	quartile	-0.8
50.0%	median	-0.8
25.0%	quartile	-0.8
10.0%		-0.8
2.5%		-0.8
0.5%		-0.8
0.0%	minimum	-0.8

Moments

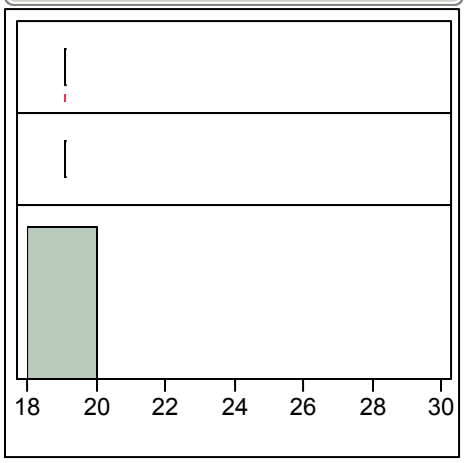
Mean	-0.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-0.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Americium-241, Preparation Method=Total dissolution by fusion

Bias

Distributions Analyte Name=Americium-241, Preparation Method=Total dissolution by fusion

Bias



Quantiles

100.0%	maximum	19.1
99.5%		19.1
97.5%		19.1
90.0%		19.1
75.0%	quartile	19.1
50.0%	median	19.1
25.0%	quartile	19.1
10.0%		19.1
2.5%		19.1
0.5%		19.1
0.0%	minimum	19.1

Moments

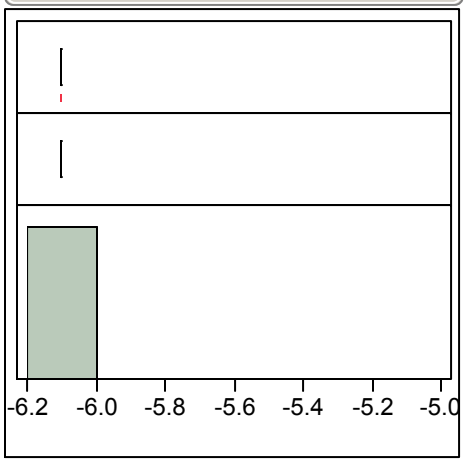
Mean	19.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	19.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-6.1
99.5%		-6.1
97.5%		-6.1
90.0%		-6.1
75.0%	quartile	-6.1
50.0%	median	-6.1
25.0%	quartile	-6.1
10.0%		-6.1
2.5%		-6.1
0.5%		-6.1
0.0%	minimum	-6.1

Moments

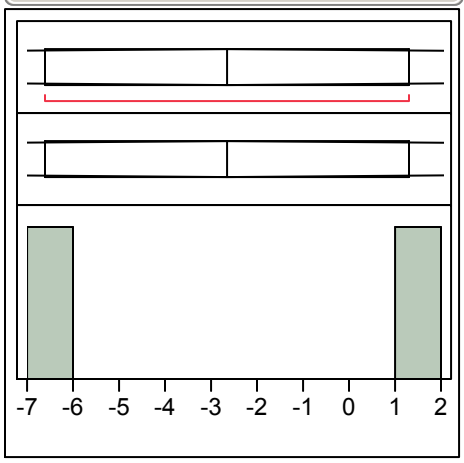
Mean	-6.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-6.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	1.3
99.5%		1.3
97.5%		1.3
90.0%		1.3
75.0%	quartile	1.3
50.0%	median	-2.65
25.0%	quartile	-6.6
10.0%		-6.6
2.5%		-6.6
0.5%		-6.6
0.0%	minimum	-6.6

Moments

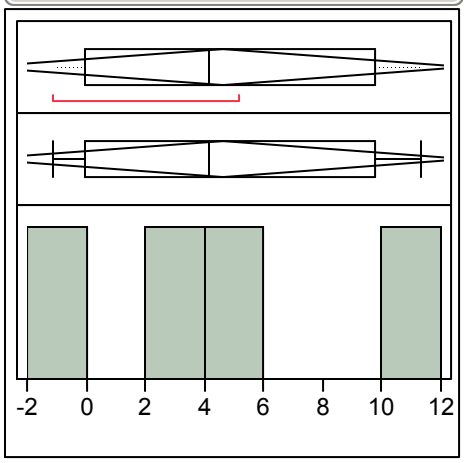
Mean	-2.65
Std Dev	5.5861436
Std Err Mean	3.95
Upper 95% Mean	47.539509
Lower 95% Mean	-52.83951
N	2
Sum Wgt	2
Sum	-5.3
Variance	31.205
Skewness	.
Kurtosis	.
CV	-210.7979
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Antimony, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	11.3
99.5%		11.3
97.5%		11.3
90.0%		11.3
75.0%	quartile	9.775
50.0%	median	4.15
25.0%	quartile	-0.05
10.0%		-1.1
2.5%		-1.1
0.5%		-1.1
0.0%	minimum	-1.1

Moments

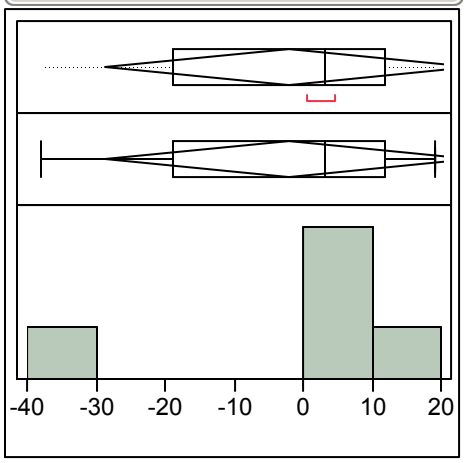
Mean	4.625
Std Dev	5.1635743
Std Err Mean	2.5817872
Upper 95% Mean	12.841399
Lower 95% Mean	-3.591399
N	4
Sum Wgt	4
Sum	18.5
Variance	26.6625
Skewness	0.515285
Kurtosis	0.8715055
CV	111.64485
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Antimony, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	19.2
99.5%		19.2
97.5%		19.2
90.0%		19.2
75.0%	quartile	11.9
50.0%	median	3.1
25.0%	quartile	-18.75
10.0%		-38
2.5%		-38
0.5%		-38
0.0%	minimum	-38

Moments

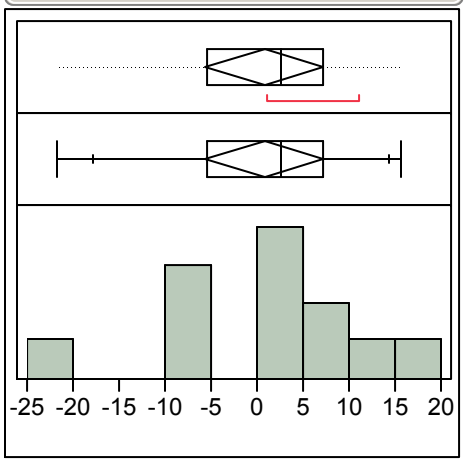
Mean	-2.12
Std Dev	21.33769
Std Err Mean	9.5425049
Upper 95% Mean	24.374241
Lower 95% Mean	-28.61424
N	5
Sum Wgt	5
Sum	-10.6
Variance	455.297
Skewness	-1.54557
Kurtosis	3.2567072
CV	-1006.495
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Antimony, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	15.7
99.5%		15.7
97.5%		15.7
90.0%		14.29
75.0%	quartile	7.15
50.0%	median	2.65
25.0%	quartile	-5.5
10.0%		-17.9
2.5%		-21.8
0.5%		-21.8
0.0%	minimum	-21.8

Moments

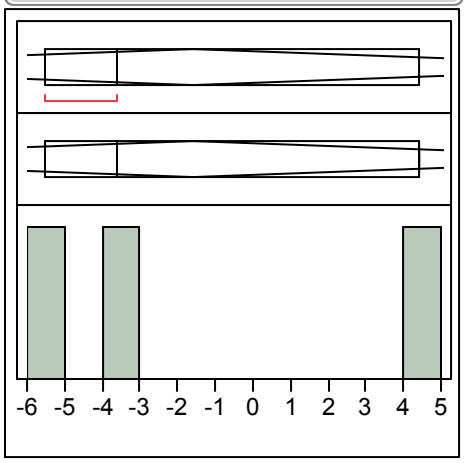
Mean	0.8
Std Dev	10.033671
Std Err Mean	2.8964712
Upper 95% Mean	7.1750901
Lower 95% Mean	-5.57509
N	12
Sum Wgt	12
Sum	9.6
Variance	100.67455
Skewness	-0.863814
Kurtosis	1.1900772
CV	1254.2088
N Missing	0

Distributions Analyte Name=Antimony, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Antimony, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		4.4
75.0%	quartile	4.4
50.0%	median	-3.6
25.0%	quartile	-5.5
10.0%		-5.5
2.5%		-5.5
0.5%		-5.5
0.0%	minimum	-5.5

Moments

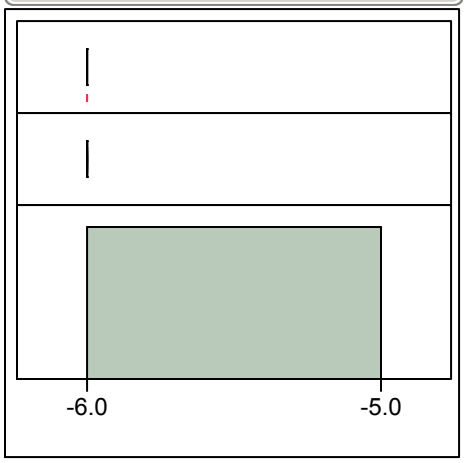
Mean	-1.566667
Std Dev	5.2538874
Std Err Mean	3.0333333
Upper 95% Mean	11.484713
Lower 95% Mean	-14.61805
N	3
Sum Wgt	3
Sum	-4.7
Variance	27.603333
Skewness	1.4807145
Kurtosis	.
CV	-335.3545
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-6
99.5%		-6
97.5%		-6
90.0%		-6
75.0%	quartile	-6
50.0%	median	-6
25.0%	quartile	-6
10.0%		-6
2.5%		-6
0.5%		-6
0.0%	minimum	-6

Moments

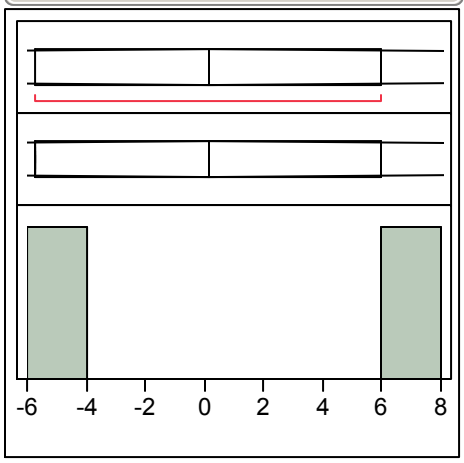
Mean	-6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	6
99.5%		6
97.5%		6
90.0%		6
75.0%	quartile	6
50.0%	median	0.15
25.0%	quartile	-5.7
10.0%		-5.7
2.5%		-5.7
0.5%		-5.7
0.0%	minimum	-5.7

Moments

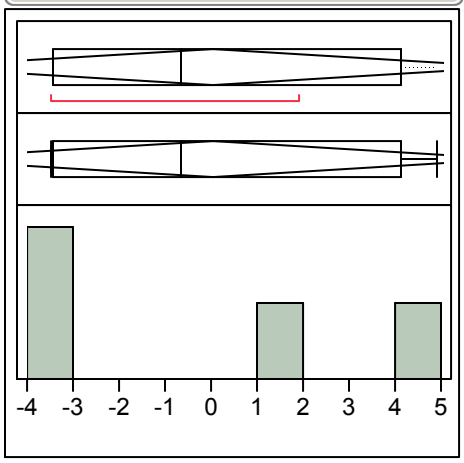
Mean	0.15
Std Dev	8.2731493
Std Err Mean	5.85
Upper 95% Mean	74.481298
Lower 95% Mean	-74.1813
N	2
Sum Wgt	2
Sum	0.3
Variance	68.445
Skewness	.
Kurtosis	.
CV	5515.4329
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Arsenic, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	4.9
99.5%		4.9
97.5%		4.9
90.0%		4.9
75.0%	quartile	4.15
50.0%	median	-0.65
25.0%	quartile	-3.425
10.0%		-3.5
2.5%		-3.5
0.5%		-3.5
0.0%	minimum	-3.5

Moments

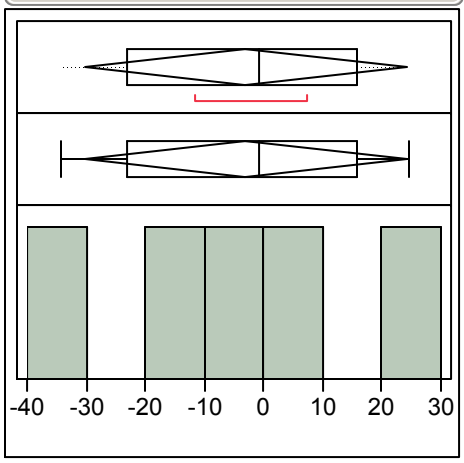
Mean	0.025
Std Dev	4.0868692
Std Err Mean	2.0434346
Upper 95% Mean	6.5281209
Lower 95% Mean	-6.478121
N	4
Sum Wgt	4
Sum	0.1
Variance	16.7025
Skewness	0.4405338
Kurtosis	-3.466386
CV	16347.477
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Arsenic, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	24.5
99.5%		24.5
97.5%		24.5
90.0%		24.5
75.0%	quartile	15.9
50.0%	median	-0.9
25.0%	quartile	-23.05
10.0%		-34.4
2.5%		-34.4
0.5%		-34.4
0.0%	minimum	-34.4

Moments

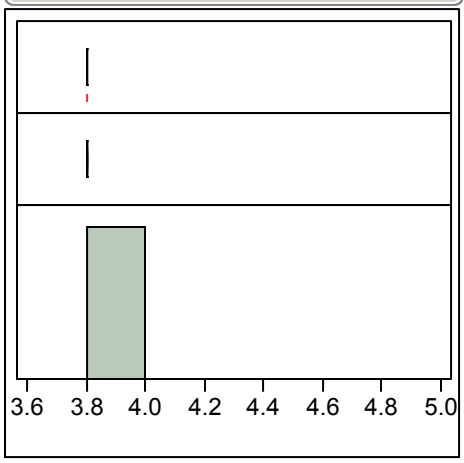
Mean	-3.04
Std Dev	21.95673
Std Err Mean	9.8193482
Upper 95% Mean	24.222881
Lower 95% Mean	-30.30288
N	5
Sum Wgt	5
Sum	-15.2
Variance	482.098
Skewness	-0.37345
Kurtosis	0.3873397
CV	-722.2609
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=Other

Bias

Distributions Analyte Name=Arsenic, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	3.8
99.5%		3.8
97.5%		3.8
90.0%		3.8
75.0%	quartile	3.8
50.0%	median	3.8
25.0%	quartile	3.8
10.0%		3.8
2.5%		3.8
0.5%		3.8
0.0%	minimum	3.8

Moments

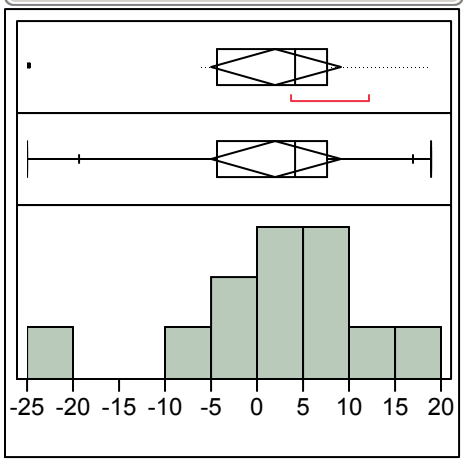
Mean	3.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	3.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Arsenic, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	18.9
99.5%		18.9
97.5%		18.9
90.0%		16.89
75.0%	quartile	7.6
50.0%	median	4.1
25.0%	quartile	-4.25
10.0%		-19.32
2.5%		-24.9
0.5%		-24.9
0.0%	minimum	-24.9

Moments

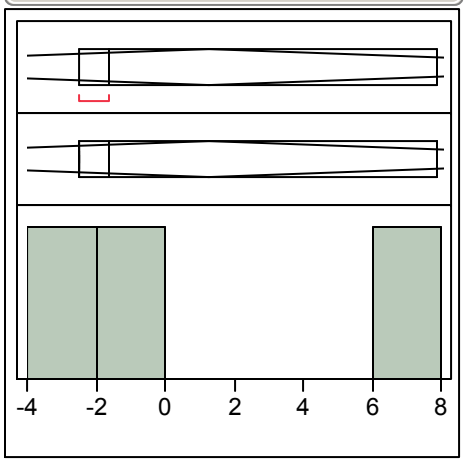
Mean	2.05
Std Dev	11.059221
Std Err Mean	3.192522
Upper 95% Mean	9.0766936
Lower 95% Mean	-4.976694
N	12
Sum Wgt	12
Sum	24.6
Variance	122.30636
Skewness	-1.159821
Kurtosis	2.588608
CV	539.47418
N Missing	0

Distributions Analyte Name=Arsenic, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Arsenic, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	7.9
99.5%		7.9
97.5%		7.9
90.0%		7.9
75.0%	quartile	7.9
50.0%	median	-1.6
25.0%	quartile	-2.5
10.0%		-2.5
2.5%		-2.5
0.5%		-2.5
0.0%	minimum	-2.5

Moments

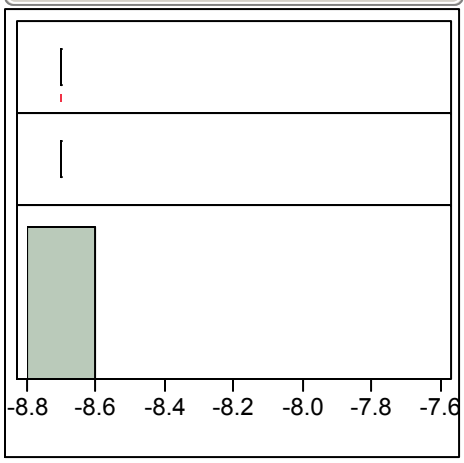
Mean	1.2666667
Std Dev	5.7622334
Std Err Mean	3.326827
Upper 95% Mean	15.580848
Lower 95% Mean	-13.04751
N	3
Sum Wgt	3
Sum	3.8
Variance	33.203333
Skewness	1.6846364
Kurtosis	.
CV	454.91316
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

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

Moments

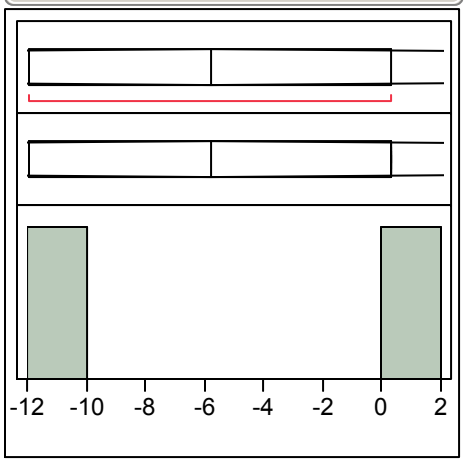
Mean	-8.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-8.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

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	-5.8
25.0%	quartile	-11.9
10.0%		-11.9
2.5%		-11.9
0.5%		-11.9
0.0%	minimum	-11.9

Moments

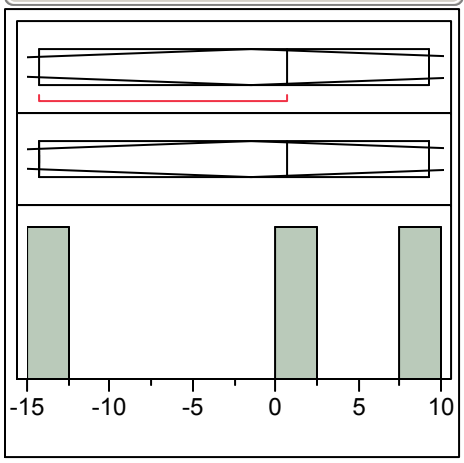
Mean	-5.8
Std Dev	8.6267027
Std Err Mean	6.1
Upper 95% Mean	71.707849
Lower 95% Mean	-83.30785
N	2
Sum Wgt	2
Sum	-11.6
Variance	74.42
Skewness	.
Kurtosis	.
CV	-148.7363
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Barium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

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	0.7
25.0%	quartile	-14.3
10.0%		-14.3
2.5%		-14.3
0.5%		-14.3
0.0%	minimum	-14.3

Moments

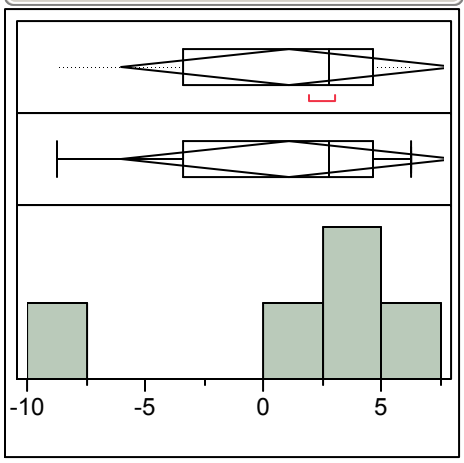
Mean	-1.433333
Std Dev	11.943757
Std Err Mean	6.8957314
Upper 95% Mean	28.236604
Lower 95% Mean	-31.10327
N	3
Sum Wgt	3
Sum	-4.3
Variance	142.65333
Skewness	-0.778124
Kurtosis	.
CV	-833.2854
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Barium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	6.2
99.5%		6.2
97.5%		6.2
90.0%		6.2
75.0%	quartile	4.6
50.0%	median	2.8
25.0%	quartile	-3.4
10.0%		-8.7
2.5%		-8.7
0.5%		-8.7
0.0%	minimum	-8.7

Moments

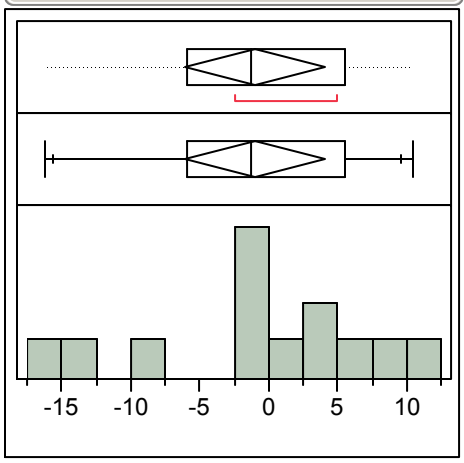
Mean	1.04
Std Dev	5.682693
Std Err Mean	2.5413776
Upper 95% Mean	8.0959953
Lower 95% Mean	-6.015995
N	5
Sum Wgt	5
Sum	5.2
Variance	32.293
Skewness	-1.755127
Kurtosis	3.667303
CV	546.41279
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Barium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		9.56
75.0%	quartile	5.55
50.0%	median	-1.2
25.0%	quartile	-5.95
10.0%		-15.68
2.5%		-16.2
0.5%		-16.2
0.0%	minimum	-16.2

Moments

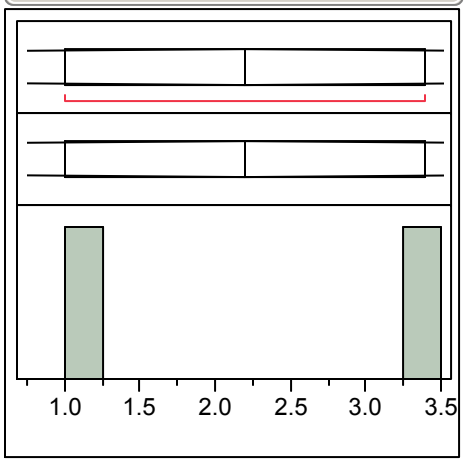
Mean	-0.923077
Std Dev	8.3761719
Std Err Mean	2.3231321
Upper 95% Mean	4.1385931
Lower 95% Mean	-5.984747
N	13
Sum Wgt	13
Sum	-12
Variance	70.160256
Skewness	-0.657008
Kurtosis	-0.390997
CV	-907.4186
N Missing	0

Distributions Analyte Name=Barium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Barium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	3.4
99.5%		3.4
97.5%		3.4
90.0%		3.4
75.0%	quartile	3.4
50.0%	median	2.2
25.0%	quartile	1
10.0%		1
2.5%		1
0.5%		1
0.0%	minimum	1

Moments

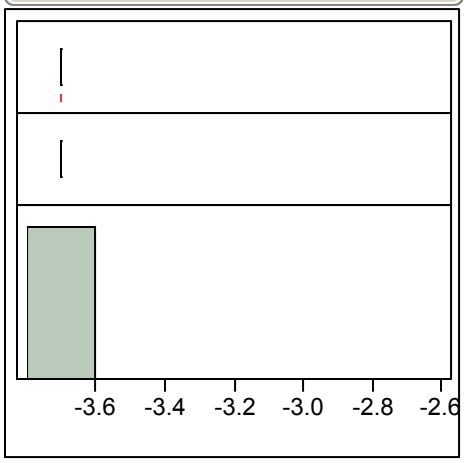
Mean	2.2
Std Dev	1.6970563
Std Err Mean	1.2
Upper 95% Mean	17.447446
Lower 95% Mean	-13.04745
N	2
Sum Wgt	2
Sum	4.4
Variance	2.88
Skewness	.
Kurtosis	.
CV	77.138922
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

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

Moments

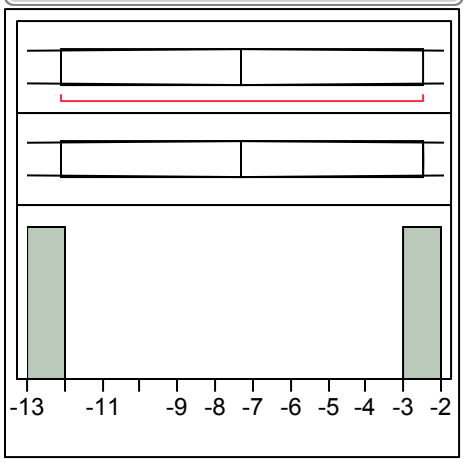
Mean	-3.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-3.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	-2.5
99.5%		-2.5
97.5%		-2.5
90.0%		-2.5
75.0%	quartile	-2.5
50.0%	median	-7.3
25.0%	quartile	-12.1
10.0%		-12.1
2.5%		-12.1
0.5%		-12.1
0.0%	minimum	-12.1

Moments

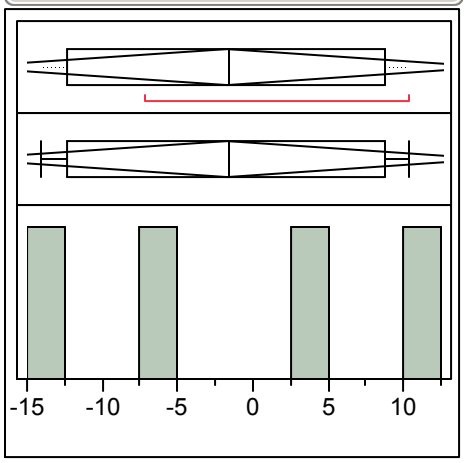
Mean	-7.3
Std Dev	6.7882251
Std Err Mean	4.8
Upper 95% Mean	53.689783
Lower 95% Mean	-68.28978
N	2
Sum Wgt	2
Sum	-14.6
Variance	46.08
Skewness	.
Kurtosis	.
CV	-92.98938
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Beryllium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		10.4
75.0%	quartile	8.825
50.0%	median	-1.55
25.0%	quartile	-12.375
10.0%		-14.1
2.5%		-14.1
0.5%		-14.1
0.0%	minimum	-14.1

Moments

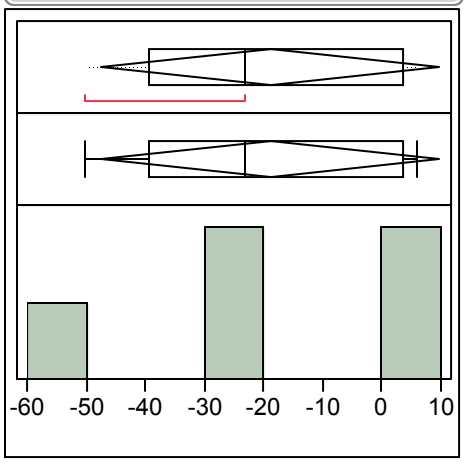
Mean	-1.7
Std Dev	11.016049
Std Err Mean	5.5080244
Upper 95% Mean	15.828992
Lower 95% Mean	-19.22899
N	4
Sum Wgt	4
Sum	-6.8
Variance	121.35333
Skewness	-0.053024
Kurtosis	-2.833443
CV	-648.0029
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Beryllium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	5.9
99.5%		5.9
97.5%		5.9
90.0%		5.9
75.0%	quartile	3.55
50.0%	median	-23.1
25.0%	quartile	-39.25
10.0%		-50.1
2.5%		-50.1
0.5%		-50.1
0.0%	minimum	-50.1

Moments

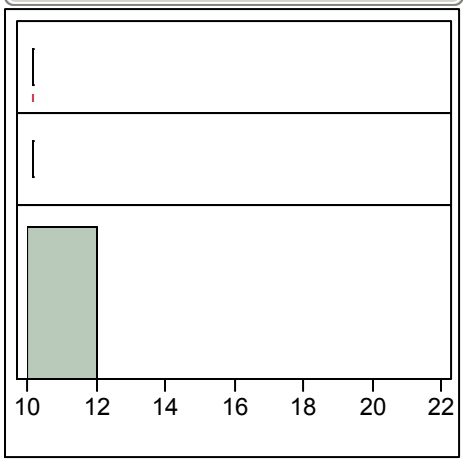
Mean	-18.9
Std Dev	22.914951
Std Err Mean	10.247878
Upper 95% Mean	9.5526702
Lower 95% Mean	-47.35267
N	5
Sum Wgt	5
Sum	-94.5
Variance	525.095
Skewness	-0.274575
Kurtosis	-1.210893
CV	-121.2431
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=Other

Bias

Distributions Analyte Name=Beryllium, Preparation Method=Other

Bias



Quantiles

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

Moments

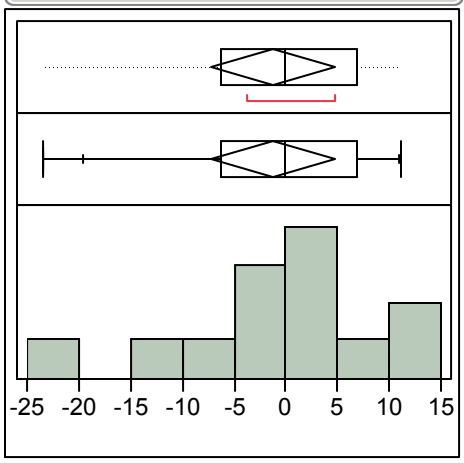
Mean	10.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	10.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Beryllium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	11.2
99.5%		11.2
97.5%		11.2
90.0%		10.88
75.0%	quartile	6.85
50.0%	median	0
25.0%	quartile	-6.25
10.0%		-19.58
2.5%		-23.5
0.5%		-23.5
0.0%	minimum	-23.5

Moments

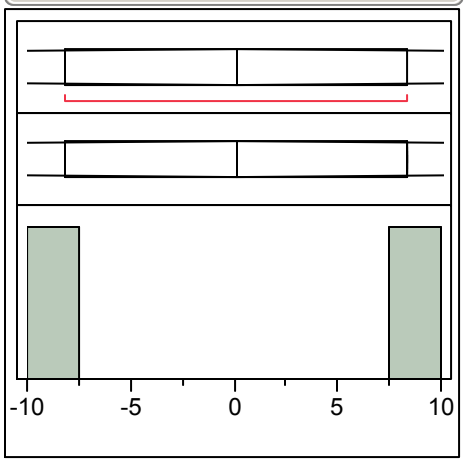
Mean	-1.207692
Std Dev	9.939103
Std Err Mean	2.7566112
Upper 95% Mean	4.7984475
Lower 95% Mean	-7.213832
N	13
Sum Wgt	13
Sum	-15.7
Variance	98.785769
Skewness	-0.864427
Kurtosis	0.7250112
CV	-822.9831
N Missing	0

Distributions Analyte Name=Beryllium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Beryllium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	8.4
99.5%		8.4
97.5%		8.4
90.0%		8.4
75.0%	quartile	8.4
50.0%	median	0.1
25.0%	quartile	-8.2
10.0%		-8.2
2.5%		-8.2
0.5%		-8.2
0.0%	minimum	-8.2

Moments

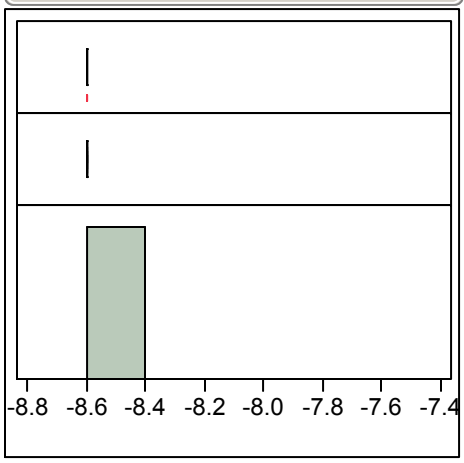
Mean	0.1
Std Dev	11.737973
Std Err Mean	8.3
Upper 95% Mean	105.5615
Lower 95% Mean	-105.3615
N	2
Sum Wgt	2
Sum	0.2
Variance	137.78
Skewness	.
Kurtosis	.
CV	11737.973
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-8.6
99.5%		-8.6
97.5%		-8.6
90.0%		-8.6
75.0%	quartile	-8.6
50.0%	median	-8.6
25.0%	quartile	-8.6
10.0%		-8.6
2.5%		-8.6
0.5%		-8.6
0.0%	minimum	-8.6

Moments

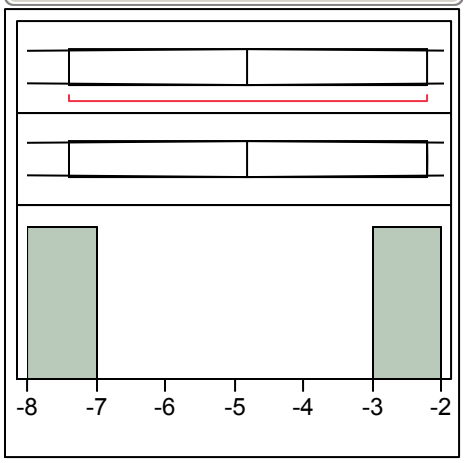
Mean	-8.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-8.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	-2.2
99.5%		-2.2
97.5%		-2.2
90.0%		-2.2
75.0%	quartile	-2.2
50.0%	median	-4.8
25.0%	quartile	-7.4
10.0%		-7.4
2.5%		-7.4
0.5%		-7.4
0.0%	minimum	-7.4

Moments

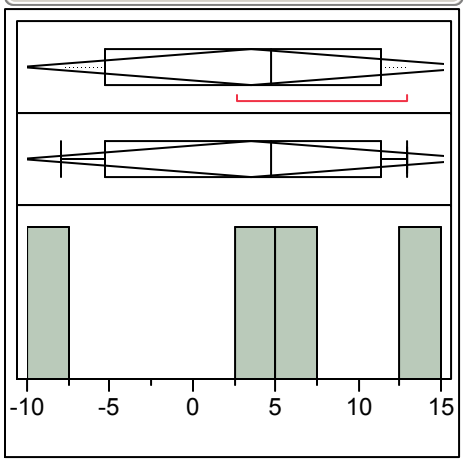
Mean	-4.8
Std Dev	3.6769553
Std Err Mean	2.6
Upper 95% Mean	28.236132
Lower 95% Mean	-37.83613
N	2
Sum Wgt	2
Sum	-9.6
Variance	13.52
Skewness	.
Kurtosis	.
CV	-76.60323
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Cadmium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		12.9
75.0%	quartile	11.35
50.0%	median	4.7
25.0%	quartile	-5.325
10.0%		-8
2.5%		-8
0.5%		-8
0.0%	minimum	-8

Moments

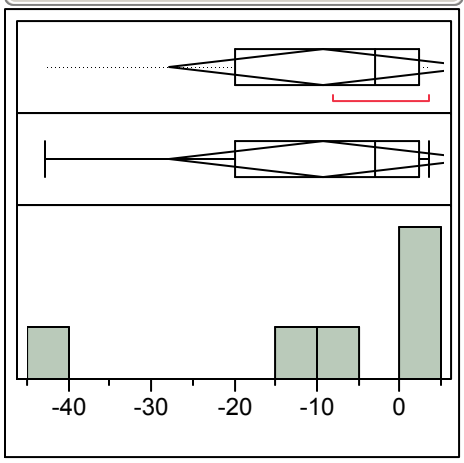
Mean	3.575
Std Dev	8.7838393
Std Err Mean	4.3919197
Upper 95% Mean	17.552049
Lower 95% Mean	-10.40205
N	4
Sum Wgt	4
Sum	14.3
Variance	77.155833
Skewness	-0.698531
Kurtosis	0.8389579
CV	245.7018
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Cadmium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	3.5
99.5%		3.5
97.5%		3.5
90.0%		3.5
75.0%	quartile	2.375
50.0%	median	-3
25.0%	quartile	-19.8
10.0%		-42.9
2.5%		-42.9
0.5%		-42.9
0.0%	minimum	-42.9

Moments

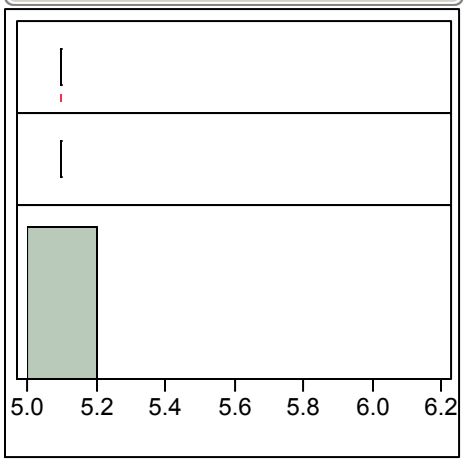
Mean	-9.25
Std Dev	17.650467
Std Err Mean	7.2057731
Upper 95% Mean	9.2730296
Lower 95% Mean	-27.77303
N	6
Sum Wgt	6
Sum	-55.5
Variance	311.539
Skewness	-1.811493
Kurtosis	3.419412
CV	-190.8159
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=Other

Bias

Distributions Analyte Name=Cadmium, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	5.1
99.5%		5.1
97.5%		5.1
90.0%		5.1
75.0%	quartile	5.1
50.0%	median	5.1
25.0%	quartile	5.1
10.0%		5.1
2.5%		5.1
0.5%		5.1
0.0%	minimum	5.1

Moments

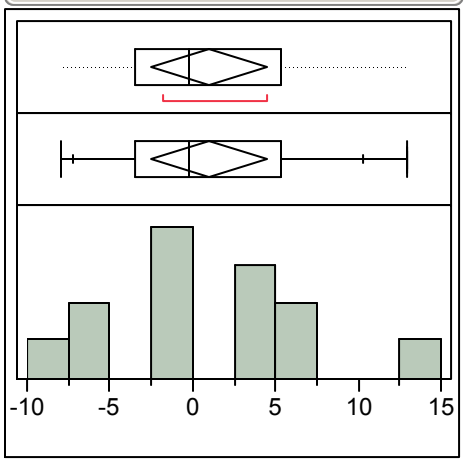
Mean	5.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	5.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Cadmium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		10.34
75.0%	quartile	5.3
50.0%	median	-0.2
25.0%	quartile	-3.45
10.0%		-7.24
2.5%		-8
0.5%		-8
0.0%	minimum	-8

Moments

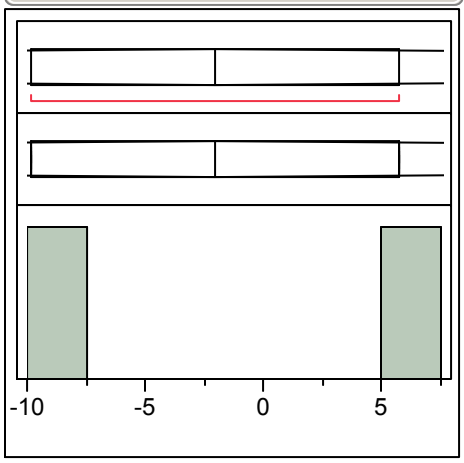
Mean	1
Std Dev	5.8051701
Std Err Mean	1.6100645
Upper 95% Mean	4.5080292
Lower 95% Mean	-2.508029
N	13
Sum Wgt	13
Sum	13
Variance	33.7
Skewness	0.3459777
Kurtosis	0.0098328
CV	580.51701
N Missing	0

Distributions Analyte Name=Cadmium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Cadmium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

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	-2.05
25.0%	quartile	-9.8
10.0%		-9.8
2.5%		-9.8
0.5%		-9.8
0.0%	minimum	-9.8

Moments

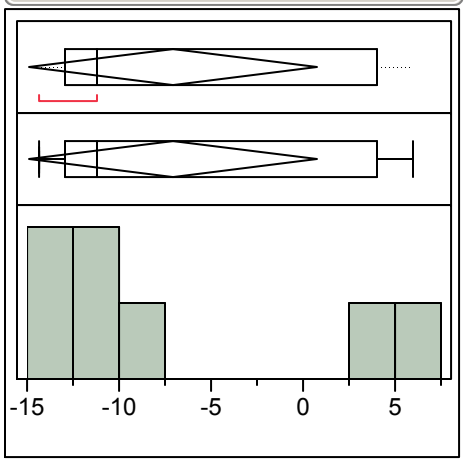
Mean	-2.05
Std Dev	10.960155
Std Err Mean	7.75
Upper 95% Mean	96.423087
Lower 95% Mean	-100.5231
N	2
Sum Wgt	2
Sum	-4.1
Variance	120.125
Skewness	.
Kurtosis	.
CV	-534.6417
N Missing	0

Distributions Analyte Name=Cesium-134, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Cesium-134, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	6
99.5%		6
97.5%		6
90.0%		6
75.0%	quartile	4
50.0%	median	-11.2
25.0%	quartile	-12.9
10.0%		-14.4
2.5%		-14.4
0.5%		-14.4
0.0%	minimum	-14.4

Moments

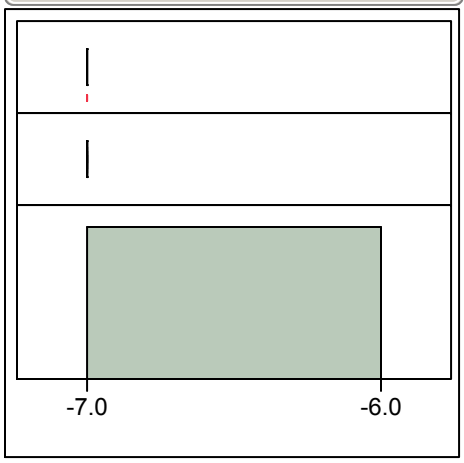
Mean	-7.085714
Std Dev	8.4376989
Std Err Mean	3.1891504
Upper 95% Mean	0.7178556
Lower 95% Mean	-14.88928
N	7
Sum Wgt	7
Sum	-49.6
Variance	71.194762
Skewness	1.0924414
Kurtosis	-0.855361
CV	-119.0804
N Missing	0

Distributions Analyte Name=Cesium-134, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Cesium-134, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	-7
99.5%		-7
97.5%		-7
90.0%		-7
75.0%	quartile	-7
50.0%	median	-7
25.0%	quartile	-7
10.0%		-7
2.5%		-7
0.5%		-7
0.0%	minimum	-7

Moments

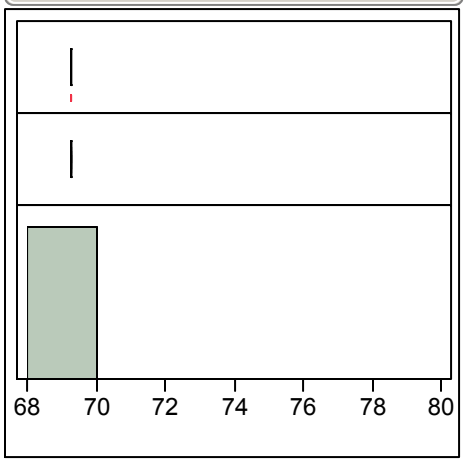
Mean	-7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cesium-134, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Cesium-134, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	69.3
99.5%		69.3
97.5%		69.3
90.0%		69.3
75.0%	quartile	69.3
50.0%	median	69.3
25.0%	quartile	69.3
10.0%		69.3
2.5%		69.3
0.5%		69.3
0.0%	minimum	69.3

Moments

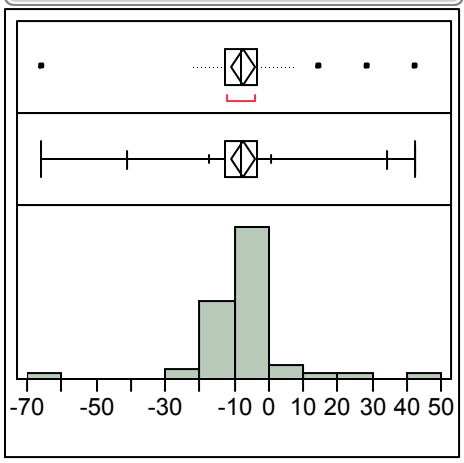
Mean	69.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	69.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cesium-134, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Cesium-134, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	42.3
99.5%		42.3
97.5%		34.3075
90.0%		0.6
75.0%	quartile	-3.475
50.0%	median	-7.95
25.0%	quartile	-12.325
10.0%		-17.2
2.5%		-41.118
0.5%		-65.9
0.0%	minimum	-65.9

Moments

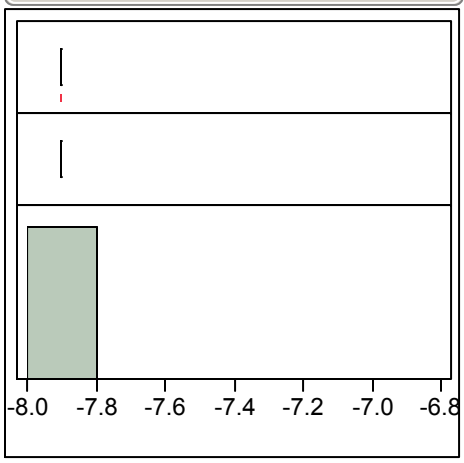
Mean	-7.417742
Std Dev	12.719322
Std Err Mean	1.6153555
Upper 95% Mean	-4.187639
Lower 95% Mean	-10.64784
N	62
Sum Wgt	62
Sum	-459.9
Variance	161.78116
Skewness	-0.227533
Kurtosis	10.615234
CV	-171.4716
N Missing	0

Distributions Analyte Name=Cesium-134, Preparation Method=Other

Bias

Distributions Analyte Name=Cesium-134, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	-7.9
99.5%		-7.9
97.5%		-7.9
90.0%		-7.9
75.0%	quartile	-7.9
50.0%	median	-7.9
25.0%	quartile	-7.9
10.0%		-7.9
2.5%		-7.9
0.5%		-7.9
0.0%	minimum	-7.9

Moments

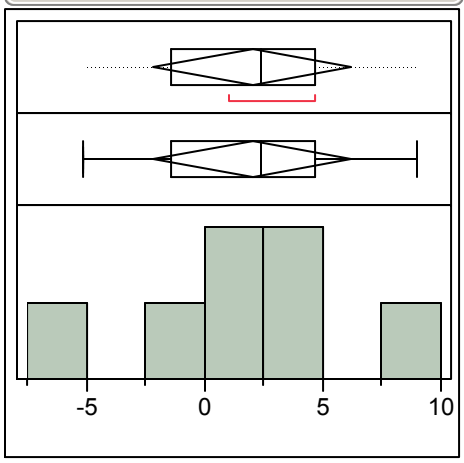
Mean	-7.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-7.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cesium-137, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Cesium-137, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	9
99.5%		9
97.5%		9
90.0%		9
75.0%	quartile	4.7
50.0%	median	2.4
25.0%	quartile	-1.4
10.0%		-5.1
2.5%		-5.1
0.5%		-5.1
0.0%	minimum	-5.1

Moments

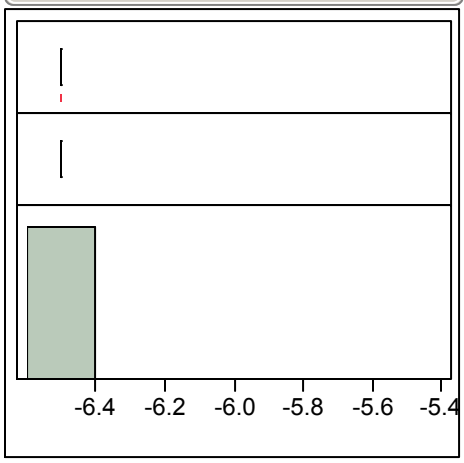
Mean	2.0428571
Std Dev	4.5147378
Std Err Mean	1.7064105
Upper 95% Mean	6.2182932
Lower 95% Mean	-2.132579
N	7
Sum Wgt	7
Sum	14.3
Variance	20.382857
Skewness	-0.117346
Kurtosis	0.3790225
CV	221.00115
N Missing	0

Distributions Analyte Name=Cesium-137, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Cesium-137, Preparation Method=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

Moments

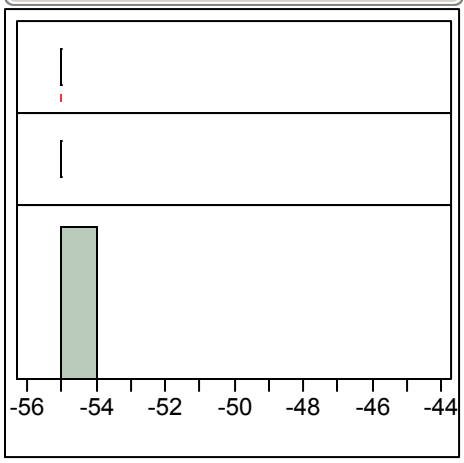
Mean	-6.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-6.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cesium-137, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Cesium-137, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-55
99.5%		-55
97.5%		-55
90.0%		-55
75.0%	quartile	-55
50.0%	median	-55
25.0%	quartile	-55
10.0%		-55
2.5%		-55
0.5%		-55
0.0%	minimum	-55

Moments

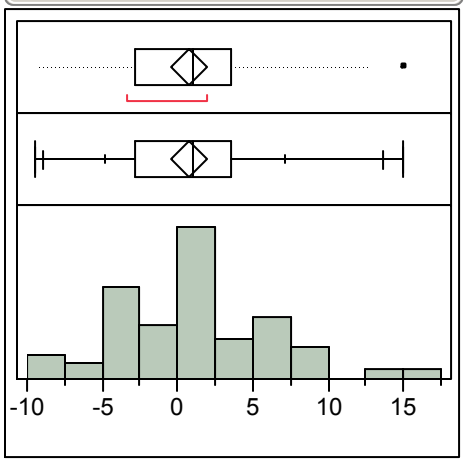
Mean	-55
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-55
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cesium-137, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Cesium-137, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	15
99.5%		15
97.5%		13.62
90.0%		7.1
75.0%	quartile	3.5
50.0%	median	1
25.0%	quartile	-2.8
10.0%		-4.8
2.5%		-8.9
0.5%		-9.5
0.0%	minimum	-9.5

Moments

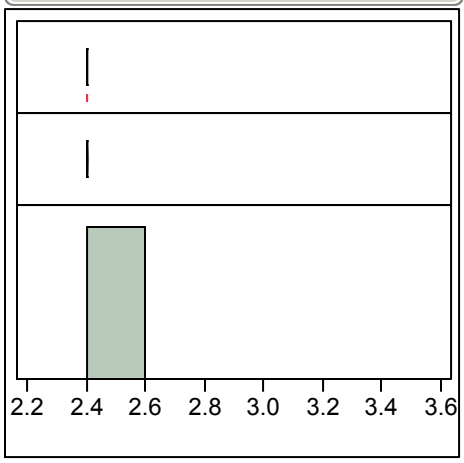
Mean	0.7698413
Std Dev	4.857805
Std Err Mean	0.6120259
Upper 95% Mean	1.9932636
Lower 95% Mean	-0.453581
N	63
Sum Wgt	63
Sum	48.5
Variance	23.598269
Skewness	0.3776147
Kurtosis	0.5028948
CV	631.01384
N Missing	0

Distributions Analyte Name=Cesium-137, Preparation Method=Other

Bias

Distributions Analyte Name=Cesium-137, Preparation Method=Other

Bias



Quantiles

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

Moments

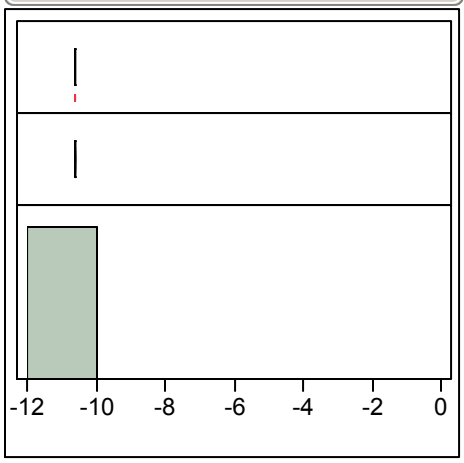
Mean	2.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	2.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

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	-10.6
25.0%	quartile	-10.6
10.0%		-10.6
2.5%		-10.6
0.5%		-10.6
0.0%	minimum	-10.6

Moments

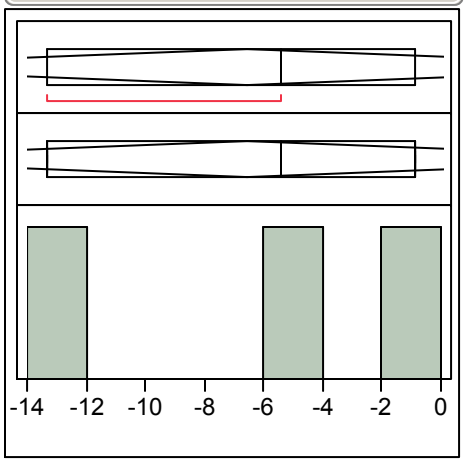
Mean	-10.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-10.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

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	-5.4
25.0%	quartile	-13.3
10.0%		-13.3
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Moments

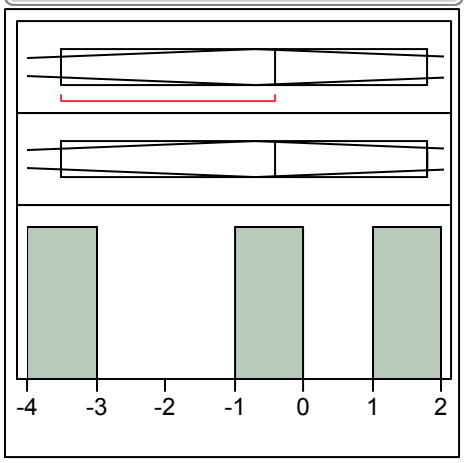
Mean	-6.533333
Std Dev	6.2772074
Std Err Mean	3.6241474
Upper 95% Mean	9.0601144
Lower 95% Mean	-22.12678
N	3
Sum Wgt	3
Sum	-19.6
Variance	39.403333
Skewness	-0.785979
Kurtosis	.
CV	-96.07971
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Chromium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	1.8
99.5%		1.8
97.5%		1.8
90.0%		1.8
75.0%	quartile	1.8
50.0%	median	-0.4
25.0%	quartile	-3.5
10.0%		-3.5
2.5%		-3.5
0.5%		-3.5
0.0%	minimum	-3.5

Moments

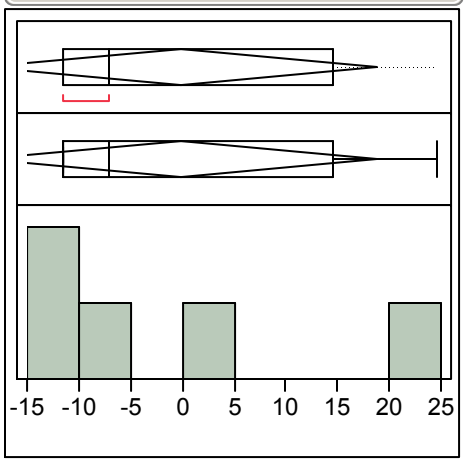
Mean	-0.7
Std Dev	2.6627054
Std Err Mean	1.5373137
Upper 95% Mean	5.9145269
Lower 95% Mean	-7.314527
N	3
Sum Wgt	3
Sum	-2.1
Variance	7.09
Skewness	-0.500567
Kurtosis	.
CV	-380.3865
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Chromium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	24.7
99.5%		24.7
97.5%		24.7
90.0%		24.7
75.0%	quartile	14.55
50.0%	median	-7.1
25.0%	quartile	-11.5
10.0%		-11.5
2.5%		-11.5
0.5%		-11.5
0.0%	minimum	-11.5

Moments

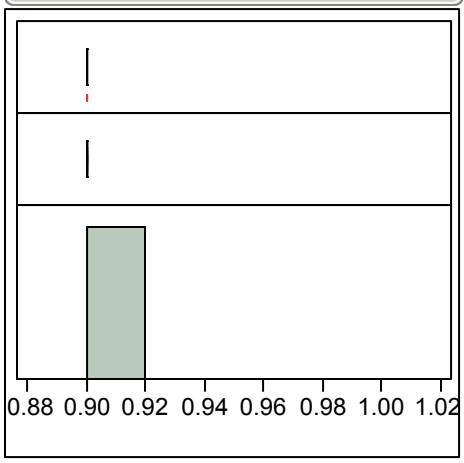
Mean	-0.2
Std Dev	15.363593
Std Err Mean	6.8708078
Upper 95% Mean	18.876421
Lower 95% Mean	-19.27642
N	5
Sum Wgt	5
Sum	-1
Variance	236.04
Skewness	1.4156837
Kurtosis	1.4170605
CV	-7681.797
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=Other

Bias

Distributions Analyte Name=Chromium, Preparation Method=Other

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	0.9
25.0%	quartile	0.9
10.0%		0.9
2.5%		0.9
0.5%		0.9
0.0%	minimum	0.9

Moments

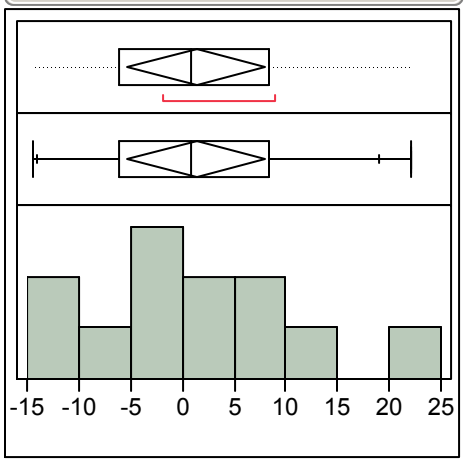
Mean	0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Chromium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	22.1
99.5%		22.1
97.5%		22.1
90.0%		18.92
75.0%	quartile	8.45
50.0%	median	0.9
25.0%	quartile	-6.075
10.0%		-14.11
2.5%		-14.5
0.5%		-14.5
0.0%	minimum	-14.5

Moments

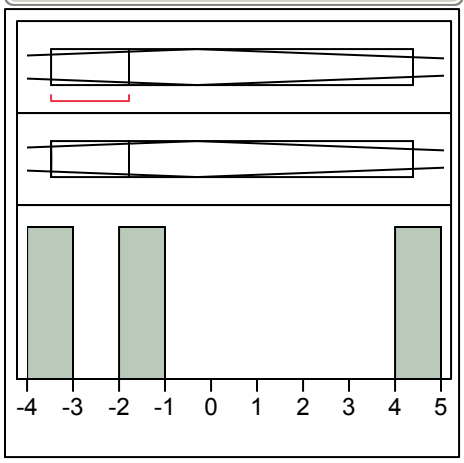
Mean	1.3416667
Std Dev	10.428323
Std Err Mean	3.0103976
Upper 95% Mean	7.9675071
Lower 95% Mean	-5.284174
N	12
Sum Wgt	12
Sum	16.1
Variance	108.74992
Skewness	0.2706332
Kurtosis	0.1603085
CV	777.26632
N Missing	0

Distributions Analyte Name=Chromium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Chromium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		4.4
75.0%	quartile	4.4
50.0%	median	-1.8
25.0%	quartile	-3.5
10.0%		-3.5
2.5%		-3.5
0.5%		-3.5
0.0%	minimum	-3.5

Moments

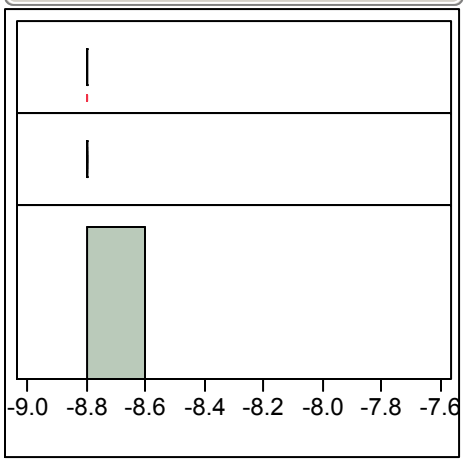
Mean	-0.3
Std Dev	4.1581246
Std Err Mean	2.4006943
Upper 95% Mean	10.029354
Lower 95% Mean	-10.62935
N	3
Sum Wgt	3
Sum	-0.9
Variance	17.29
Skewness	1.4120794
Kurtosis	.
CV	-1386.042
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-8.8
99.5%		-8.8
97.5%		-8.8
90.0%		-8.8
75.0%	quartile	-8.8
50.0%	median	-8.8
25.0%	quartile	-8.8
10.0%		-8.8
2.5%		-8.8
0.5%		-8.8
0.0%	minimum	-8.8

Moments

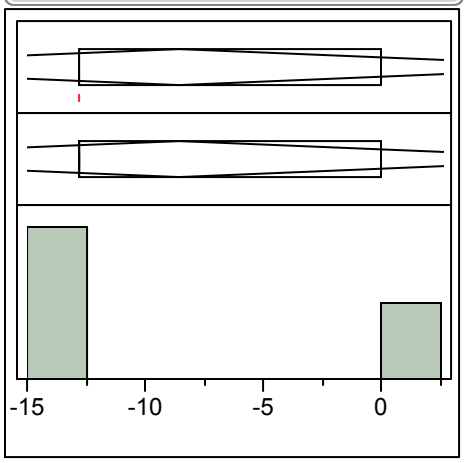
Mean	-8.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-8.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	-12.8
25.0%	quartile	-12.8
10.0%		-12.8
2.5%		-12.8
0.5%		-12.8
0.0%	minimum	-12.8

Moments

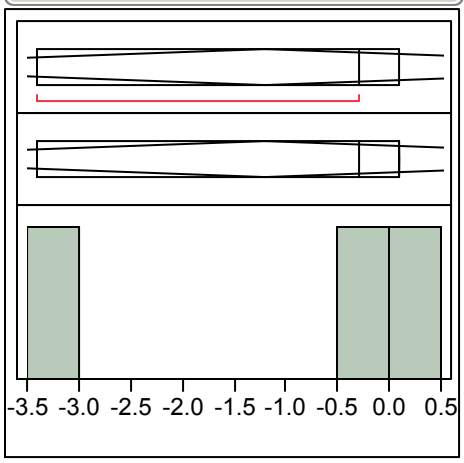
Mean	-8.533333
Std Dev	7.3900834
Std Err Mean	4.2666667
Upper 95% Mean	9.8246516
Lower 95% Mean	-26.89132
N	3
Sum Wgt	3
Sum	-25.6
Variance	54.613333
Skewness	1.7320508
Kurtosis	.
CV	-86.60254
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Cobalt, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	0.1
99.5%		0.1
97.5%		0.1
90.0%		0.1
75.0%	quartile	0.1
50.0%	median	-0.3
25.0%	quartile	-3.4
10.0%		-3.4
2.5%		-3.4
0.5%		-3.4
0.0%	minimum	-3.4

Moments

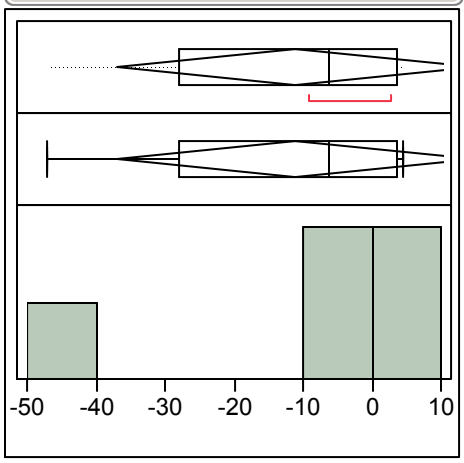
Mean	-1.2
Std Dev	1.9157244
Std Err Mean	1.106044
Upper 95% Mean	3.5589232
Lower 95% Mean	-5.958923
N	3
Sum Wgt	3
Sum	-3.6
Variance	3.67
Skewness	-1.647487
Kurtosis	.
CV	-159.6437
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Cobalt, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	4.5
99.5%		4.5
97.5%		4.5
90.0%		4.5
75.0%	quartile	3.6
50.0%	median	-6.1
25.0%	quartile	-28.1
10.0%		-47.1
2.5%		-47.1
0.5%		-47.1
0.0%	minimum	-47.1

Moments

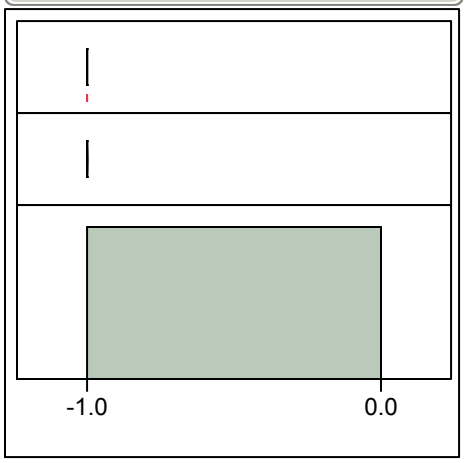
Mean	-11.02
Std Dev	20.968834
Std Err Mean	9.3775477
Upper 95% Mean	15.016246
Lower 95% Mean	-37.05625
N	5
Sum Wgt	5
Sum	-55.1
Variance	439.692
Skewness	-1.831226
Kurtosis	3.5647875
CV	-190.2798
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=Other

Bias

Distributions Analyte Name=Cobalt, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	-1
99.5%		-1
97.5%		-1
90.0%		-1
75.0%	quartile	-1
50.0%	median	-1
25.0%	quartile	-1
10.0%		-1
2.5%		-1
0.5%		-1
0.0%	minimum	-1

Moments

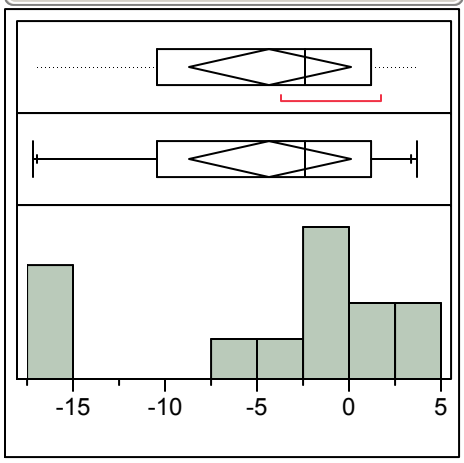
Mean	-1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Cobalt, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	3.7
99.5%		3.7
97.5%		3.7
90.0%		3.42
75.0%	quartile	1.2
50.0%	median	-2.4
25.0%	quartile	-10.45
10.0%		-16.96
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Moments

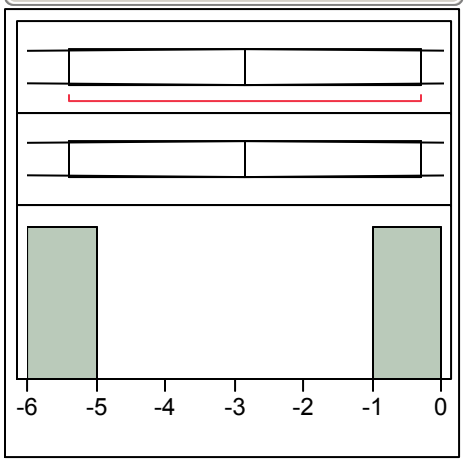
Mean	-4.3
Std Dev	7.3474485
Std Err Mean	2.0378156
Upper 95% Mean	0.1400187
Lower 95% Mean	-8.740019
N	13
Sum Wgt	13
Sum	-55.9
Variance	53.985
Skewness	-0.985169
Kurtosis	-0.432608
CV	-170.8709
N Missing	0

Distributions Analyte Name=Cobalt, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Cobalt, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

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	-2.85
25.0%	quartile	-5.4
10.0%		-5.4
2.5%		-5.4
0.5%		-5.4
0.0%	minimum	-5.4

Moments

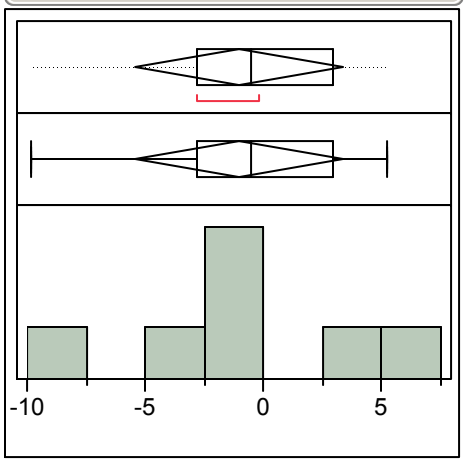
Mean	-2.85
Std Dev	3.6062446
Std Err Mean	2.55
Upper 95% Mean	29.550822
Lower 95% Mean	-35.25082
N	2
Sum Wgt	2
Sum	-5.7
Variance	13.005
Skewness	.
Kurtosis	.
CV	-126.5349
N Missing	0

Distributions Analyte Name=Cobalt-60, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Cobalt-60, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.2
75.0%	quartile	2.9
50.0%	median	-0.5
25.0%	quartile	-2.8
10.0%		-9.8
2.5%		-9.8
0.5%		-9.8
0.0%	minimum	-9.8

Moments

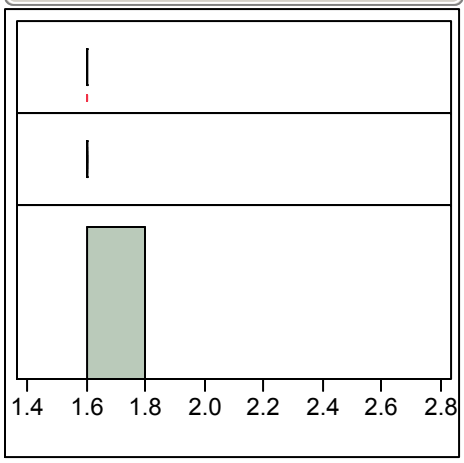
Mean	-1.028571
Std Dev	4.7647016
Std Err Mean	1.8008879
Upper 95% Mean	3.3780426
Lower 95% Mean	-5.435185
N	7
Sum Wgt	7
Sum	-7.2
Variance	22.702381
Skewness	-0.816125
Kurtosis	1.5484102
CV	-463.2349
N Missing	0

Distributions Analyte Name=Cobalt-60, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Cobalt-60, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	1.6
99.5%		1.6
97.5%		1.6
90.0%		1.6
75.0%	quartile	1.6
50.0%	median	1.6
25.0%	quartile	1.6
10.0%		1.6
2.5%		1.6
0.5%		1.6
0.0%	minimum	1.6

Moments

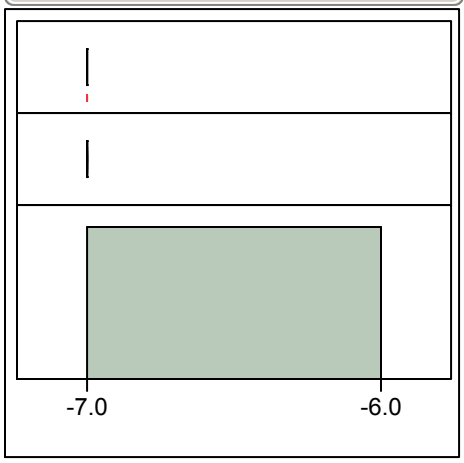
Mean	1.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	1.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cobalt-60, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Cobalt-60, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-7
99.5%		-7
97.5%		-7
90.0%		-7
75.0%	quartile	-7
50.0%	median	-7
25.0%	quartile	-7
10.0%		-7
2.5%		-7
0.5%		-7
0.0%	minimum	-7

Moments

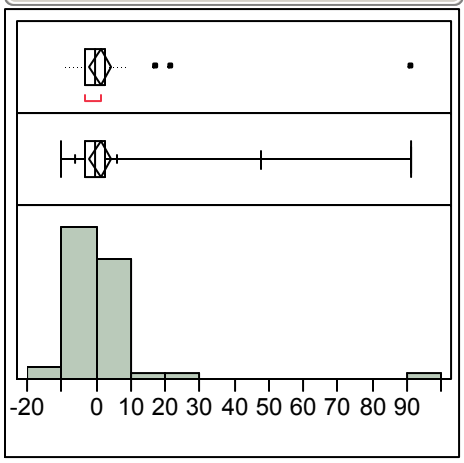
Mean	-7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Cobalt-60, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Cobalt-60, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	91.1
99.5%		91.1
97.5%		47.6
90.0%		5.95
75.0%	quartile	2.8
50.0%	median	-0.45
25.0%	quartile	-3.125
10.0%		-6.3
2.5%		-10.338
0.5%		-10.4
0.0%	minimum	-10.4

Moments

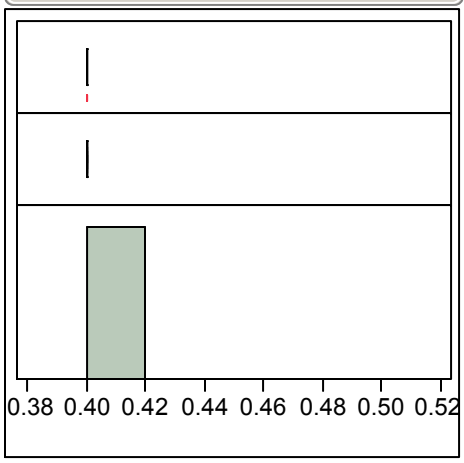
Mean	1.359375
Std Dev	12.63321
Std Err Mean	1.5791513
Upper 95% Mean	4.5150571
Lower 95% Mean	-1.796307
N	64
Sum Wgt	64
Sum	87
Variance	159.59801
Skewness	5.9014532
Kurtosis	41.528985
CV	929.33962
N Missing	0

Distributions Analyte Name=Cobalt-60, Preparation Method=Other

Bias

Distributions Analyte Name=Cobalt-60, Preparation Method=Other

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

Moments

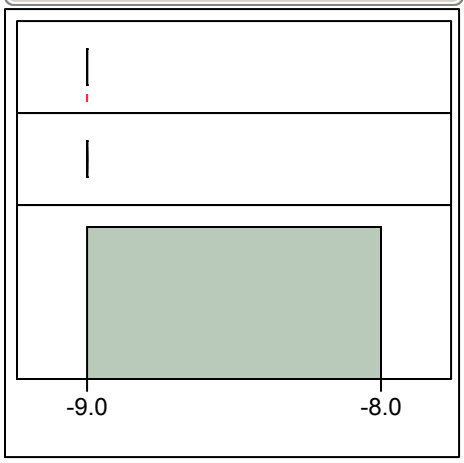
Mean	0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-9
99.5%		-9
97.5%		-9
90.0%		-9
75.0%	quartile	-9
50.0%	median	-9
25.0%	quartile	-9
10.0%		-9
2.5%		-9
0.5%		-9
0.0%	minimum	-9

Moments

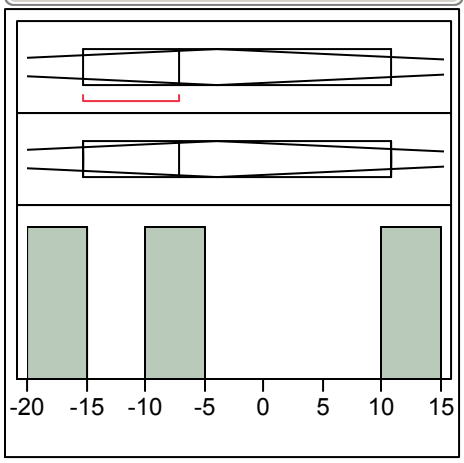
Mean	-9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	10.8
99.5%		10.8
97.5%		10.8
90.0%		10.8
75.0%	quartile	10.8
50.0%	median	-7.2
25.0%	quartile	-15.2
10.0%		-15.2
2.5%		-15.2
0.5%		-15.2
0.0%	minimum	-15.2

Moments

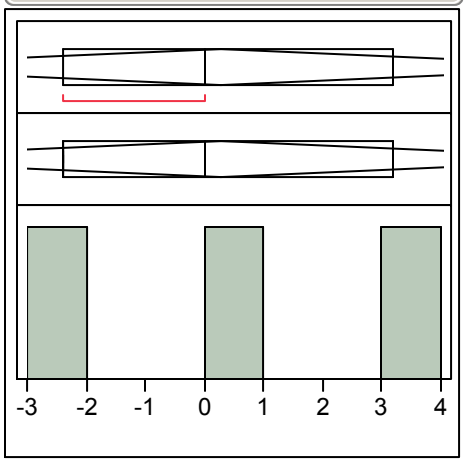
Mean	-3.866667
Std Dev	13.316656
Std Err Mean	7.6883751
Upper 95% Mean	29.213741
Lower 95% Mean	-36.94707
N	3
Sum Wgt	3
Sum	-11.6
Variance	177.33333
Skewness	1.0558319
Kurtosis	.
CV	-344.3963
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Copper, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		3.2
75.0%	quartile	3.2
50.0%	median	0
25.0%	quartile	-2.4
10.0%		-2.4
2.5%		-2.4
0.5%		-2.4
0.0%	minimum	-2.4

Moments

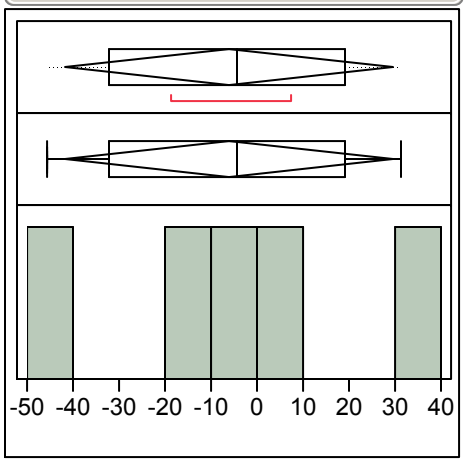
Mean	0.2666667
Std Dev	2.8095077
Std Err Mean	1.62207
Upper 95% Mean	7.2458706
Lower 95% Mean	-6.712537
N	3
Sum Wgt	3
Sum	0.8
Variance	7.8933333
Skewness	0.4232732
Kurtosis	.
CV	1053.5654
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Copper, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	31.2
99.5%		31.2
97.5%		31.2
90.0%		31.2
75.0%	quartile	19.2
50.0%	median	-4.2
25.0%	quartile	-32.1
10.0%		-45.5
2.5%		-45.5
0.5%		-45.5
0.0%	minimum	-45.5

Moments

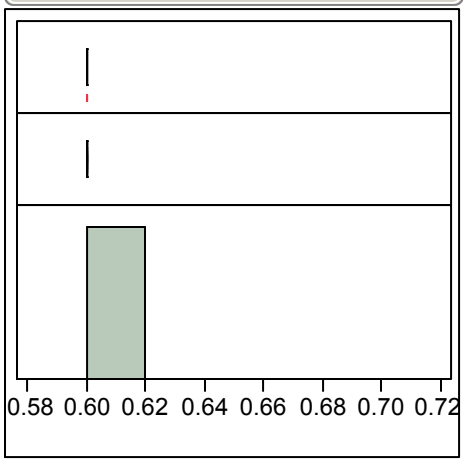
Mean	-6
Std Dev	28.648124
Std Err Mean	12.81183
Upper 95% Mean	29.571344
Lower 95% Mean	-41.57134
N	5
Sum Wgt	5
Sum	-30
Variance	820.715
Skewness	-0.175329
Kurtosis	0.1761313
CV	-477.4687
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=Other

Bias

Distributions Analyte Name=Copper, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	0.6
99.5%		0.6
97.5%		0.6
90.0%		0.6
75.0%	quartile	0.6
50.0%	median	0.6
25.0%	quartile	0.6
10.0%		0.6
2.5%		0.6
0.5%		0.6
0.0%	minimum	0.6

Moments

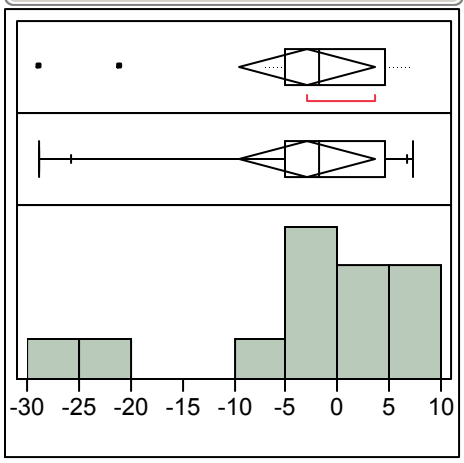
Mean	0.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Copper, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	7.2
99.5%		7.2
97.5%		7.2
90.0%		6.72
75.0%	quartile	4.5
50.0%	median	-1.8
25.0%	quartile	-5.1
10.0%		-25.78
2.5%		-28.9
0.5%		-28.9
0.0%	minimum	-28.9

Moments

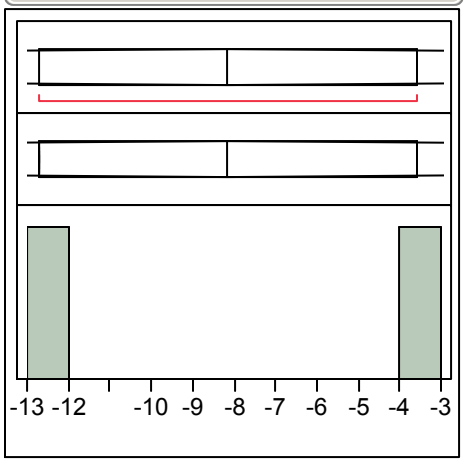
Mean	-2.907692
Std Dev	10.790077
Std Err Mean	2.992629
Upper 95% Mean	3.6126862
Lower 95% Mean	-9.428071
N	13
Sum Wgt	13
Sum	-37.8
Variance	116.42577
Skewness	-1.614051
Kurtosis	2.1006935
CV	-371.0873
N Missing	0

Distributions Analyte Name=Copper, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Copper, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	-3.6
99.5%		-3.6
97.5%		-3.6
90.0%		-3.6
75.0%	quartile	-3.6
50.0%	median	-8.15
25.0%	quartile	-12.7
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Moments

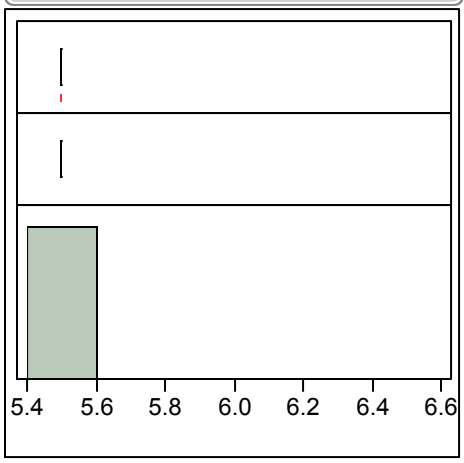
Mean	-8.15
Std Dev	6.4346717
Std Err Mean	4.55
Upper 95% Mean	49.663232
Lower 95% Mean	-65.96323
N	2
Sum Wgt	2
Sum	-16.3
Variance	41.405
Skewness	.
Kurtosis	.
CV	-78.95303
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	5.5
99.5%		5.5
97.5%		5.5
90.0%		5.5
75.0%	quartile	5.5
50.0%	median	5.5
25.0%	quartile	5.5
10.0%		5.5
2.5%		5.5
0.5%		5.5
0.0%	minimum	5.5

Moments

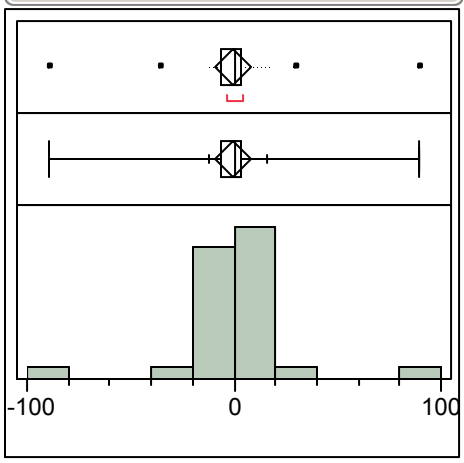
Mean	5.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	5.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=Distillation

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=Distillation

Bias



Quantiles

100.0%	maximum	89.8
99.5%		89.8
97.5%		89.8
90.0%		16.24
75.0%	quartile	3.725
50.0%	median	0
25.0%	quartile	-6.375
10.0%		-12.25
2.5%		-89
0.5%		-89
0.0%	minimum	-89

Moments

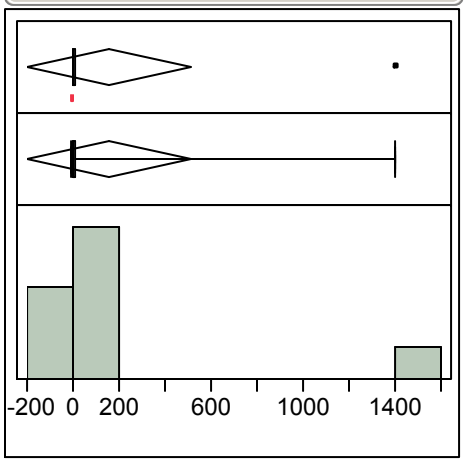
Mean	-0.325
Std Dev	24.959348
Std Err Mean	4.412231
Upper 95% Mean	8.6738044
Lower 95% Mean	-9.323804
N	32
Sum Wgt	32
Sum	-10.4
Variance	622.96903
Skewness	0.0530509
Kurtosis	9.8382398
CV	-7679.799
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=EPA 906, Tritium, 600/4/80-032

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=EPA 906, Tritium, 600/4/80-032

Bias



Quantiles

100.0%	maximum	1402.1
99.5%		1402.1
97.5%		1402.1
90.0%		1402.1
75.0%	quartile	11
50.0%	median	4.1
25.0%	quartile	-1.25
10.0%		-5.8
2.5%		-5.8
0.5%		-5.8
0.0%	minimum	-5.8

Moments

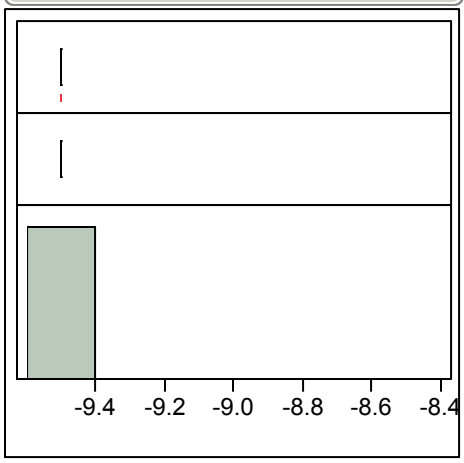
Mean	158.91111
Std Dev	466.23355
Std Err Mean	155.41118
Upper 95% Mean	517.28994
Lower 95% Mean	-199.4677
N	9
Sum Wgt	9
Sum	1430.2
Variance	217373.72
Skewness	2.9990641
Kurtosis	8.9958408
CV	293.39267
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-9.5
99.5%		-9.5
97.5%		-9.5
90.0%		-9.5
75.0%	quartile	-9.5
50.0%	median	-9.5
25.0%	quartile	-9.5
10.0%		-9.5
2.5%		-9.5
0.5%		-9.5
0.0%	minimum	-9.5

Moments

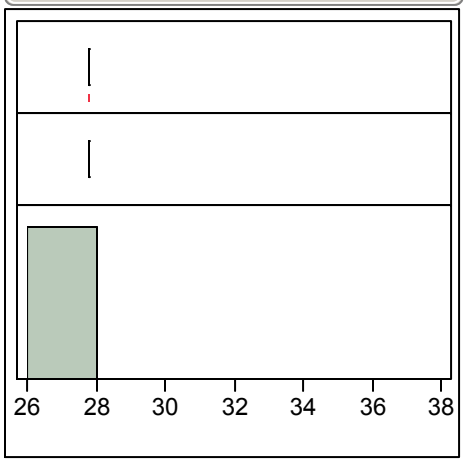
Mean	-9.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-9.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	27.8
99.5%		27.8
97.5%		27.8
90.0%		27.8
75.0%	quartile	27.8
50.0%	median	27.8
25.0%	quartile	27.8
10.0%		27.8
2.5%		27.8
0.5%		27.8
0.0%	minimum	27.8

Moments

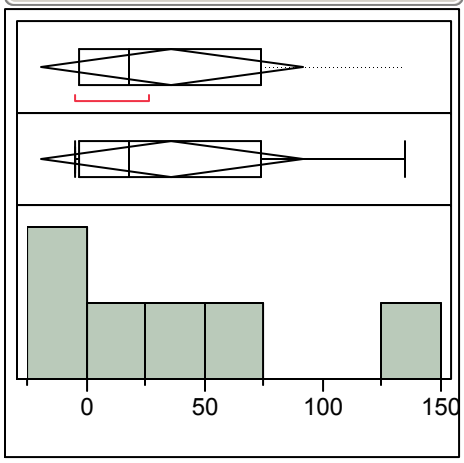
Mean	27.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	27.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	134.4
99.5%		134.4
97.5%		134.4
90.0%		134.4
75.0%	quartile	74.325
50.0%	median	18.3
25.0%	quartile	-3.4
10.0%		-4.9
2.5%		-4.9
0.5%		-4.9
0.0%	minimum	-4.9

Moments

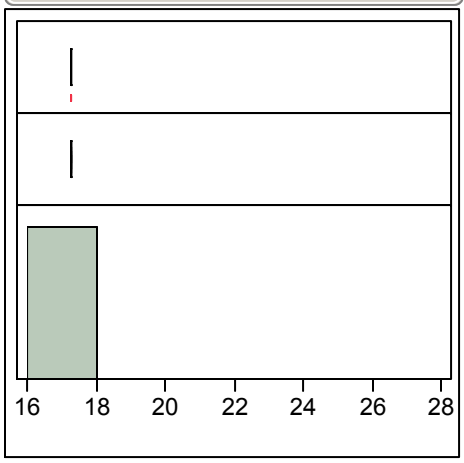
Mean	36.25
Std Dev	52.859805
Std Err Mean	21.579925
Upper 95% Mean	91.722963
Lower 95% Mean	-19.22296
N	6
Sum Wgt	6
Sum	217.5
Variance	2794.159
Skewness	1.630106
Kurtosis	2.5918472
CV	145.82015
N Missing	0

Distributions Analyte Name=Hydrogen-3, Preparation Method=Other

Bias

Distributions Analyte Name=Hydrogen-3, Preparation Method=Other

Bias



Quantiles

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

Moments

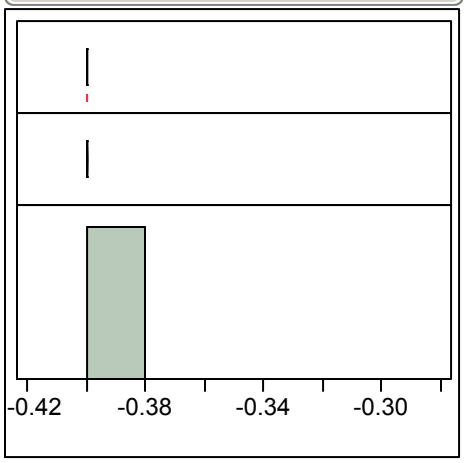
Mean	17.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	17.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Iron-55, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Iron-55, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

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

Moments

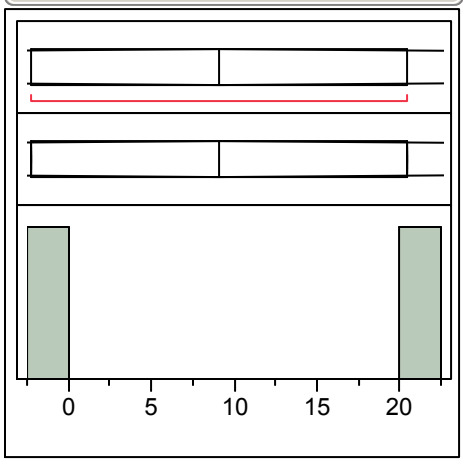
Mean	-0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-0.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Iron-55, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Iron-55, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	20.5
99.5%		20.5
97.5%		20.5
90.0%		20.5
75.0%	quartile	20.5
50.0%	median	9.1
25.0%	quartile	-2.3
10.0%		-2.3
2.5%		-2.3
0.5%		-2.3
0.0%	minimum	-2.3

Moments

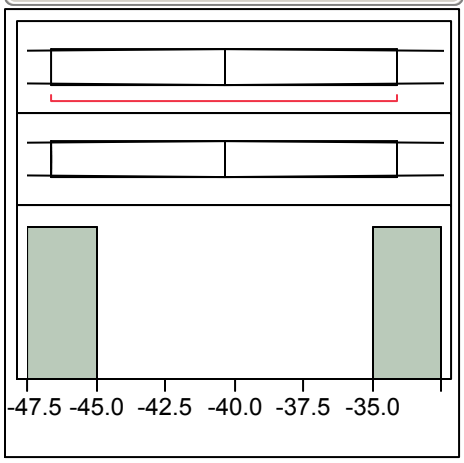
Mean	9.1
Std Dev	16.122035
Std Err Mean	11.4
Upper 95% Mean	153.95073
Lower 95% Mean	-135.7507
N	2
Sum Wgt	2
Sum	18.2
Variance	259.92
Skewness	.
Kurtosis	.
CV	177.16522
N Missing	0

Distributions Analyte Name=Iron-55, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Iron-55, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	-34.1
99.5%		-34.1
97.5%		-34.1
90.0%		-34.1
75.0%	quartile	-34.1
50.0%	median	-40.35
25.0%	quartile	-46.6
10.0%		-46.6
2.5%		-46.6
0.5%		-46.6
0.0%	minimum	-46.6

Moments

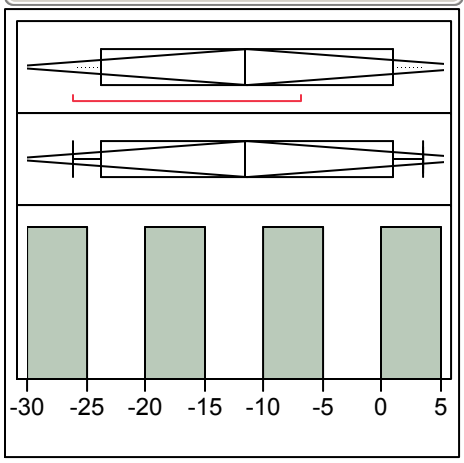
Mean	-40.35
Std Dev	8.8388348
Std Err Mean	6.25
Upper 95% Mean	39.06378
Lower 95% Mean	-119.7638
N	2
Sum Wgt	2
Sum	-80.7
Variance	78.125
Skewness	.
Kurtosis	.
CV	-21.90541
N Missing	0

Distributions Analyte Name=Iron-55, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Iron-55, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	3.5
99.5%		3.5
97.5%		3.5
90.0%		3.5
75.0%	quartile	0.925
50.0%	median	-11.6
25.0%	quartile	-23.675
10.0%		-26.1
2.5%		-26.1
0.5%		-26.1
0.0%	minimum	-26.1

Moments

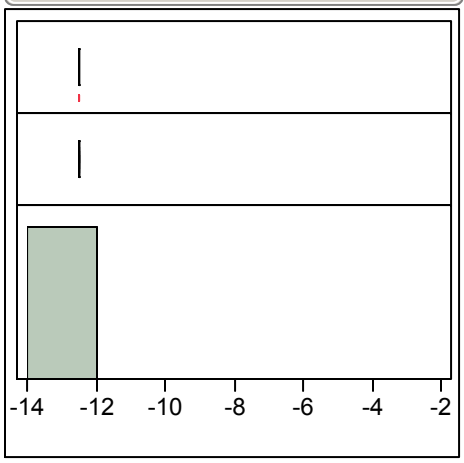
Mean	-11.45
Std Dev	12.704986
Std Err Mean	6.3524929
Upper 95% Mean	8.7664677
Lower 95% Mean	-31.66647
N	4
Sum Wgt	4
Sum	-45.8
Variance	161.41667
Skewness	0.0573436
Kurtosis	-1.079758
CV	-110.9606
N Missing	0

Distributions Analyte Name=Iron-55, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Iron-55, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

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

Moments

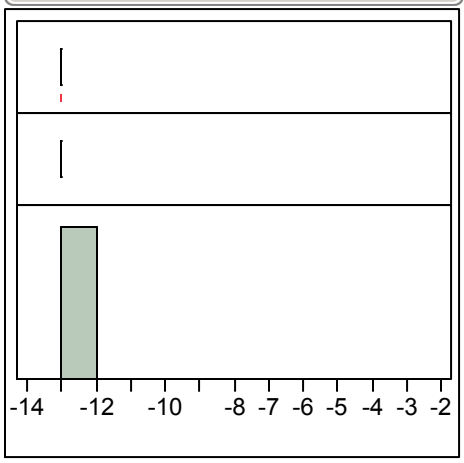
Mean	-12.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-12.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-13
99.5%		-13
97.5%		-13
90.0%		-13
75.0%	quartile	-13
50.0%	median	-13
25.0%	quartile	-13
10.0%		-13
2.5%		-13
0.5%		-13
0.0%	minimum	-13

Moments

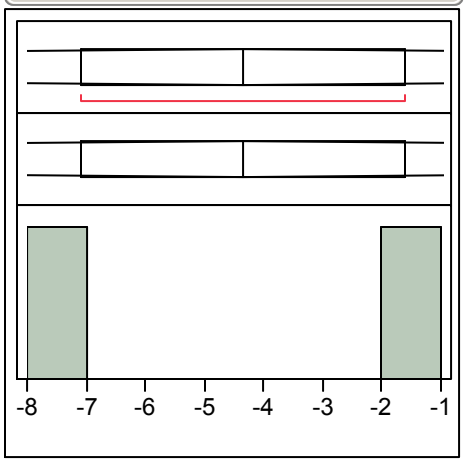
Mean	-13
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-13
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	-1.6
99.5%		-1.6
97.5%		-1.6
90.0%		-1.6
75.0%	quartile	-1.6
50.0%	median	-4.35
25.0%	quartile	-7.1
10.0%		-7.1
2.5%		-7.1
0.5%		-7.1
0.0%	minimum	-7.1

Moments

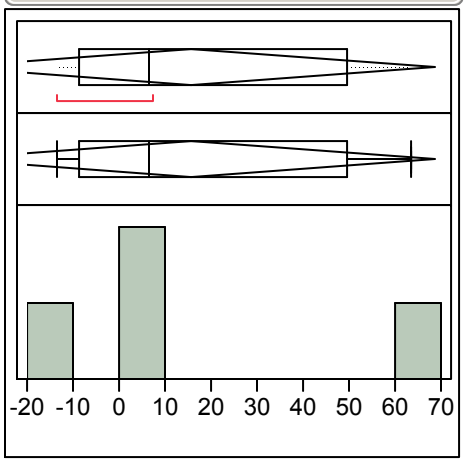
Mean	-4.35
Std Dev	3.8890873
Std Err Mean	2.75
Upper 95% Mean	30.592063
Lower 95% Mean	-39.29206
N	2
Sum Wgt	2
Sum	-8.7
Variance	15.125
Skewness	.
Kurtosis	.
CV	-89.40431
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Lead, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	63.4
99.5%		63.4
97.5%		63.4
90.0%		63.4
75.0%	quartile	49.35
50.0%	median	6.65
25.0%	quartile	-8.6
10.0%		-13.5
2.5%		-13.5
0.5%		-13.5
0.0%	minimum	-13.5

Moments

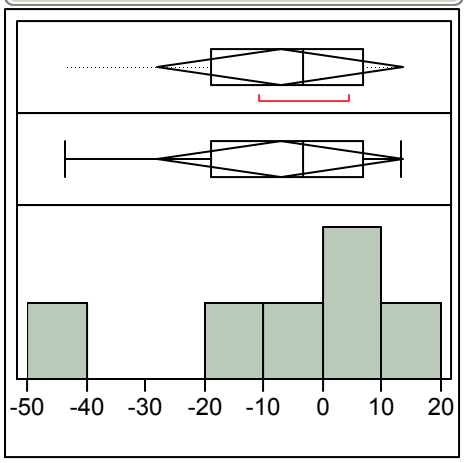
Mean	15.8
Std Dev	33.127531
Std Err Mean	16.563766
Upper 95% Mean	68.513295
Lower 95% Mean	-36.91329
N	4
Sum Wgt	4
Sum	63.2
Variance	1097.4333
Skewness	1.4880505
Kurtosis	2.7880336
CV	209.66792
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Lead, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	13.3
99.5%		13.3
97.5%		13.3
90.0%		13.3
75.0%	quartile	6.7
50.0%	median	-3.45
25.0%	quartile	-18.9
10.0%		-43.5
2.5%		-43.5
0.5%		-43.5
0.0%	minimum	-43.5

Moments

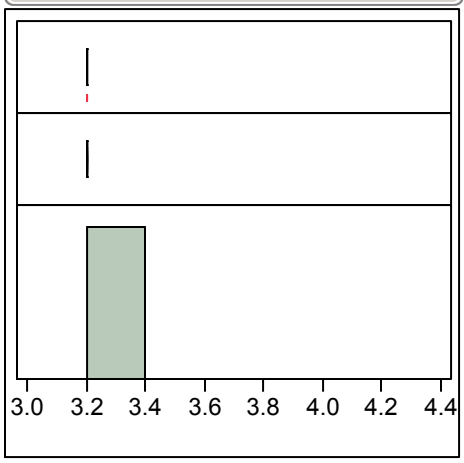
Mean	-7.216667
Std Dev	19.763847
Std Err Mean	8.0685569
Upper 95% Mean	13.524219
Lower 95% Mean	-27.95755
N	6
Sum Wgt	6
Sum	-43.3
Variance	390.60967
Skewness	-1.438976
Kurtosis	2.6213034
CV	-273.8639
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=Other

Bias

Distributions Analyte Name=Lead, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		3.2
75.0%	quartile	3.2
50.0%	median	3.2
25.0%	quartile	3.2
10.0%		3.2
2.5%		3.2
0.5%		3.2
0.0%	minimum	3.2

Moments

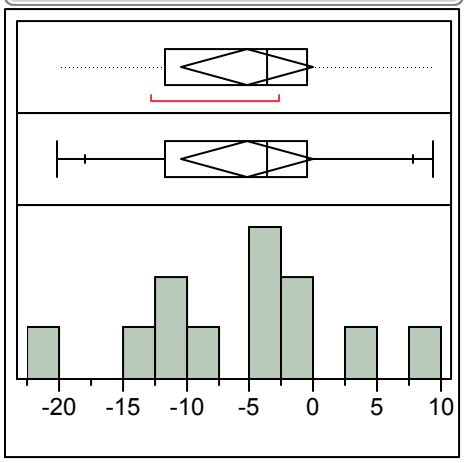
Mean	3.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	3.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Lead, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	9.4
99.5%		9.4
97.5%		9.4
90.0%		7.87
75.0%	quartile	-0.475
50.0%	median	-3.65
25.0%	quartile	-11.625
10.0%		-17.95
2.5%		-20.2
0.5%		-20.2
0.0%	minimum	-20.2

Moments

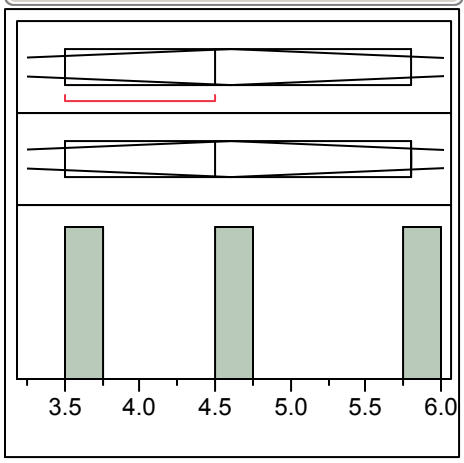
Mean	-5.208333
Std Dev	8.1141244
Std Err Mean	2.342346
Upper 95% Mean	-0.052865
Lower 95% Mean	-10.3638
N	12
Sum Wgt	12
Sum	-62.5
Variance	65.839015
Skewness	-0.026441
Kurtosis	0.0169686
CV	-155.7912
N Missing	0

Distributions Analyte Name=Lead, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Lead, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	5.8
99.5%		5.8
97.5%		5.8
90.0%		5.8
75.0%	quartile	5.8
50.0%	median	4.5
25.0%	quartile	3.5
10.0%		3.5
2.5%		3.5
0.5%		3.5
0.0%	minimum	3.5

Moments

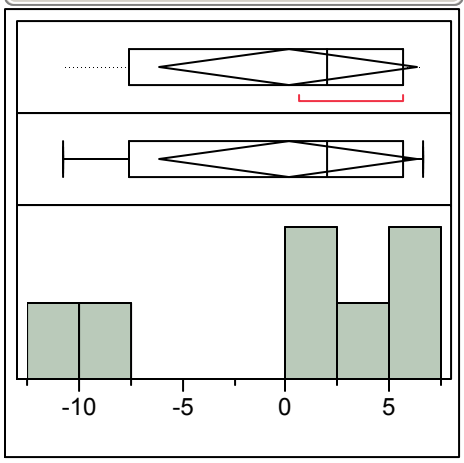
Mean	4.6
Std Dev	1.1532563
Std Err Mean	0.6658328
Upper 95% Mean	7.4648474
Lower 95% Mean	1.7351526
N	3
Sum Wgt	3
Sum	13.8
Variance	1.33
Skewness	0.3872657
Kurtosis	.
CV	25.070788
N Missing	0

Distributions Analyte Name=Manganese-54, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Manganese-54, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	6.6
99.5%		6.6
97.5%		6.6
90.0%		6.6
75.0%	quartile	5.7
50.0%	median	2
25.0%	quartile	-7.6
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Moments

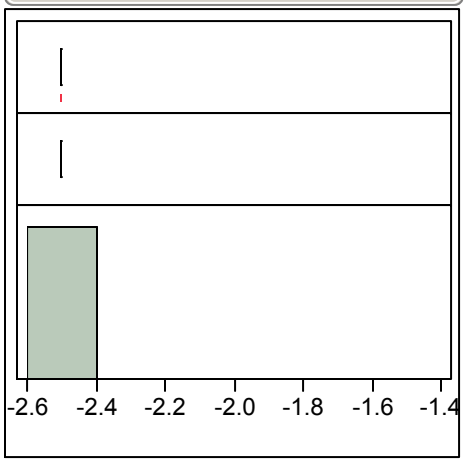
Mean	0.1285714
Std Dev	6.758381
Std Err Mean	2.5544279
Upper 95% Mean	6.3790314
Lower 95% Mean	-6.121889
N	7
Sum Wgt	7
Sum	0.9
Variance	45.675714
Skewness	-0.936013
Kurtosis	-0.726158
CV	5256.5186
N Missing	0

Distributions Analyte Name=Manganese-54, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Manganese-54, Preparation Method=Evaporation, acidified

Bias



Quantiles

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

Moments

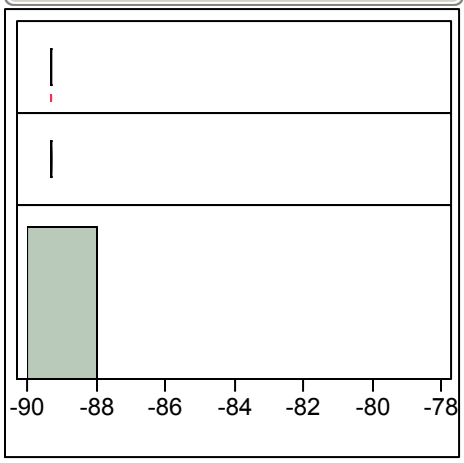
Mean	-2.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-2.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Manganese-54, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Manganese-54, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-89.3
99.5%		-89.3
97.5%		-89.3
90.0%		-89.3
75.0%	quartile	-89.3
50.0%	median	-89.3
25.0%	quartile	-89.3
10.0%		-89.3
2.5%		-89.3
0.5%		-89.3
0.0%	minimum	-89.3

Moments

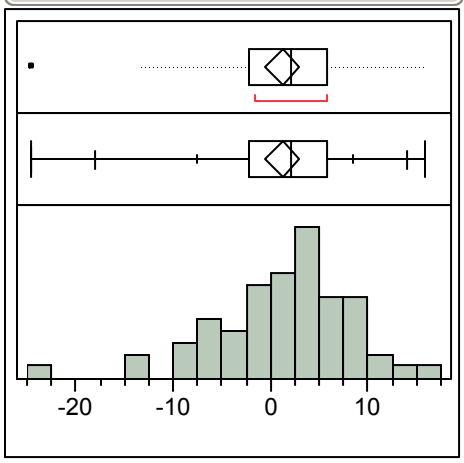
Mean	-89.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-89.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Manganese-54, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Manganese-54, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	15.8
99.5%		15.8
97.5%		13.94
90.0%		8.5
75.0%	quartile	5.7
50.0%	median	2.1
25.0%	quartile	-2.2
10.0%		-7.48
2.5%		-18
0.5%		-24.6
0.0%	minimum	-24.6

Moments

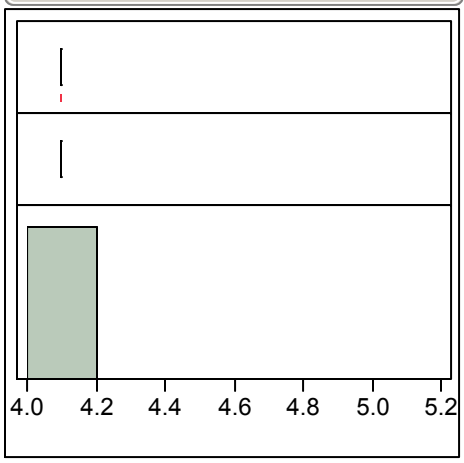
Mean	1.2555556
Std Dev	6.892417
Std Err Mean	0.8683629
Upper 95% Mean	2.9913883
Lower 95% Mean	-0.480277
N	63
Sum Wgt	63
Sum	79.1
Variance	47.505412
Skewness	-0.936047
Kurtosis	2.2948206
CV	548.95357
N Missing	0

Distributions Analyte Name=Manganese-54, Preparation Method=Other

Bias

Distributions Analyte Name=Manganese-54, Preparation Method=Other

Bias



Quantiles

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

Moments

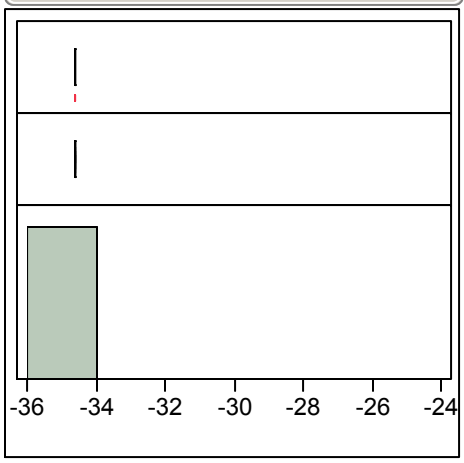
Mean	4.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	4.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Mercury, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Mercury, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	-34.6
99.5%		-34.6
97.5%		-34.6
90.0%		-34.6
75.0%	quartile	-34.6
50.0%	median	-34.6
25.0%	quartile	-34.6
10.0%		-34.6
2.5%		-34.6
0.5%		-34.6
0.0%	minimum	-34.6

Moments

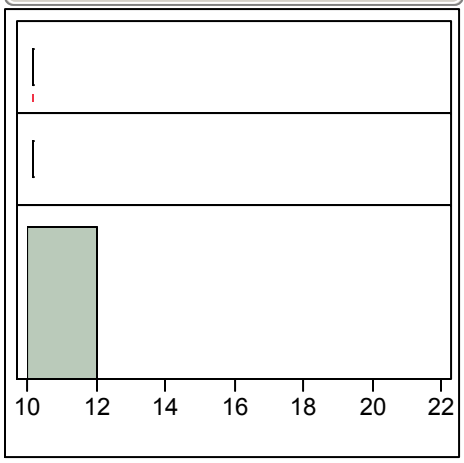
Mean	-34.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-34.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Mercury, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Mercury, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

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

Moments

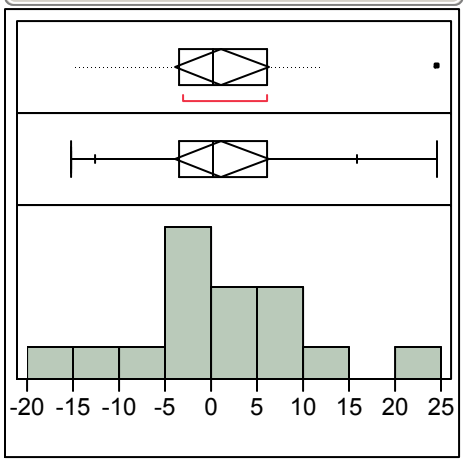
Mean	10.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	10.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Mercury, Preparation Method=Mercury per SW846 Method 7470 or 7471

Bias

Distributions Analyte Name=Mercury, Preparation Method=Mercury per SW846 Method 7470 or 7471

Bias



Quantiles

100.0%	maximum	24.5
99.5%		24.5
97.5%		24.5
90.0%		15.89
75.0%	quartile	6.025
50.0%	median	0.2
25.0%	quartile	-3.375
10.0%		-12.64
2.5%		-15.3
0.5%		-15.3
0.0%	minimum	-15.3

Moments

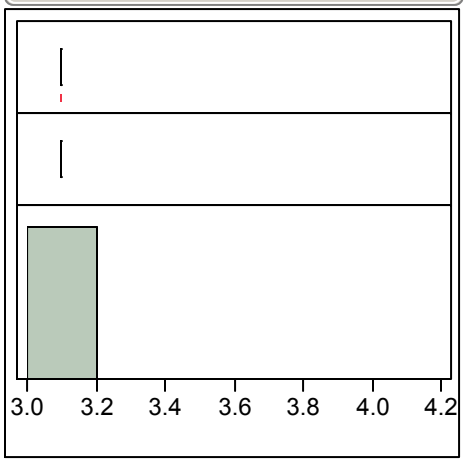
Mean	1.1625
Std Dev	9.6685659
Std Err Mean	2.4171415
Upper 95% Mean	6.3145151
Lower 95% Mean	-3.989515
N	16
Sum Wgt	16
Sum	18.6
Variance	93.481167
Skewness	0.5970039
Kurtosis	1.1861744
CV	831.70459
N Missing	0

Distributions Analyte Name=Mercury, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Mercury, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	3.1
50.0%	median	3.1
25.0%	quartile	3.1
10.0%		3.1
2.5%		3.1
0.5%		3.1
0.0%	minimum	3.1

Moments

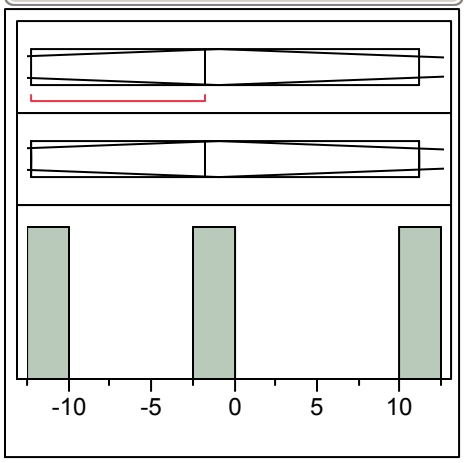
Mean	3.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	3.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Mercury, Preparation Method=Other

Bias

Distributions Analyte Name=Mercury, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	11.2
99.5%		11.2
97.5%		11.2
90.0%		11.2
75.0%	quartile	11.2
50.0%	median	-1.7
25.0%	quartile	-12.2
10.0%		-12.2
2.5%		-12.2
0.5%		-12.2
0.0%	minimum	-12.2

Moments

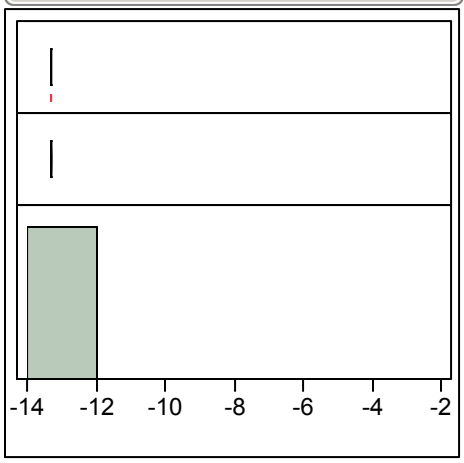
Mean	-0.9
Std Dev	11.720495
Std Err Mean	6.7668309
Upper 95% Mean	28.215323
Lower 95% Mean	-30.01532
N	3
Sum Wgt	3
Sum	-2.7
Variance	137.37
Skewness	0.3057232
Kurtosis	.
CV	-1302.277
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-13.3
99.5%		-13.3
97.5%		-13.3
90.0%		-13.3
75.0%	quartile	-13.3
50.0%	median	-13.3
25.0%	quartile	-13.3
10.0%		-13.3
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Moments

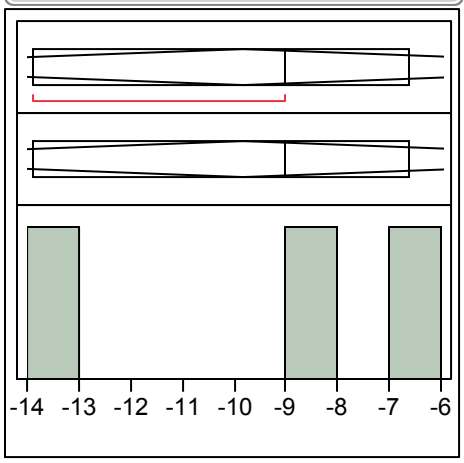
Mean	-13.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-13.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	-6.6
99.5%		-6.6
97.5%		-6.6
90.0%		-6.6
75.0%	quartile	-6.6
50.0%	median	-9
25.0%	quartile	-13.9
10.0%		-13.9
2.5%		-13.9
0.5%		-13.9
0.0%	minimum	-13.9

Moments

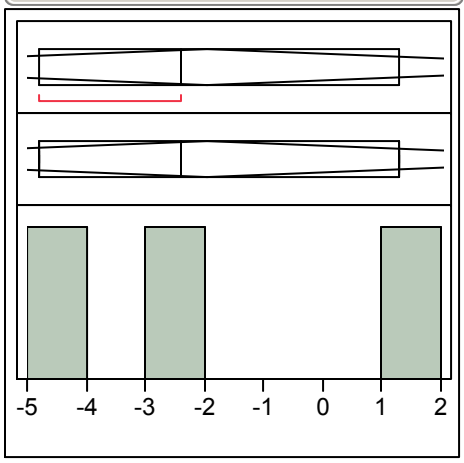
Mean	-9.833333
Std Dev	3.720663
Std Err Mean	2.1481258
Upper 95% Mean	-0.590694
Lower 95% Mean	-19.07597
N	3
Sum Wgt	3
Sum	-29.5
Variance	13.843333
Skewness	-0.957325
Kurtosis	.
CV	-37.83725
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Nickel, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	1.3
99.5%		1.3
97.5%		1.3
90.0%		1.3
75.0%	quartile	1.3
50.0%	median	-2.4
25.0%	quartile	-4.8
10.0%		-4.8
2.5%		-4.8
0.5%		-4.8
0.0%	minimum	-4.8

Moments

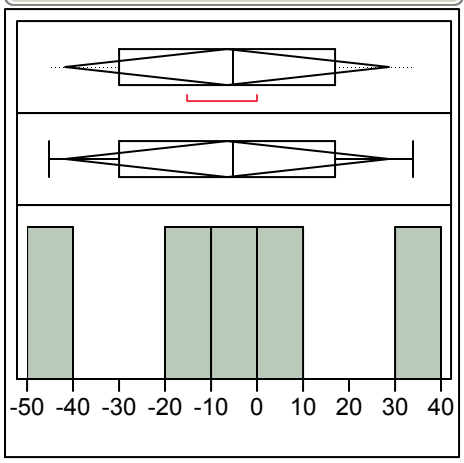
Mean	-1.966667
Std Dev	3.0730007
Std Err Mean	1.7741978
Upper 95% Mean	5.6670903
Lower 95% Mean	-9.600424
N	3
Sum Wgt	3
Sum	-5.9
Variance	9.4433333
Skewness	0.6219409
Kurtosis	.
CV	-156.2543
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Nickel, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	33.7
99.5%		33.7
97.5%		33.7
90.0%		33.7
75.0%	quartile	16.85
50.0%	median	-5.4
25.0%	quartile	-30.2
10.0%		-45.3
2.5%		-45.3
0.5%		-45.3
0.0%	minimum	-45.3

Moments

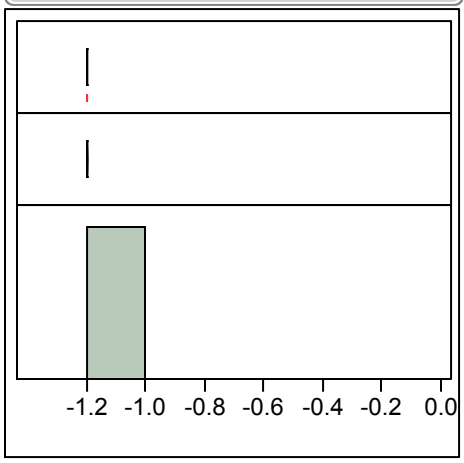
Mean	-6.42
Std Dev	28.455527
Std Err Mean	12.725698
Upper 95% Mean	28.912203
Lower 95% Mean	-41.7522
N	5
Sum Wgt	5
Sum	-32.1
Variance	809.717
Skewness	0.0979472
Kurtosis	1.3102195
CV	-443.2325
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=Other

Bias

Distributions Analyte Name=Nickel, Preparation Method=Other

Bias



Quantiles

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

Moments

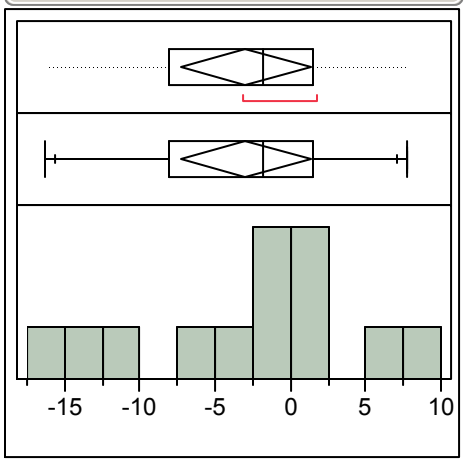
Mean	-1.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-1.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Nickel, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	7.8
99.5%		7.8
97.5%		7.8
90.0%		7.08
75.0%	quartile	1.5
50.0%	median	-1.8
25.0%	quartile	-8.1
10.0%		-15.58
2.5%		-16.3
0.5%		-16.3
0.0%	minimum	-16.3

Moments

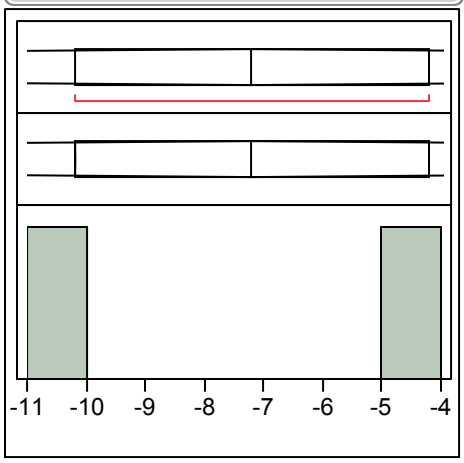
Mean	-2.976923
Std Dev	7.2015223
Std Err Mean	1.9973429
Upper 95% Mean	1.3749133
Lower 95% Mean	-7.328759
N	13
Sum Wgt	13
Sum	-38.7
Variance	51.861923
Skewness	-0.556041
Kurtosis	-0.193166
CV	-241.9116
N Missing	0

Distributions Analyte Name=Nickel, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Nickel, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	-4.2
99.5%		-4.2
97.5%		-4.2
90.0%		-4.2
75.0%	quartile	-4.2
50.0%	median	-7.2
25.0%	quartile	-10.2
10.0%		-10.2
2.5%		-10.2
0.5%		-10.2
0.0%	minimum	-10.2

Moments

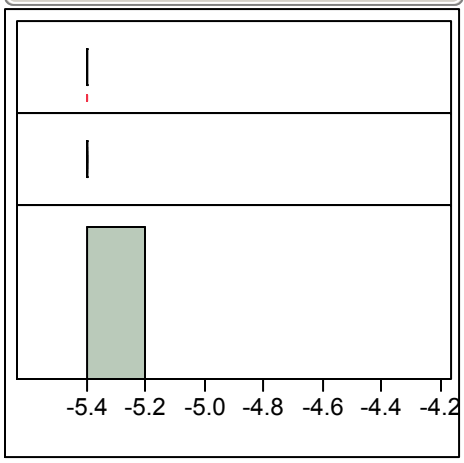
Mean	-7.2
Std Dev	4.2426407
Std Err Mean	3
Upper 95% Mean	30.918614
Lower 95% Mean	-45.31861
N	2
Sum Wgt	2
Sum	-14.4
Variance	18
Skewness	.
Kurtosis	.
CV	-58.92557
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

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

Moments

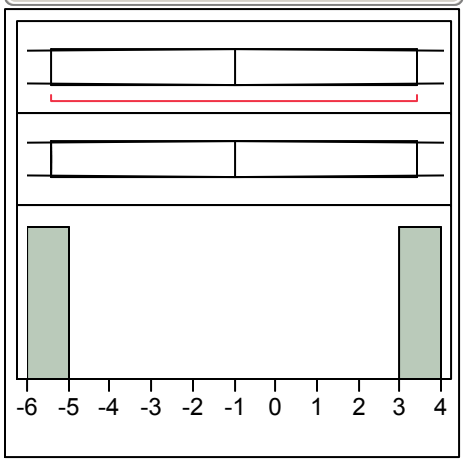
Mean	-5.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-5.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	3.4
99.5%		3.4
97.5%		3.4
90.0%		3.4
75.0%	quartile	3.4
50.0%	median	-1
25.0%	quartile	-5.4
10.0%		-5.4
2.5%		-5.4
0.5%		-5.4
0.0%	minimum	-5.4

Moments

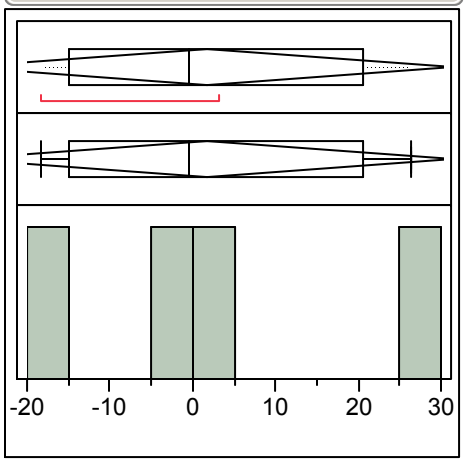
Mean	-1
Std Dev	6.2225397
Std Err Mean	4.4
Upper 95% Mean	54.907301
Lower 95% Mean	-56.9073
N	2
Sum Wgt	2
Sum	-2
Variance	38.72
Skewness	.
Kurtosis	.
CV	-622.254
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	26.3
99.5%		26.3
97.5%		26.3
90.0%		26.3
75.0%	quartile	20.525
50.0%	median	-0.55
25.0%	quartile	-14.875
10.0%		-18.4
2.5%		-18.4
0.5%		-18.4
0.0%	minimum	-18.4

Moments

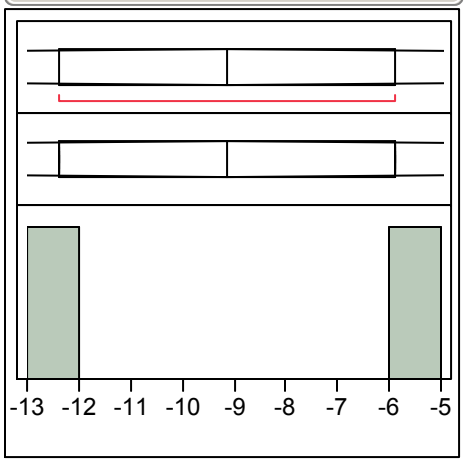
Mean	1.7
Std Dev	18.685288
Std Err Mean	9.3426442
Upper 95% Mean	31.432463
Lower 95% Mean	-28.03246
N	4
Sum Wgt	4
Sum	6.8
Variance	349.14
Skewness	0.6697251
Kurtosis	1.0132419
CV	1099.1346
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	-5.9
99.5%		-5.9
97.5%		-5.9
90.0%		-5.9
75.0%	quartile	-5.9
50.0%	median	-9.15
25.0%	quartile	-12.4
10.0%		-12.4
2.5%		-12.4
0.5%		-12.4
0.0%	minimum	-12.4

Moments

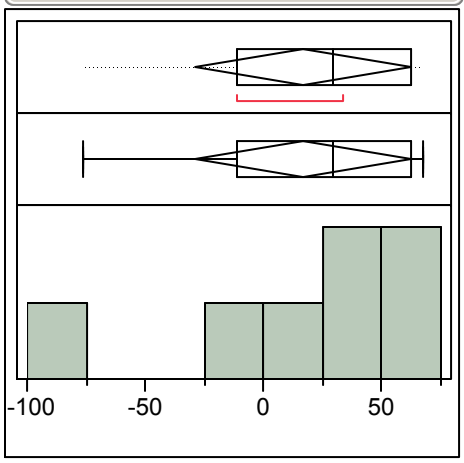
Mean	-9.15
Std Dev	4.5961941
Std Err Mean	3.25
Upper 95% Mean	32.145165
Lower 95% Mean	-50.44517
N	2
Sum Wgt	2
Sum	-18.3
Variance	21.125
Skewness	.
Kurtosis	.
CV	-50.23163
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	67.2
99.5%		67.2
97.5%		67.2
90.0%		67.2
75.0%	quartile	62.4
50.0%	median	29.6
25.0%	quartile	-11.4
10.0%		-76.1
2.5%		-76.1
0.5%		-76.1
0.0%	minimum	-76.1

Moments

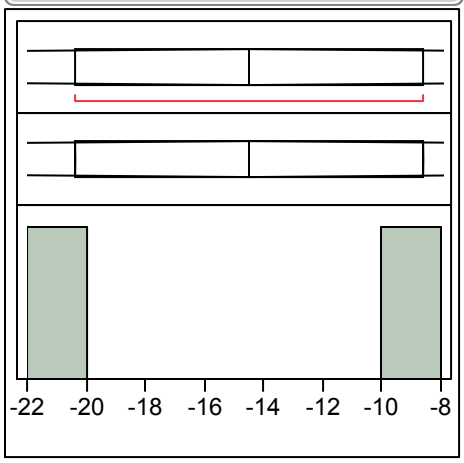
Mean	16.628571
Std Dev	49.222648
Std Err Mean	18.604412
Upper 95% Mean	62.151928
Lower 95% Mean	-28.89479
N	7
Sum Wgt	7
Sum	116.4
Variance	2422.869
Skewness	-1.148452
Kurtosis	1.404971
CV	296.01249
N Missing	0

Distributions Analyte Name=Nickel-63, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Nickel-63, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	-8.6
99.5%		-8.6
97.5%		-8.6
90.0%		-8.6
75.0%	quartile	-8.6
50.0%	median	-14.5
25.0%	quartile	-20.4
10.0%		-20.4
2.5%		-20.4
0.5%		-20.4
0.0%	minimum	-20.4

Moments

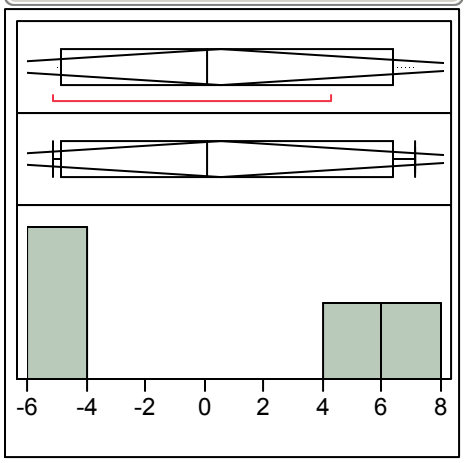
Mean	-14.5
Std Dev	8.34386
Std Err Mean	5.9
Upper 95% Mean	60.466608
Lower 95% Mean	-89.46661
N	2
Sum Wgt	2
Sum	-29
Variance	69.62
Skewness	.
Kurtosis	.
CV	-57.54386
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	7.1
99.5%		7.1
97.5%		7.1
90.0%		7.1
75.0%	quartile	6.4
50.0%	median	0.1
25.0%	quartile	-4.85
10.0%		-5.1
2.5%		-5.1
0.5%		-5.1
0.0%	minimum	-5.1

Moments

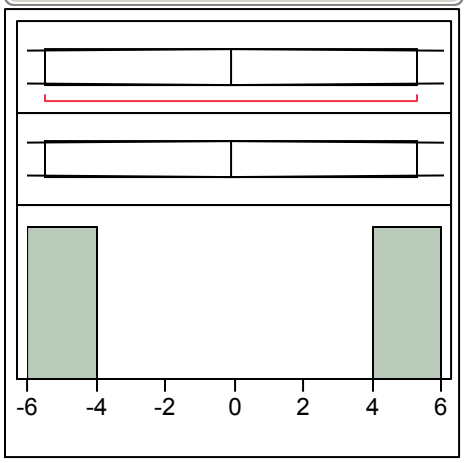
Mean	0.55
Std Dev	6.0693218
Std Err Mean	3.0346609
Upper 95% Mean	10.207645
Lower 95% Mean	-9.107645
N	4
Sum Wgt	4
Sum	2.2
Variance	36.836667
Skewness	0.1575589
Kurtosis	-4.840917
CV	1103.513
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	5.3
99.5%		5.3
97.5%		5.3
90.0%		5.3
75.0%	quartile	5.3
50.0%	median	-0.1
25.0%	quartile	-5.5
10.0%		-5.5
2.5%		-5.5
0.5%		-5.5
0.0%	minimum	-5.5

Moments

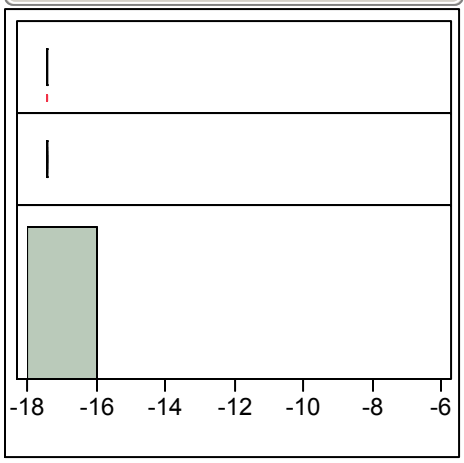
Mean	-0.1
Std Dev	7.6367532
Std Err Mean	5.4
Upper 95% Mean	68.513506
Lower 95% Mean	-68.71351
N	2
Sum Wgt	2
Sum	-0.2
Variance	58.32
Skewness	.
Kurtosis	.
CV	-7636.753
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=EPA 907, Actinide Elements, 600/4/80-032

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=EPA 907, Actinide Elements, 600/4/80-032

Bias



Quantiles

100.0%	maximum	-17.4
99.5%		-17.4
97.5%		-17.4
90.0%		-17.4
75.0%	quartile	-17.4
50.0%	median	-17.4
25.0%	quartile	-17.4
10.0%		-17.4
2.5%		-17.4
0.5%		-17.4
0.0%	minimum	-17.4

Moments

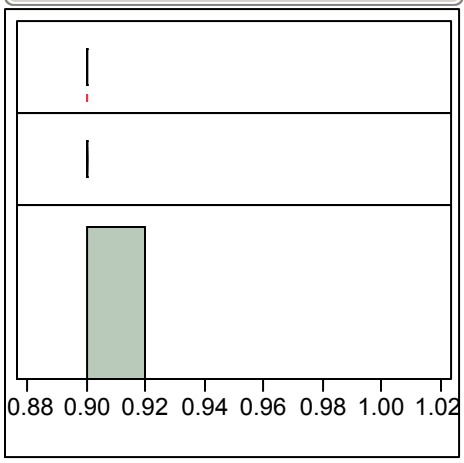
Mean	-17.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-17.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Evaporation, acidified

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	0.9
25.0%	quartile	0.9
10.0%		0.9
2.5%		0.9
0.5%		0.9
0.0%	minimum	0.9

Moments

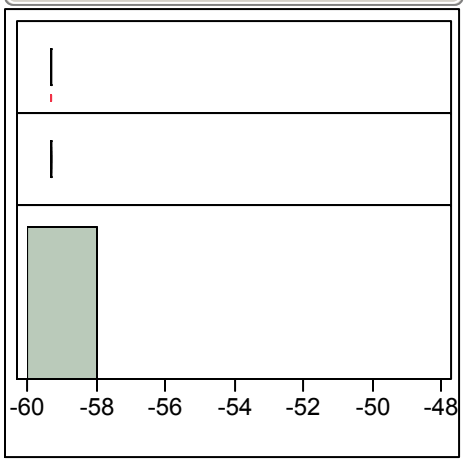
Mean	0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.9
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-59.3
99.5%		-59.3
97.5%		-59.3
90.0%		-59.3
75.0%	quartile	-59.3
50.0%	median	-59.3
25.0%	quartile	-59.3
10.0%		-59.3
2.5%		-59.3
0.5%		-59.3
0.0%	minimum	-59.3

Moments

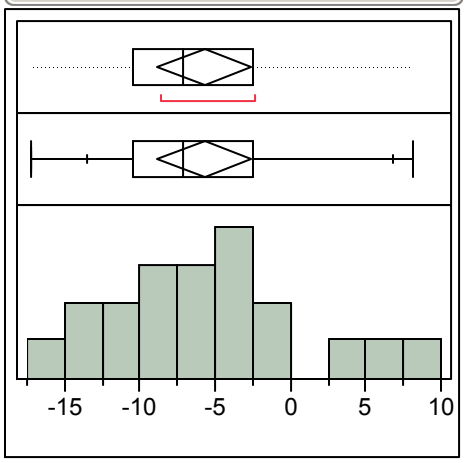
Mean	-59.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-59.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		6.79
75.0%	quartile	-2.525
50.0%	median	-7.15
25.0%	quartile	-10.475
10.0%		-13.48
2.5%		-17.3
0.5%		-17.3
0.0%	minimum	-17.3

Moments

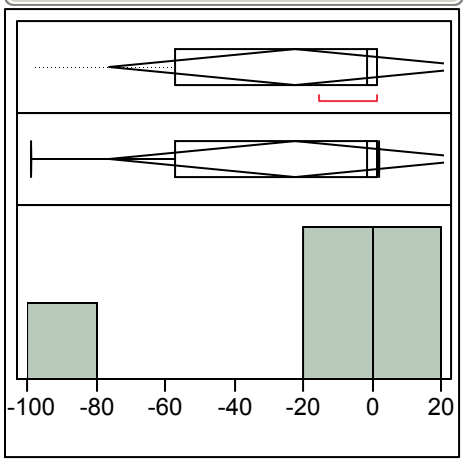
Mean	-5.705
Std Dev	6.6757594
Std Err Mean	1.4927452
Upper 95% Mean	-2.580648
Lower 95% Mean	-8.829352
N	20
Sum Wgt	20
Sum	-114.1
Variance	44.565763
Skewness	0.6122314
Kurtosis	0.182567
CV	-117.0159
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	1.9
99.5%		1.9
97.5%		1.9
90.0%		1.9
75.0%	quartile	1.7
50.0%	median	-1.3
25.0%	quartile	-57.1
10.0%		-98.9
2.5%		-98.9
0.5%		-98.9
0.0%	minimum	-98.9

Moments

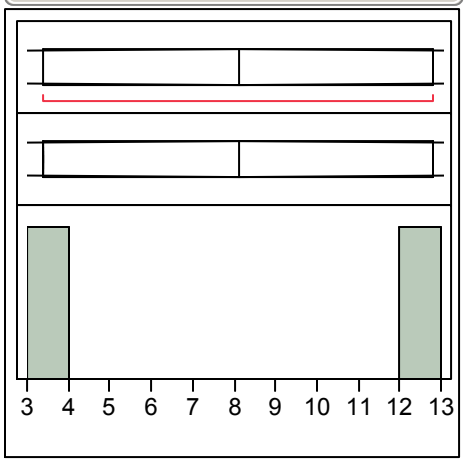
Mean	-22.42
Std Dev	43.328882
Std Err Mean	19.377265
Upper 95% Mean	31.379913
Lower 95% Mean	-76.21991
N	5
Sum Wgt	5
Sum	-112.1
Variance	1877.392
Skewness	-2.097509
Kurtosis	4.445298
CV	-193.26
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Other

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	12.8
99.5%		12.8
97.5%		12.8
90.0%		12.8
75.0%	quartile	12.8
50.0%	median	8.1
25.0%	quartile	3.4
10.0%		3.4
2.5%		3.4
0.5%		3.4
0.0%	minimum	3.4

Moments

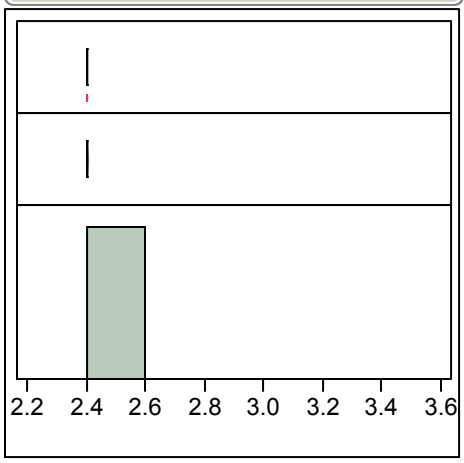
Mean	8.1
Std Dev	6.6468037
Std Err Mean	4.7
Upper 95% Mean	67.819162
Lower 95% Mean	-51.61916
N	2
Sum Wgt	2
Sum	16.2
Variance	44.18
Skewness	.
Kurtosis	.
CV	82.059305
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Total dissolution by fusion

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Total dissolution by fusion

Bias



Quantiles

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

Moments

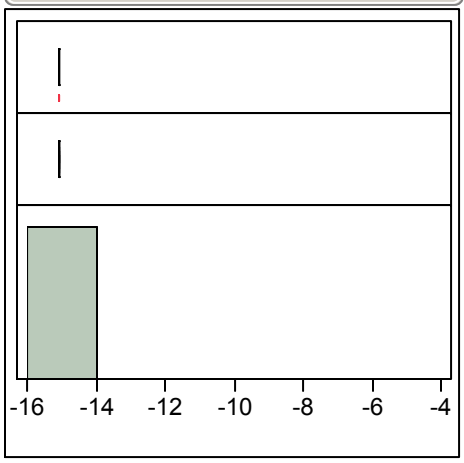
Mean	2.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	2.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-238, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias

Distributions Analyte Name=Plutonium-238, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias



Quantiles

100.0%	maximum	-15.1
99.5%		-15.1
97.5%		-15.1
90.0%		-15.1
75.0%	quartile	-15.1
50.0%	median	-15.1
25.0%	quartile	-15.1
10.0%		-15.1
2.5%		-15.1
0.5%		-15.1
0.0%	minimum	-15.1

Moments

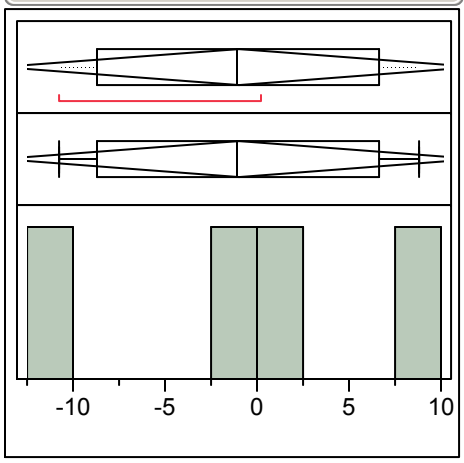
Mean	-15.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-15.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	8.8
99.5%		8.8
97.5%		8.8
90.0%		8.8
75.0%	quartile	6.65
50.0%	median	-1.05
25.0%	quartile	-8.675
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Moments

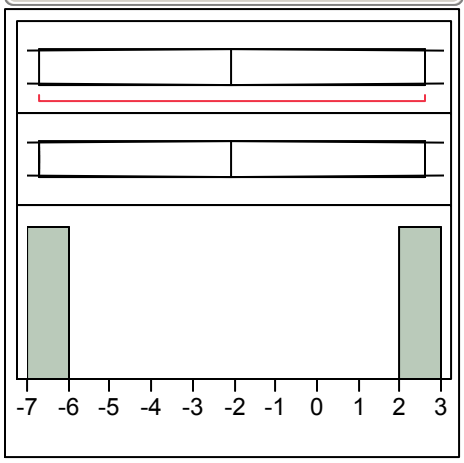
Mean	-1.025
Std Dev	8.0665461
Std Err Mean	4.0332731
Upper 95% Mean	11.810675
Lower 95% Mean	-13.86067
N	4
Sum Wgt	4
Sum	-4.1
Variance	65.069167
Skewness	0.0179997
Kurtosis	1.0276283
CV	-786.9801
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Coprecipitation, straight

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	-2.05
25.0%	quartile	-6.7
10.0%		-6.7
2.5%		-6.7
0.5%		-6.7
0.0%	minimum	-6.7

Moments

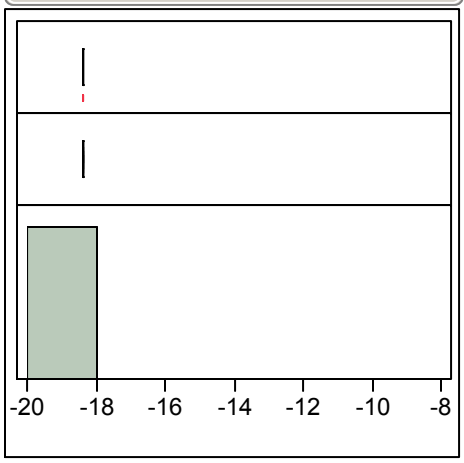
Mean	-2.05
Std Dev	6.5760931
Std Err Mean	4.65
Upper 95% Mean	57.033852
Lower 95% Mean	-61.13385
N	2
Sum Wgt	2
Sum	-4.1
Variance	43.245
Skewness	.
Kurtosis	.
CV	-320.785
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=EPA 907, Actinide Elements, 600/4/80-032

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=EPA 907, Actinide Elements, 600/4/80-032

Bias



Quantiles

100.0%	maximum	-18.4
99.5%		-18.4
97.5%		-18.4
90.0%		-18.4
75.0%	quartile	-18.4
50.0%	median	-18.4
25.0%	quartile	-18.4
10.0%		-18.4
2.5%		-18.4
0.5%		-18.4
0.0%	minimum	-18.4

Moments

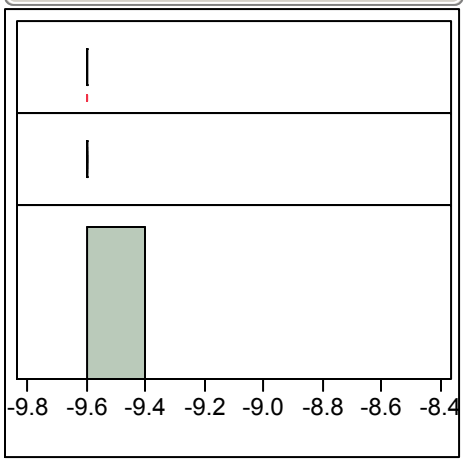
Mean	-18.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-18.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Evaporation, acidified

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	-9.6
25.0%	quartile	-9.6
10.0%		-9.6
2.5%		-9.6
0.5%		-9.6
0.0%	minimum	-9.6

Moments

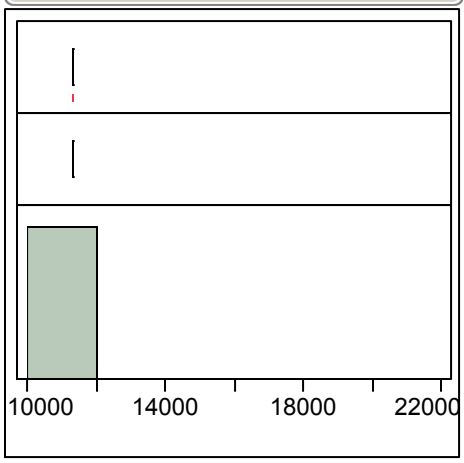
Mean	-9.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-9.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	11358.6
99.5%		11358.6
97.5%		11358.6
90.0%		11358.6
75.0%	quartile	11358.6
50.0%	median	11358.6
25.0%	quartile	11358.6
10.0%		11358.6
2.5%		11358.6
0.5%		11358.6
0.0%	minimum	11358.6

Moments

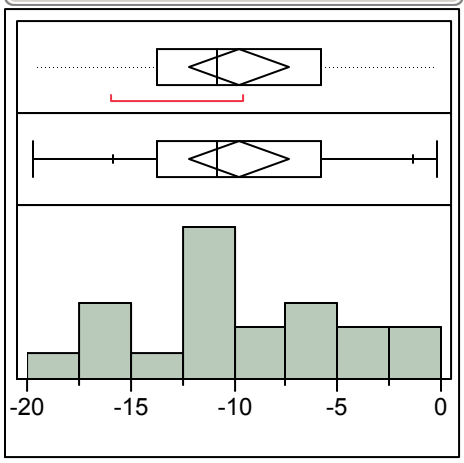
Mean	11358.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	11358.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	-0.2
99.5%		-0.2
97.5%		-0.2
90.0%		-1.38
75.0%	quartile	-5.8
50.0%	median	-10.85
25.0%	quartile	-13.75
10.0%		-15.87
2.5%		-19.7
0.5%		-19.7
0.0%	minimum	-19.7

Moments

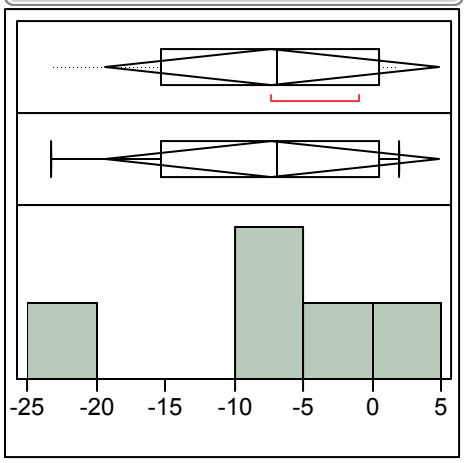
Mean	-9.79
Std Dev	5.161181
Std Err Mean	1.1540752
Upper 95% Mean	-7.374493
Lower 95% Mean	-12.20551
N	20
Sum Wgt	20
Sum	-195.8
Variance	26.637789
Skewness	0.1320277
Kurtosis	-0.46041
CV	-52.71891
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=No preparation - analyzed as received

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	-6.9
25.0%	quartile	-15.25
10.0%		-23.2
2.5%		-23.2
0.5%		-23.2
0.0%	minimum	-23.2

Moments

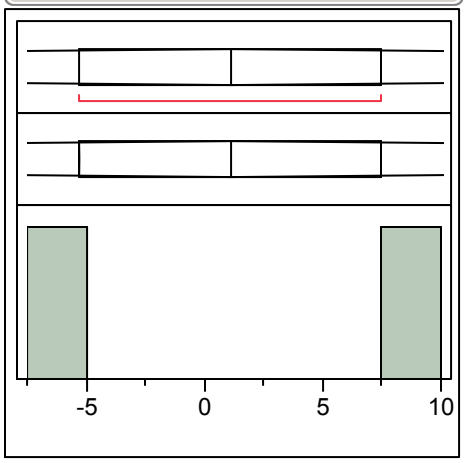
Mean	-7.28
Std Dev	9.728412
Std Err Mean	4.3506781
Upper 95% Mean	4.7994189
Lower 95% Mean	-19.35942
N	5
Sum Wgt	5
Sum	-36.4
Variance	94.642
Skewness	-1.358316
Kurtosis	2.1865723
CV	-133.632
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Other

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	7.5
99.5%		7.5
97.5%		7.5
90.0%		7.5
75.0%	quartile	7.5
50.0%	median	1.1
25.0%	quartile	-5.3
10.0%		-5.3
2.5%		-5.3
0.5%		-5.3
0.0%	minimum	-5.3

Moments

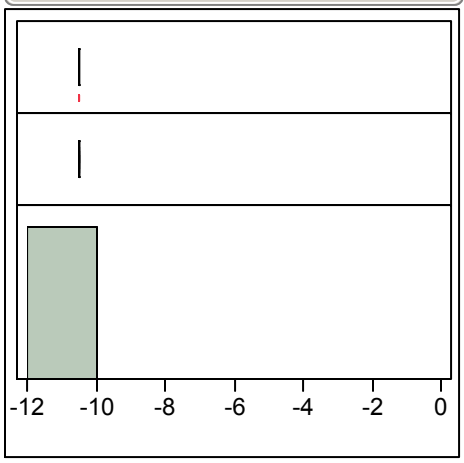
Mean	1.1
Std Dev	9.0509668
Std Err Mean	6.4
Upper 95% Mean	82.41971
Lower 95% Mean	-80.21971
N	2
Sum Wgt	2
Sum	2.2
Variance	81.92
Skewness	.
Kurtosis	.
CV	822.81516
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Total dissolution by fusion

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Total dissolution by fusion

Bias



Quantiles

100.0%	maximum	-10.5
99.5%		-10.5
97.5%		-10.5
90.0%		-10.5
75.0%	quartile	-10.5
50.0%	median	-10.5
25.0%	quartile	-10.5
10.0%		-10.5
2.5%		-10.5
0.5%		-10.5
0.0%	minimum	-10.5

Moments

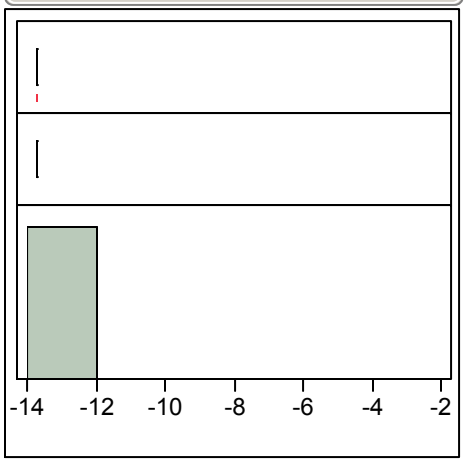
Mean	-10.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-10.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias

Distributions Analyte Name=Plutonium-239/240, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias



Quantiles

100.0%	maximum	-13.7
99.5%		-13.7
97.5%		-13.7
90.0%		-13.7
75.0%	quartile	-13.7
50.0%	median	-13.7
25.0%	quartile	-13.7
10.0%		-13.7
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Moments

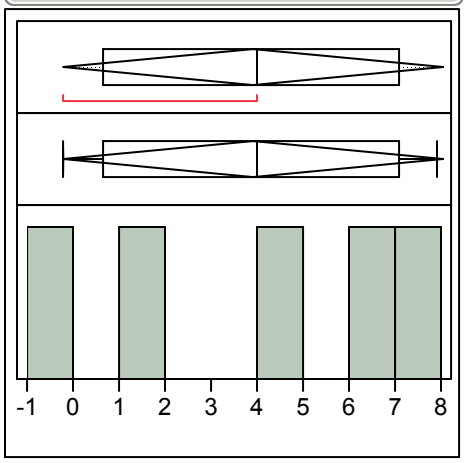
Mean	-13.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-13.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Potassium-40, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias

Distributions Analyte Name=Potassium-40, Preparation Method=EPA 901.1, Gamma Emitting, 600/4-80-032

Bias



Quantiles

100.0%	maximum	7.9
99.5%		7.9
97.5%		7.9
90.0%		7.9
75.0%	quartile	7.1
50.0%	median	4
25.0%	quartile	0.65
10.0%		-0.2
2.5%		-0.2
0.5%		-0.2
0.0%	minimum	-0.2

Moments

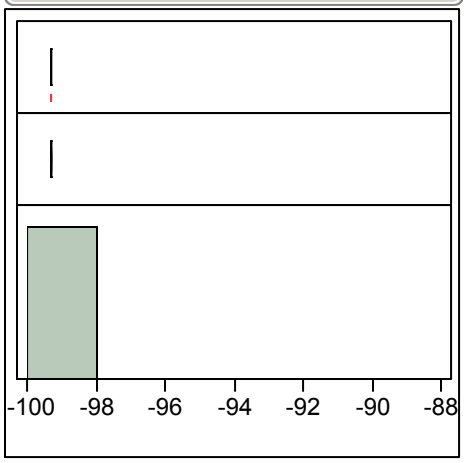
Mean	3.9
Std Dev	3.3294144
Std Err Mean	1.4889594
Upper 95% Mean	8.0340139
Lower 95% Mean	-0.234014
N	5
Sum Wgt	5
Sum	19.5
Variance	11.085
Skewness	-0.055546
Kurtosis	-1.846181
CV	85.369599
N Missing	0

Distributions Analyte Name=Potassium-40, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Potassium-40, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	-99.3
99.5%		-99.3
97.5%		-99.3
90.0%		-99.3
75.0%	quartile	-99.3
50.0%	median	-99.3
25.0%	quartile	-99.3
10.0%		-99.3
2.5%		-99.3
0.5%		-99.3
0.0%	minimum	-99.3

Moments

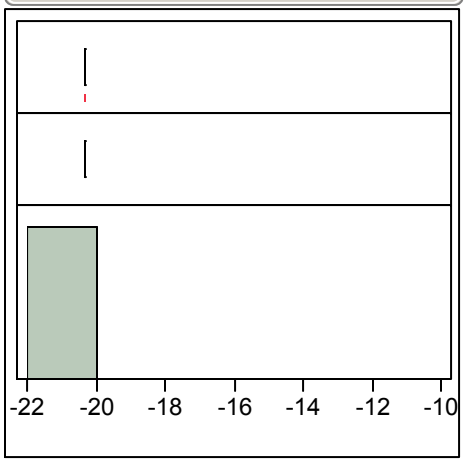
Mean	-99.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-99.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Potassium-40, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Potassium-40, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-20.3
99.5%		-20.3
97.5%		-20.3
90.0%		-20.3
75.0%	quartile	-20.3
50.0%	median	-20.3
25.0%	quartile	-20.3
10.0%		-20.3
2.5%		-20.3
0.5%		-20.3
0.0%	minimum	-20.3

Moments

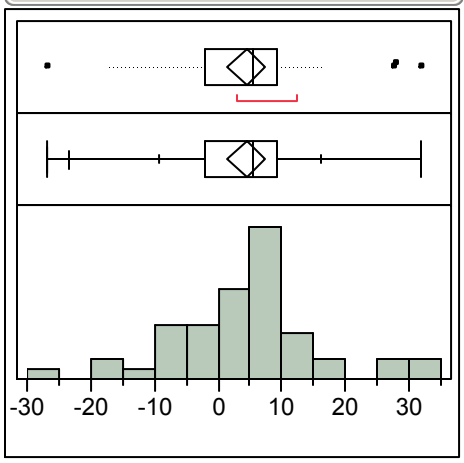
Mean	-20.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-20.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Potassium-40, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Potassium-40, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	31.9
99.5%		31.9
97.5%		31.9
90.0%		16.1
75.0%	quartile	9.1
50.0%	median	5.4
25.0%	quartile	-2
10.0%		-9.4
2.5%		-23.313
0.5%		-26.8
0.0%	minimum	-26.8

Moments

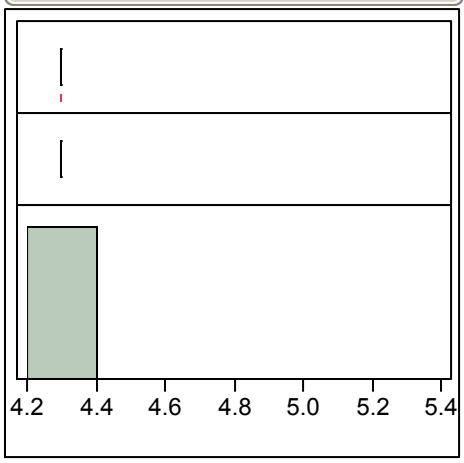
Mean	4.4555556
Std Dev	11.242367
Std Err Mean	1.5298924
Upper 95% Mean	7.5241311
Lower 95% Mean	1.38698
N	54
Sum Wgt	54
Sum	240.6
Variance	126.39082
Skewness	0.0690568
Kurtosis	1.3002191
CV	252.32245
N Missing	0

Distributions Analyte Name=Potassium-40, Preparation Method=Other

Bias

Distributions Analyte Name=Potassium-40, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	4.3
99.5%		4.3
97.5%		4.3
90.0%		4.3
75.0%	quartile	4.3
50.0%	median	4.3
25.0%	quartile	4.3
10.0%		4.3
2.5%		4.3
0.5%		4.3
0.0%	minimum	4.3

Moments

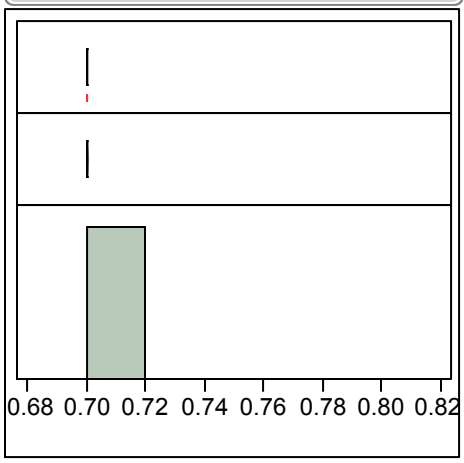
Mean	4.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	4.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Selenium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Selenium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

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	0.7
25.0%	quartile	0.7
10.0%		0.7
2.5%		0.7
0.5%		0.7
0.0%	minimum	0.7

Moments

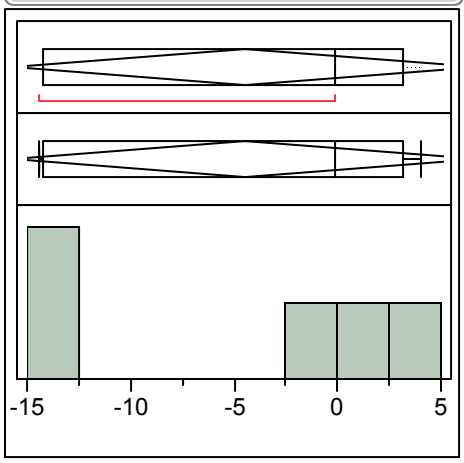
Mean	0.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Selenium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Selenium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		4
75.0%	quartile	3.2
50.0%	median	-0.1
25.0%	quartile	-14.25
10.0%		-14.4
2.5%		-14.4
0.5%		-14.4
0.0%	minimum	-14.4

Moments

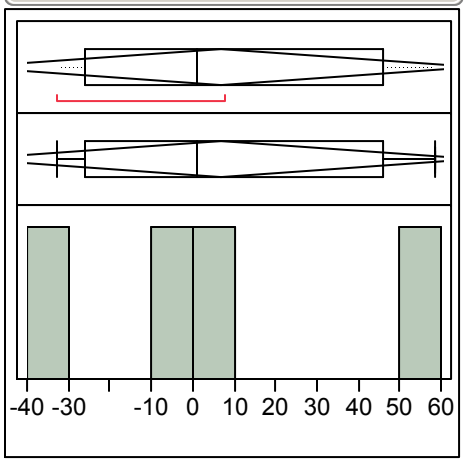
Mean	-4.44
Std Dev	9.0743044
Std Err Mean	4.0581523
Upper 95% Mean	6.8272371
Lower 95% Mean	-15.70724
N	5
Sum Wgt	5
Sum	-22.2
Variance	82.343
Skewness	-0.494345
Kurtosis	-3.176027
CV	-204.3762
N Missing	0

Distributions Analyte Name=Selenium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Selenium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	58.6
99.5%		58.6
97.5%		58.6
90.0%		58.6
75.0%	quartile	45.9
50.0%	median	1.25
25.0%	quartile	-25.925
10.0%		-32.8
2.5%		-32.8
0.5%		-32.8
0.0%	minimum	-32.8

Moments

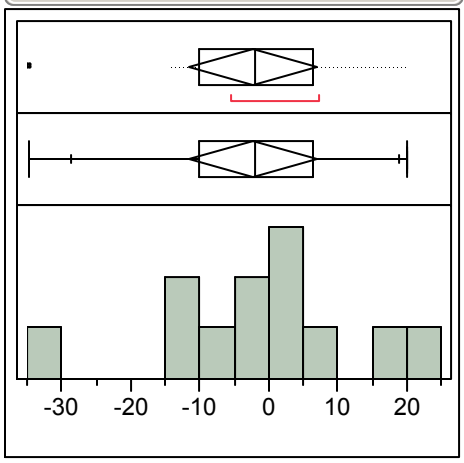
Mean	7.075
Std Dev	38.290588
Std Err Mean	19.145294
Upper 95% Mean	68.003871
Lower 95% Mean	-53.85387
N	4
Sum Wgt	4
Sum	28.3
Variance	1466.1692
Skewness	0.8489808
Kurtosis	1.3856668
CV	541.20973
N Missing	0

Distributions Analyte Name=Selenium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Selenium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	20
99.5%		20
97.5%		20
90.0%		19.01
75.0%	quartile	6.475
50.0%	median	-2
25.0%	quartile	-9.975
10.0%		-28.74
2.5%		-34.8
0.5%		-34.8
0.0%	minimum	-34.8

Moments

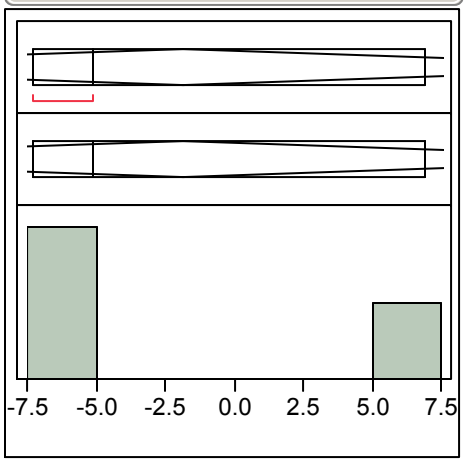
Mean	-2.191667
Std Dev	14.513909
Std Err Mean	4.1898047
Upper 95% Mean	7.0300313
Lower 95% Mean	-11.41336
N	12
Sum Wgt	12
Sum	-26.3
Variance	210.65356
Skewness	-0.665255
Kurtosis	1.4408441
CV	-662.2316
N Missing	0

Distributions Analyte Name=Selenium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Selenium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	6.9
99.5%		6.9
97.5%		6.9
90.0%		6.9
75.0%	quartile	6.9
50.0%	median	-5.1
25.0%	quartile	-7.3
10.0%		-7.3
2.5%		-7.3
0.5%		-7.3
0.0%	minimum	-7.3

Moments

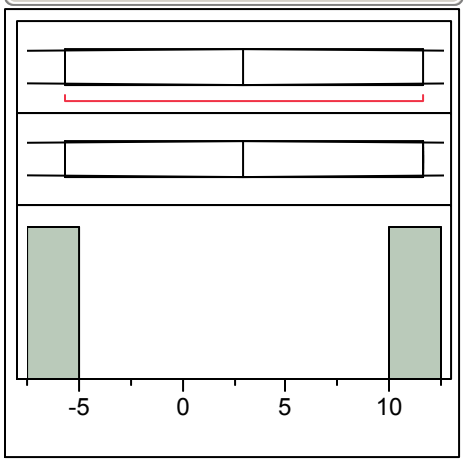
Mean	-1.833333
Std Dev	7.6428616
Std Err Mean	4.4126082
Upper 95% Mean	17.152587
Lower 95% Mean	-20.81925
N	3
Sum Wgt	3
Sum	-5.5
Variance	58.413333
Skewness	1.571998
Kurtosis	.
CV	-416.8834
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	11.6
99.5%		11.6
97.5%		11.6
90.0%		11.6
75.0%	quartile	11.6
50.0%	median	2.95
25.0%	quartile	-5.7
10.0%		-5.7
2.5%		-5.7
0.5%		-5.7
0.0%	minimum	-5.7

Moments

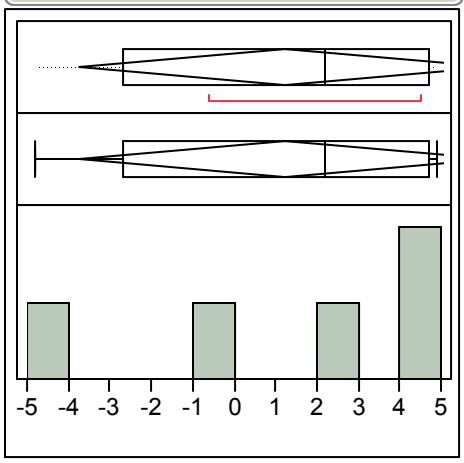
Mean	2.95
Std Dev	12.232947
Std Err Mean	8.65
Upper 95% Mean	112.85867
Lower 95% Mean	-106.9587
N	2
Sum Wgt	2
Sum	5.9
Variance	149.645
Skewness	.
Kurtosis	.
CV	414.67618
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	4.9
99.5%		4.9
97.5%		4.9
90.0%		4.9
75.0%	quartile	4.7
50.0%	median	2.2
25.0%	quartile	-2.7
10.0%		-4.8
2.5%		-4.8
0.5%		-4.8
0.0%	minimum	-4.8

Moments

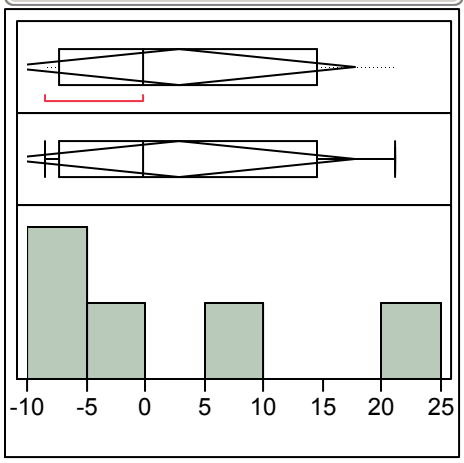
Mean	1.24
Std Dev	4.025295
Std Err Mean	1.8001667
Upper 95% Mean	6.2380639
Lower 95% Mean	-3.758064
N	5
Sum Wgt	5
Sum	6.2
Variance	16.203
Skewness	-0.907286
Kurtosis	-0.2125
CV	324.62057
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	21.1
99.5%		21.1
97.5%		21.1
90.0%		21.1
75.0%	quartile	14.5
50.0%	median	-0.2
25.0%	quartile	-7.25
10.0%		-8.5
2.5%		-8.5
0.5%		-8.5
0.0%	minimum	-8.5

Moments

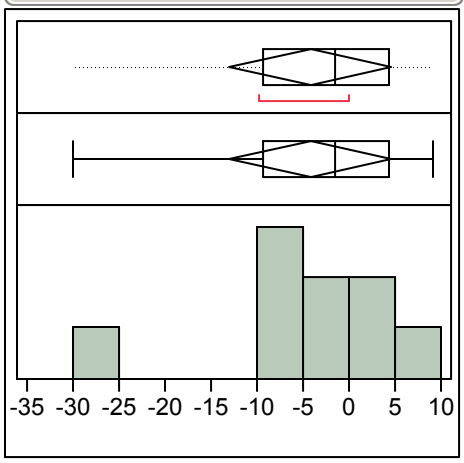
Mean	2.86
Std Dev	11.989704
Std Err Mean	5.3619586
Upper 95% Mean	17.747184
Lower 95% Mean	-12.02718
N	5
Sum Wgt	5
Sum	14.3
Variance	143.753
Skewness	0.9685078
Kurtosis	0.1198333
CV	419.22042
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=EPA 905, Radioactive Strontium, 600/4-80-032

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=EPA 905, Radioactive Strontium, 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	4.25
50.0%	median	-1.5
25.0%	quartile	-9.45
10.0%		-30
2.5%		-30
0.5%		-30
0.0%	minimum	-30

Moments

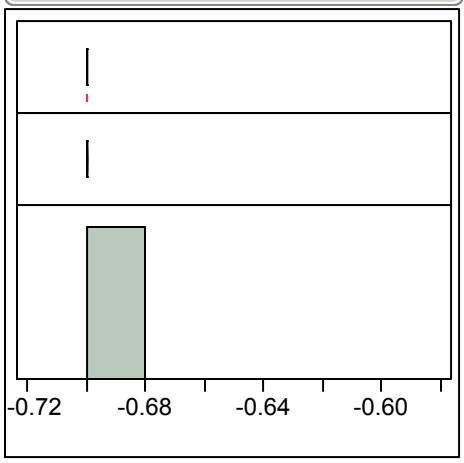
Mean	-4.233333
Std Dev	11.557465
Std Err Mean	3.8524884
Upper 95% Mean	4.6505208
Lower 95% Mean	-13.11719
N	9
Sum Wgt	9
Sum	-38.1
Variance	133.575
Skewness	-1.421726
Kurtosis	2.7183916
CV	-273.011
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Evaporation, acidified

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	-0.7
25.0%	quartile	-0.7
10.0%		-0.7
2.5%		-0.7
0.5%		-0.7
0.0%	minimum	-0.7

Moments

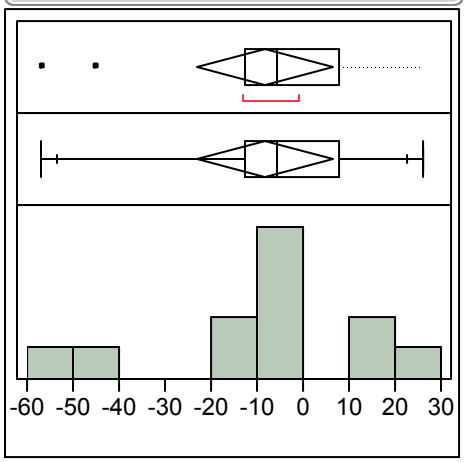
Mean	-0.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-0.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	26.1
99.5%		26.1
97.5%		26.1
90.0%		22.68
75.0%	quartile	7.75
50.0%	median	-5.8
25.0%	quartile	-12.4
10.0%		-53.29
2.5%		-56.8
0.5%		-56.8
0.0%	minimum	-56.8

Moments

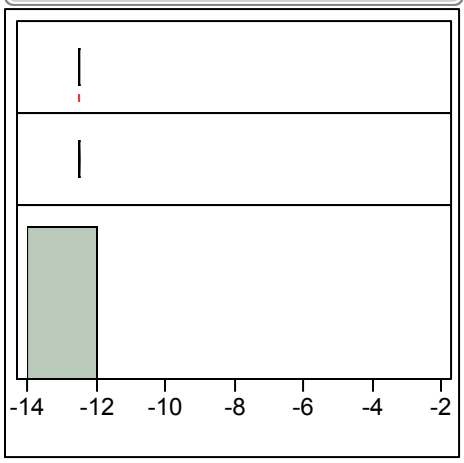
Mean	-8.175
Std Dev	23.139856
Std Err Mean	6.6799012
Upper 95% Mean	6.5273633
Lower 95% Mean	-22.87736
N	12
Sum Wgt	12
Sum	-98.1
Variance	535.45295
Skewness	-0.93409
Kurtosis	1.0402627
CV	-283.0563
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

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

Moments

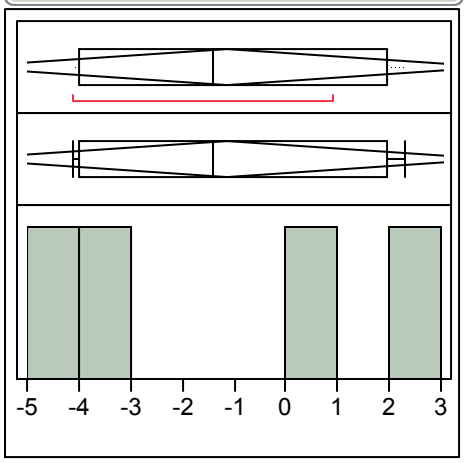
Mean	-12.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-12.5
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Strontium-90, Preparation Method=Other

Bias

Distributions Analyte Name=Strontium-90, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	1.95
50.0%	median	-1.4
25.0%	quartile	-4
10.0%		-4.1
2.5%		-4.1
0.5%		-4.1
0.0%	minimum	-4.1

Moments

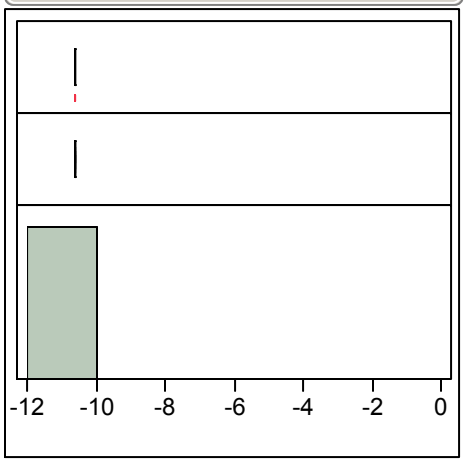
Mean	-1.15
Std Dev	3.230583
Std Err Mean	1.6152915
Upper 95% Mean	3.9905785
Lower 95% Mean	-6.290579
N	4
Sum Wgt	4
Sum	-4.6
Variance	10.436667
Skewness	0.1468123
Kurtosis	-5.012538
CV	-280.9203
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Acid leaching without hydrofluoric acid

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Acid leaching without hydrofluoric acid

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	-10.6
25.0%	quartile	-10.6
10.0%		-10.6
2.5%		-10.6
0.5%		-10.6
0.0%	minimum	-10.6

Moments

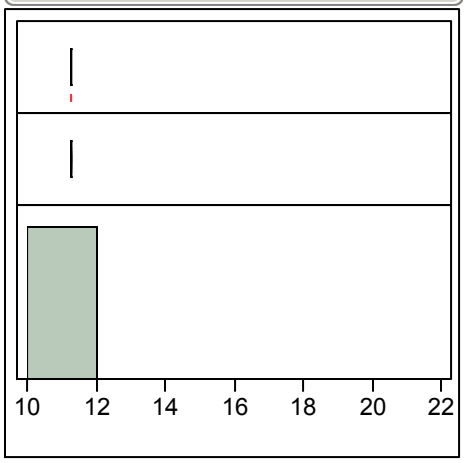
Mean	-10.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-10.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	11.3
99.5%		11.3
97.5%		11.3
90.0%		11.3
75.0%	quartile	11.3
50.0%	median	11.3
25.0%	quartile	11.3
10.0%		11.3
2.5%		11.3
0.5%		11.3
0.0%	minimum	11.3

Moments

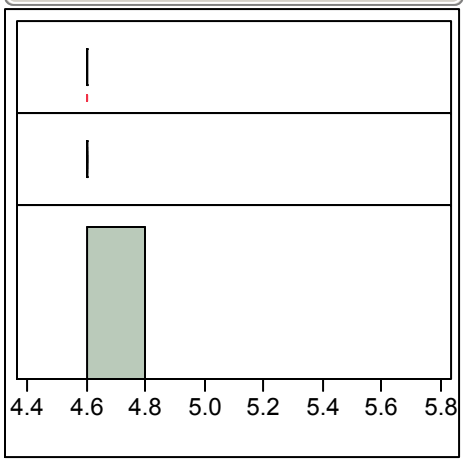
Mean	11.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	11.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	4.6
99.5%		4.6
97.5%		4.6
90.0%		4.6
75.0%	quartile	4.6
50.0%	median	4.6
25.0%	quartile	4.6
10.0%		4.6
2.5%		4.6
0.5%		4.6
0.0%	minimum	4.6

Moments

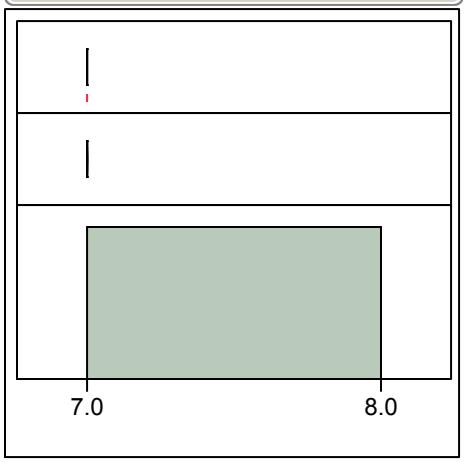
Mean	4.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	4.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		7
75.0%	quartile	7
50.0%	median	7
25.0%	quartile	7
10.0%		7
2.5%		7
0.5%		7
0.0%	minimum	7

Moments

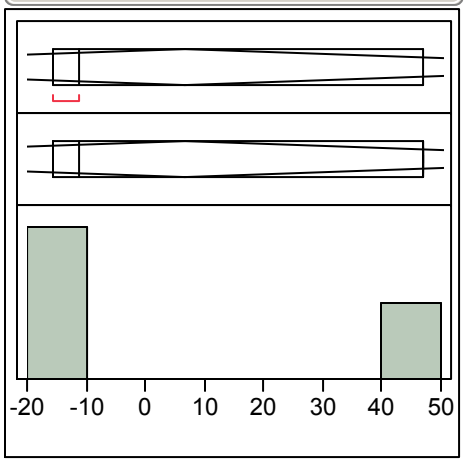
Mean	7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	46.8
99.5%		46.8
97.5%		46.8
90.0%		46.8
75.0%	quartile	46.8
50.0%	median	-11.3
25.0%	quartile	-15.5
10.0%		-15.5
2.5%		-15.5
0.5%		-15.5
0.0%	minimum	-15.5

Moments

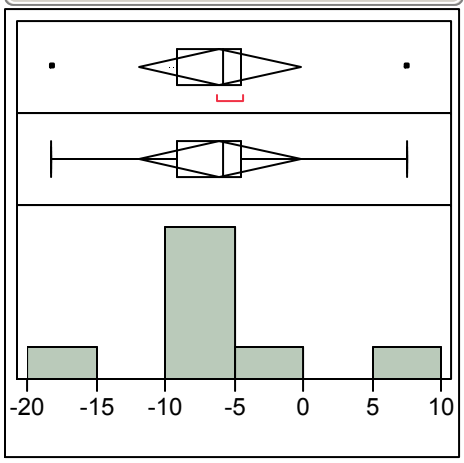
Mean	6.6666667
Std Dev	34.81987
Std Err Mean	20.103261
Upper 95% Mean	93.164018
Lower 95% Mean	-79.83069
N	3
Sum Wgt	3
Sum	20
Variance	1212.4233
Skewness	1.7037435
Kurtosis	.
CV	522.29805
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	7.5
99.5%		7.5
97.5%		7.5
90.0%		7.5
75.0%	quartile	-4.55
50.0%	median	-5.85
25.0%	quartile	-9.075
10.0%		-18.2
2.5%		-18.2
0.5%		-18.2
0.0%	minimum	-18.2

Moments

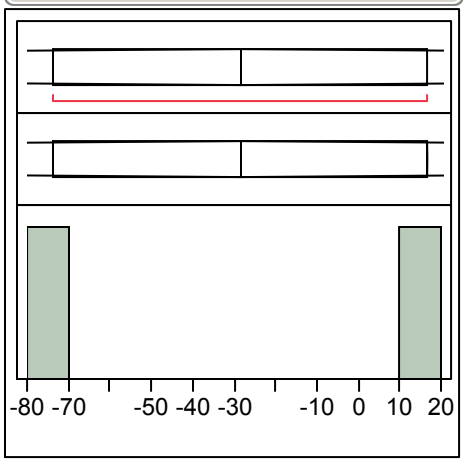
Mean	-6.0375
Std Dev	7.0795354
Std Err Mean	2.5029937
Upper 95% Mean	-0.11886
Lower 95% Mean	-11.95614
N	8
Sum Wgt	8
Sum	-48.3
Variance	50.119821
Skewness	0.3356948
Kurtosis	2.7056403
CV	-117.2594
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	16.8
99.5%		16.8
97.5%		16.8
90.0%		16.8
75.0%	quartile	16.8
50.0%	median	-28.45
25.0%	quartile	-73.7
10.0%		-73.7
2.5%		-73.7
0.5%		-73.7
0.0%	minimum	-73.7

Moments

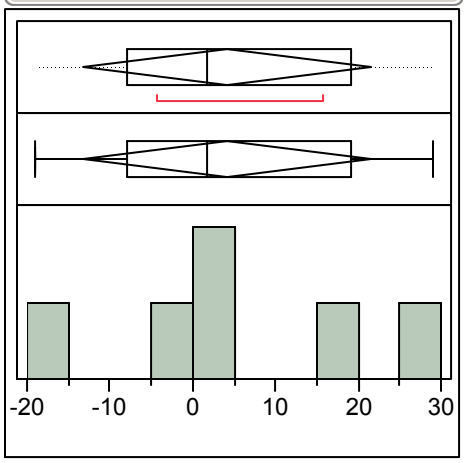
Mean	-28.45
Std Dev	63.993164
Std Err Mean	45.25
Upper 95% Mean	546.50576
Lower 95% Mean	-603.4058
N	2
Sum Wgt	2
Sum	-56.9
Variance	4095.125
Skewness	.
Kurtosis	.
CV	-224.932
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Other

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	29
99.5%		29
97.5%		29
90.0%		29
75.0%	quartile	19.025
50.0%	median	1.65
25.0%	quartile	-7.925
10.0%		-19.1
2.5%		-19.1
0.5%		-19.1
0.0%	minimum	-19.1

Moments

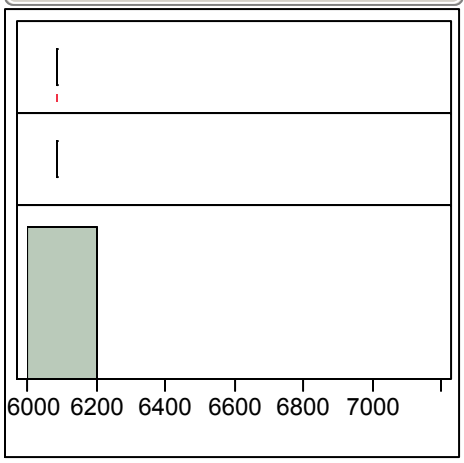
Mean	4.1166667
Std Dev	16.577746
Std Err Mean	6.7678365
Upper 95% Mean	21.513944
Lower 95% Mean	-13.28061
N	6
Sum Wgt	6
Sum	24.7
Variance	274.82167
Skewness	0.2527981
Kurtosis	0.2080498
CV	402.69829
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias



Quantiles

100.0%	maximum	6088.8
99.5%		6088.8
97.5%		6088.8
90.0%		6088.8
75.0%	quartile	6088.8
50.0%	median	6088.8
25.0%	quartile	6088.8
10.0%		6088.8
2.5%		6088.8
0.5%		6088.8
0.0%	minimum	6088.8

Moments

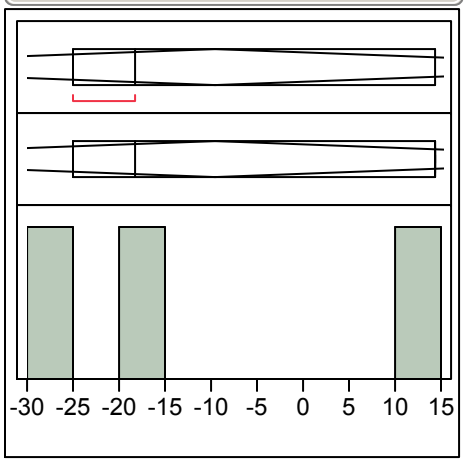
Mean	6088.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	6088.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Technetium-99, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias

Distributions Analyte Name=Technetium-99, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias



Quantiles

100.0%	maximum	14.3
99.5%		14.3
97.5%		14.3
90.0%		14.3
75.0%	quartile	14.3
50.0%	median	-18.2
25.0%	quartile	-25.1
10.0%		-25.1
2.5%		-25.1
0.5%		-25.1
0.0%	minimum	-25.1

Moments

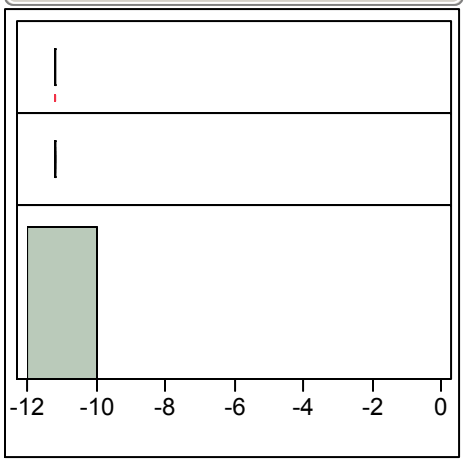
Mean	-9.666667
Std Dev	21.040516
Std Err Mean	12.147748
Upper 95% Mean	42.600874
Lower 95% Mean	-61.93421
N	3
Sum Wgt	3
Sum	-29
Variance	442.70333
Skewness	1.524858
Kurtosis	.
CV	-217.6605
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-11.2
99.5%		-11.2
97.5%		-11.2
90.0%		-11.2
75.0%	quartile	-11.2
50.0%	median	-11.2
25.0%	quartile	-11.2
10.0%		-11.2
2.5%		-11.2
0.5%		-11.2
0.0%	minimum	-11.2

Moments

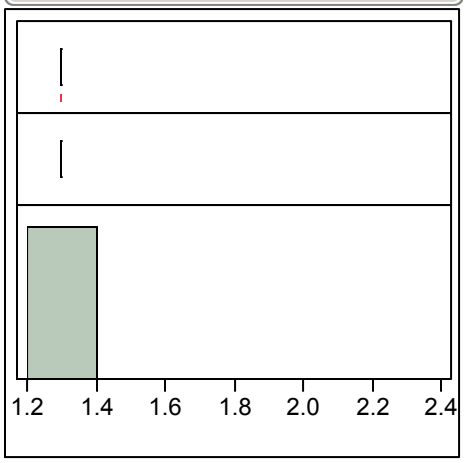
Mean	-11.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-11.2
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	1.3
99.5%		1.3
97.5%		1.3
90.0%		1.3
75.0%	quartile	1.3
50.0%	median	1.3
25.0%	quartile	1.3
10.0%		1.3
2.5%		1.3
0.5%		1.3
0.0%	minimum	1.3

Moments

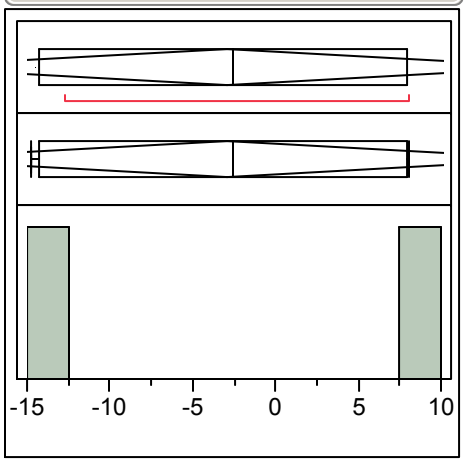
Mean	1.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	1.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Thallium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		8.1
75.0%	quartile	7.975
50.0%	median	-2.55
25.0%	quartile	-14.275
10.0%		-14.8
2.5%		-14.8
0.5%		-14.8
0.0%	minimum	-14.8

Moments

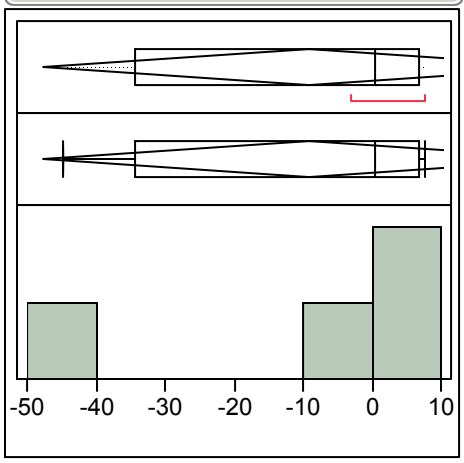
Mean	-2.95
Std Dev	12.501867
Std Err Mean	6.2509333
Upper 95% Mean	16.943259
Lower 95% Mean	-22.84326
N	4
Sum Wgt	4
Sum	-11.8
Variance	156.29667
Skewness	-0.022993
Kurtosis	-5.851518
CV	-423.7921
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Thallium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	7.6
99.5%		7.6
97.5%		7.6
90.0%		7.6
75.0%	quartile	6.7
50.0%	median	0.5
25.0%	quartile	-34.35
10.0%		-44.8
2.5%		-44.8
0.5%		-44.8
0.0%	minimum	-44.8

Moments

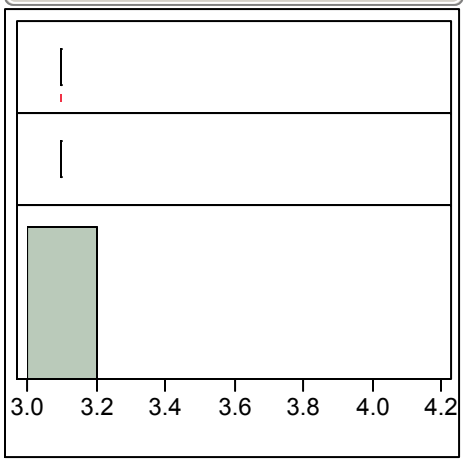
Mean	-9.05
Std Dev	24.236268
Std Err Mean	12.118134
Upper 95% Mean	29.51531
Lower 95% Mean	-47.61531
N	4
Sum Wgt	4
Sum	-36.2
Variance	587.39667
Skewness	-1.809041
Kurtosis	3.3160674
CV	-267.8041
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=Other

Bias

Distributions Analyte Name=Thallium, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	3.1
50.0%	median	3.1
25.0%	quartile	3.1
10.0%		3.1
2.5%		3.1
0.5%		3.1
0.0%	minimum	3.1

Moments

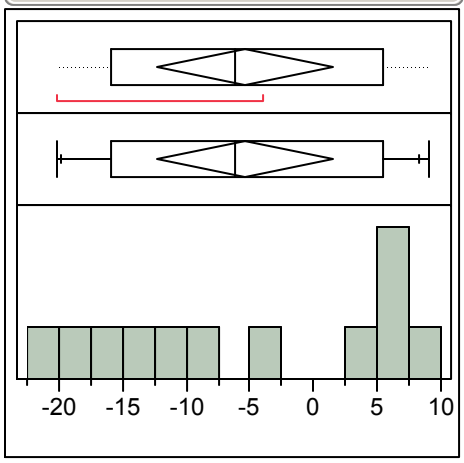
Mean	3.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	3.1
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Thallium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	9
99.5%		9
97.5%		9
90.0%		8.31
75.0%	quartile	5.4
50.0%	median	-6.25
25.0%	quartile	-15.925
10.0%		-19.78
2.5%		-20.2
0.5%		-20.2
0.0%	minimum	-20.2

Moments

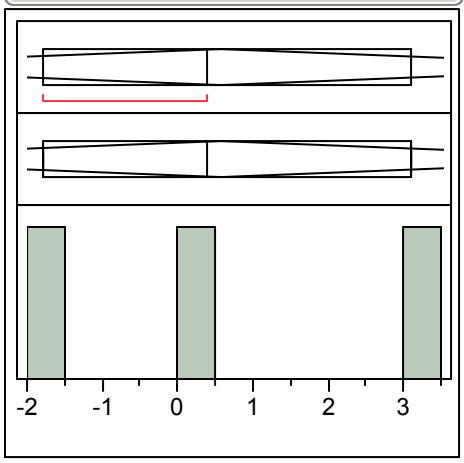
Mean	-5.408333
Std Dev	10.89374
Std Err Mean	3.1447517
Upper 95% Mean	1.5132185
Lower 95% Mean	-12.32989
N	12
Sum Wgt	12
Sum	-64.9
Variance	118.67356
Skewness	-0.012971
Kurtosis	-1.804202
CV	-201.4251
N Missing	0

Distributions Analyte Name=Thallium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Thallium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	3.1
50.0%	median	0.4
25.0%	quartile	-1.8
10.0%		-1.8
2.5%		-1.8
0.5%		-1.8
0.0%	minimum	-1.8

Moments

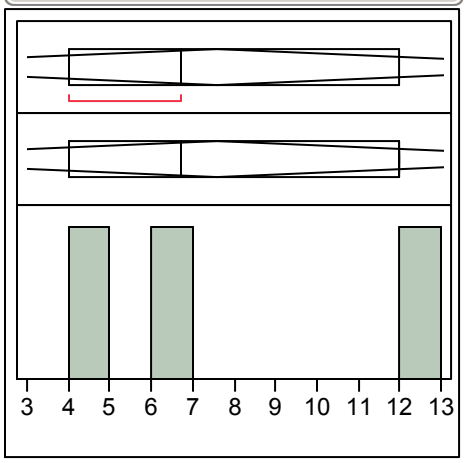
Mean	0.5666667
Std Dev	2.454248
Std Err Mean	1.4169608
Upper 95% Mean	6.6633567
Lower 95% Mean	-5.530023
N	3
Sum Wgt	3
Sum	1.7
Variance	6.0233333
Skewness	0.3041833
Kurtosis	.
CV	433.10259
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	12
99.5%		12
97.5%		12
90.0%		12
75.0%	quartile	12
50.0%	median	6.7
25.0%	quartile	4
10.0%		4
2.5%		4
0.5%		4
0.0%	minimum	4

Moments

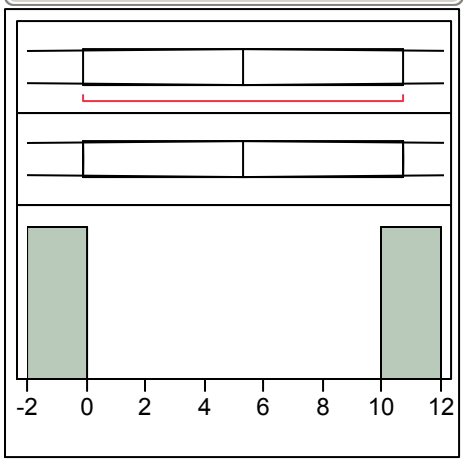
Mean	7.5666667
Std Dev	4.0698075
Std Err Mean	2.3497045
Upper 95% Mean	17.676629
Lower 95% Mean	-2.543296
N	3
Sum Wgt	3
Sum	22.7
Variance	16.563333
Skewness	0.9148205
Kurtosis	.
CV	53.786003
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	10.7
99.5%		10.7
97.5%		10.7
90.0%		10.7
75.0%	quartile	10.7
50.0%	median	5.3
25.0%	quartile	-0.1
10.0%		-0.1
2.5%		-0.1
0.5%		-0.1
0.0%	minimum	-0.1

Moments

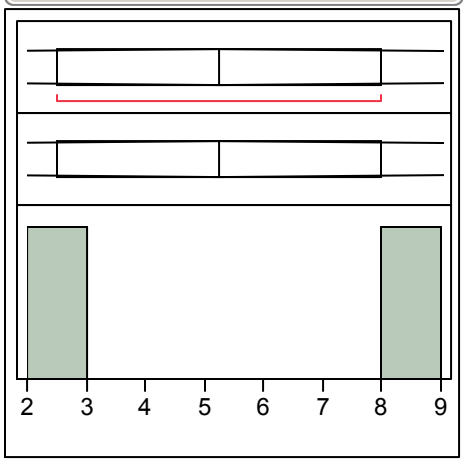
Mean	5.3
Std Dev	7.6367532
Std Err Mean	5.4
Upper 95% Mean	73.913506
Lower 95% Mean	-63.31351
N	2
Sum Wgt	2
Sum	10.6
Variance	58.32
Skewness	.
Kurtosis	.
CV	144.08968
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	8
99.5%		8
97.5%		8
90.0%		8
75.0%	quartile	8
50.0%	median	5.25
25.0%	quartile	2.5
10.0%		2.5
2.5%		2.5
0.5%		2.5
0.0%	minimum	2.5

Moments

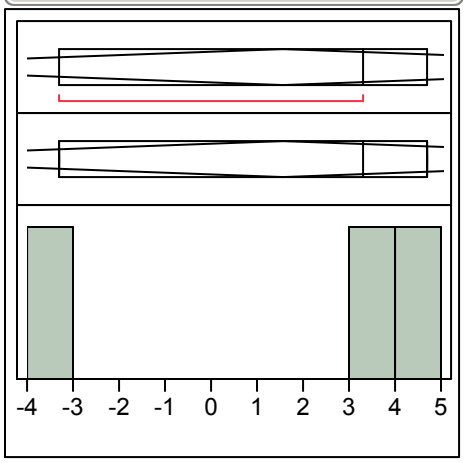
Mean	5.25
Std Dev	3.8890873
Std Err Mean	2.75
Upper 95% Mean	40.192063
Lower 95% Mean	-29.69206
N	2
Sum Wgt	2
Sum	10.5
Variance	15.125
Skewness	.
Kurtosis	.
CV	74.077853
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=EPA 908, Uranium-Radiochemical Method, 600/4/80-032

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=EPA 908, Uranium-Radiochemical Method, 600/4/80-032

Bias



Quantiles

100.0%	maximum	4.7
99.5%		4.7
97.5%		4.7
90.0%		4.7
75.0%	quartile	4.7
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

Moments

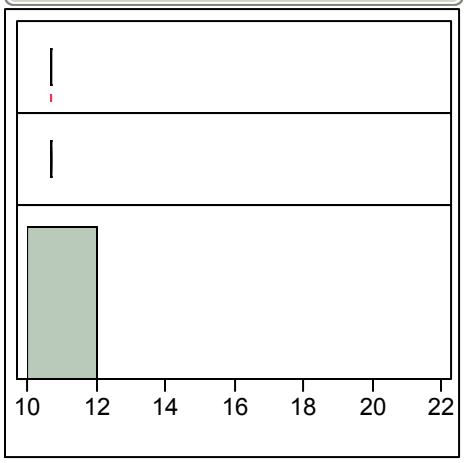
Mean	1.5666667
Std Dev	4.272392
Std Err Mean	2.4666667
Upper 95% Mean	12.179877
Lower 95% Mean	-9.046543
N	3
Sum Wgt	3
Sum	4.7
Variance	18.253333
Skewness	-1.525174
Kurtosis	.
CV	272.70587
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	10.7
99.5%		10.7
97.5%		10.7
90.0%		10.7
75.0%	quartile	10.7
50.0%	median	10.7
25.0%	quartile	10.7
10.0%		10.7
2.5%		10.7
0.5%		10.7
0.0%	minimum	10.7

Moments

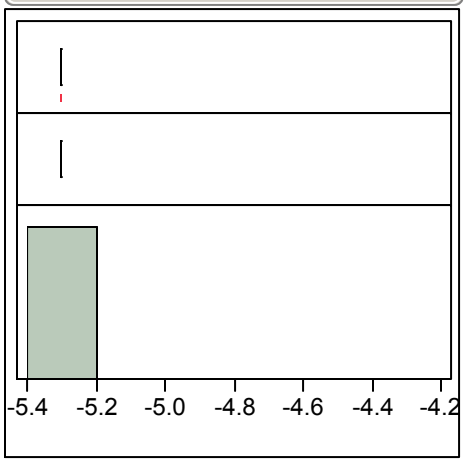
Mean	10.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	10.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-5.3
99.5%		-5.3
97.5%		-5.3
90.0%		-5.3
75.0%	quartile	-5.3
50.0%	median	-5.3
25.0%	quartile	-5.3
10.0%		-5.3
2.5%		-5.3
0.5%		-5.3
0.0%	minimum	-5.3

Moments

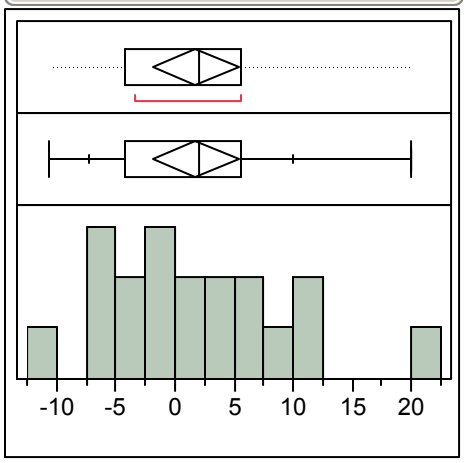
Mean	-5.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-5.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	20
99.5%		20
97.5%		20
90.0%		10
75.0%	quartile	5.6
50.0%	median	2
25.0%	quartile	-4.2
10.0%		-7.3
2.5%		-10.7
0.5%		-10.7
0.0%	minimum	-10.7

Moments

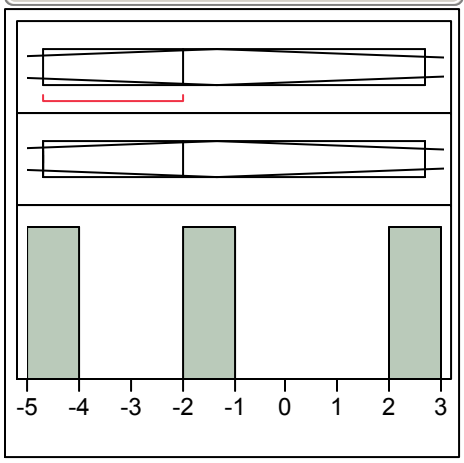
Mean	1.7315789
Std Dev	7.5446856
Std Err Mean	1.7308696
Upper 95% Mean	5.368001
Lower 95% Mean	-1.904843
N	19
Sum Wgt	19
Sum	32.9
Variance	56.922281
Skewness	0.5271092
Kurtosis	0.4144004
CV	435.71133
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	2.7
99.5%		2.7
97.5%		2.7
90.0%		2.7
75.0%	quartile	2.7
50.0%	median	-2
25.0%	quartile	-4.7
10.0%		-4.7
2.5%		-4.7
0.5%		-4.7
0.0%	minimum	-4.7

Moments

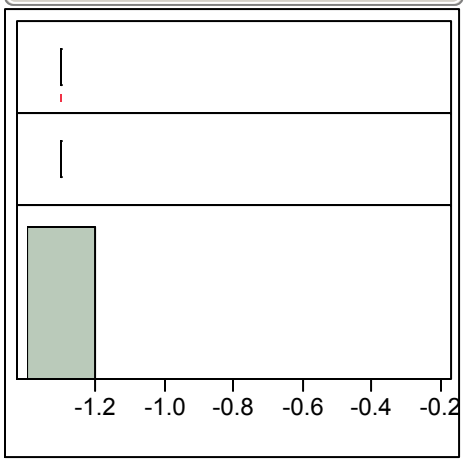
Mean	-1.333333
Std Dev	3.7447741
Std Err Mean	2.1620464
Upper 95% Mean	7.9692013
Lower 95% Mean	-10.63587
N	3
Sum Wgt	3
Sum	-4
Variance	14.023333
Skewness	0.7757265
Kurtosis	.
CV	-280.8581
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Other

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	-1.3
99.5%		-1.3
97.5%		-1.3
90.0%		-1.3
75.0%	quartile	-1.3
50.0%	median	-1.3
25.0%	quartile	-1.3
10.0%		-1.3
2.5%		-1.3
0.5%		-1.3
0.0%	minimum	-1.3

Moments

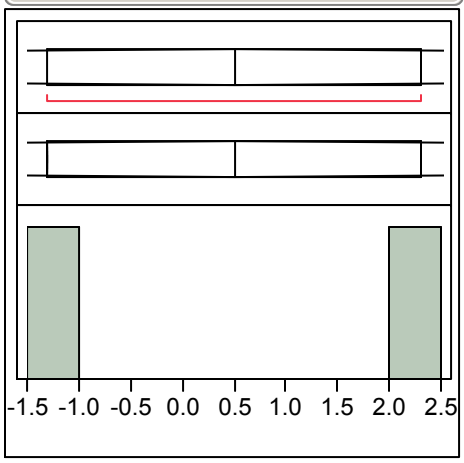
Mean	-1.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-1.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Total dissolution by fusion

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Total dissolution by fusion

Bias



Quantiles

100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	0.5
25.0%	quartile	-1.3
10.0%		-1.3
2.5%		-1.3
0.5%		-1.3
0.0%	minimum	-1.3

Moments

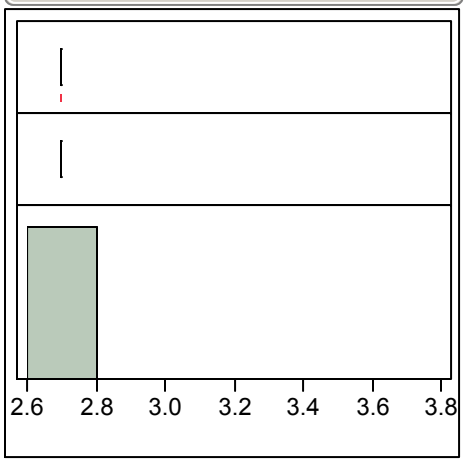
Mean	0.5
Std Dev	2.5455844
Std Err Mean	1.8
Upper 95% Mean	23.371169
Lower 95% Mean	-22.37117
N	2
Sum Wgt	2
Sum	1
Variance	6.48
Skewness	.
Kurtosis	.
CV	509.11688
N Missing	0

Distributions Analyte Name=Uranium-234/233, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias

Distributions Analyte Name=Uranium-234/233, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias



Quantiles

100.0%	maximum	2.7
99.5%		2.7
97.5%		2.7
90.0%		2.7
75.0%	quartile	2.7
50.0%	median	2.7
25.0%	quartile	2.7
10.0%		2.7
2.5%		2.7
0.5%		2.7
0.0%	minimum	2.7

Moments

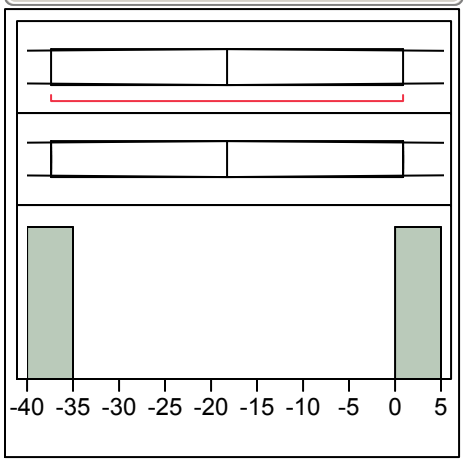
Mean	2.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	2.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

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	-18.25
25.0%	quartile	-37.4
10.0%		-37.4
2.5%		-37.4
0.5%		-37.4
0.0%	minimum	-37.4

Moments

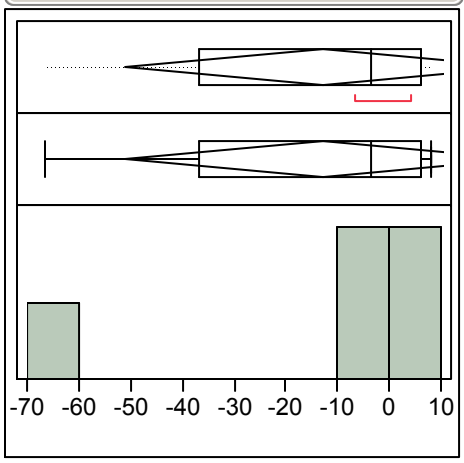
Mean	-18.25
Std Dev	27.08219
Std Err Mean	19.15
Upper 95% Mean	225.07382
Lower 95% Mean	-261.5738
N	2
Sum Wgt	2
Sum	-36.5
Variance	733.445
Skewness	.
Kurtosis	.
CV	-148.3956
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	8
99.5%		8
97.5%		8
90.0%		8
75.0%	quartile	6.1
50.0%	median	-3.4
25.0%	quartile	-36.7
10.0%		-66.7
2.5%		-66.7
0.5%		-66.7
0.0%	minimum	-66.7

Moments

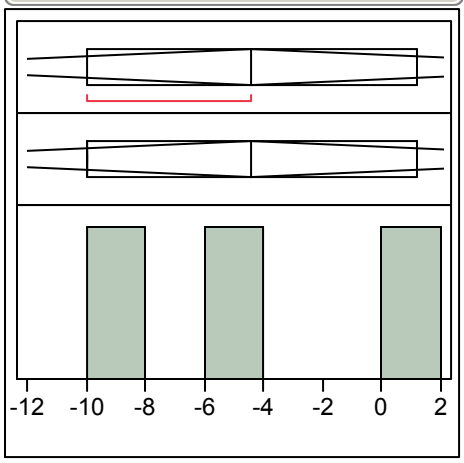
Mean	-12.92
Std Dev	30.628206
Std Err Mean	13.69735
Upper 95% Mean	25.109941
Lower 95% Mean	-50.94994
N	5
Sum Wgt	5
Sum	-64.6
Variance	938.087
Skewness	-2.034185
Kurtosis	4.2903559
CV	-237.0604
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=Other

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	1.2
99.5%		1.2
97.5%		1.2
90.0%		1.2
75.0%	quartile	1.2
50.0%	median	-4.4
25.0%	quartile	-10
10.0%		-10
2.5%		-10
0.5%		-10
0.0%	minimum	-10

Moments

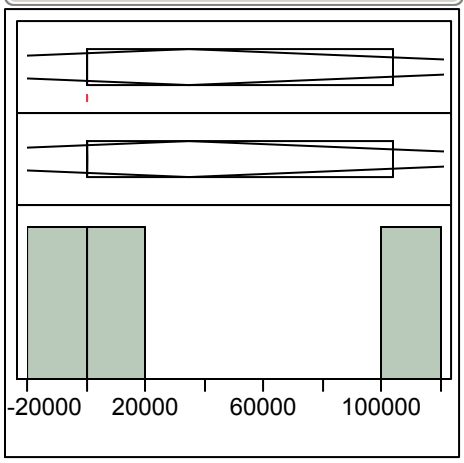
Mean	-4.4
Std Dev	5.6
Std Err Mean	3.2331615
Upper 95% Mean	9.5111712
Lower 95% Mean	-18.31117
N	3
Sum Wgt	3
Sum	-13.2
Variance	31.36
Skewness	9.992e-16
Kurtosis	.
CV	-127.2727
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	103900
99.5%		103900
97.5%		103900
90.0%		103900
75.0%	quartile	103900
50.0%	median	13.1
25.0%	quartile	-9.4
10.0%		-9.4
2.5%		-9.4
0.5%		-9.4
0.0%	minimum	-9.4

Moments

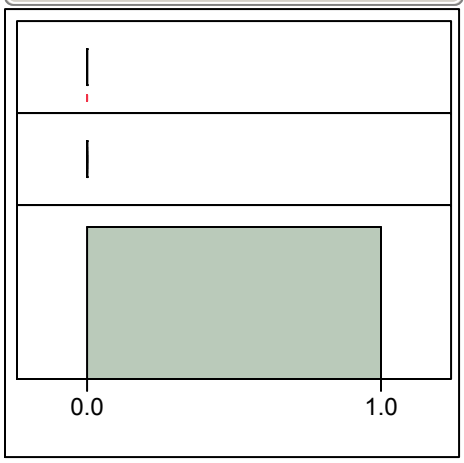
Mean	34634.567
Std Dev	59985.626
Std Err Mean	34632.717
Upper 95% Mean	183647.12
Lower 95% Mean	-114378
N	3
Sum Wgt	3
Sum	103903.7
Variance	3.5983e+9
Skewness	1.7320505
Kurtosis	.
CV	173.19583
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	0
25.0%	quartile	0
10.0%		0
2.5%		0
0.5%		0
0.0%	minimum	0

Moments

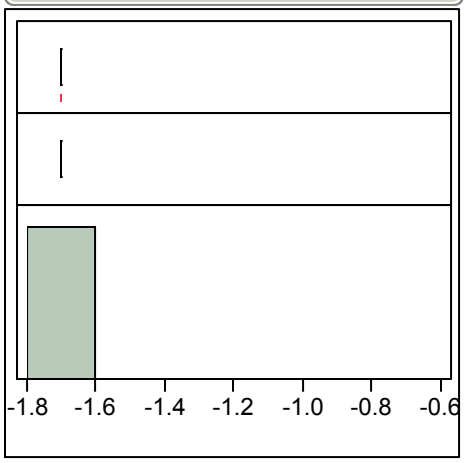
Mean	0
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-235, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias

Distributions Analyte Name=Uranium-235, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias



Quantiles

100.0%	maximum	-1.7
99.5%		-1.7
97.5%		-1.7
90.0%		-1.7
75.0%	quartile	-1.7
50.0%	median	-1.7
25.0%	quartile	-1.7
10.0%		-1.7
2.5%		-1.7
0.5%		-1.7
0.0%	minimum	-1.7

Moments

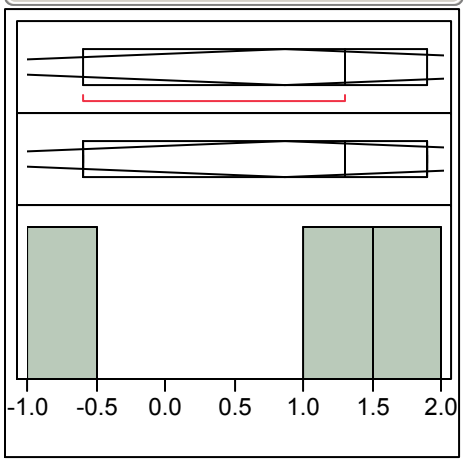
Mean	-1.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-1.7
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Acid dissolution by strong Aqua Reqia, hydrofluoric acid, etc.

Bias



Quantiles

100.0%	maximum	1.9
99.5%		1.9
97.5%		1.9
90.0%		1.9
75.0%	quartile	1.9
50.0%	median	1.3
25.0%	quartile	-0.6
10.0%		-0.6
2.5%		-0.6
0.5%		-0.6
0.0%	minimum	-0.6

Moments

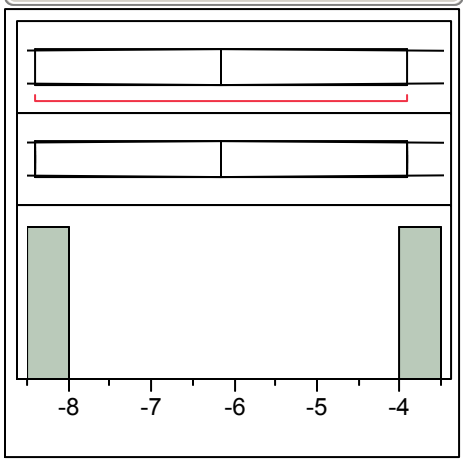
Mean	0.8666667
Std Dev	1.3051181
Std Err Mean	0.7535103
Upper 95% Mean	4.1087598
Lower 95% Mean	-2.375426
N	3
Sum Wgt	3
Sum	2.6
Variance	1.7033333
Skewness	-1.329404
Kurtosis	.
CV	150.59055
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Coprecipitation, acidified

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Coprecipitation, acidified

Bias



Quantiles

100.0%	maximum	-3.9
99.5%		-3.9
97.5%		-3.9
90.0%		-3.9
75.0%	quartile	-3.9
50.0%	median	-6.15
25.0%	quartile	-8.4
10.0%		-8.4
2.5%		-8.4
0.5%		-8.4
0.0%	minimum	-8.4

Moments

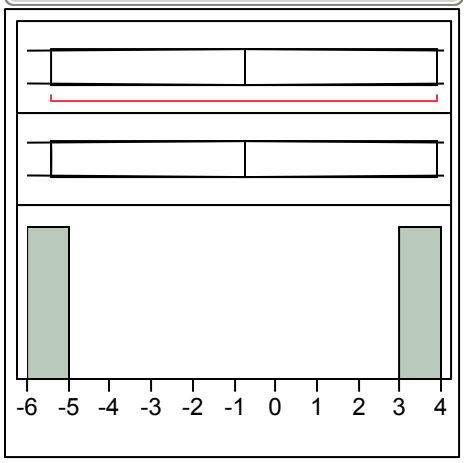
Mean	-6.15
Std Dev	3.1819805
Std Err Mean	2.25
Upper 95% Mean	22.438961
Lower 95% Mean	-34.73896
N	2
Sum Wgt	2
Sum	-12.3
Variance	10.125
Skewness	.
Kurtosis	.
CV	-51.73952
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Coprecipitation, straight

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Coprecipitation, straight

Bias



Quantiles

100.0%	maximum	3.9
99.5%		3.9
97.5%		3.9
90.0%		3.9
75.0%	quartile	3.9
50.0%	median	-0.75
25.0%	quartile	-5.4
10.0%		-5.4
2.5%		-5.4
0.5%		-5.4
0.0%	minimum	-5.4

Moments

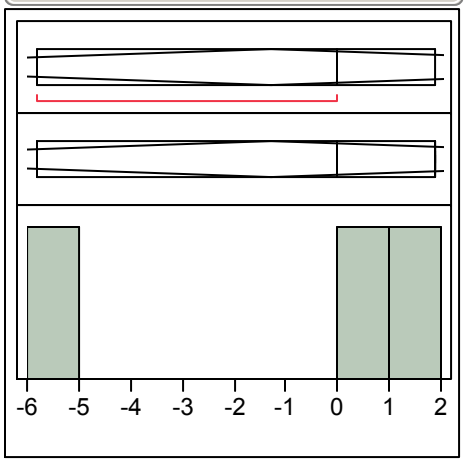
Mean	-0.75
Std Dev	6.5760931
Std Err Mean	4.65
Upper 95% Mean	58.333852
Lower 95% Mean	-59.83385
N	2
Sum Wgt	2
Sum	-1.5
Variance	43.245
Skewness	.
Kurtosis	.
CV	-876.8124
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=EPA 908, Uranium-Radiochemical Method, 600/4/80-032

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=EPA 908, Uranium-Radiochemical Method, 600/4/80-032

Bias



Quantiles

100.0%	maximum	1.9
99.5%		1.9
97.5%		1.9
90.0%		1.9
75.0%	quartile	1.9
50.0%	median	0
25.0%	quartile	-5.8
10.0%		-5.8
2.5%		-5.8
0.5%		-5.8
0.0%	minimum	-5.8

Moments

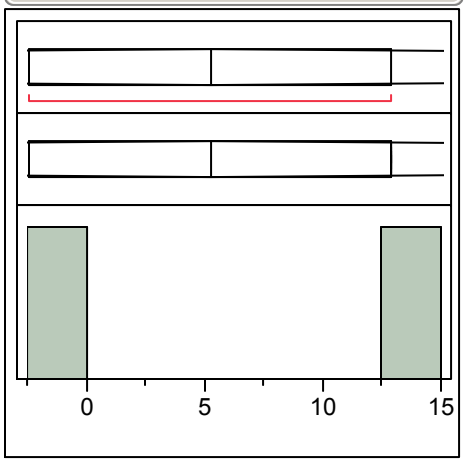
Mean	-1.3
Std Dev	4.0112342
Std Err Mean	2.3158872
Upper 95% Mean	8.6644582
Lower 95% Mean	-11.26446
N	3
Sum Wgt	3
Sum	-3.9
Variance	16.09
Skewness	-1.305222
Kurtosis	.
CV	-308.5565
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	12.9
99.5%		12.9
97.5%		12.9
90.0%		12.9
75.0%	quartile	12.9
50.0%	median	5.25
25.0%	quartile	-2.4
10.0%		-2.4
2.5%		-2.4
0.5%		-2.4
0.0%	minimum	-2.4

Moments

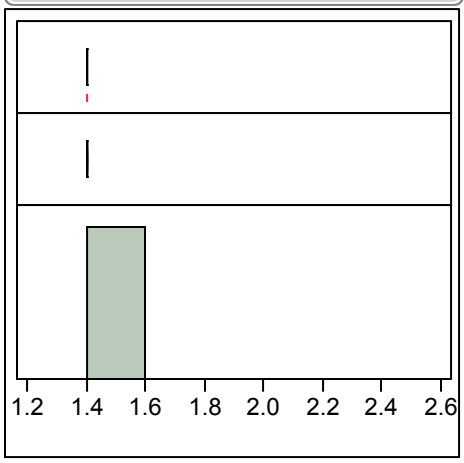
Mean	5.25
Std Dev	10.818734
Std Err Mean	7.65
Upper 95% Mean	102.45247
Lower 95% Mean	-91.95247
N	2
Sum Wgt	2
Sum	10.5
Variance	117.045
Skewness	.
Kurtosis	.
CV	206.07112
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Evaporation, acidified

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Evaporation, acidified

Bias



Quantiles

100.0%	maximum	1.4
99.5%		1.4
97.5%		1.4
90.0%		1.4
75.0%	quartile	1.4
50.0%	median	1.4
25.0%	quartile	1.4
10.0%		1.4
2.5%		1.4
0.5%		1.4
0.0%	minimum	1.4

Moments

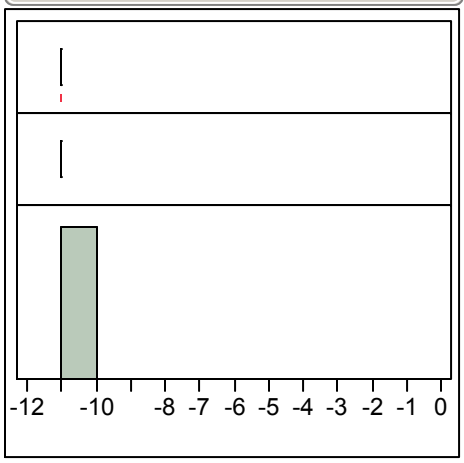
Mean	1.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	1.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Evaporation, straight

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Evaporation, straight

Bias



Quantiles

100.0%	maximum	-11
99.5%		-11
97.5%		-11
90.0%		-11
75.0%	quartile	-11
50.0%	median	-11
25.0%	quartile	-11
10.0%		-11
2.5%		-11
0.5%		-11
0.0%	minimum	-11

Moments

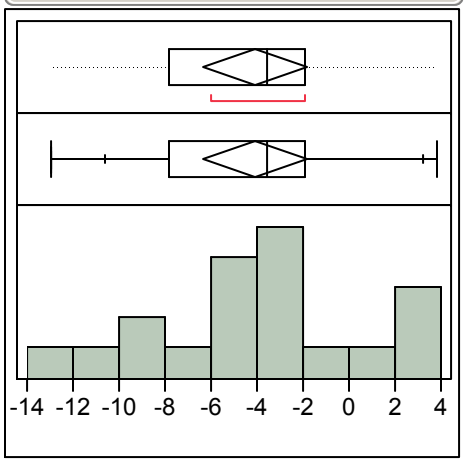
Mean	-11
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-11
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Ion Exchange Chromatography / Ion Chromatography

Bias



Quantiles

100.0%	maximum	3.8
99.5%		3.8
97.5%		3.8
90.0%		3.2
75.0%	quartile	-1.9
50.0%	median	-3.6
25.0%	quartile	-7.8
10.0%		-10.6
2.5%		-13
0.5%		-13
0.0%	minimum	-13

Moments

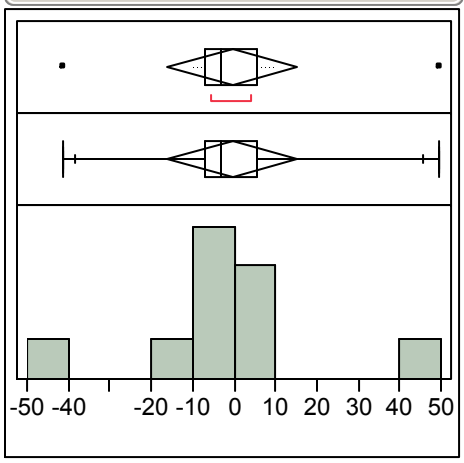
Mean	-4.084211
Std Dev	4.7732196
Std Err Mean	1.0950517
Upper 95% Mean	-1.783592
Lower 95% Mean	-6.384829
N	19
Sum Wgt	19
Sum	-77.6
Variance	22.783626
Skewness	0.0460613
Kurtosis	-0.610621
CV	-116.8701
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	49.4
99.5%		49.4
97.5%		49.4
90.0%		45.43
75.0%	quartile	5.425
50.0%	median	-3.2
25.0%	quartile	-6.8
10.0%		-38.39
2.5%		-41.5
0.5%		-41.5
0.0%	minimum	-41.5

Moments

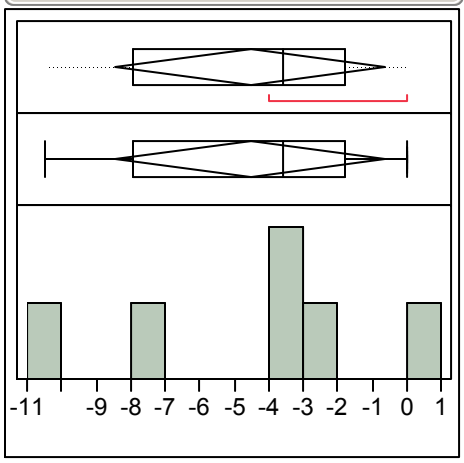
Mean	-0.47
Std Dev	22.225363
Std Err Mean	7.028277
Upper 95% Mean	15.429067
Lower 95% Mean	-16.36907
N	10
Sum Wgt	10
Sum	-4.7
Variance	493.96678
Skewness	0.694549
Kurtosis	3.7476837
CV	-4728.801
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Other

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	-1.8
50.0%	median	-3.6
25.0%	quartile	-7.95
10.0%		-10.5
2.5%		-10.5
0.5%		-10.5
0.0%	minimum	-10.5

Moments

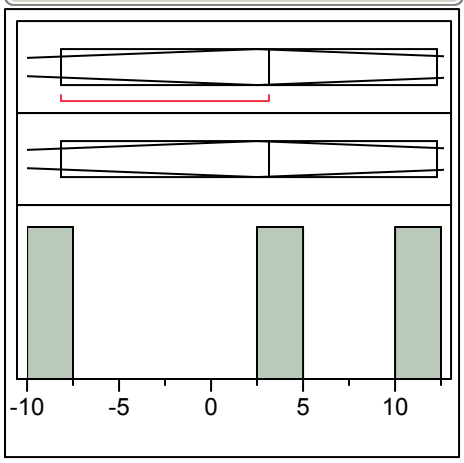
Mean	-4.533333
Std Dev	3.7243344
Std Err Mean	1.5204531
Upper 95% Mean	-0.624884
Lower 95% Mean	-8.441783
N	6
Sum Wgt	6
Sum	-27.2
Variance	13.870667
Skewness	-0.719715
Kurtosis	0.1430745
CV	-82.15444
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	12.3
99.5%		12.3
97.5%		12.3
90.0%		12.3
75.0%	quartile	12.3
50.0%	median	3.2
25.0%	quartile	-8.1
10.0%		-8.1
2.5%		-8.1
0.5%		-8.1
0.0%	minimum	-8.1

Moments

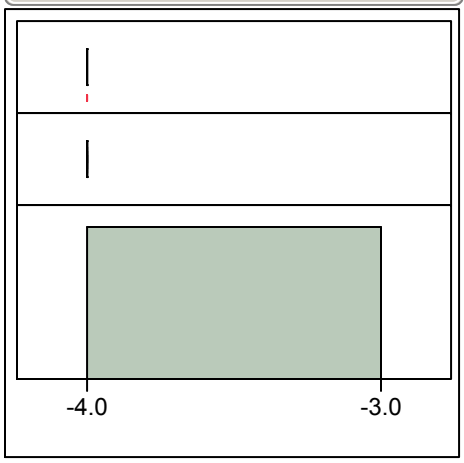
Mean	2.4666667
Std Dev	10.219752
Std Err Mean	5.9003766
Upper 95% Mean	27.853938
Lower 95% Mean	-22.9206
N	3
Sum Wgt	3
Sum	7.4
Variance	104.44333
Skewness	-0.321241
Kurtosis	.
CV	414.31428
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	-4
99.5%		-4
97.5%		-4
90.0%		-4
75.0%	quartile	-4
50.0%	median	-4
25.0%	quartile	-4
10.0%		-4
2.5%		-4
0.5%		-4
0.0%	minimum	-4

Moments

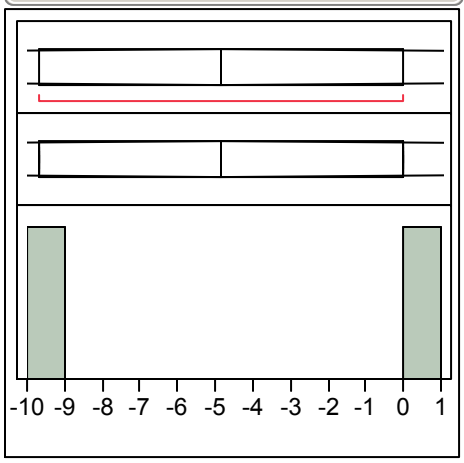
Mean	-4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Total dissolution by fusion

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Total dissolution by fusion

Bias



Quantiles

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	-4.85
25.0%	quartile	-9.7
10.0%		-9.7
2.5%		-9.7
0.5%		-9.7
0.0%	minimum	-9.7

Moments

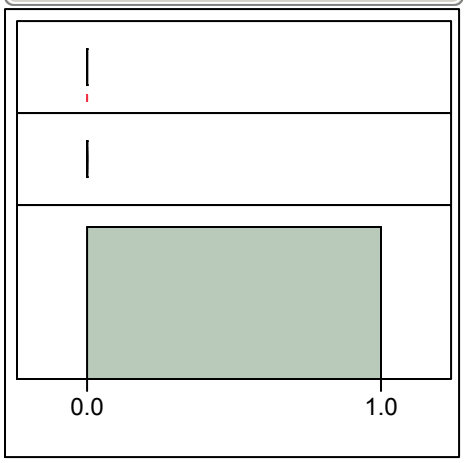
Mean	-4.85
Std Dev	6.8589358
Std Err Mean	4.85
Upper 95% Mean	56.775093
Lower 95% Mean	-66.47509
N	2
Sum Wgt	2
Sum	-9.7
Variance	47.045
Skewness	.
Kurtosis	.
CV	-141.4214
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias



Quantiles

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	0
25.0%	quartile	0
10.0%		0
2.5%		0
0.5%		0
0.0%	minimum	0

Moments

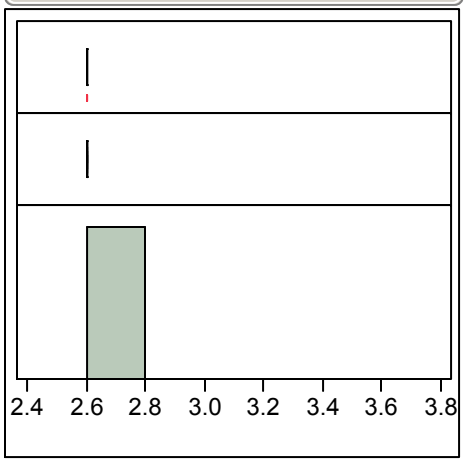
Mean	0
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-238, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

Bias

Distributions Analyte Name=Uranium-238, Preparation Method=Wet ash - Acid digestion - the use of oxidizers to destroy organics

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	2.6
25.0%	quartile	2.6
10.0%		2.6
2.5%		2.6
0.5%		2.6
0.0%	minimum	2.6

Moments

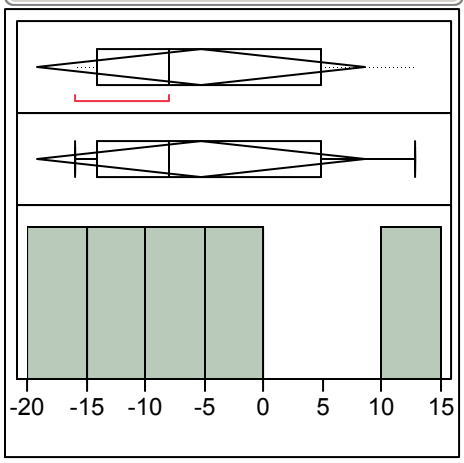
Mean	2.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	2.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	12.8
99.5%		12.8
97.5%		12.8
90.0%		12.8
75.0%	quartile	4.8
50.0%	median	-8
25.0%	quartile	-14
10.0%		-16
2.5%		-16
0.5%		-16
0.0%	minimum	-16

Moments

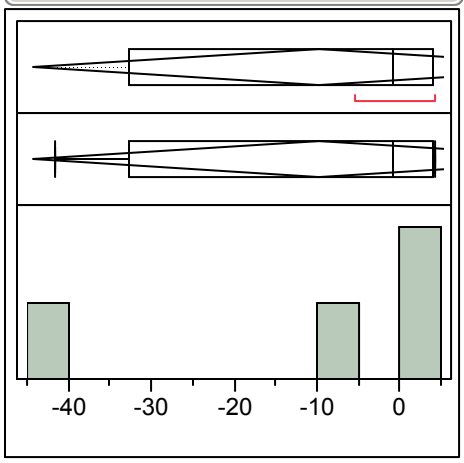
Mean	-5.28
Std Dev	11.165662
Std Err Mean	4.9934357
Upper 95% Mean	8.5840001
Lower 95% Mean	-19.144
N	5
Sum Wgt	5
Sum	-26.4
Variance	124.672
Skewness	1.3061092
Kurtosis	1.8253914
CV	-211.4709
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	4.2
99.5%		4.2
97.5%		4.2
90.0%		4.2
75.0%	quartile	4.15
50.0%	median	-0.7
25.0%	quartile	-32.625
10.0%		-41.7
2.5%		-41.7
0.5%		-41.7
0.0%	minimum	-41.7

Moments

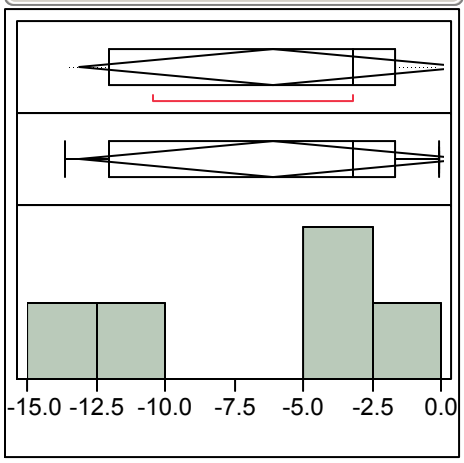
Mean	-9.725
Std Dev	21.78216
Std Err Mean	10.89108
Upper 95% Mean	24.935278
Lower 95% Mean	-44.38528
N	4
Sum Wgt	4
Sum	-38.9
Variance	474.4625
Skewness	-1.762635
Kurtosis	3.0654499
CV	-223.9811
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=Other

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	-0.1
99.5%		-0.1
97.5%		-0.1
90.0%		-0.1
75.0%	quartile	-1.65
50.0%	median	-3.2
25.0%	quartile	-12
10.0%		-13.6
2.5%		-13.6
0.5%		-13.6
0.0%	minimum	-13.6

Moments

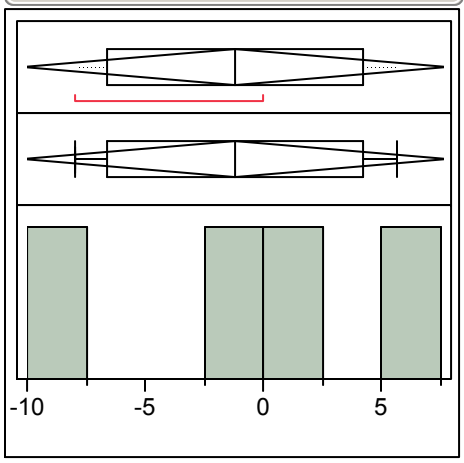
Mean	-6.1
Std Dev	5.6471232
Std Err Mean	2.5254703
Upper 95% Mean	0.9118295
Lower 95% Mean	-13.11183
N	5
Sum Wgt	5
Sum	-30.5
Variance	31.89
Skewness	-0.547431
Kurtosis	-1.923876
CV	-92.57579
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	5.6
99.5%		5.6
97.5%		5.6
90.0%		5.6
75.0%	quartile	4.2
50.0%	median	-1.2
25.0%	quartile	-6.6
10.0%		-8
2.5%		-8
0.5%		-8
0.0%	minimum	-8

Moments

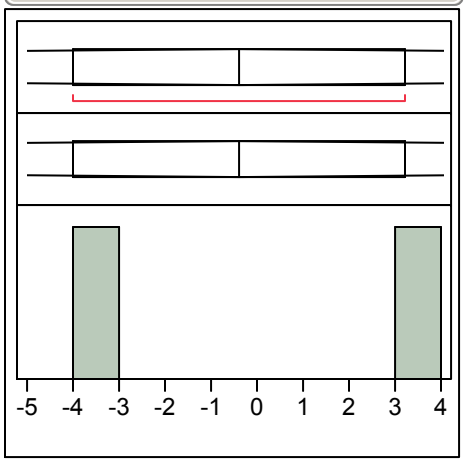
Mean	-1.2
Std Dev	5.6379665
Std Err Mean	2.8189833
Upper 95% Mean	7.7712629
Lower 95% Mean	-10.17126
N	4
Sum Wgt	4
Sum	-4.8
Variance	31.786667
Skewness	-6.48e-17
Kurtosis	0.6213234
CV	-469.8305
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		3.2
75.0%	quartile	3.2
50.0%	median	-0.4
25.0%	quartile	-4
10.0%		-4
2.5%		-4
0.5%		-4
0.0%	minimum	-4

Moments

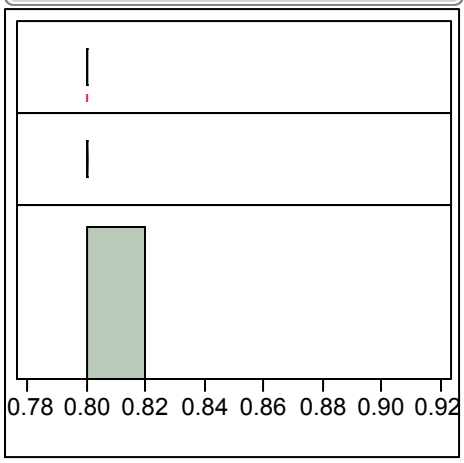
Mean	-0.4
Std Dev	5.0911688
Std Err Mean	3.6
Upper 95% Mean	45.342337
Lower 95% Mean	-46.14234
N	2
Sum Wgt	2
Sum	-0.8
Variance	25.92
Skewness	.
Kurtosis	.
CV	-1272.792
N Missing	0

Distributions Analyte Name=Uranium-Total, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias

Distributions Analyte Name=Uranium-Total, Preparation Method=Total Metals Analysis (i.e. XRF, Fusion, neutron activation)

Bias



Quantiles

100.0%	maximum	0.8
99.5%		0.8
97.5%		0.8
90.0%		0.8
75.0%	quartile	0.8
50.0%	median	0.8
25.0%	quartile	0.8
10.0%		0.8
2.5%		0.8
0.5%		0.8
0.0%	minimum	0.8

Moments

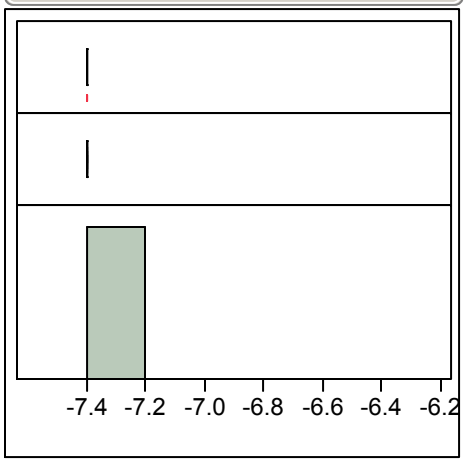
Mean	0.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.8
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-7.4
99.5%		-7.4
97.5%		-7.4
90.0%		-7.4
75.0%	quartile	-7.4
50.0%	median	-7.4
25.0%	quartile	-7.4
10.0%		-7.4
2.5%		-7.4
0.5%		-7.4
0.0%	minimum	-7.4

Moments

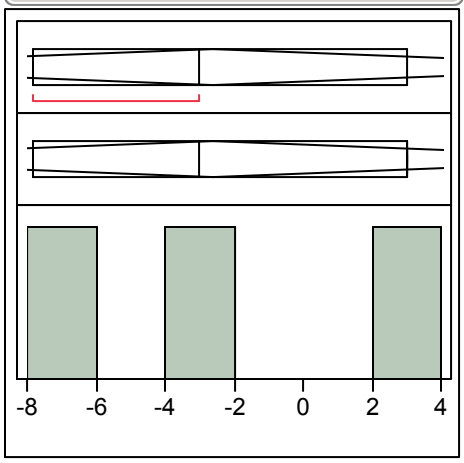
Mean	-7.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-7.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	3
99.5%		3
97.5%		3
90.0%		3
75.0%	quartile	3
50.0%	median	-3
25.0%	quartile	-7.8
10.0%		-7.8
2.5%		-7.8
0.5%		-7.8
0.0%	minimum	-7.8

Moments

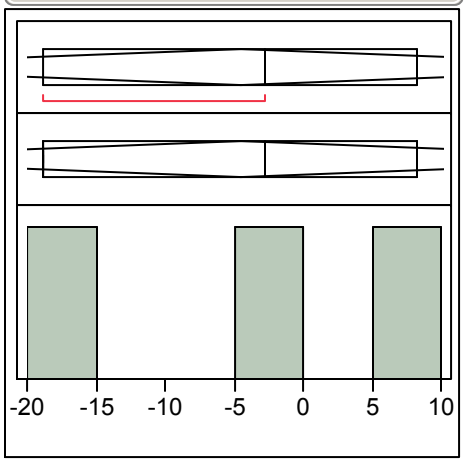
Mean	-2.6
Std Dev	5.4110997
Std Err Mean	3.1240999
Upper 95% Mean	10.841917
Lower 95% Mean	-16.04192
N	3
Sum Wgt	3
Sum	-7.8
Variance	29.28
Skewness	0.3308318
Kurtosis	.
CV	-208.1192
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Vanadium, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias



Quantiles

100.0%	maximum	8.3
99.5%		8.3
97.5%		8.3
90.0%		8.3
75.0%	quartile	8.3
50.0%	median	-2.8
25.0%	quartile	-18.8
10.0%		-18.8
2.5%		-18.8
0.5%		-18.8
0.0%	minimum	-18.8

Moments

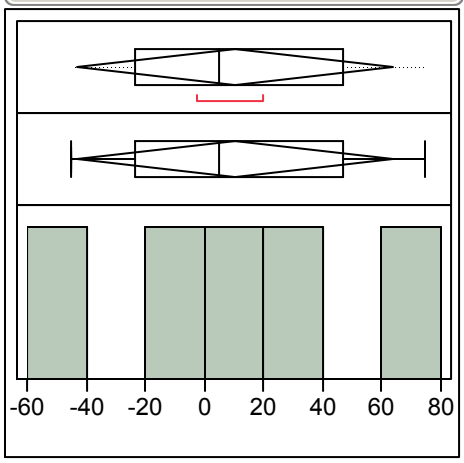
Mean	-4.433333
Std Dev	13.623631
Std Err Mean	7.8656073
Upper 95% Mean	29.409643
Lower 95% Mean	-38.27631
N	3
Sum Wgt	3
Sum	-13.3
Variance	185.60333
Skewness	-0.531749
Kurtosis	.
CV	-307.3
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Vanadium, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	74.3
99.5%		74.3
97.5%		74.3
90.0%		74.3
75.0%	quartile	47.15
50.0%	median	5.2
25.0%	quartile	-23.5
10.0%		-44.8
2.5%		-44.8
0.5%		-44.8
0.0%	minimum	-44.8

Moments

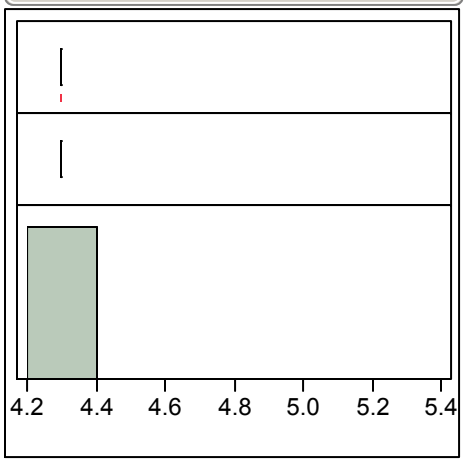
Mean	10.5
Std Dev	43.035334
Std Err Mean	19.245987
Upper 95% Mean	63.935425
Lower 95% Mean	-42.93543
N	5
Sum Wgt	5
Sum	52.5
Variance	1852.04
Skewness	0.4665322
Kurtosis	1.4588011
CV	409.86033
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=Other

Bias

Distributions Analyte Name=Vanadium, Preparation Method=Other

Bias



Quantiles

100.0%	maximum	4.3
99.5%		4.3
97.5%		4.3
90.0%		4.3
75.0%	quartile	4.3
50.0%	median	4.3
25.0%	quartile	4.3
10.0%		4.3
2.5%		4.3
0.5%		4.3
0.0%	minimum	4.3

Moments

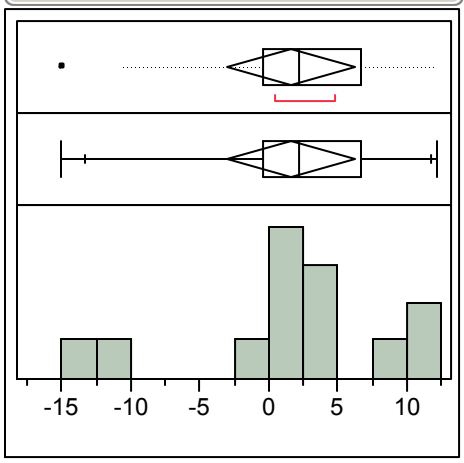
Mean	4.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	4.3
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Vanadium, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	12.2
99.5%		12.2
97.5%		12.2
90.0%		11.76
75.0%	quartile	6.75
50.0%	median	2.2
25.0%	quartile	-0.45
10.0%		-13.28
2.5%		-15
0.5%		-15
0.0%	minimum	-15

Moments

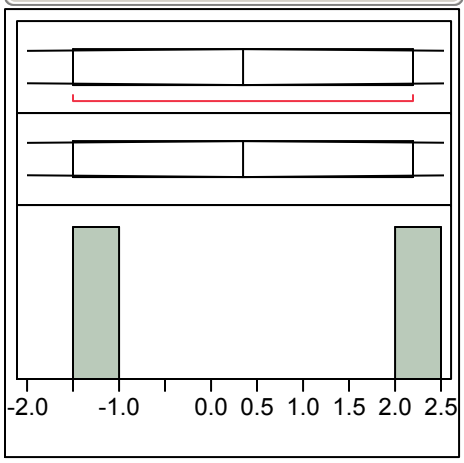
Mean	1.6538462
Std Dev	7.6915121
Std Err Mean	2.1332416
Upper 95% Mean	6.3017804
Lower 95% Mean	-2.994088
N	13
Sum Wgt	13
Sum	21.5
Variance	59.159359
Skewness	-0.890864
Kurtosis	0.9279051
CV	465.06818
N Missing	0

Distributions Analyte Name=Vanadium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Vanadium, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



Quantiles

100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		2.2
75.0%	quartile	2.2
50.0%	median	0.35
25.0%	quartile	-1.5
10.0%		-1.5
2.5%		-1.5
0.5%		-1.5
0.0%	minimum	-1.5

Moments

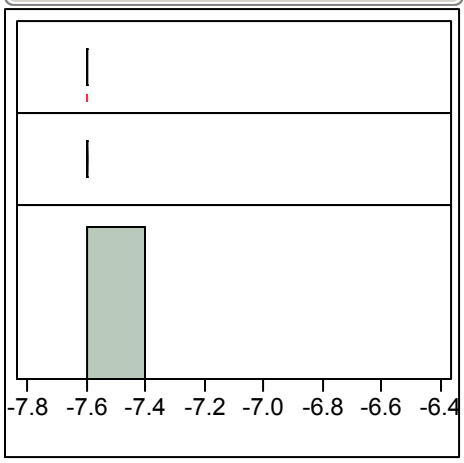
Mean	0.35
Std Dev	2.6162951
Std Err Mean	1.85
Upper 95% Mean	23.856479
Lower 95% Mean	-23.15648
N	2
Sum Wgt	2
Sum	0.7
Variance	6.845
Skewness	.
Kurtosis	.
CV	747.51288
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.2 Sample Preparation Methods

Bias



Quantiles

100.0%	maximum	-7.6
99.5%		-7.6
97.5%		-7.6
90.0%		-7.6
75.0%	quartile	-7.6
50.0%	median	-7.6
25.0%	quartile	-7.6
10.0%		-7.6
2.5%		-7.6
0.5%		-7.6
0.0%	minimum	-7.6

Moments

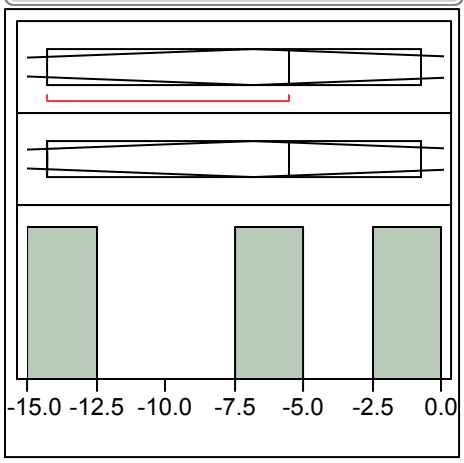
Mean	-7.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	-7.6
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.7 Trace Metals in Waters & Wastes

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	-5.5
25.0%	quartile	-14.3
10.0%		-14.3
2.5%		-14.3
0.5%		-14.3
0.0%	minimum	-14.3

Moments

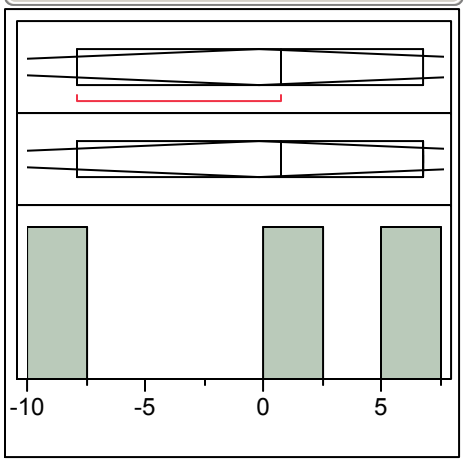
Mean	-6.833333
Std Dev	6.8973425
Std Err Mean	3.9821825
Upper 95% Mean	10.300615
Lower 95% Mean	-23.96728
N	3
Sum Wgt	3
Sum	-20.5
Variance	47.573333
Skewness	-0.837393
Kurtosis	.
CV	-100.9367
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

Bias

Distributions Analyte Name=Zinc, Preparation Method=EPA Method 200.8 Trace Metals in Waters & Wastes

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	0.7
25.0%	quartile	-7.9
10.0%		-7.9
2.5%		-7.9
0.5%		-7.9
0.0%	minimum	-7.9

Moments

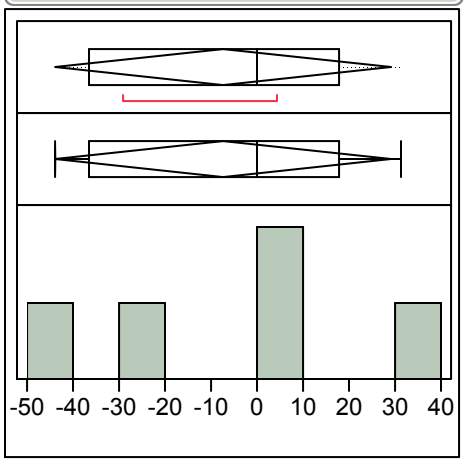
Mean	-0.166667
Std Dev	7.338483
Std Err Mean	4.2368752
Upper 95% Mean	18.063136
Lower 95% Mean	-18.39647
N	3
Sum Wgt	3
Sum	-0.5
Variance	53.853333
Skewness	-0.524033
Kurtosis	.
CV	-4403.09
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=No preparation - analyzed as received

Bias

Distributions Analyte Name=Zinc, Preparation Method=No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	31.2
99.5%		31.2
97.5%		31.2
90.0%		31.2
75.0%	quartile	17.85
50.0%	median	0.1
25.0%	quartile	-36.4
10.0%		-43.8
2.5%		-43.8
0.5%		-43.8
0.0%	minimum	-43.8

Moments

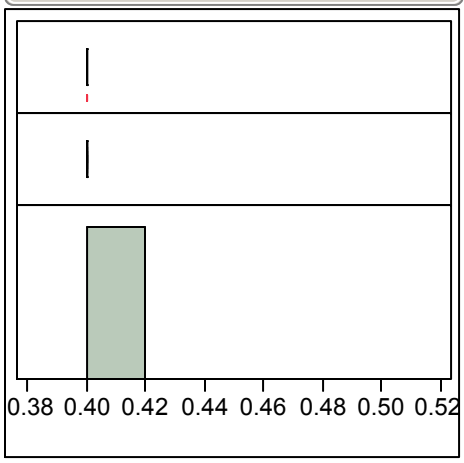
Mean	-7.4
Std Dev	29.492965
Std Err Mean	13.189655
Upper 95% Mean	29.220353
Lower 95% Mean	-44.02035
N	5
Sum Wgt	5
Sum	-37
Variance	869.835
Skewness	0.0213295
Kurtosis	-1.034094
CV	-398.5536
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=Other

Bias

Distributions Analyte Name=Zinc, Preparation Method=Other

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

Moments

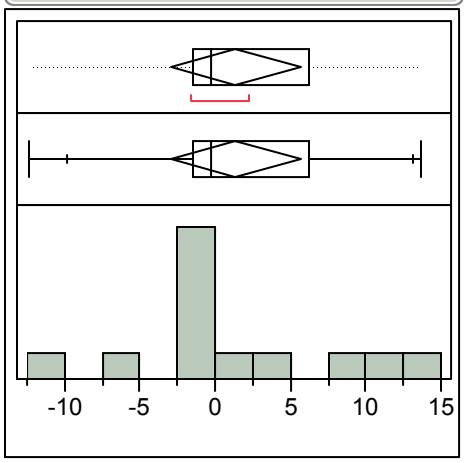
Mean	0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1
Sum Wgt	1
Sum	0.4
Variance	.
Skewness	.
Kurtosis	.
CV	.
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias

Distributions Analyte Name=Zinc, Preparation Method=SW846 Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

Bias



Quantiles

100.0%	maximum	13.7
99.5%		13.7
97.5%		13.7
90.0%		13.18
75.0%	quartile	6.2
50.0%	median	-0.3
25.0%	quartile	-1.45
10.0%		-9.88
2.5%		-12.4
0.5%		-12.4
0.0%	minimum	-12.4

Moments

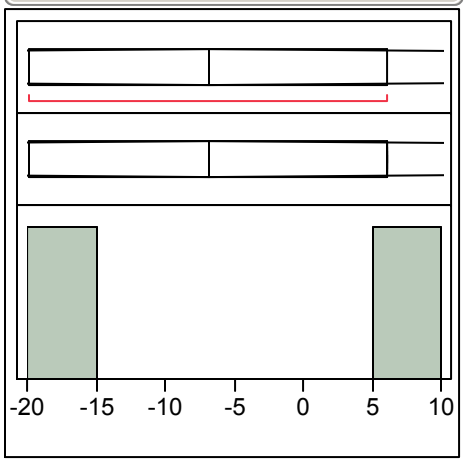
Mean	1.3615385
Std Dev	7.1883631
Std Err Mean	1.9936932
Upper 95% Mean	5.7054228
Lower 95% Mean	-2.982346
N	13
Sum Wgt	13
Sum	17.7
Variance	51.672564
Skewness	0.1899954
Kurtosis	0.3069148
CV	527.95887
N Missing	0

Distributions Analyte Name=Zinc, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias

Distributions Analyte Name=Zinc, Preparation Method=SW846 Methods 3015, 3051 (Microwave assisted)

Bias



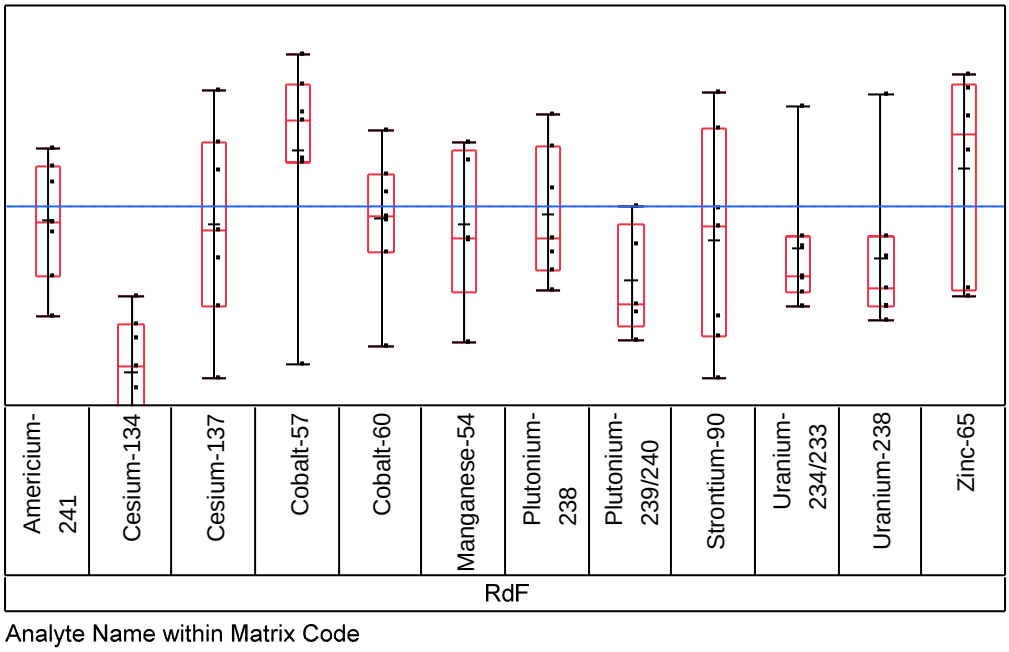
Quantiles

100.0%	maximum	6.1
99.5%		6.1
97.5%		6.1
90.0%		6.1
75.0%	quartile	6.1
50.0%	median	-6.85
25.0%	quartile	-19.8
10.0%		-19.8
2.5%		-19.8
0.5%		-19.8
0.0%	minimum	-19.8

Moments

Mean	-6.85
Std Dev	18.314066
Std Err Mean	12.95
Upper 95% Mean	157.69535
Lower 95% Mean	-171.3954
N	2
Sum Wgt	2
Sum	-13.7
Variance	335.405
Skewness	.
Kurtosis	.
CV	-267.3586
N Missing	0

The intent of the historical graphs contained within this report is to graphically illustrate how laboratories are historically performing within the MAPEP program. The data points (small 'dots') plot the bias (or z-score for organic constituents) of each of the analytes in each of the matrices for each of the studies for MAPEP since Series 12. The BLACK small horizontal line is the mean of the population of the bias shown for that analyte in the matrix. The red box is a typical "box plot" of the data.



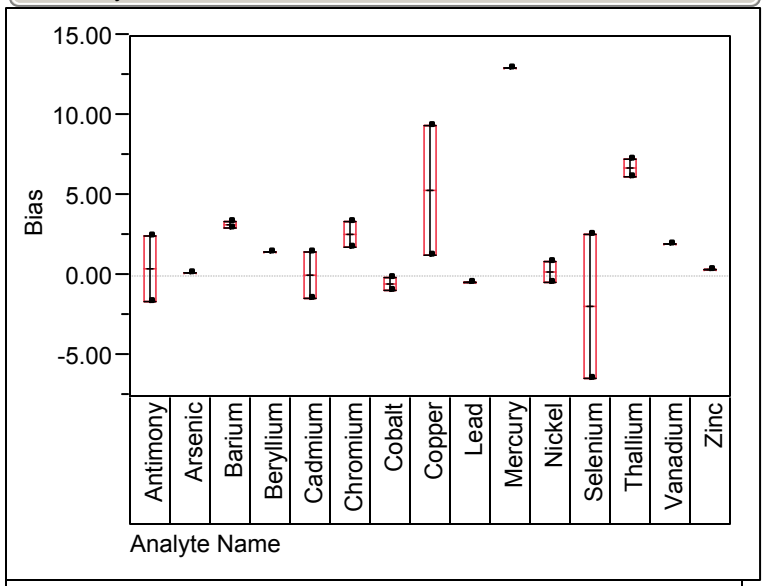
The box plots summarize the distribution of points for each analyte. The ends of the box are the 25th and 75th quantiles. The difference between the quartiles is the interquartile range. The line across the middle of the box identifies the median sample value. Each box has lines, sometimes called whiskers, that extend from each end. The whiskers extend from the ends of the end to the outermost data point that falls within the distances computed .

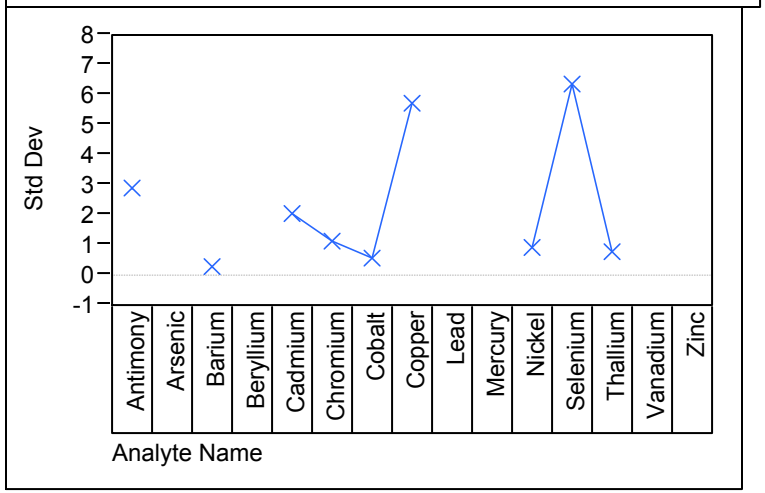
The box plot along with the laboratory bias data points and the mean visually illustrate the breadth of the distribution and where any potential outliers in the distribution might lie. The ideal visual representation would be to have a very small box plot on top of a very small distribution of data thus indicating very good precision. Accuracy would be reflected by having the mean bias very close to zero (i.e. the box plot overlaps zero at some point).

The Standard Deviation plot below the Bias plot is just that, the standard deviation of the % bias shown above. The ideal pot would be to have the standard deviation as small as possible.

Variability Gauge Lab Code=AALI01

Variability Chart for Bias



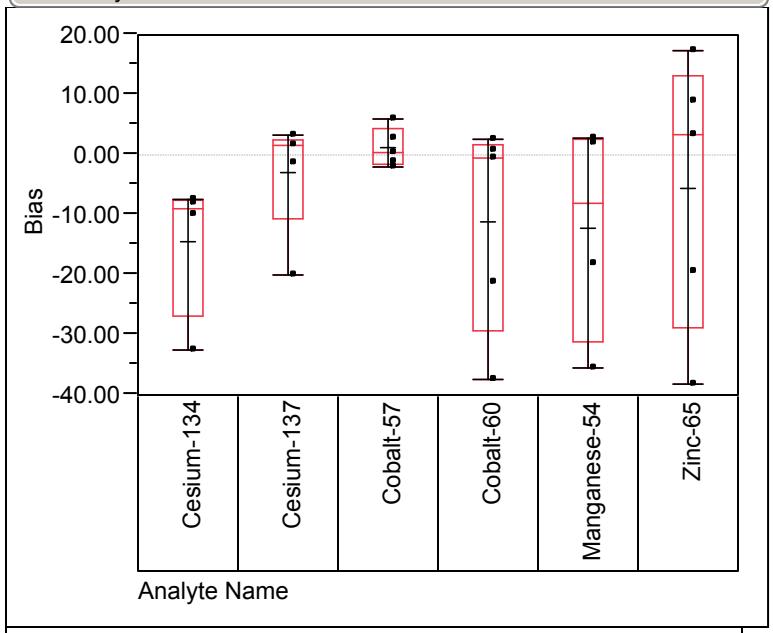


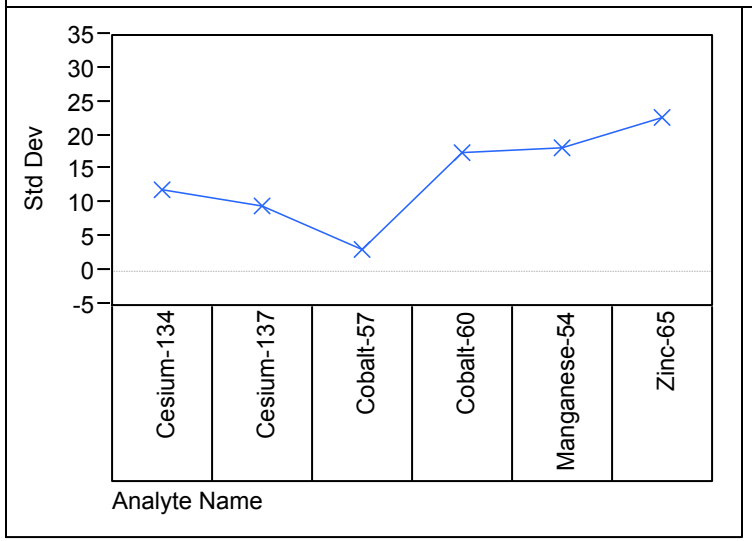
Variability Gauge Lab Code=ADEM01

Variability Chart for Bias

Variability Gauge Lab Code=ADEM01

Variability Chart for Bias



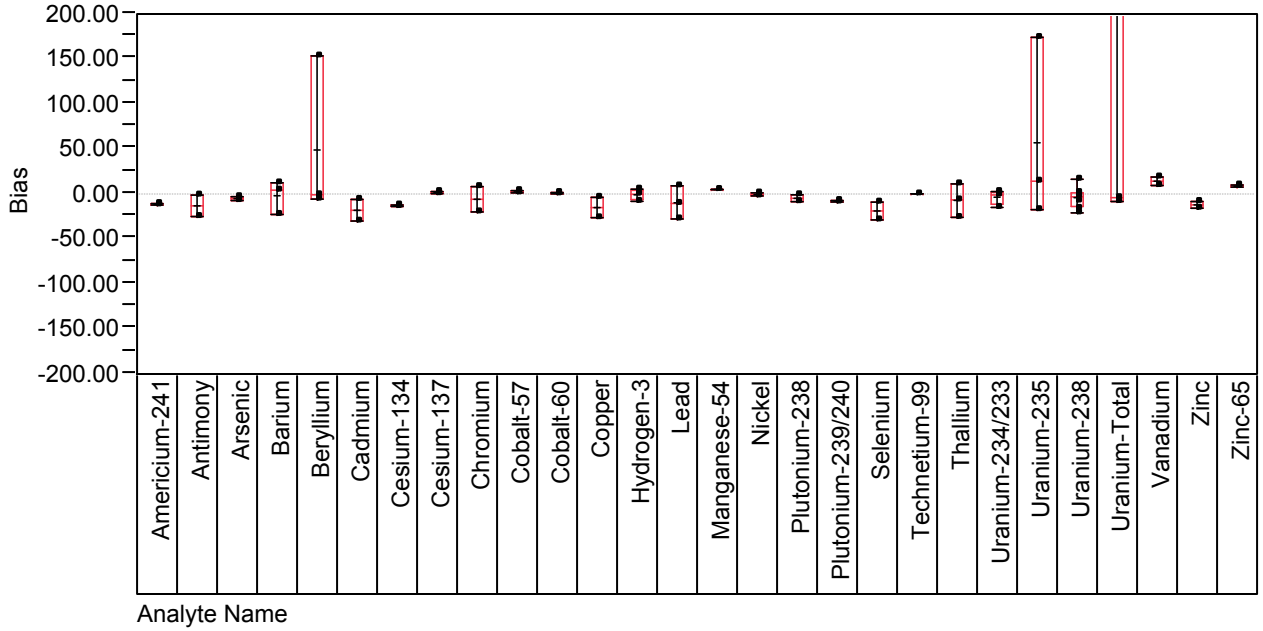


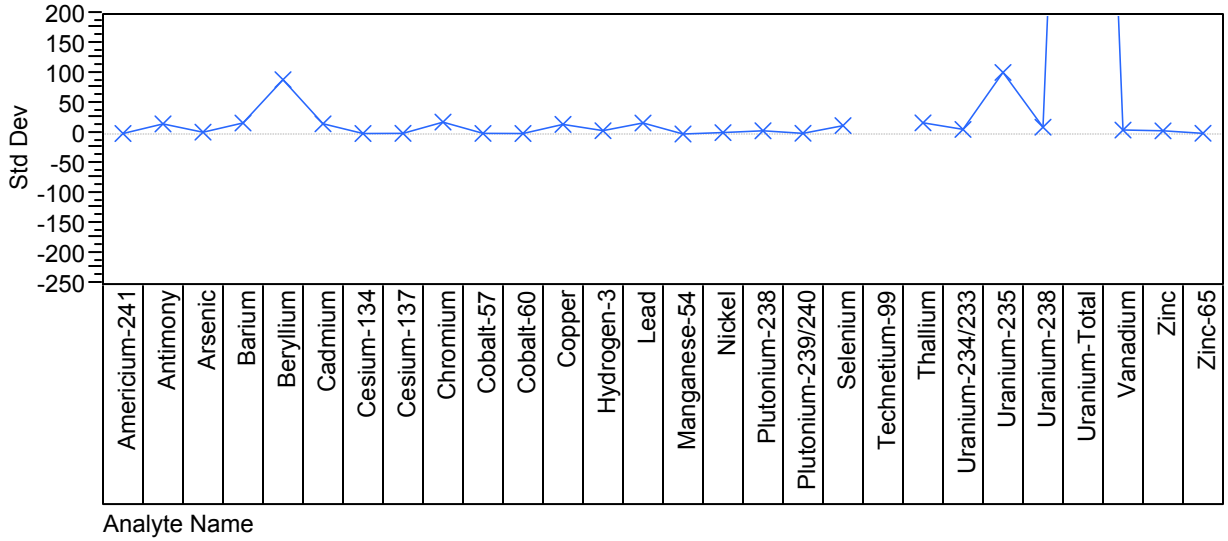
Variability Gauge Lab Code=AFOH01

Variability Chart for Bias

Variability Gauge Lab Code=AFOH01

Variability Chart for Bias



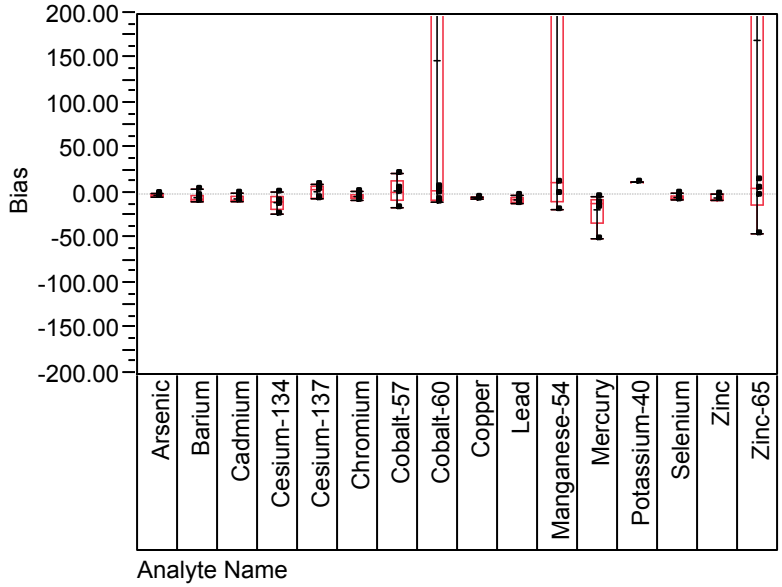


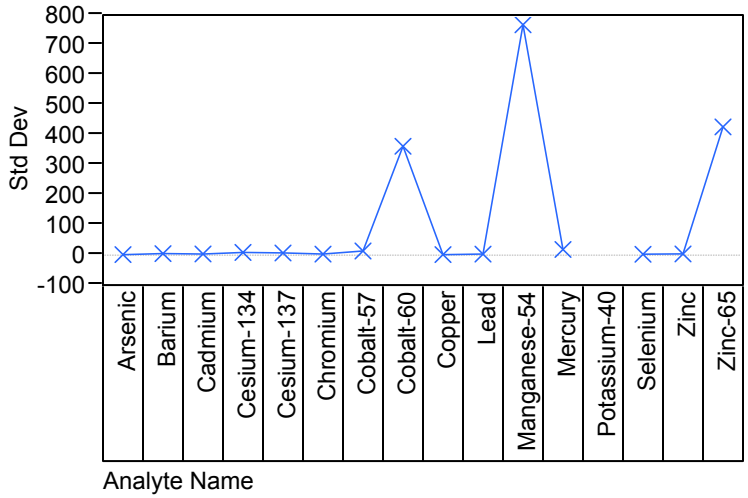
Variability Gauge Lab Code=ANLA01

Variability Chart for Bias

Variability Gauge Lab Code=ANLA01

Variability Chart for Bias



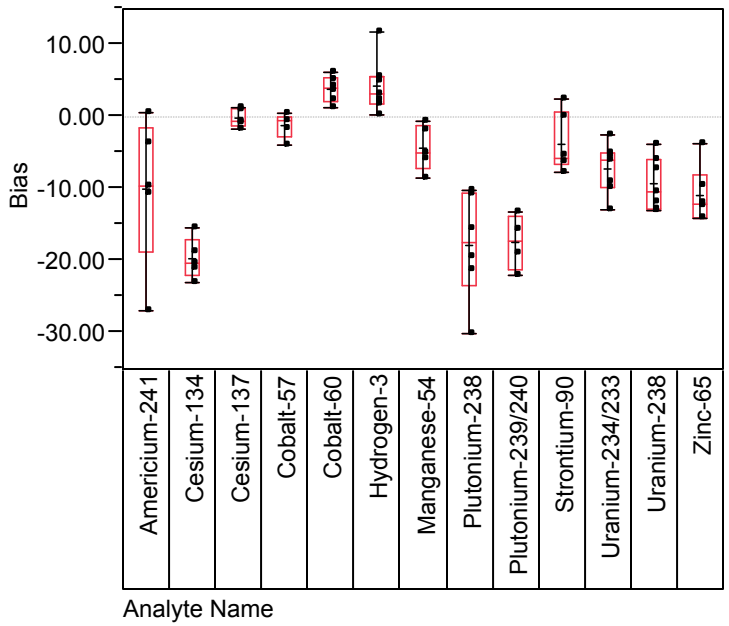


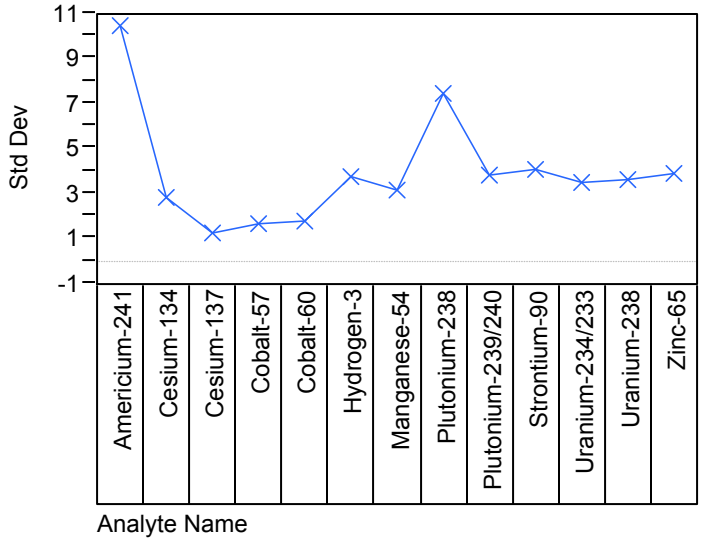
Variability Gauge Lab Code=ANLB01

Variability Chart for Bias

Variability Gauge Lab Code=ANLB01

Variability Chart for Bias



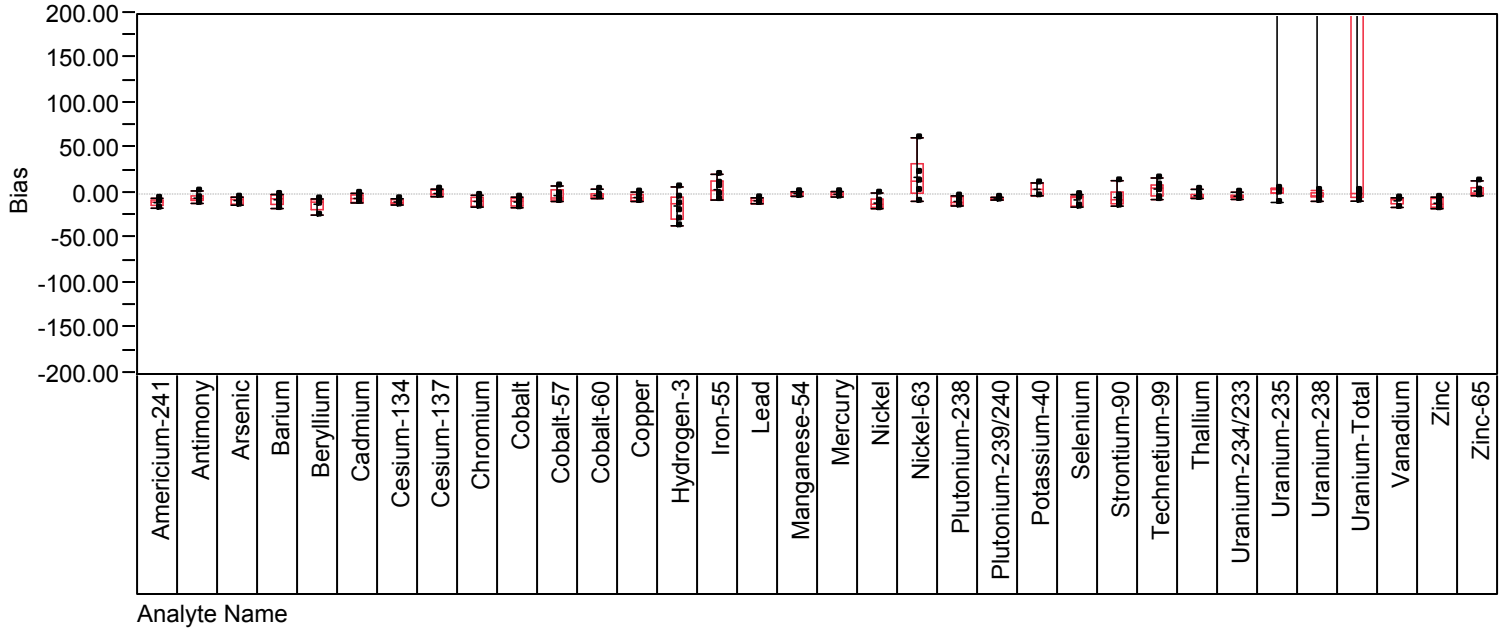


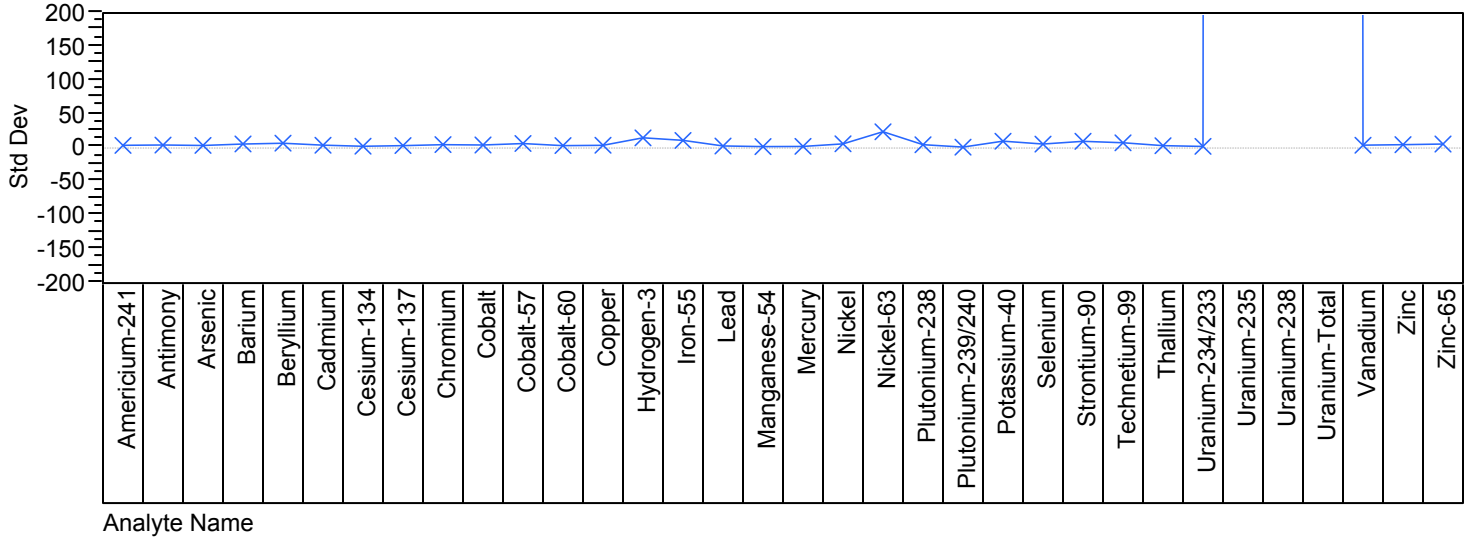
Variability Gauge Lab Code=ANTE01

Variability Chart for Bias

Variability Gauge Lab Code=ANTE01

Variability Chart for Bias



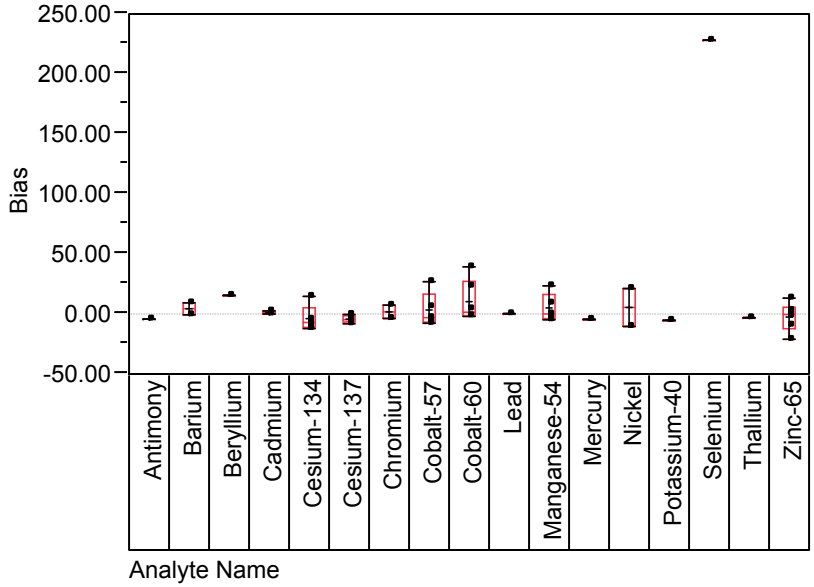


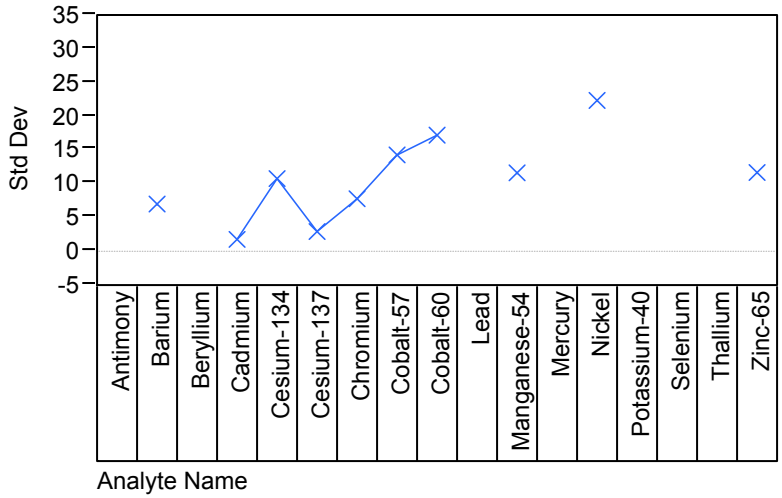
Variability Gauge Lab Code=ARGO01

Variability Chart for Bias

Variability Gauge Lab Code=ARGO01

Variability Chart for Bias



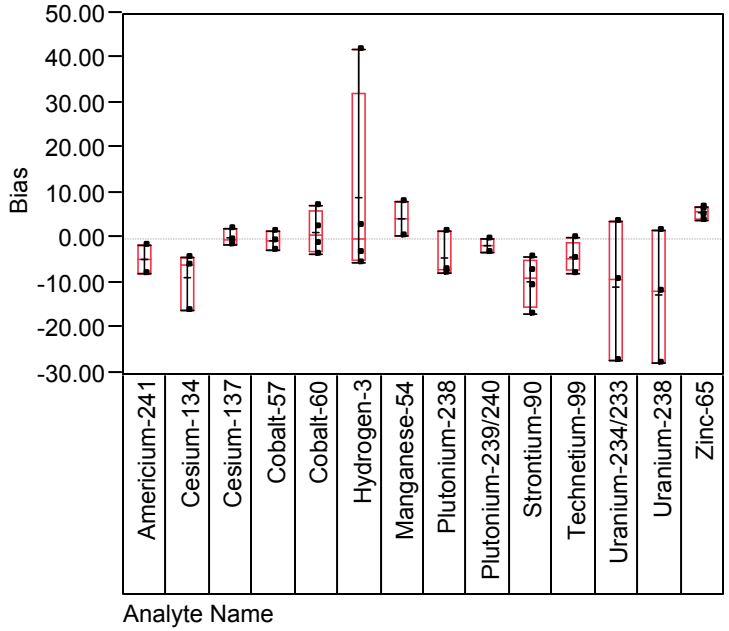


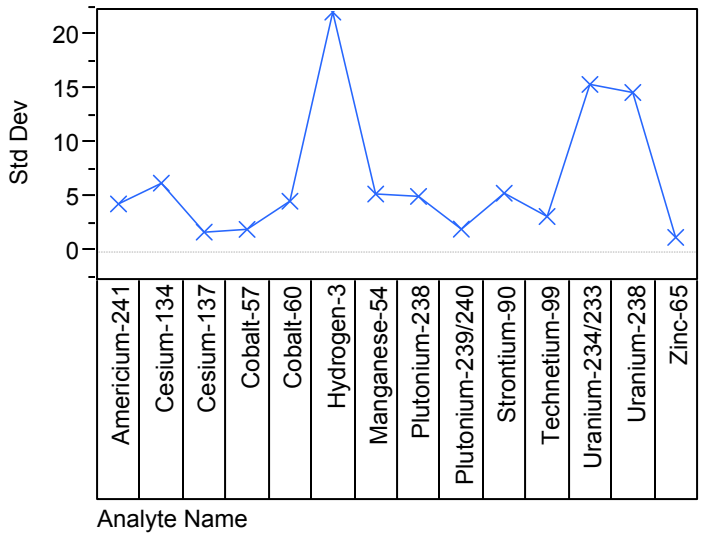
Variability Gauge Lab Code=ARPL01

Variability Chart for Bias

Variability Gauge Lab Code=ARPL01

Variability Chart for Bias



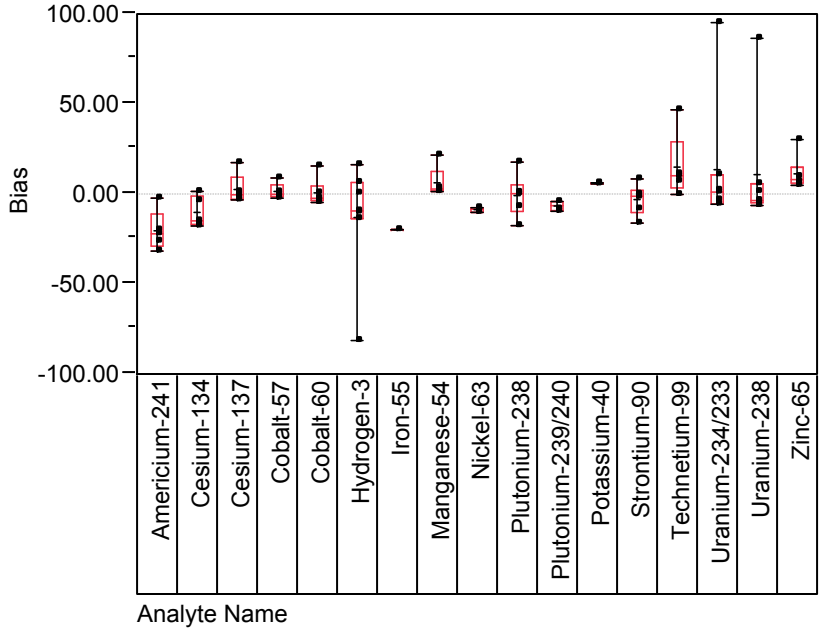


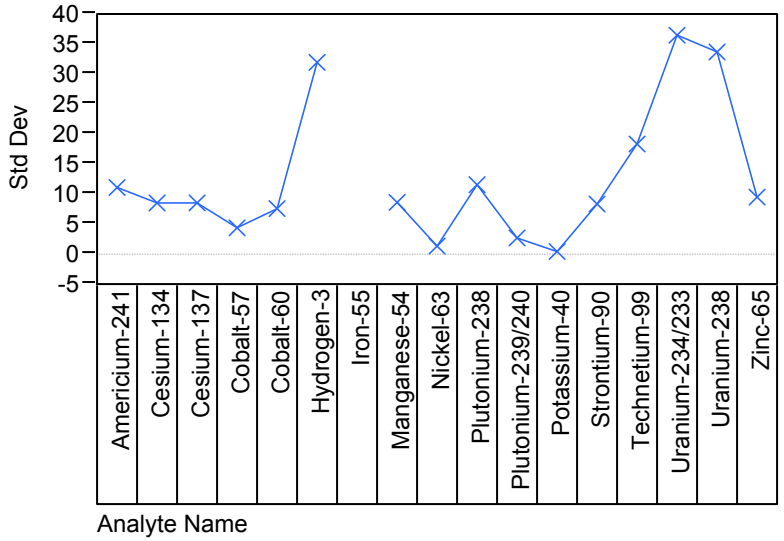
Variability Gauge Lab Code=ARSL01

Variability Chart for Bias

Variability Gauge Lab Code=ARSL01

Variability Chart for Bias



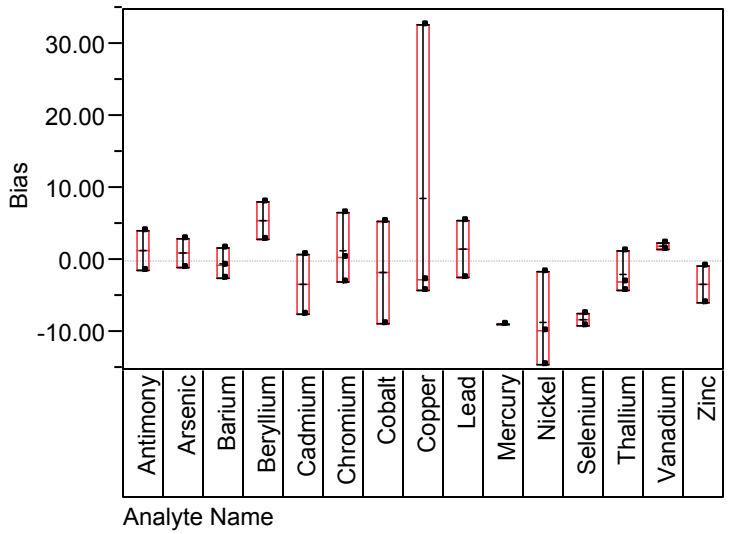


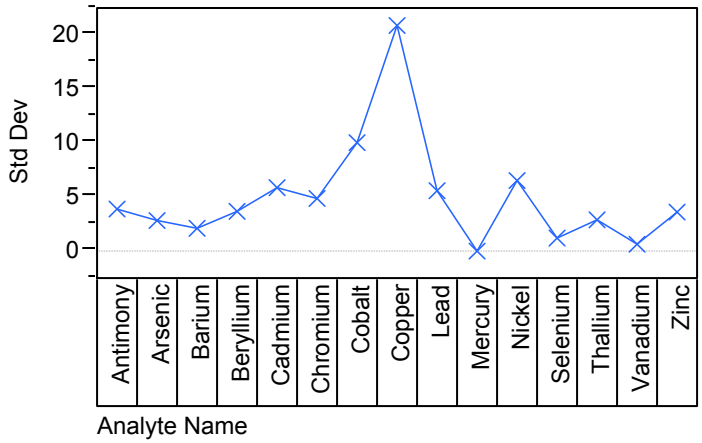
Variability Gauge Lab Code=ASHL01

Variability Chart for Bias

Variability Gauge Lab Code=ASHL01

Variability Chart for Bias



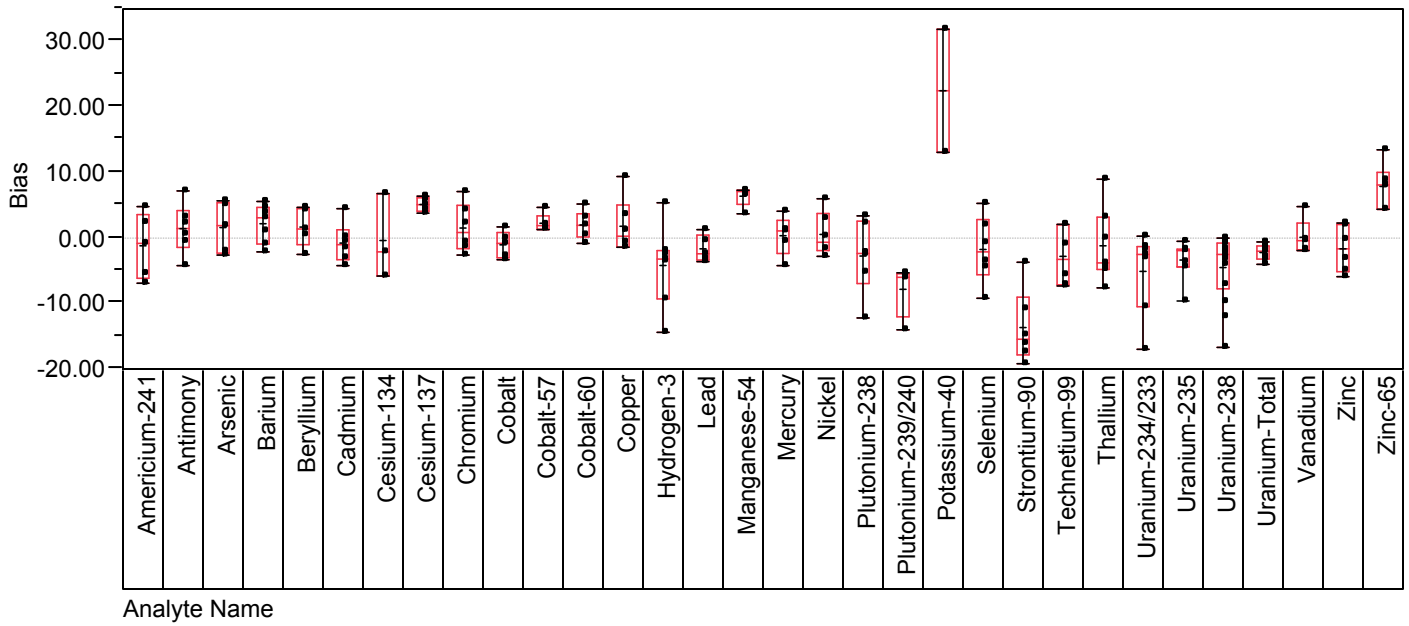


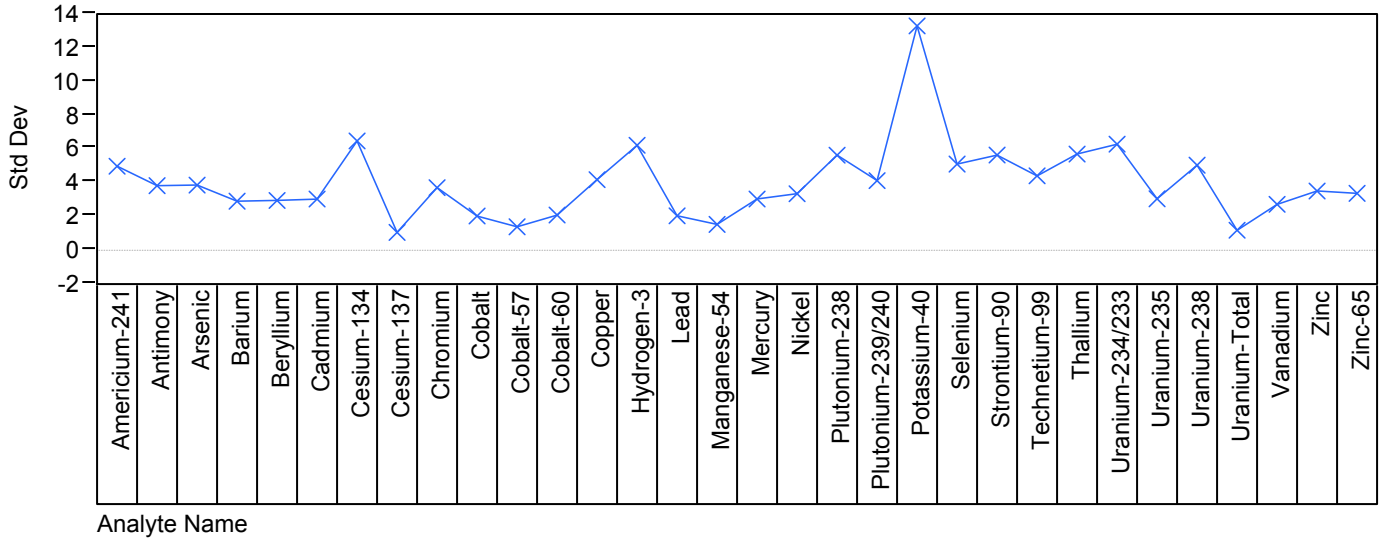
Variability Gauge Lab Code=AY1201

Variability Chart for Bias

Variability Gauge Lab Code=AY1201

Variability Chart for Bias



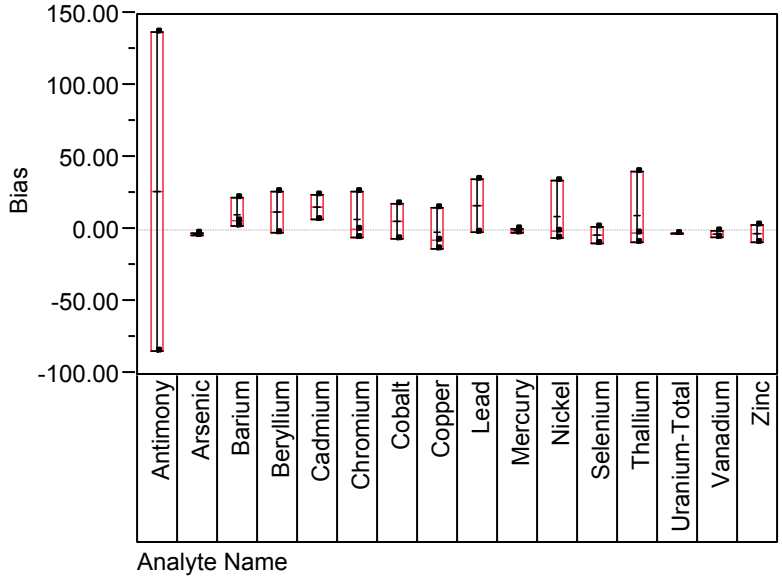


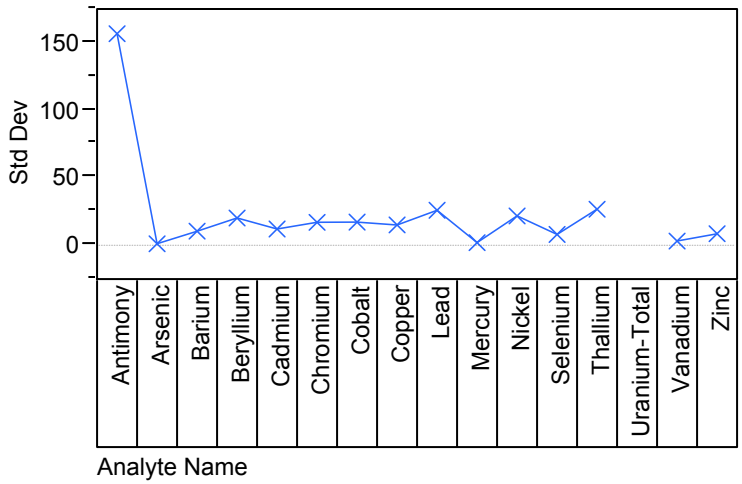
Variability Gauge Lab Code=BNEL01

Variability Chart for Bias

Variability Gauge Lab Code=BNEL01

Variability Chart for Bias



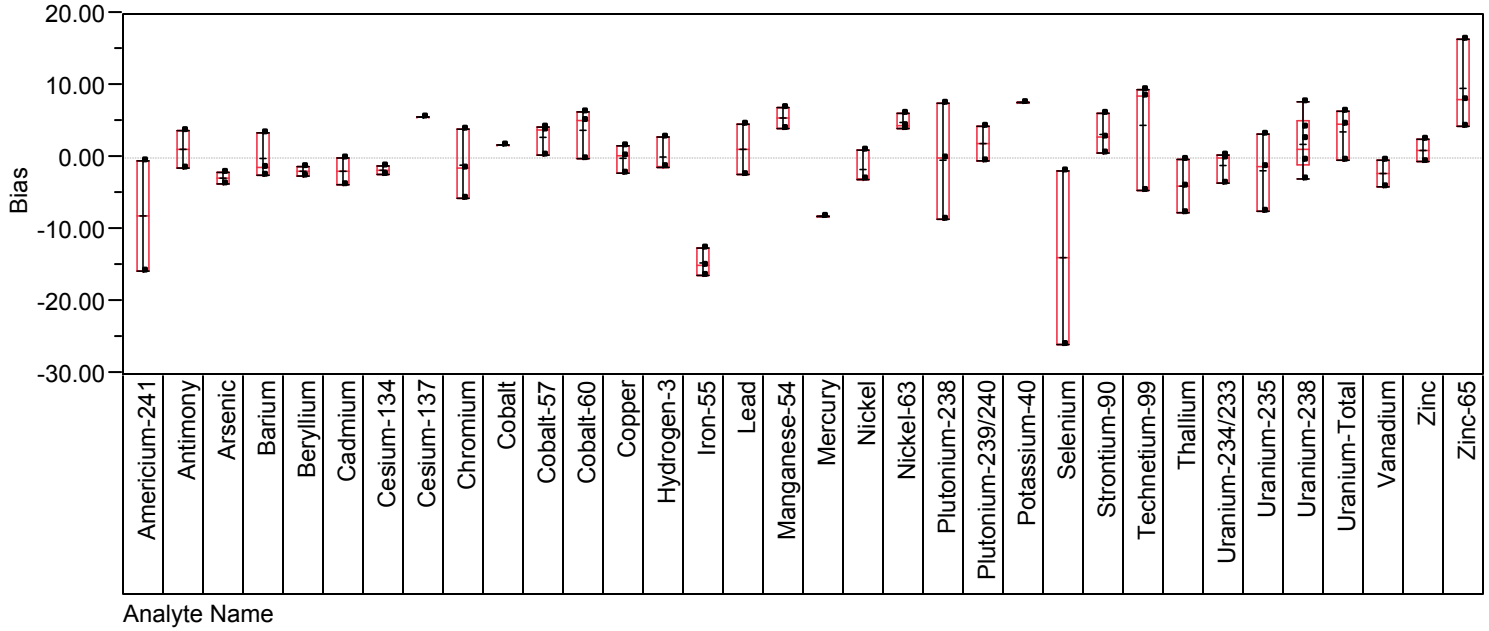


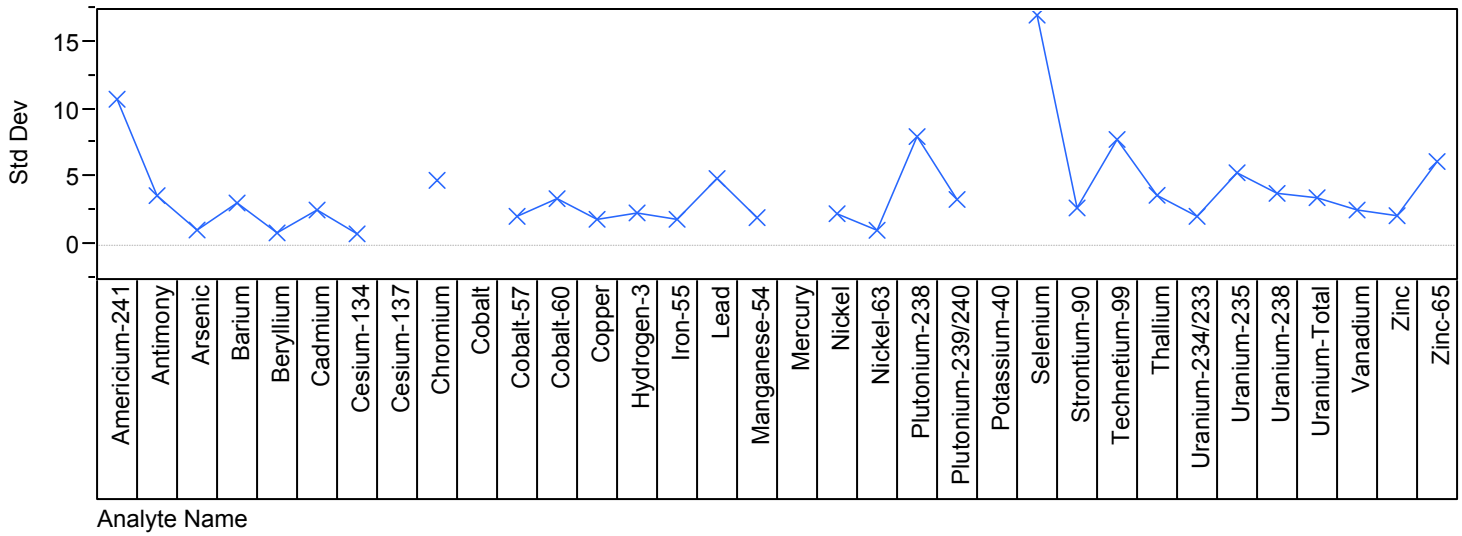
Variability Gauge Lab Code=CDHS01

Variability Chart for Bias

Variability Gauge Lab Code=CDHS01

Variability Chart for Bias



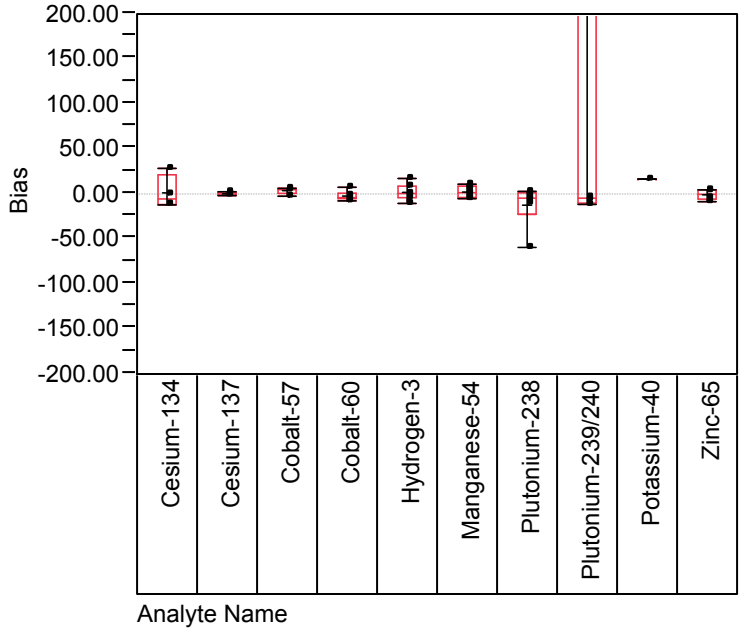


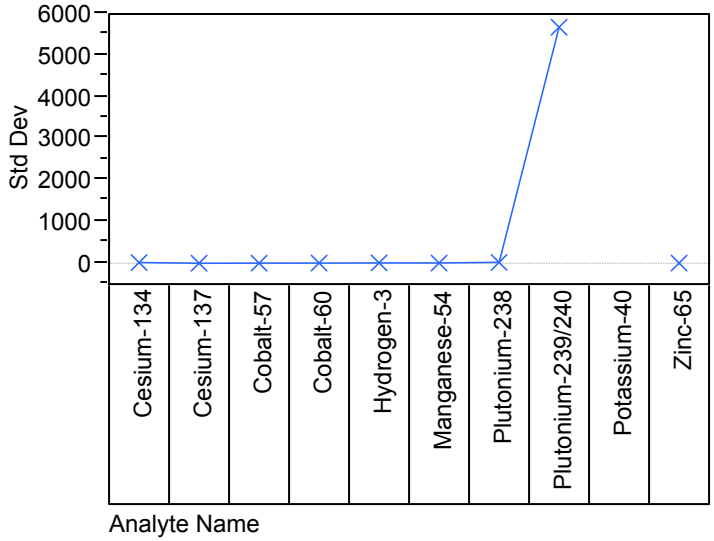
Variability Gauge Lab Code=CESL01

Variability Chart for Bias

Variability Gauge Lab Code=CESL01

Variability Chart for Bias



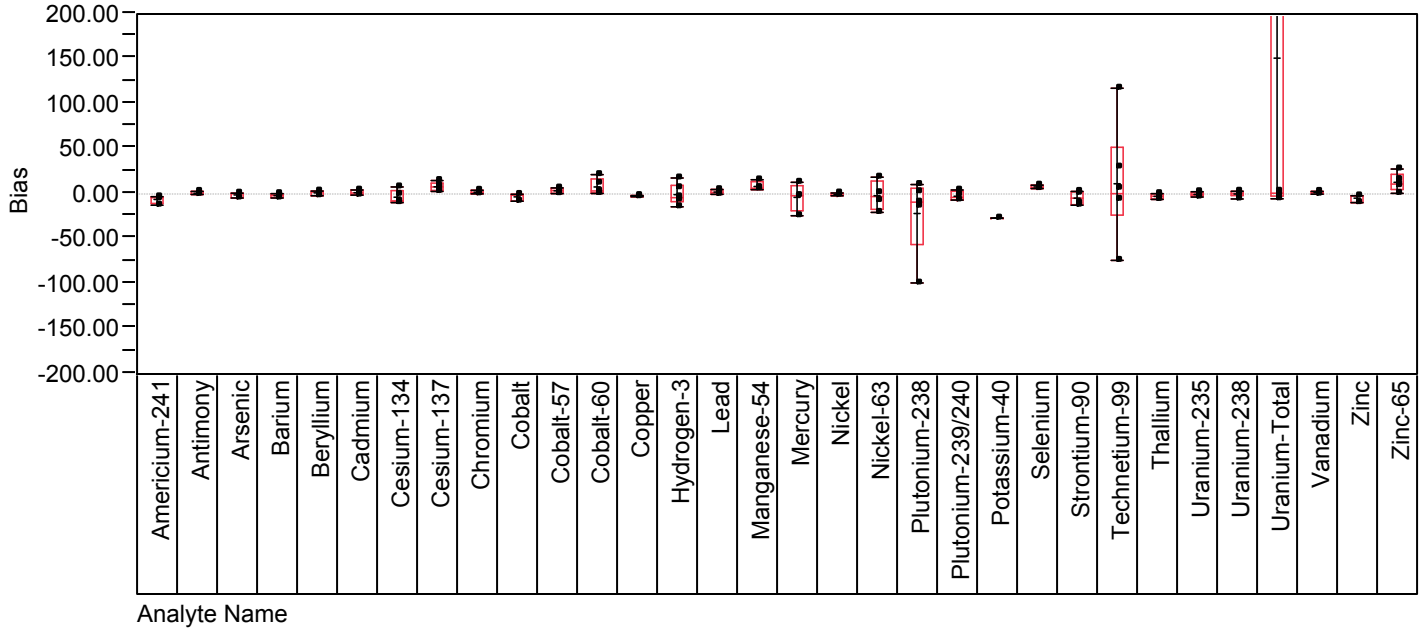


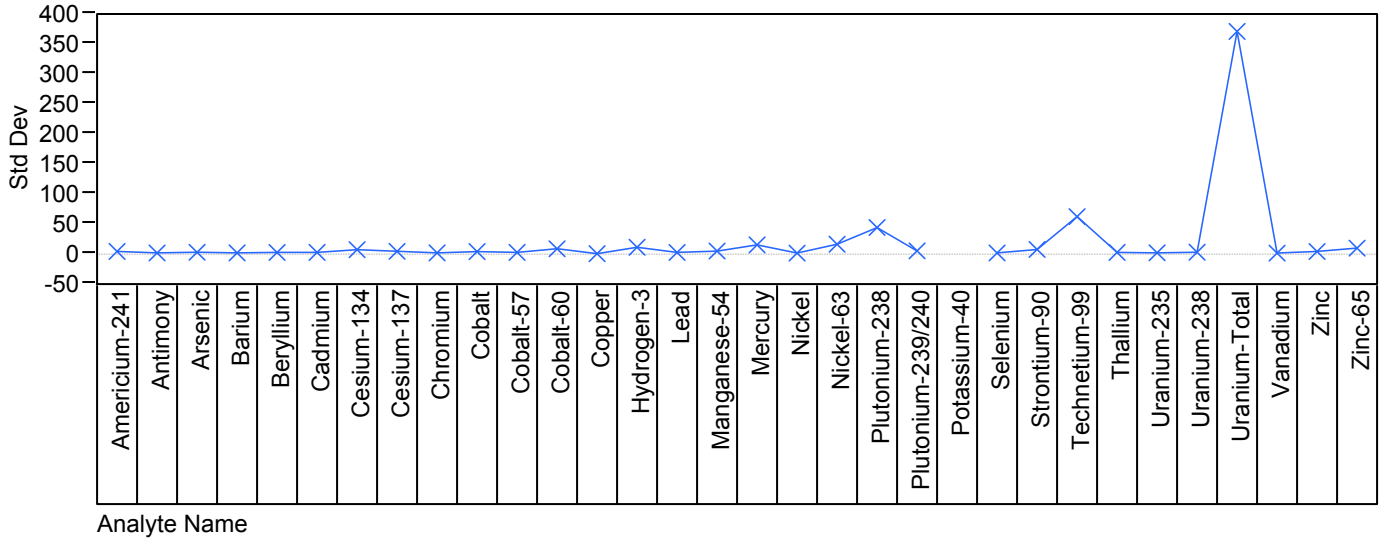
Variability Gauge Lab Code=CHMH01

Variability Chart for Bias

Variability Gauge Lab Code=CHMH01

Variability Chart for Bias



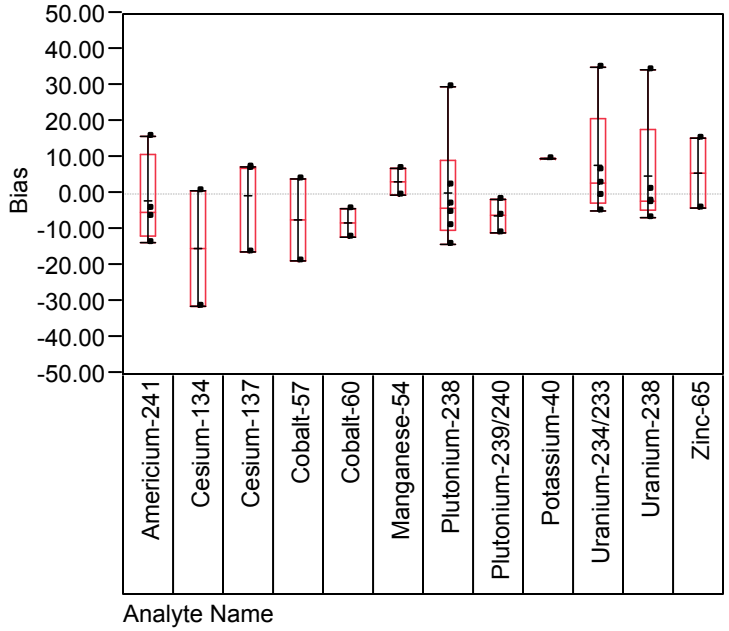


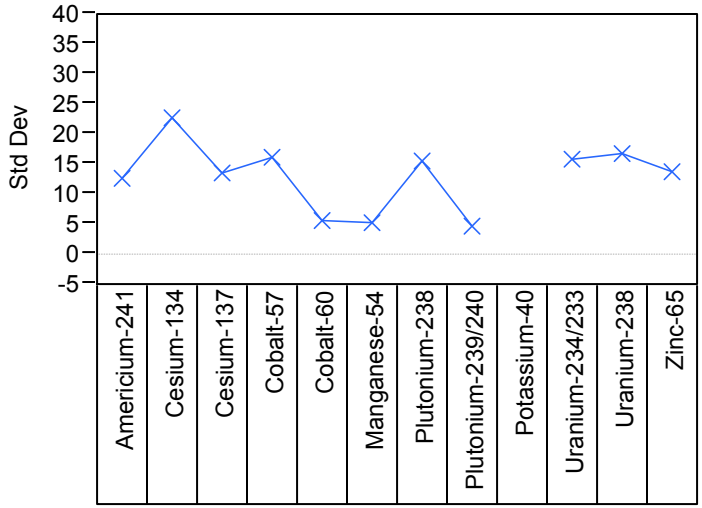
Variability Gauge Lab Code=CMRC01

Variability Chart for Bias

Variability Gauge Lab Code=CMRC01

Variability Chart for Bias



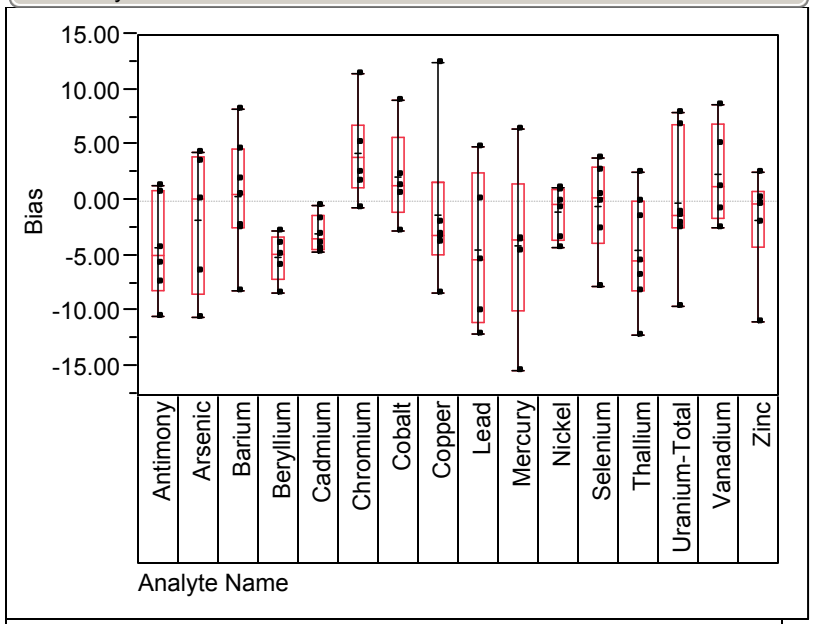


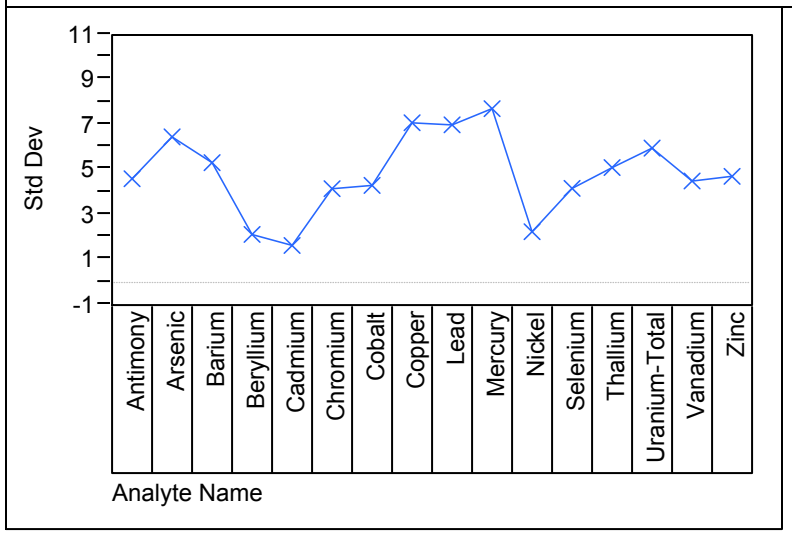
Variability Gauge Lab Code=CORE02

Variability Chart for Bias

Variability Gauge Lab Code=CORE02

Variability Chart for Bias



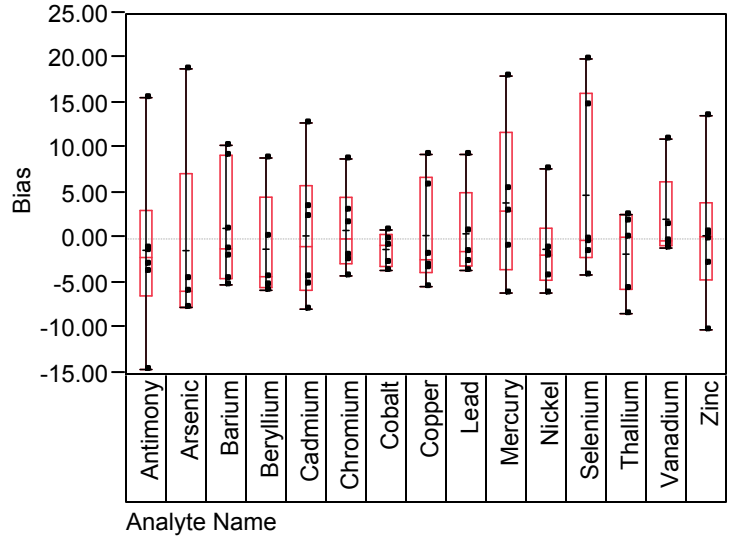


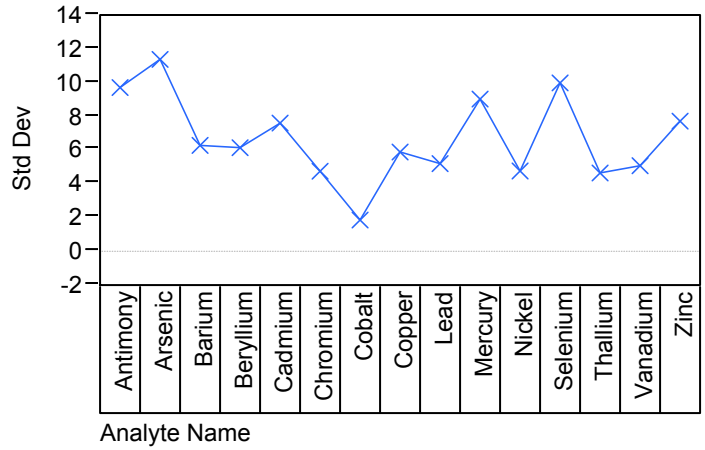
Variability Gauge Lab Code=DAFI01

Variability Chart for Bias

Variability Gauge Lab Code=DAFI01

Variability Chart for Bias



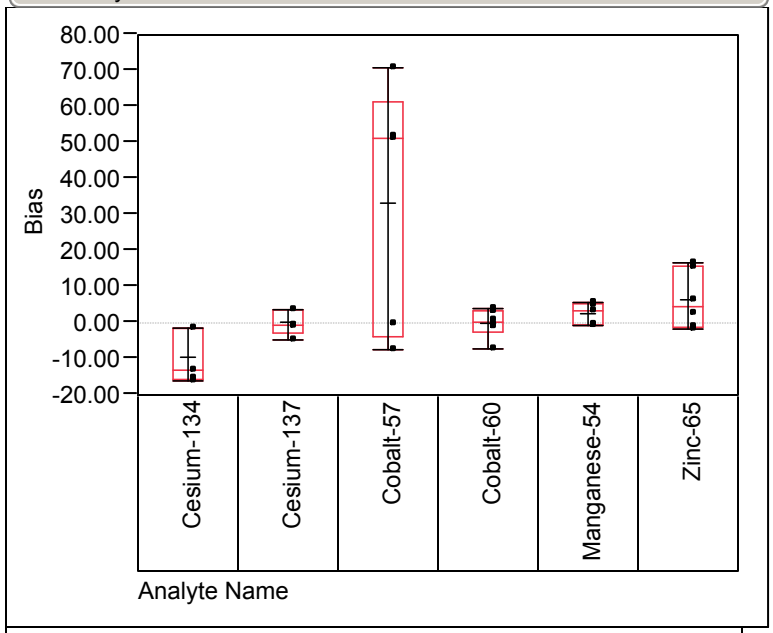


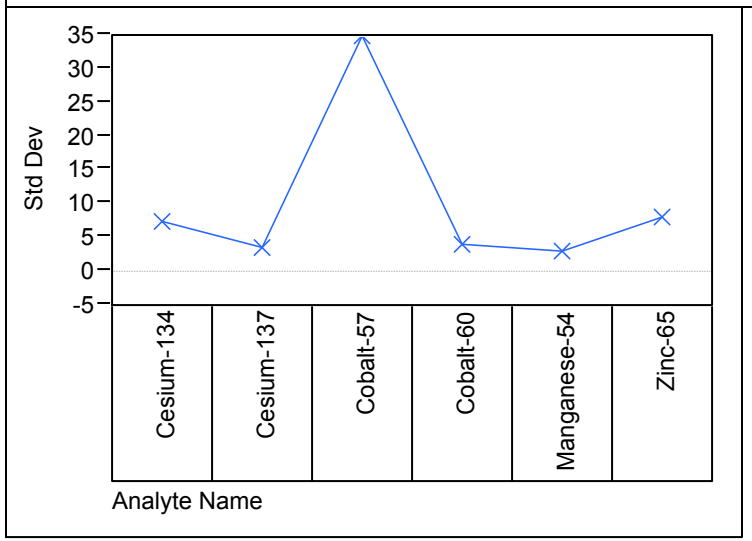
Variability Gauge Lab Code=DEHS01

Variability Chart for Bias

Variability Gauge Lab Code=DEHS01

Variability Chart for Bias



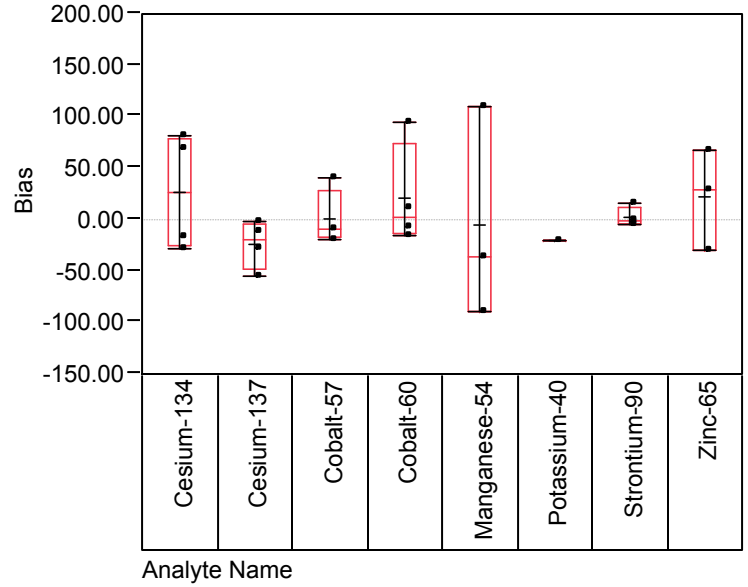


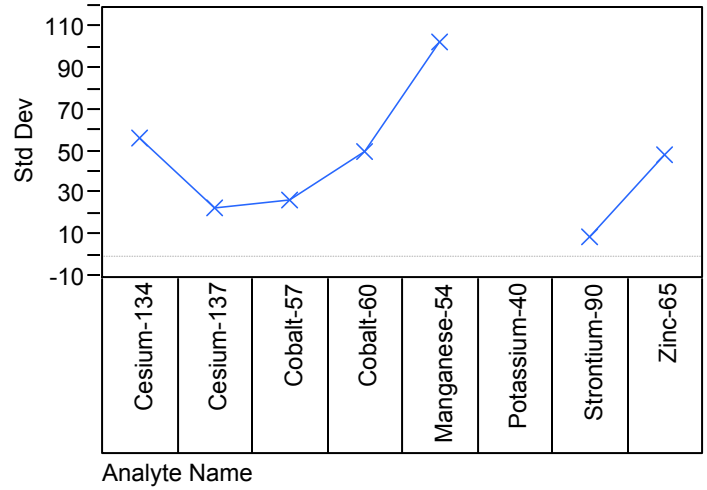
Variability Gauge Lab Code=DLEA01

Variability Chart for Bias

Variability Gauge Lab Code=DLEA01

Variability Chart for Bias



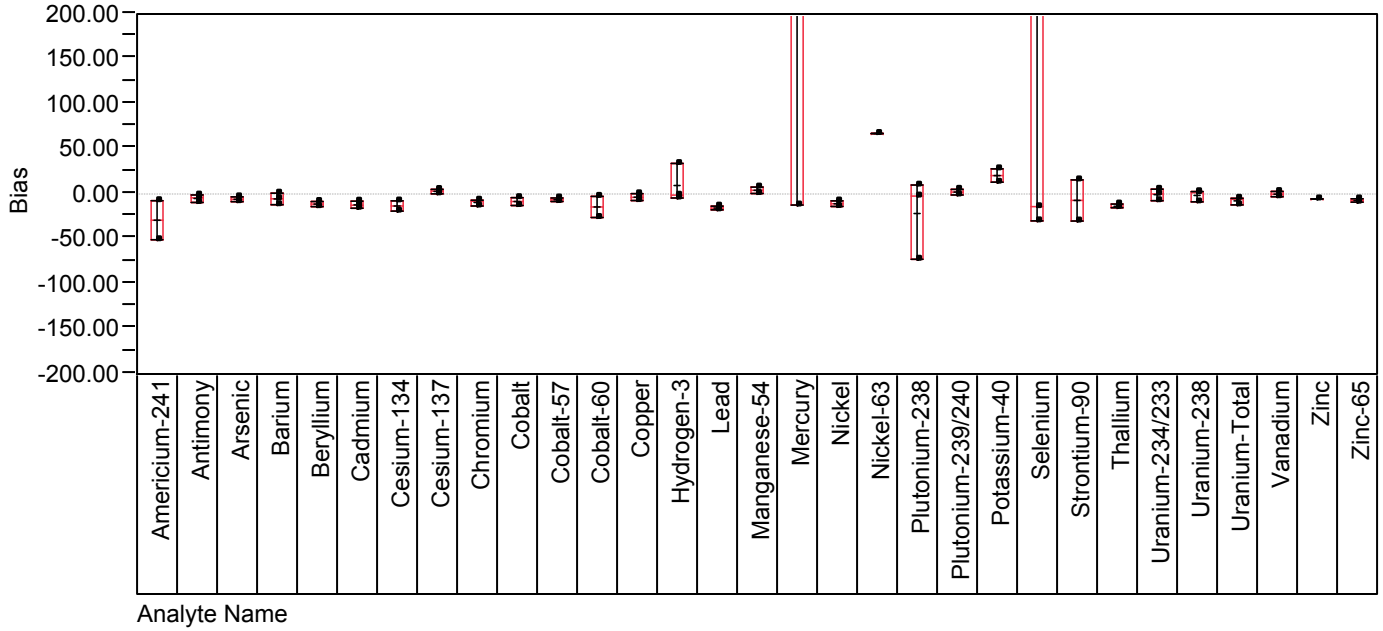


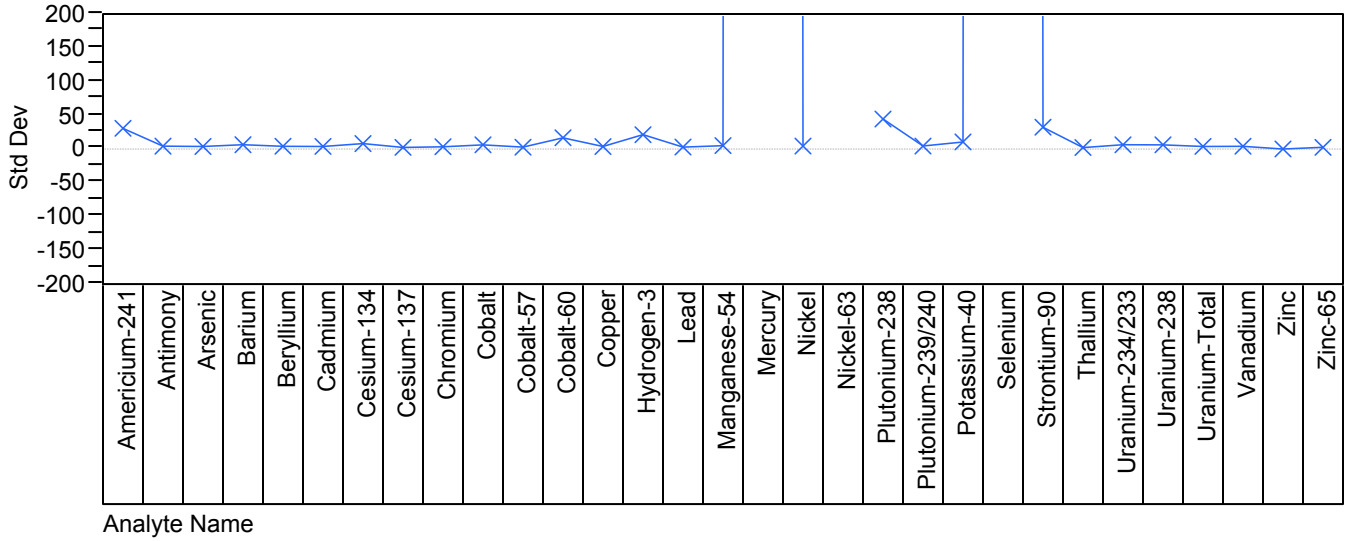
Variability Gauge Lab Code=DPHE01

Variability Chart for Bias

Variability Gauge Lab Code=DPHE01

Variability Chart for Bias



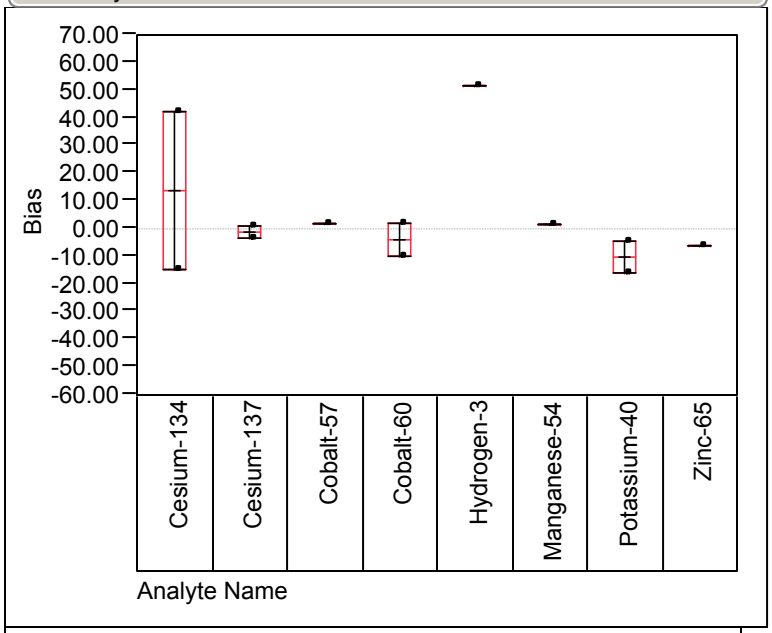


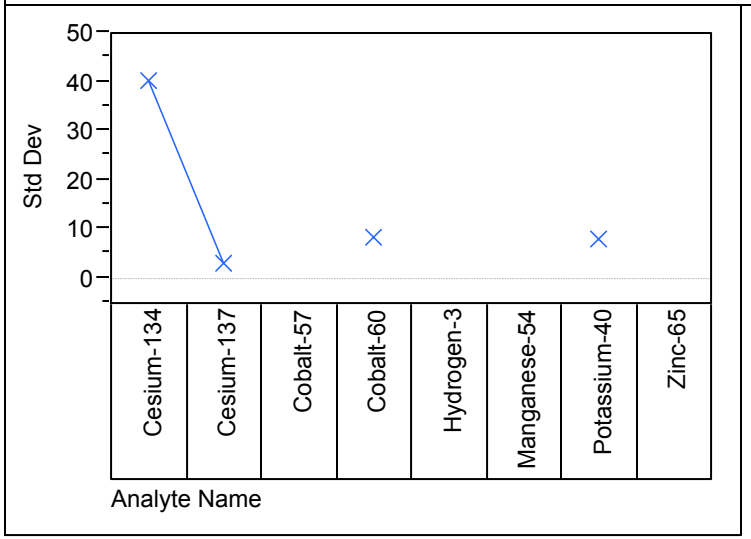
Variability Gauge Lab Code=DRMG01

Variability Chart for Bias

Variability Gauge Lab Code=DRMG01

Variability Chart for Bias



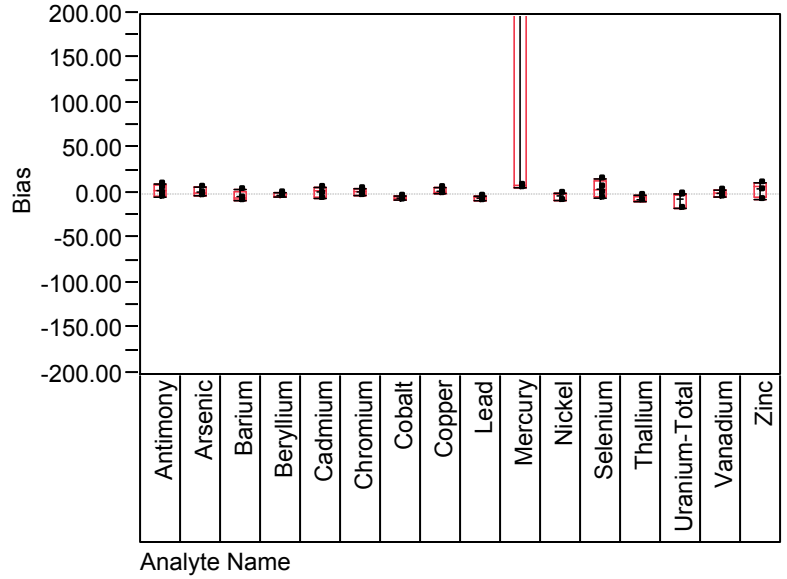


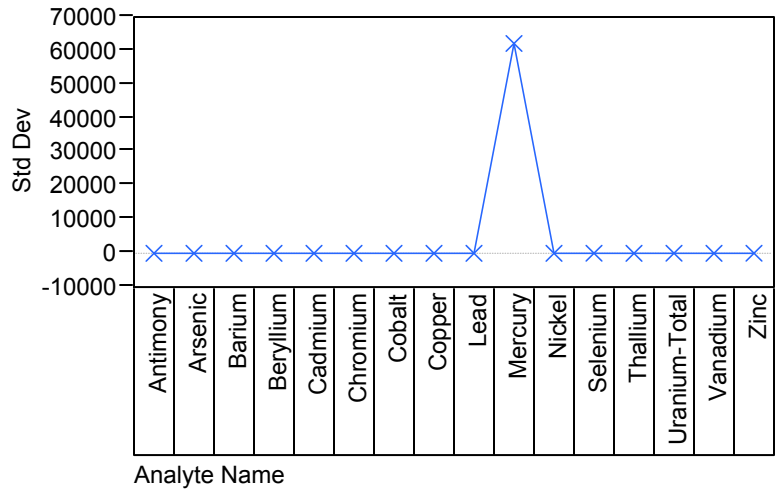
Variability Gauge Lab Code=EMAX01

Variability Chart for Bias

Variability Gauge Lab Code=EMAX01

Variability Chart for Bias



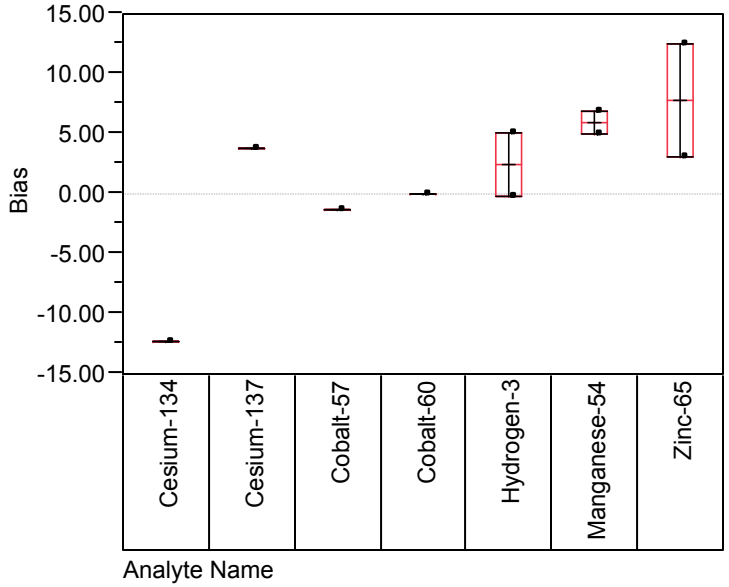


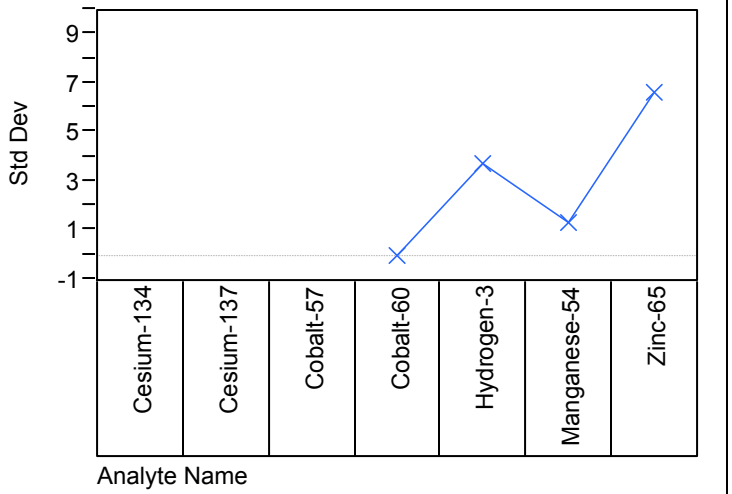
Variability Gauge Lab Code=ENES01

Variability Chart for Bias

Variability Gauge Lab Code=ENES01

Variability Chart for Bias



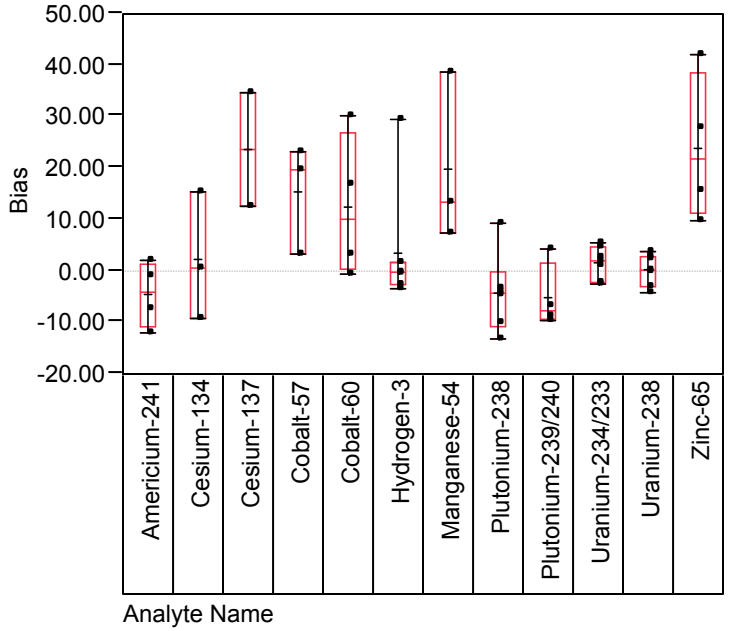


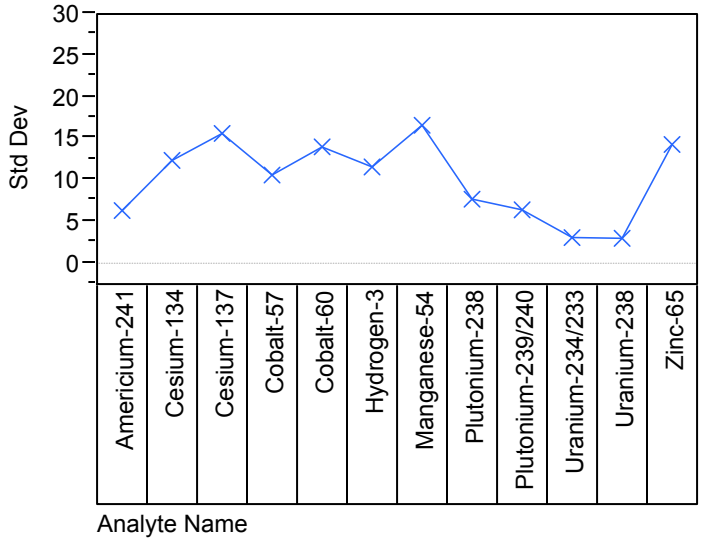
Variability Gauge Lab Code=EPAL01

Variability Chart for Bias

Variability Gauge Lab Code=EPAL01

Variability Chart for Bias



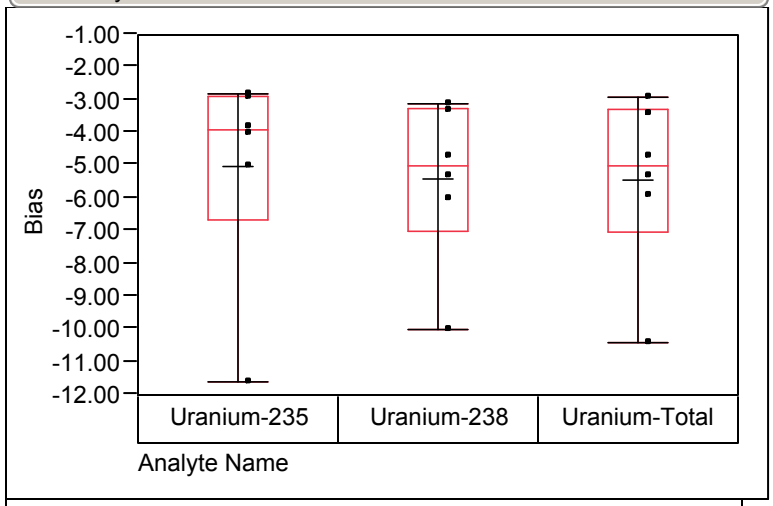


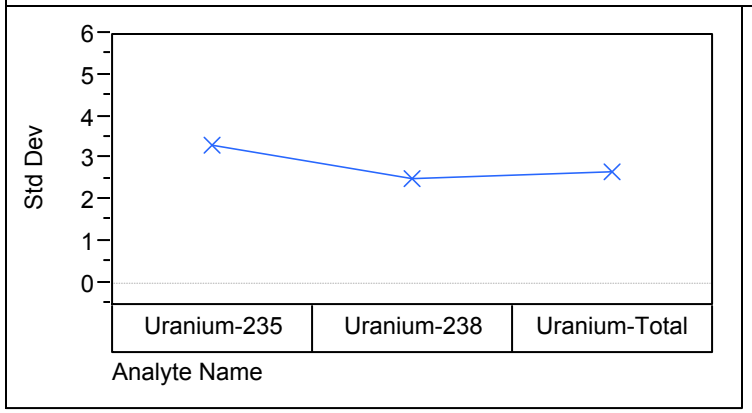
Variability Gauge Lab Code=ERAD01

Variability Chart for Bias

Variability Gauge Lab Code=ERAD01

Variability Chart for Bias



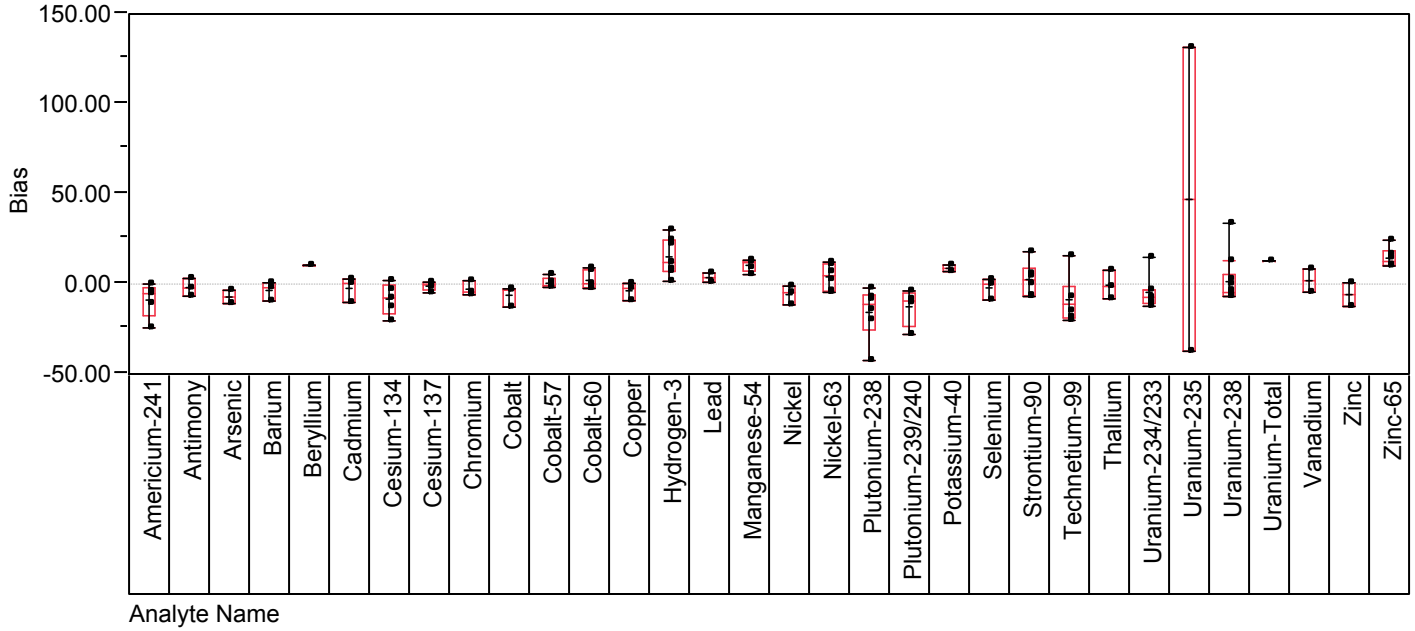


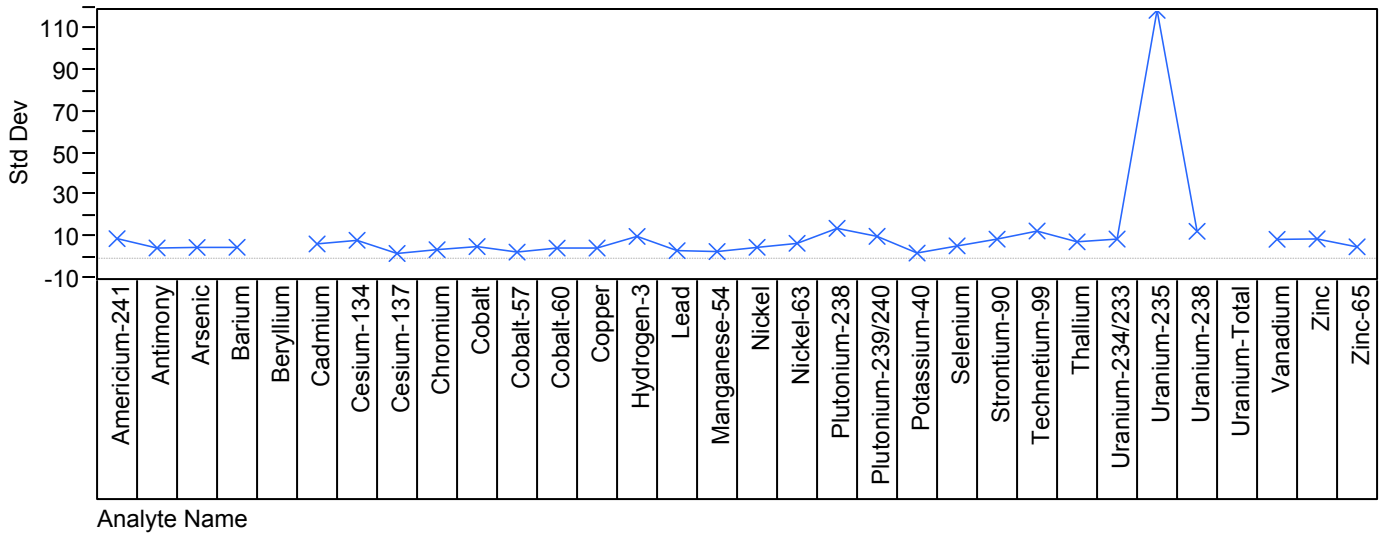
Variability Gauge Lab Code=ERCL01

Variability Chart for Bias

Variability Gauge Lab Code=ERCL01

Variability Chart for Bias



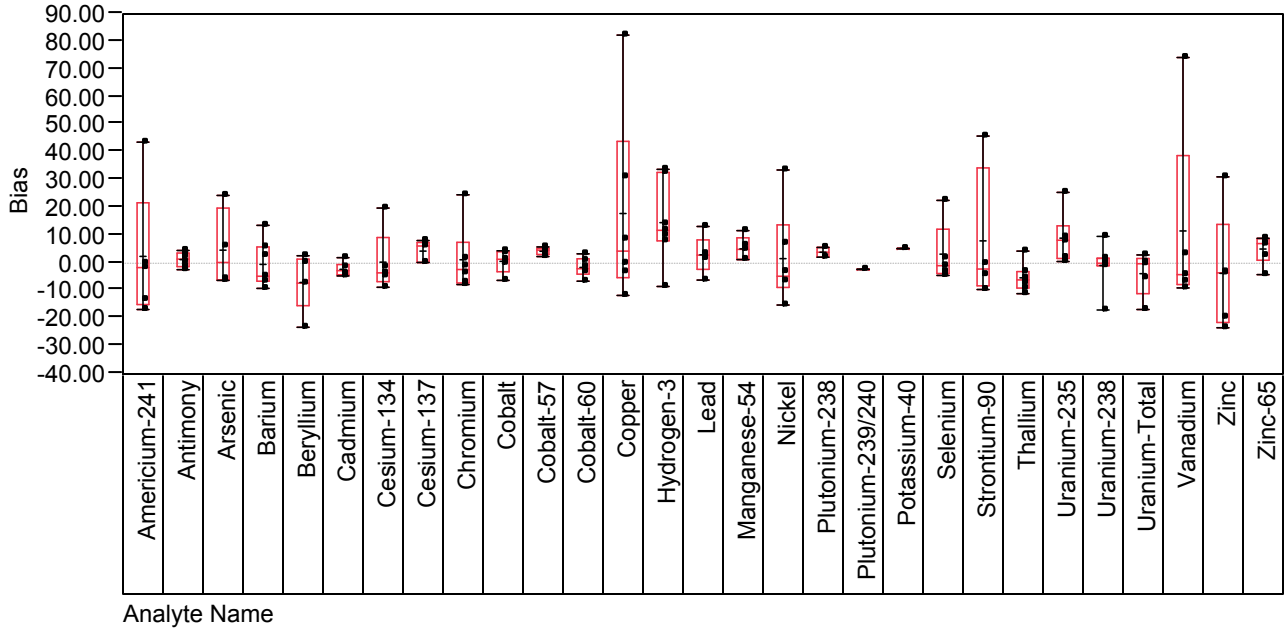


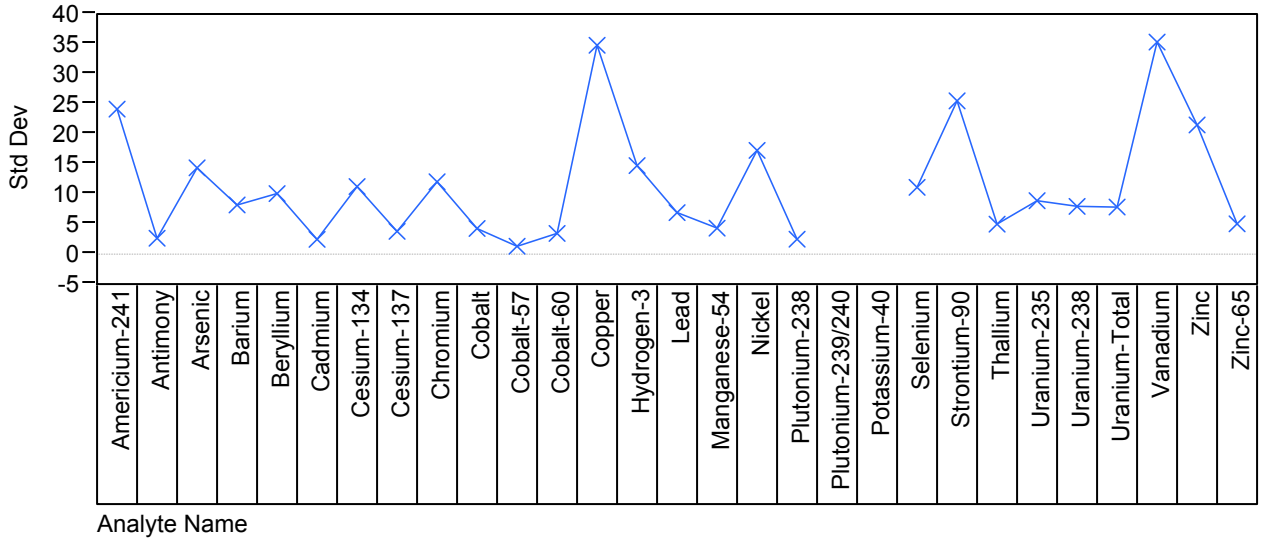
Variability Gauge Lab Code=ERHD99

Variability Chart for Bias

Variability Gauge Lab Code=ERHD99

Variability Chart for Bias



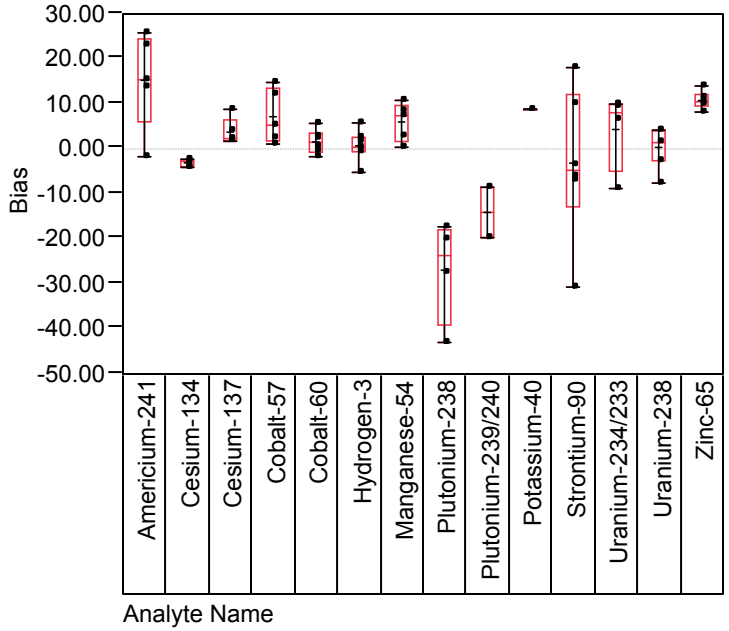


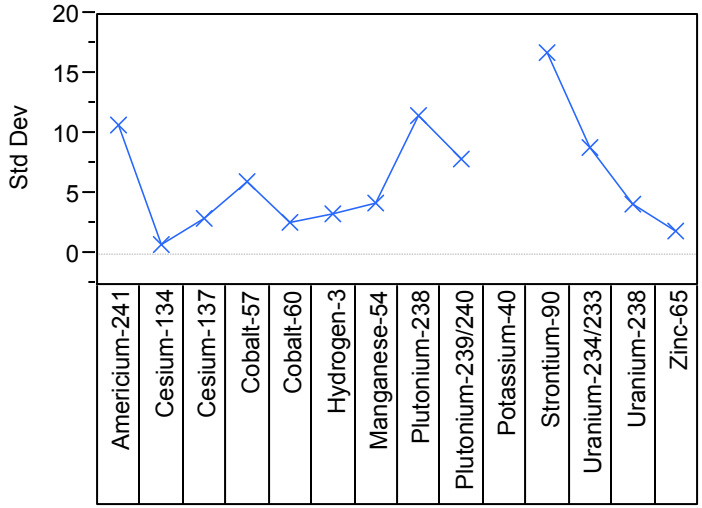
Variability Gauge Lab Code=ERLG01

Variability Chart for Bias

Variability Gauge Lab Code=ERLG01

Variability Chart for Bias



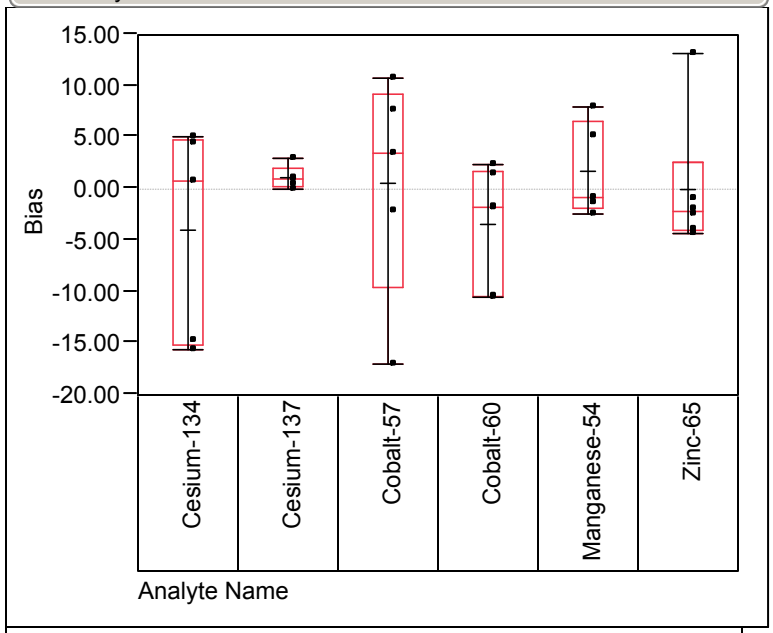


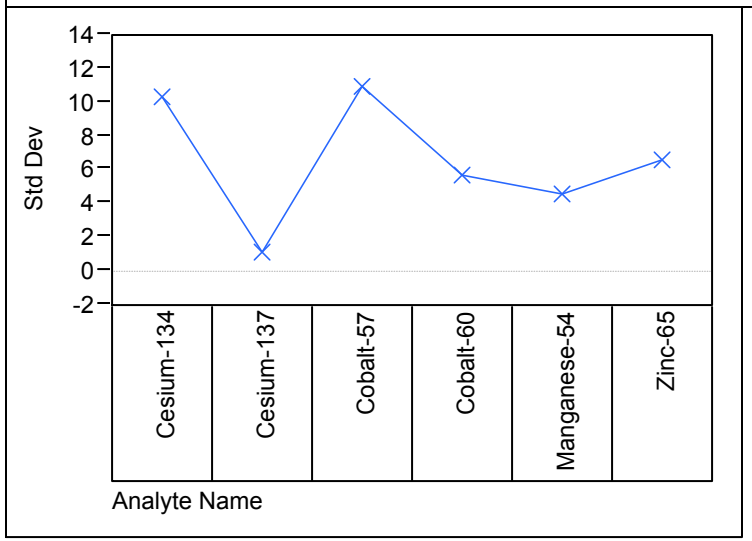
Variability Gauge Lab Code=ERPD99

Variability Chart for Bias

Variability Gauge Lab Code=ERPD99

Variability Chart for Bias



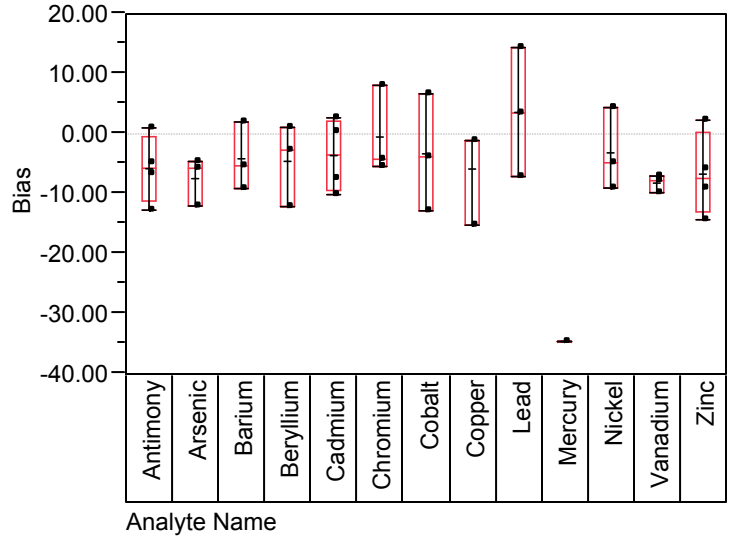


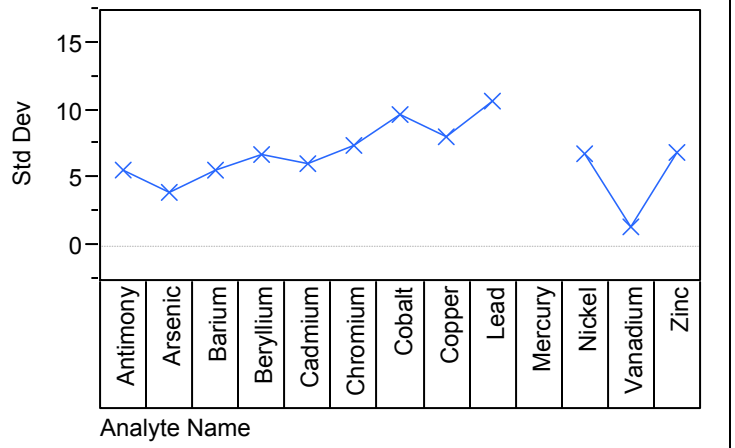
Variability Gauge Lab Code=ESCQ99

Variability Chart for Bias

Variability Gauge Lab Code=ESCQ99

Variability Chart for Bias



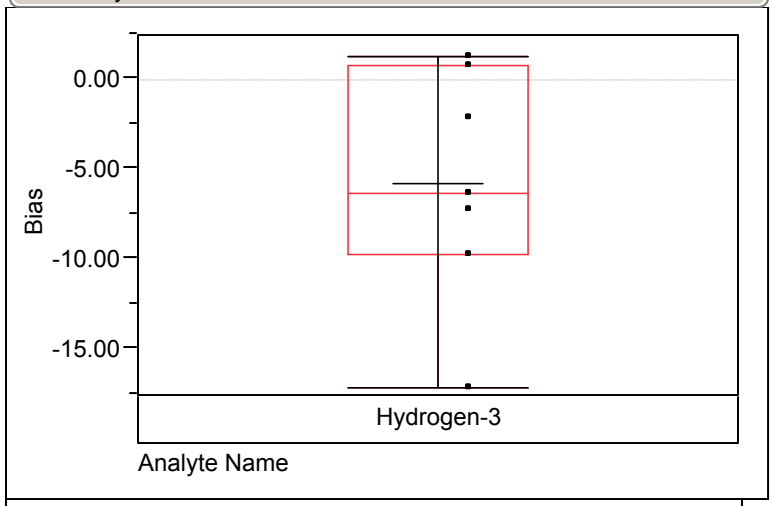


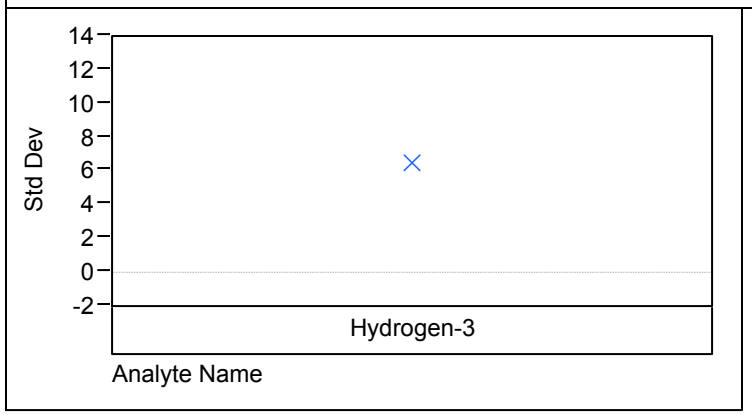
Variability Gauge Lab Code=ESDE01

Variability Chart for Bias

Variability Gauge Lab Code=ESDE01

Variability Chart for Bias



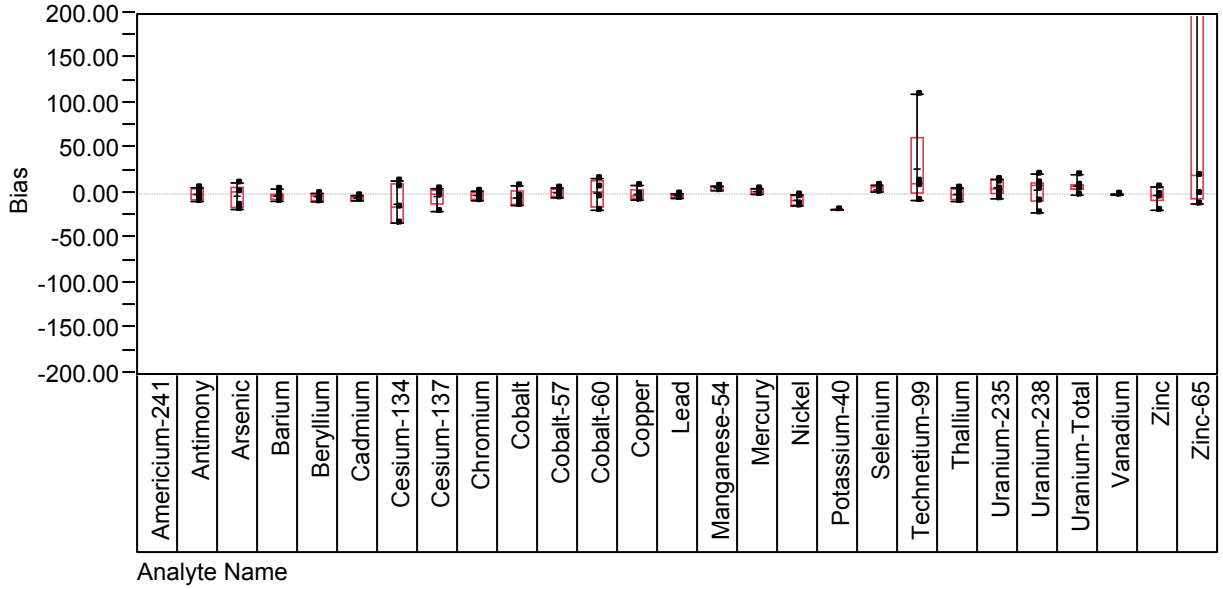


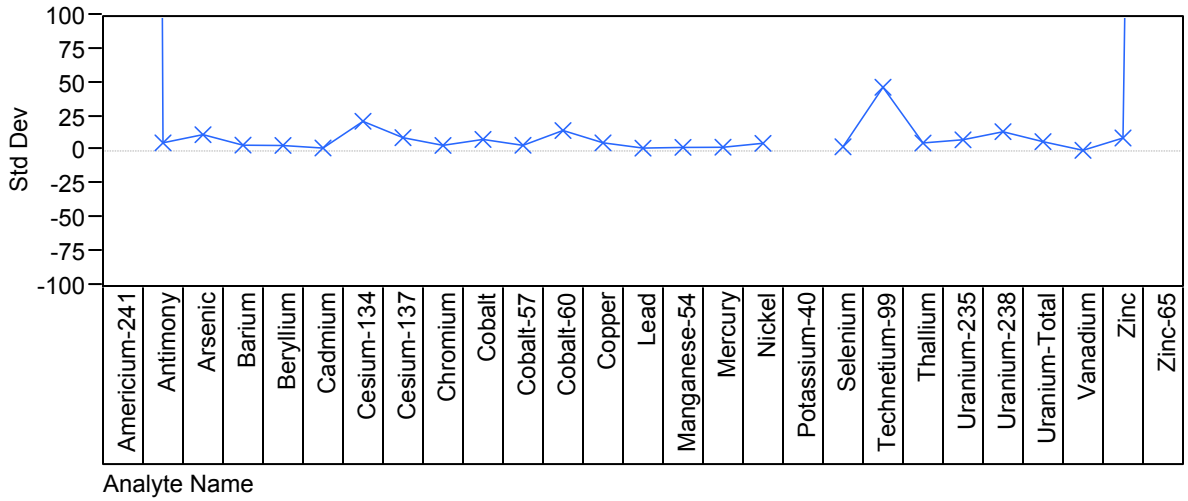
Variability Gauge Lab Code=ETTP01

Variability Chart for Bias

Variability Gauge Lab Code=ETTP01

Variability Chart for Bias



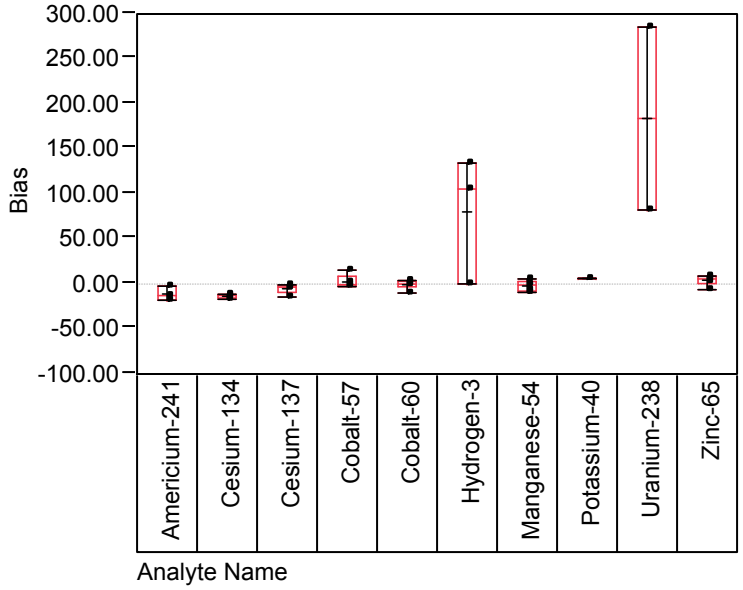


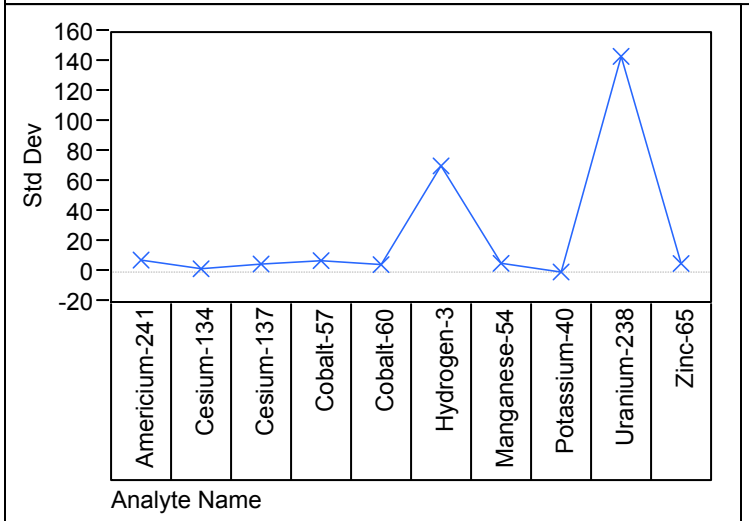
Variability Gauge Lab Code=EULC01

Variability Chart for Bias

Variability Gauge Lab Code=EULC01

Variability Chart for Bias



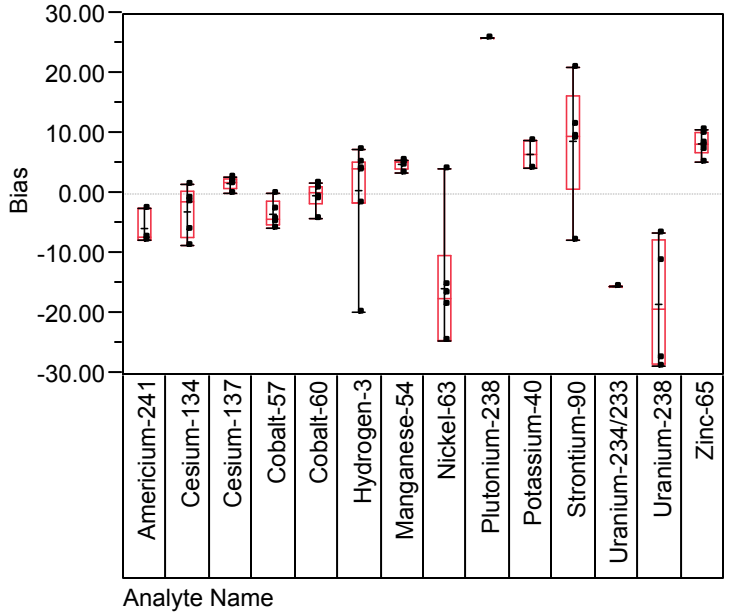


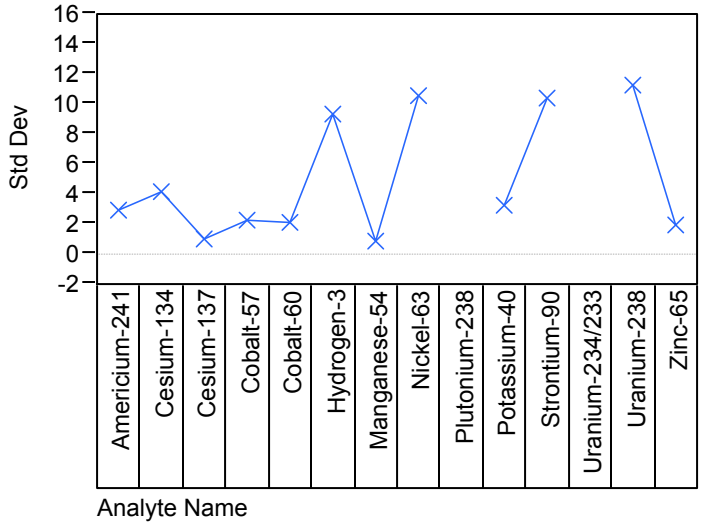
Variability Gauge Lab Code=FDHE01

Variability Chart for Bias

Variability Gauge Lab Code=FDHE01

Variability Chart for Bias



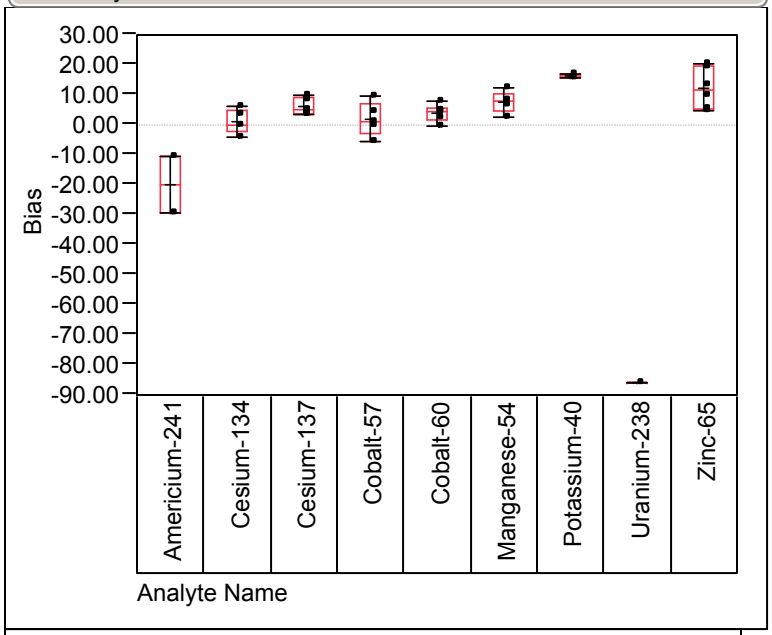


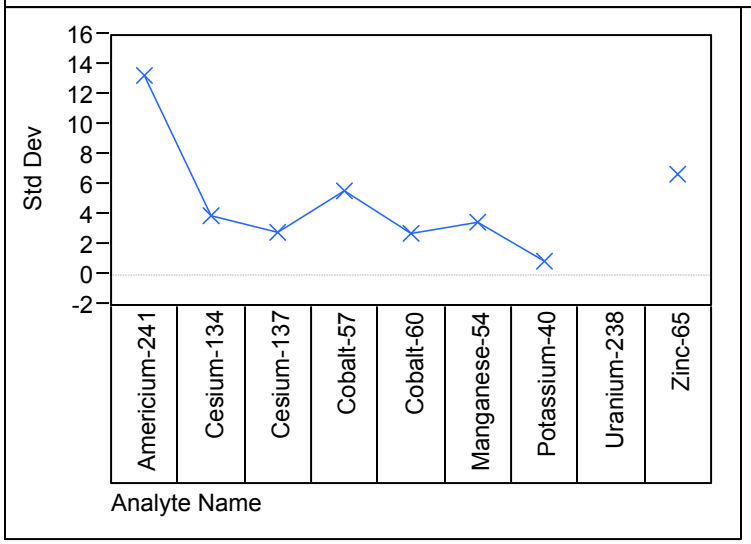
Variability Gauge Lab Code=FDOH01

Variability Chart for Bias

Variability Gauge Lab Code=FDOH01

Variability Chart for Bias



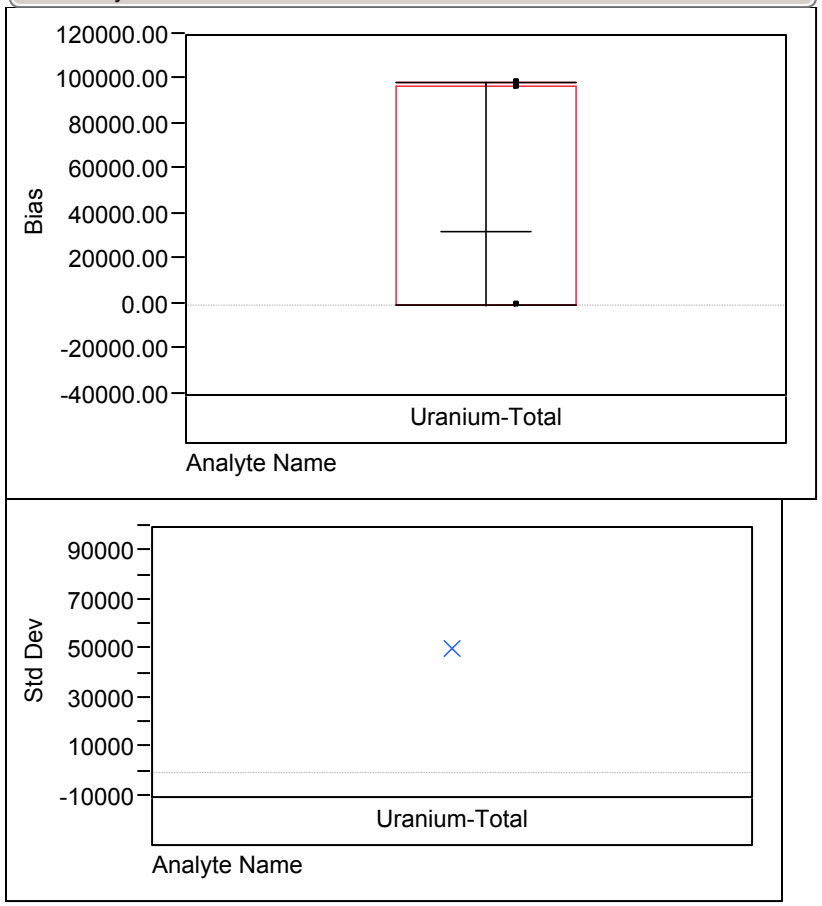


Variability Gauge Lab Code=FERM01

Variability Chart for Bias

Variability Gauge Lab Code=FERM01

Variability Chart for Bias

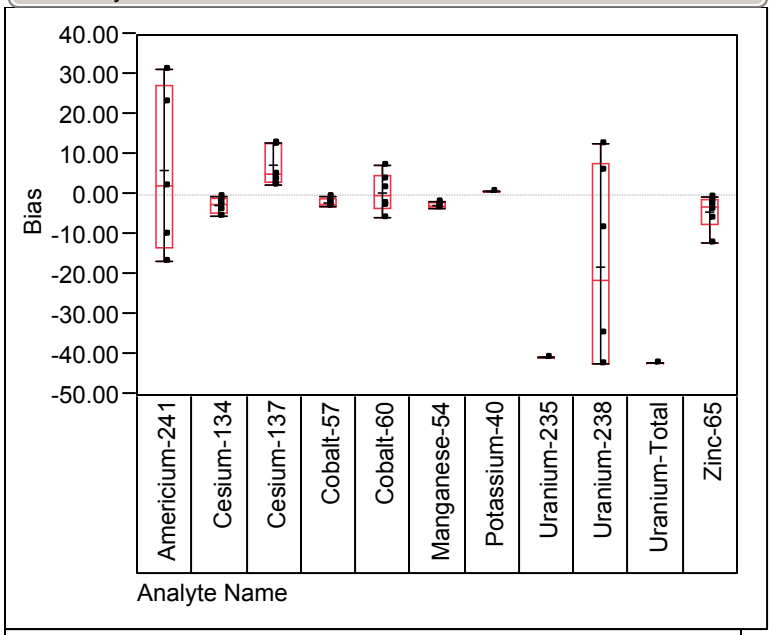


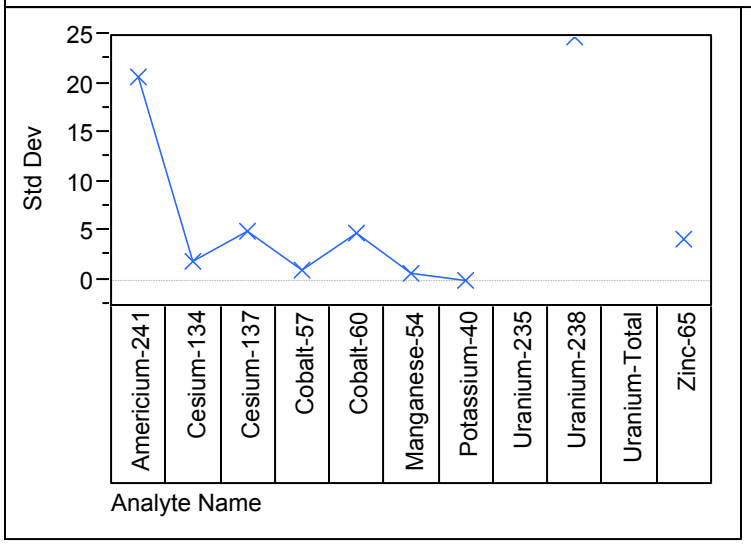
Variability Gauge Lab Code=FMEC99

Variability Chart for Bias

Variability Gauge Lab Code=FMEC99

Variability Chart for Bias



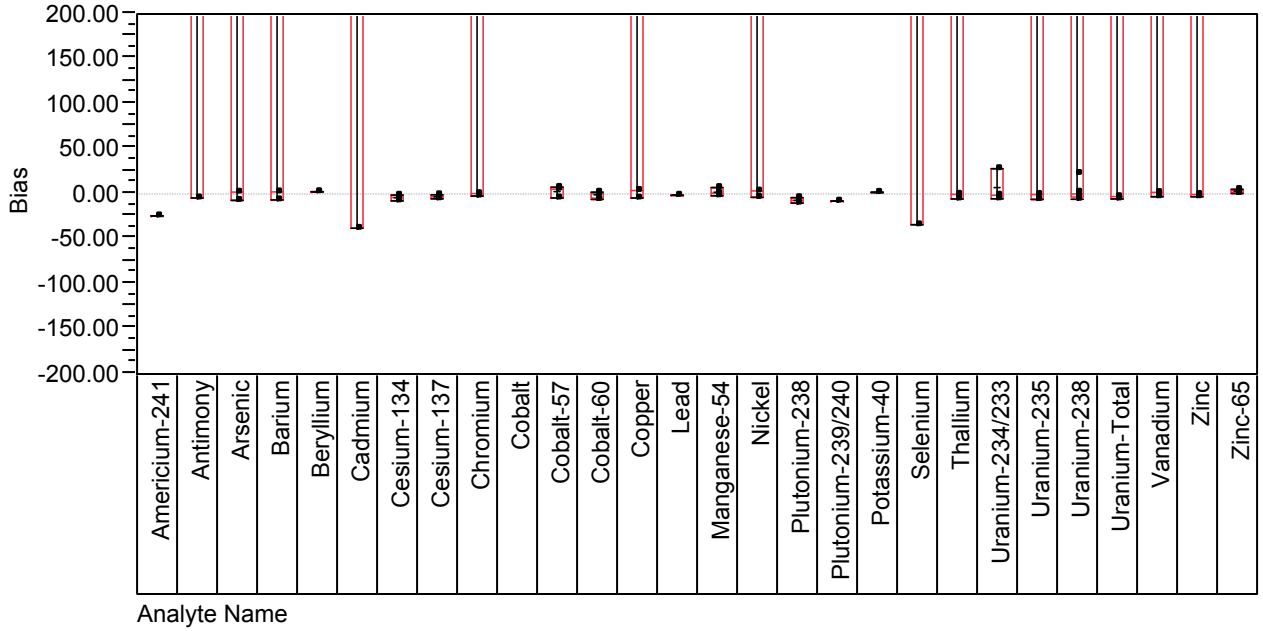


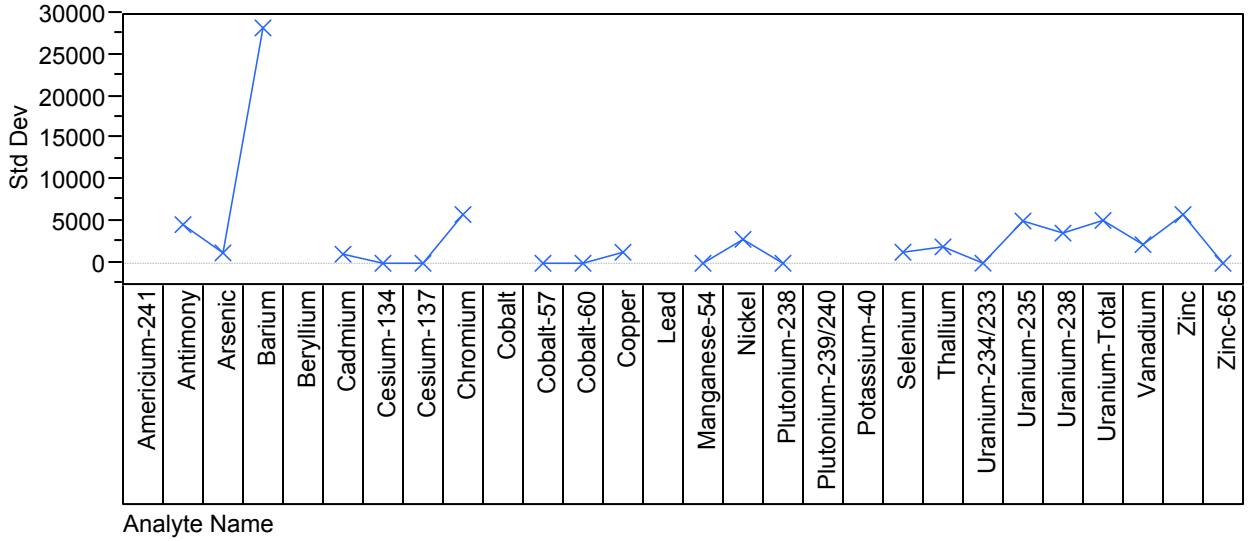
Variability Gauge Lab Code=FSCL01

Variability Chart for Bias

Variability Gauge Lab Code=FSCL01

Variability Chart for Bias



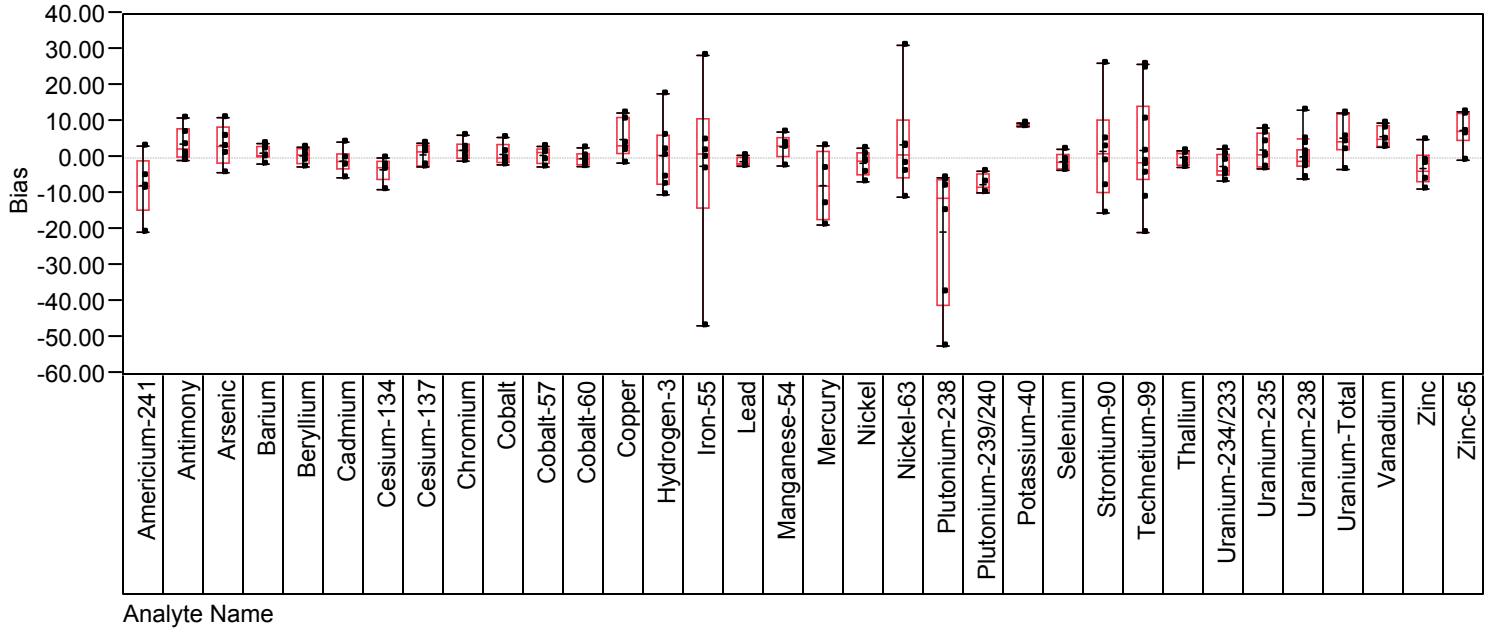


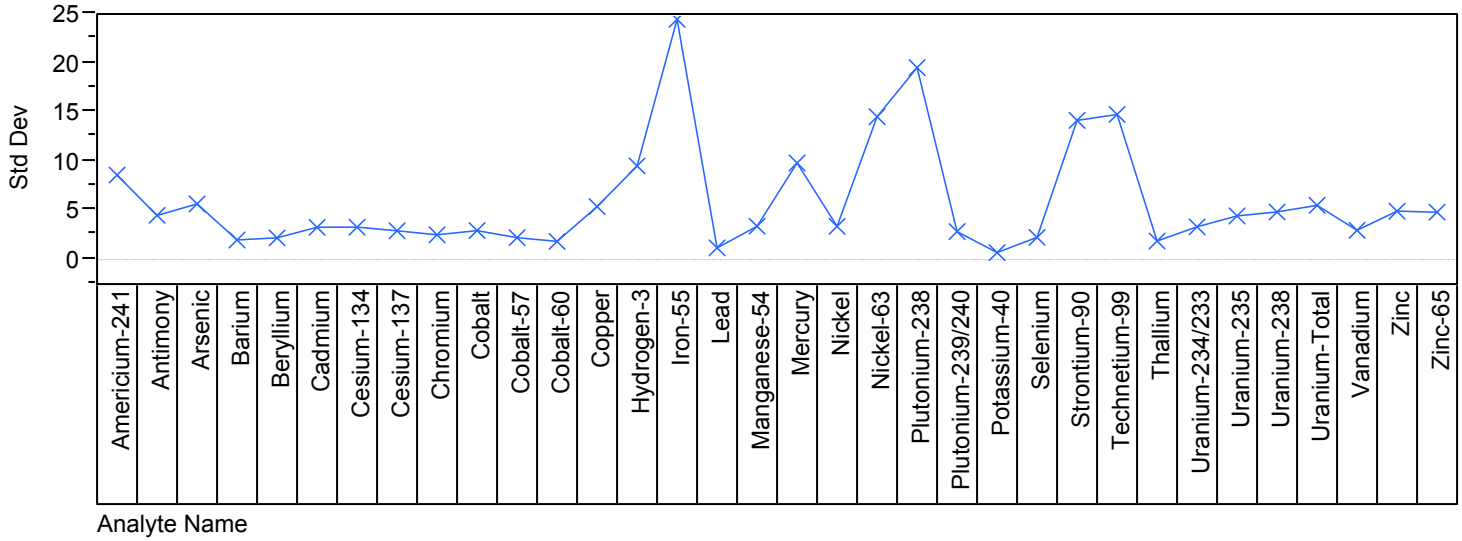
Variability Gauge Lab Code=GENE01

Variability Chart for Bias

Variability Gauge Lab Code=GENE01

Variability Chart for Bias



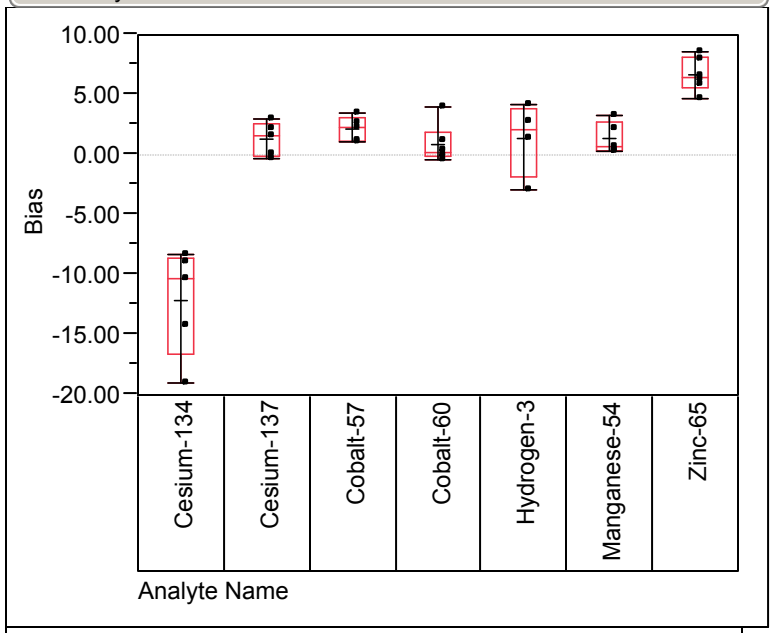


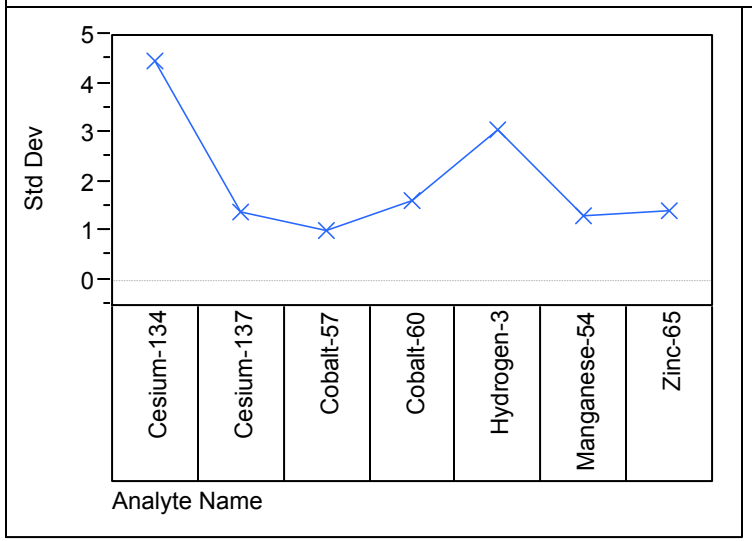
Variability Gauge Lab Code=GPCL01

Variability Chart for Bias

Variability Gauge Lab Code=GPCL01

Variability Chart for Bias



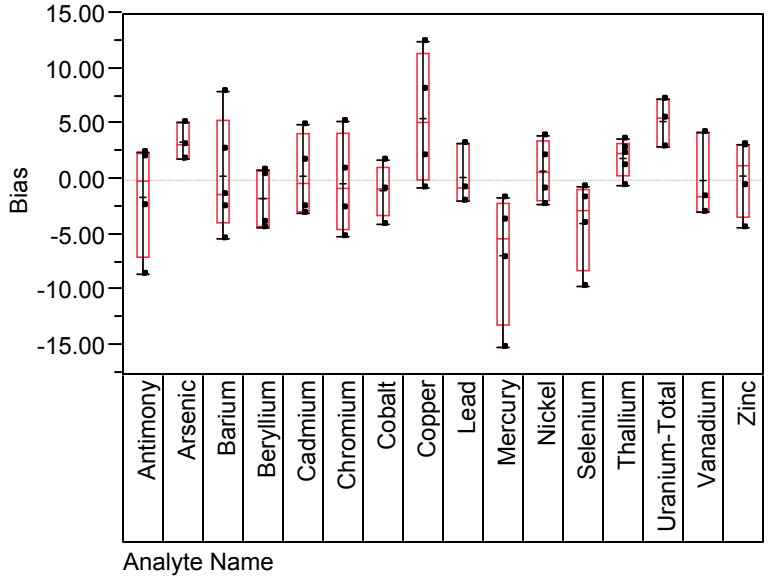


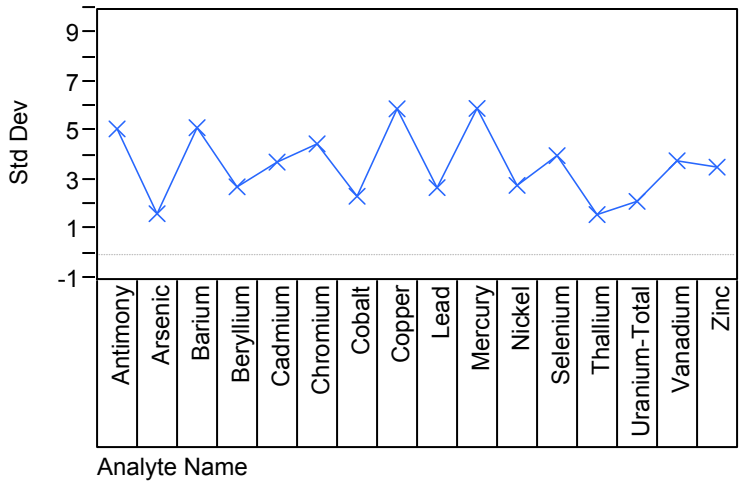
Variability Gauge Lab Code=GPLP01

Variability Chart for Bias

Variability Gauge Lab Code=GPLP01

Variability Chart for Bias



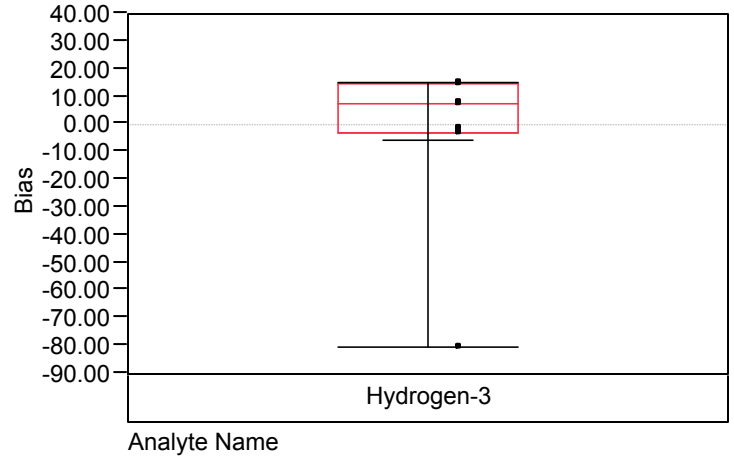


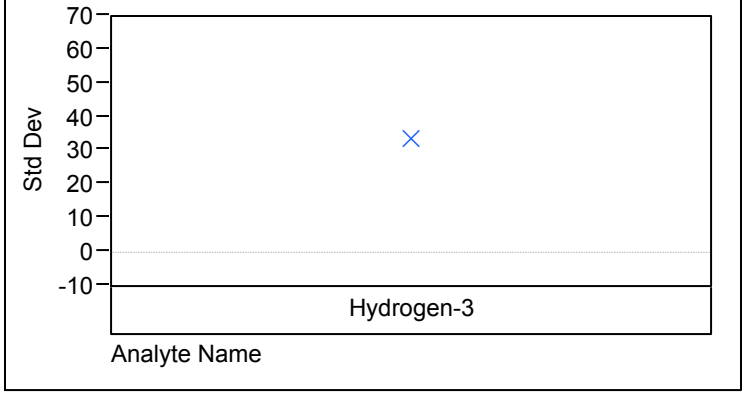
Variability Gauge Lab Code=HCAL01

Variability Chart for Bias

Variability Gauge Lab Code=HCAL01

Variability Chart for Bias



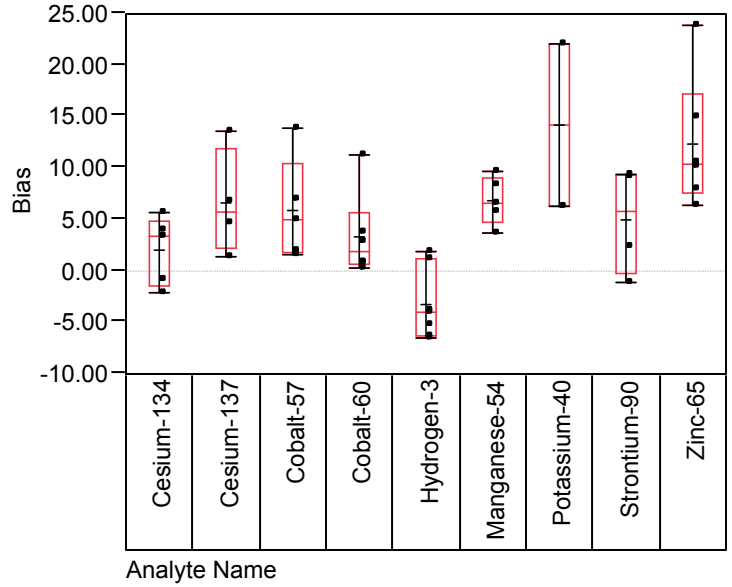


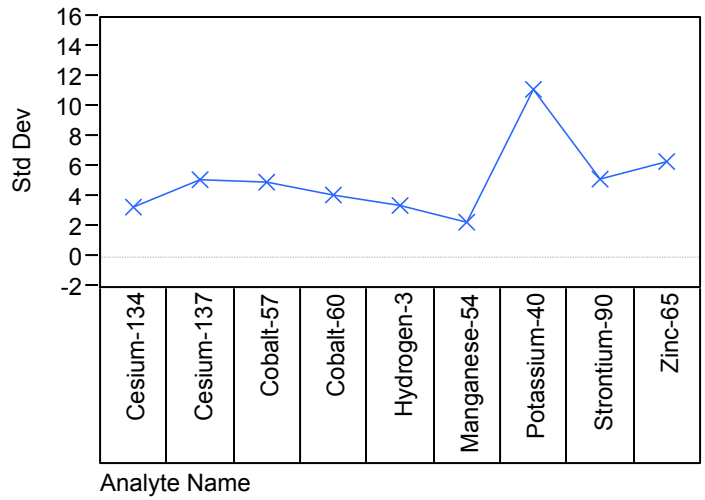
Variability Gauge Lab Code=HECR01

Variability Chart for Bias

Variability Gauge Lab Code=HECR01

Variability Chart for Bias



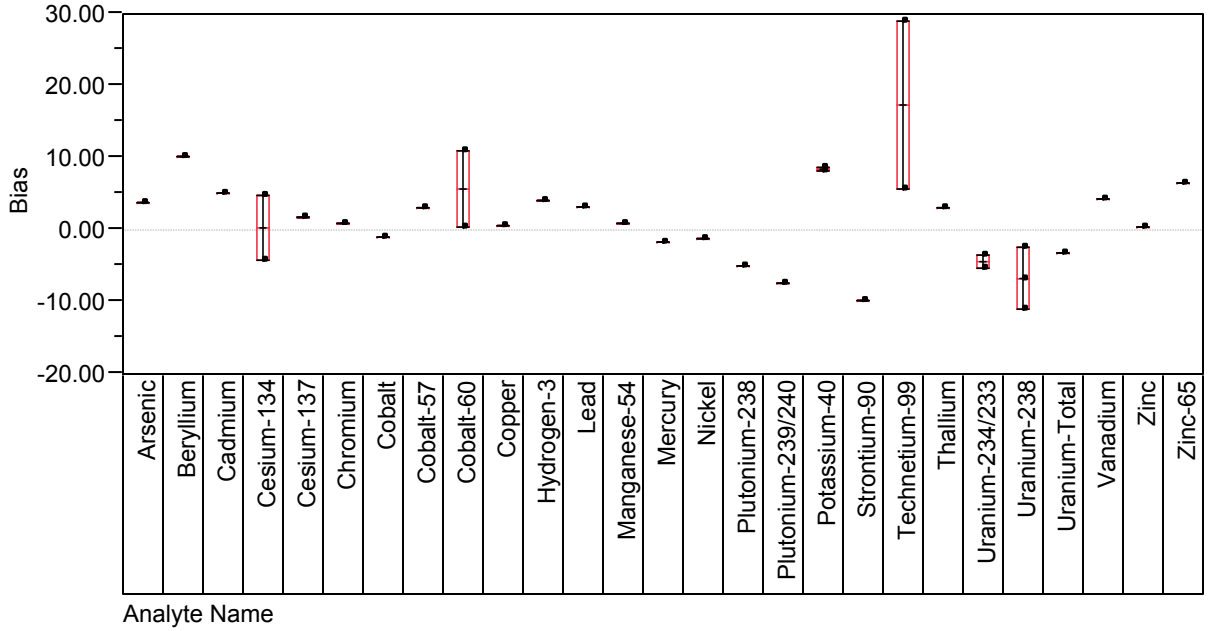


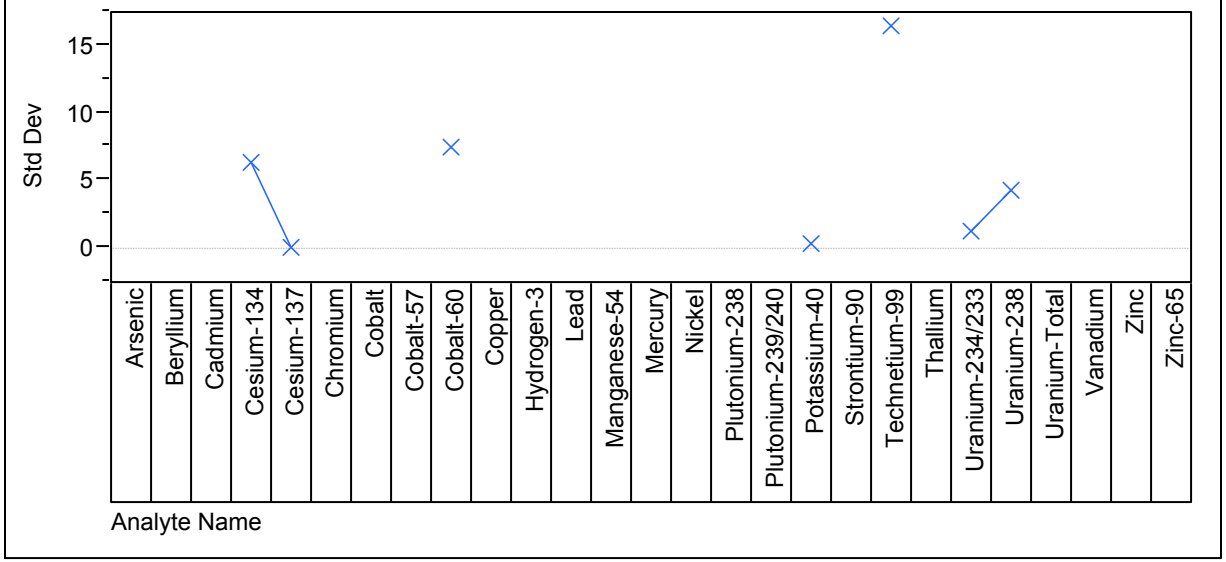
Variability Gauge Lab Code=HPAC99

Variability Chart for Bias

Variability Gauge Lab Code=HPAC99

Variability Chart for Bias



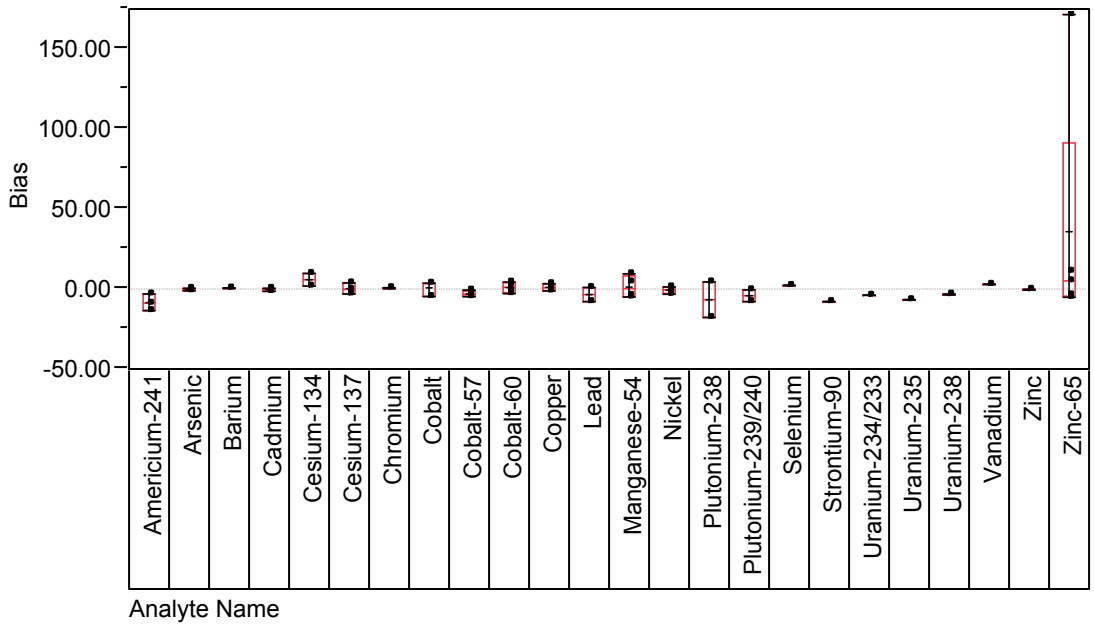


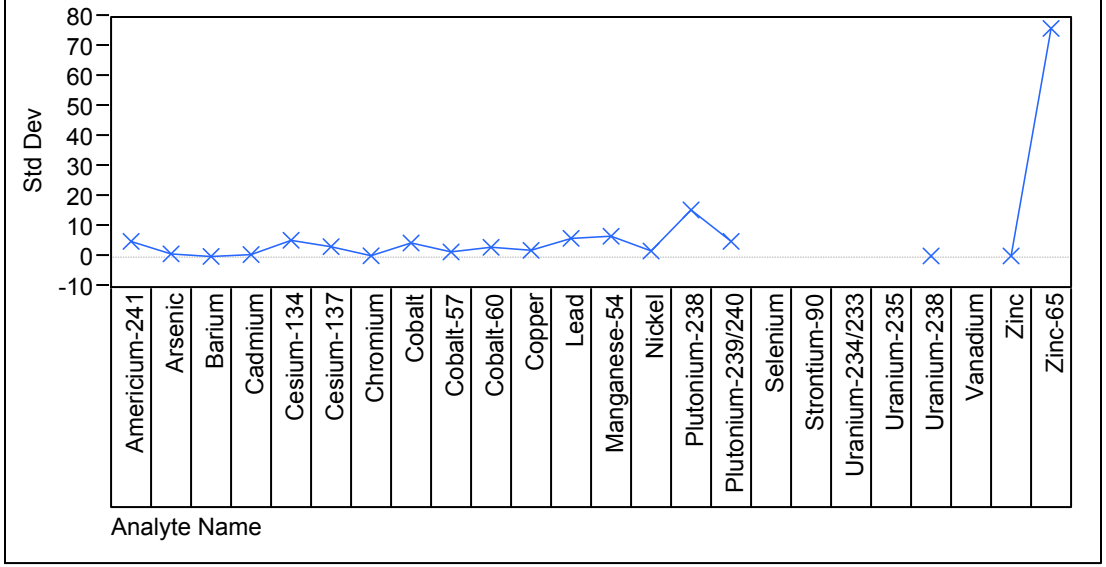
Variability Gauge Lab Code=IAEA99

Variability Chart for Bias

Variability Gauge Lab Code=IAEA99

Variability Chart for Bias



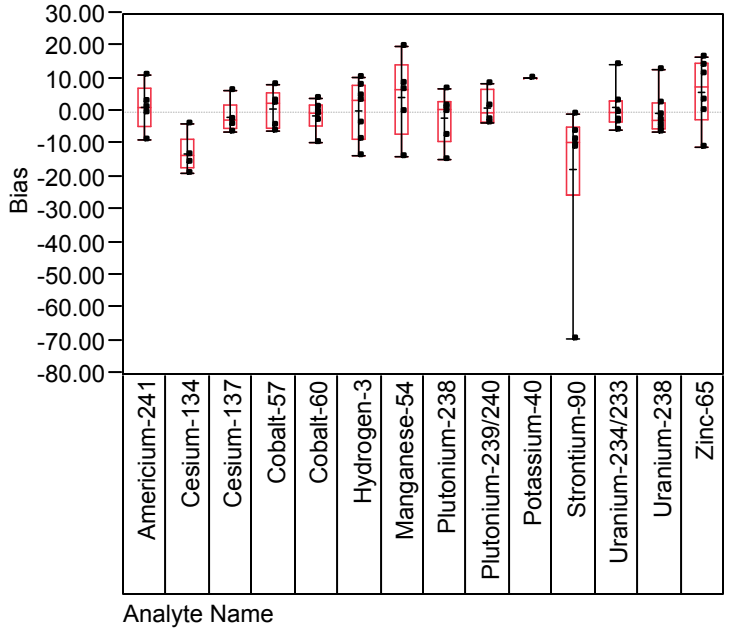


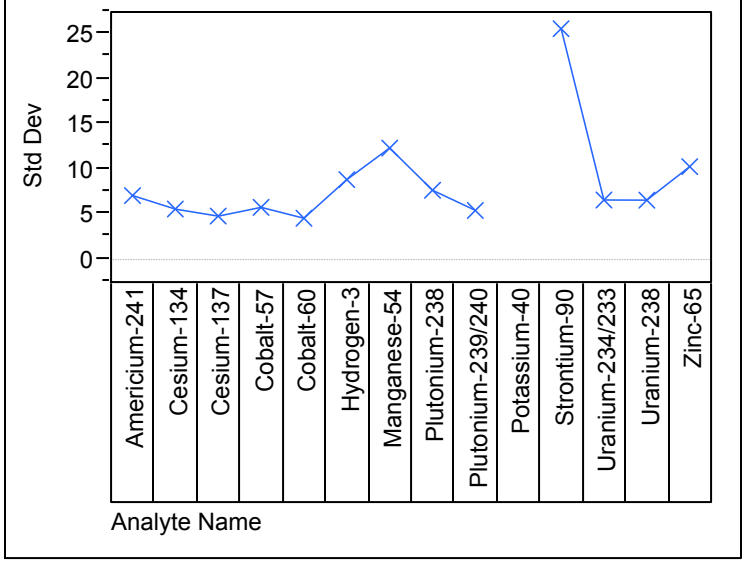
Variability Gauge Lab Code=IDGR01

Variability Chart for Bias

Variability Gauge Lab Code=IDGR01

Variability Chart for Bias



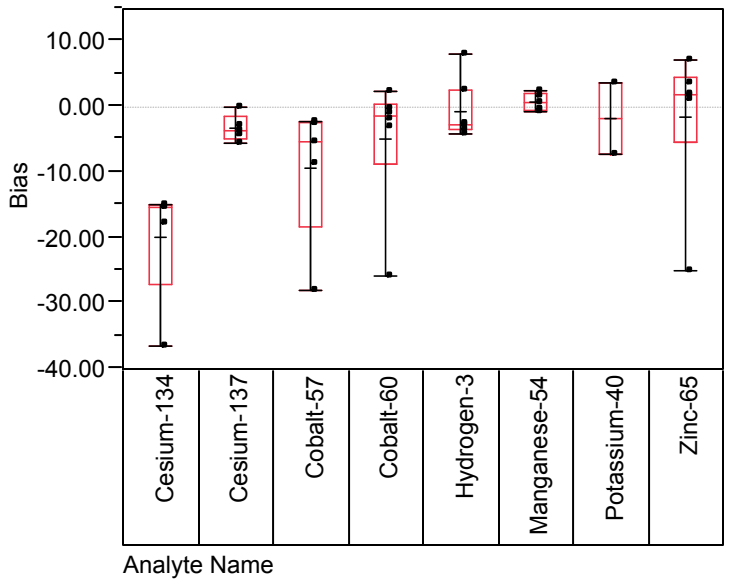


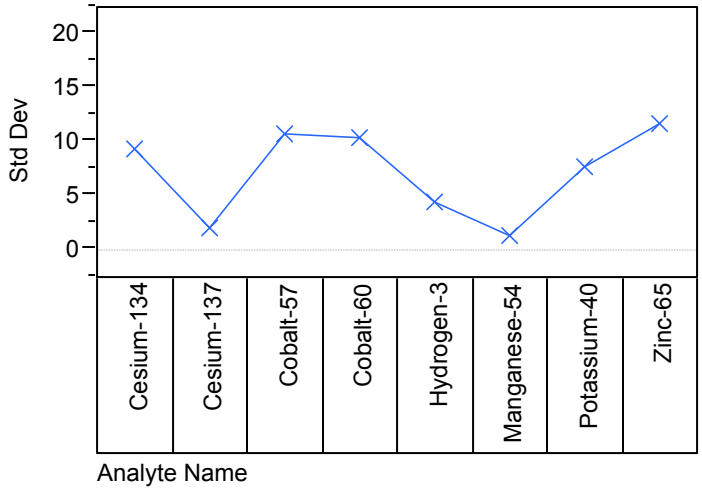
Variability Gauge Lab Code=ISUP01

Variability Chart for Bias

Variability Gauge Lab Code=ISUP01

Variability Chart for Bias



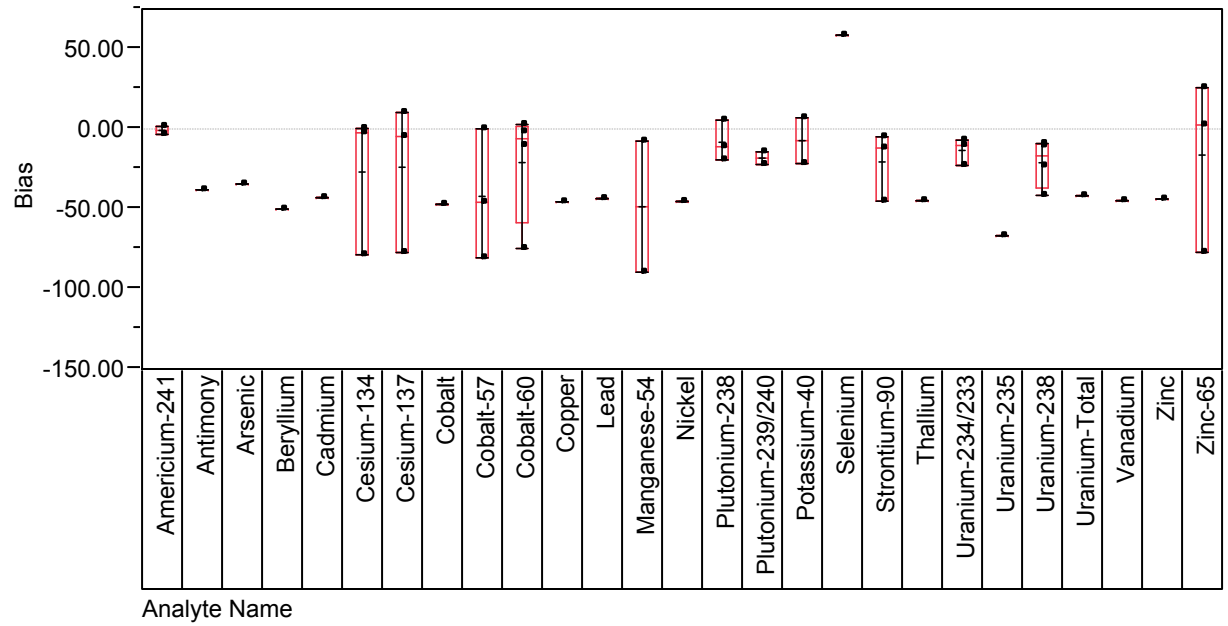


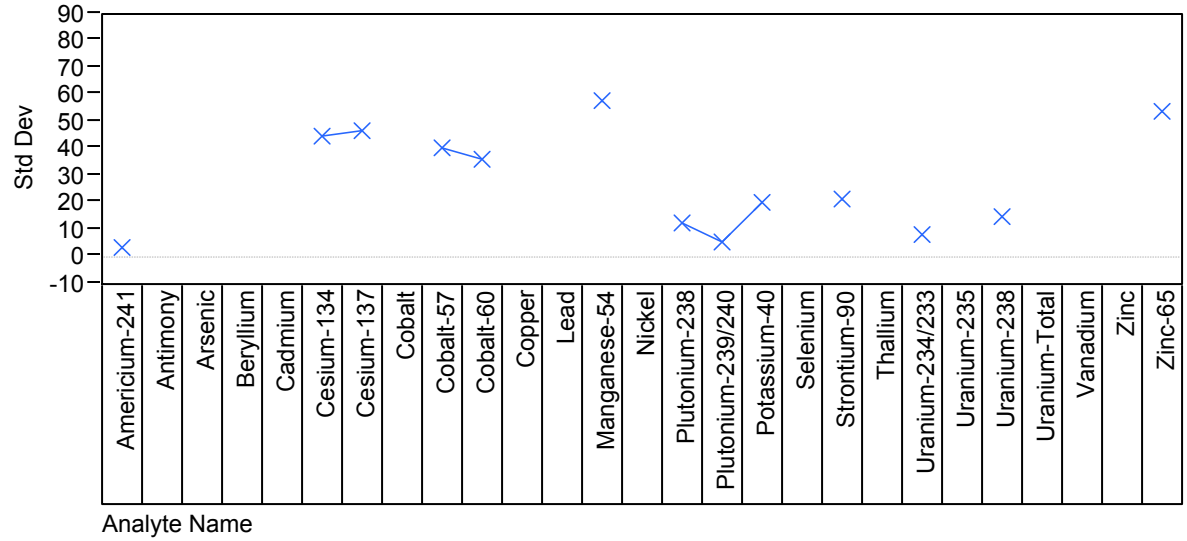
Variability Gauge Lab Code=JAEC99

Variability Chart for Bias

Variability Gauge Lab Code=JAEC99

Variability Chart for Bias



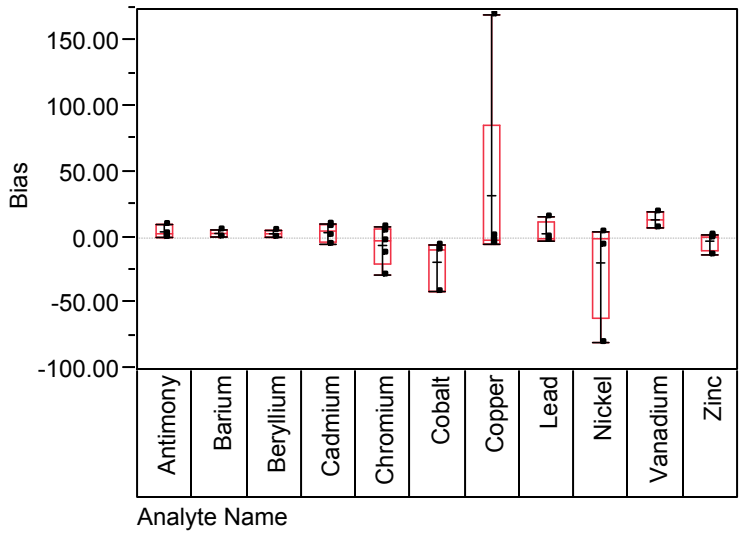


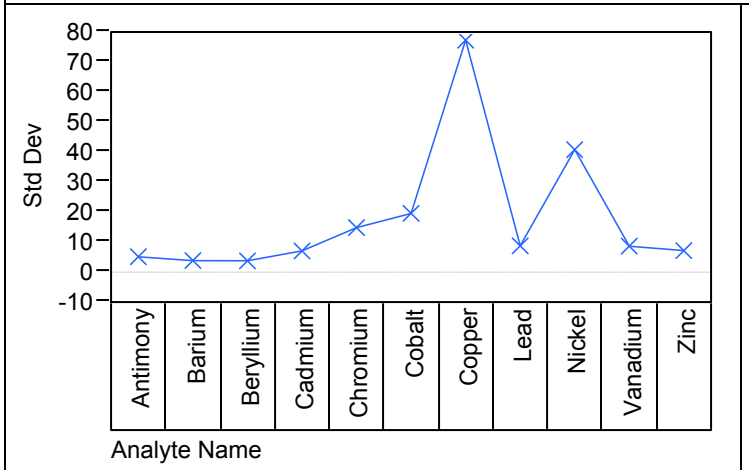
Variability Gauge Lab Code=JCAL99

Variability Chart for Bias

Variability Gauge Lab Code=JCAL99

Variability Chart for Bias



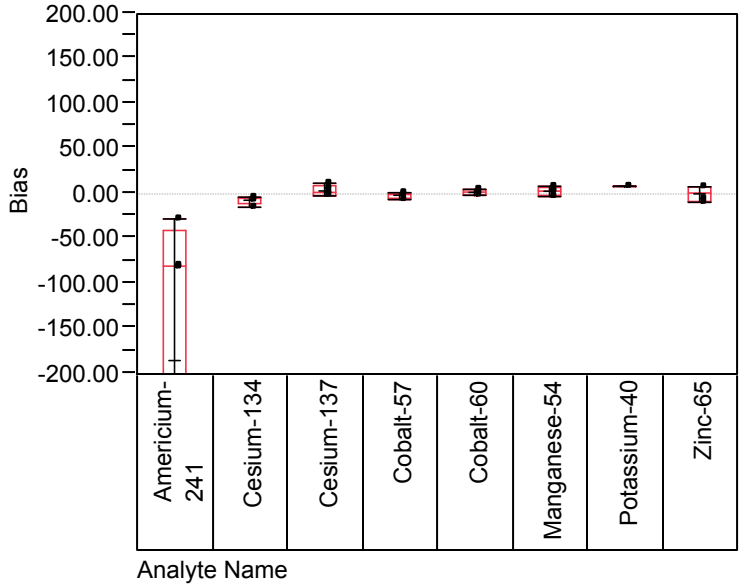


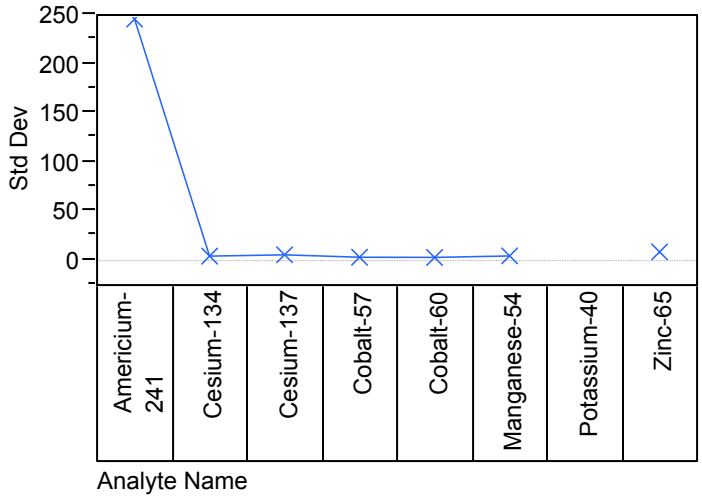
Variability Gauge Lab Code=JLNN01

Variability Chart for Bias

Variability Gauge Lab Code=JLNN01

Variability Chart for Bias



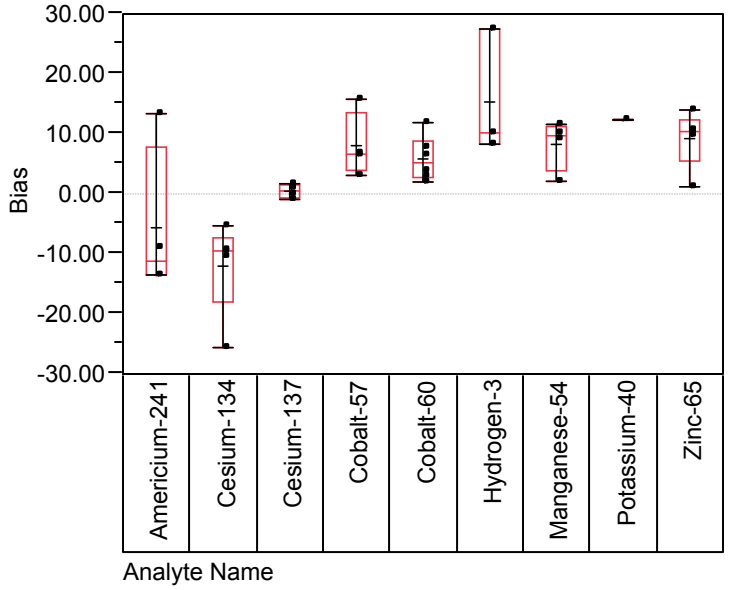


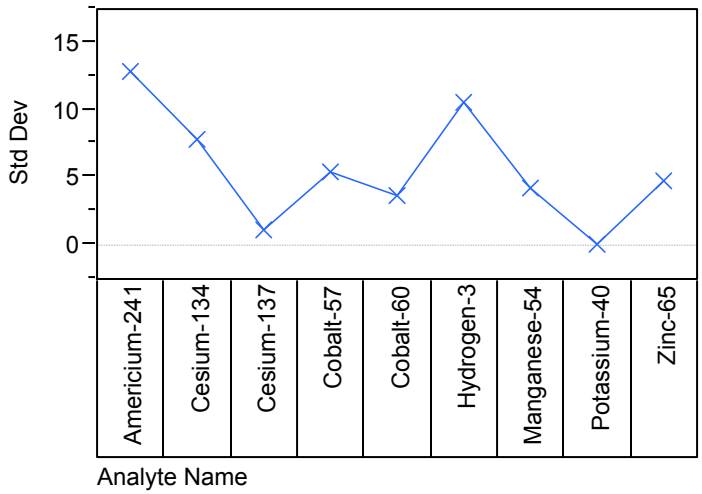
Variability Gauge Lab Code=KDHE01

Variability Chart for Bias

Variability Gauge Lab Code=KDHE01

Variability Chart for Bias



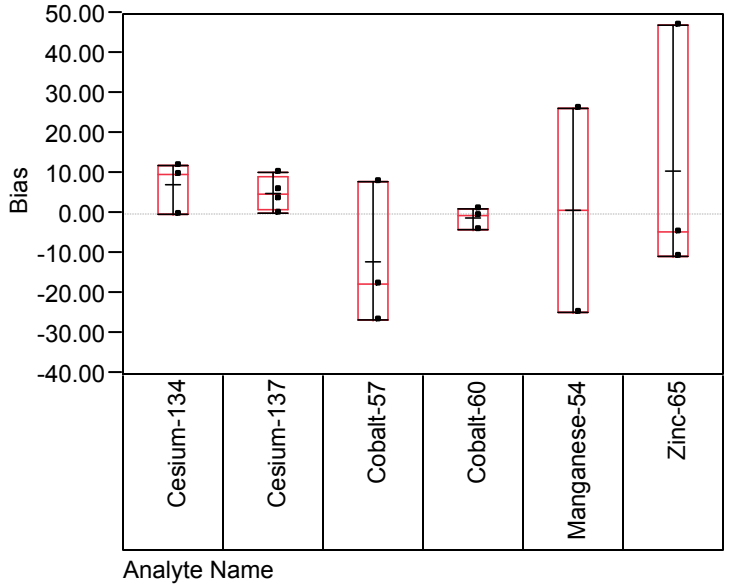


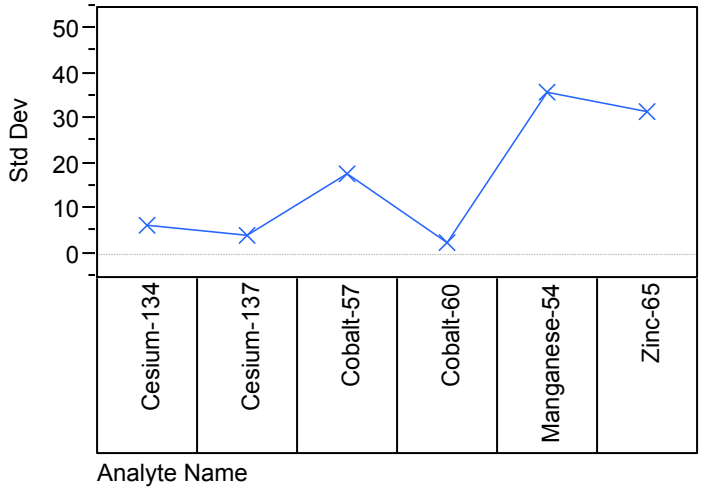
Variability Gauge Lab Code=LANL01

Variability Chart for Bias

Variability Gauge Lab Code=LANL01

Variability Chart for Bias



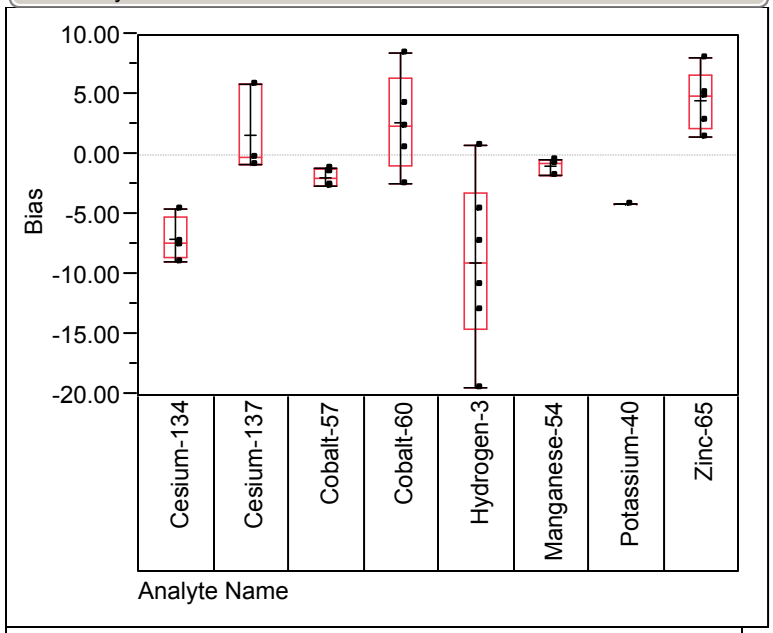


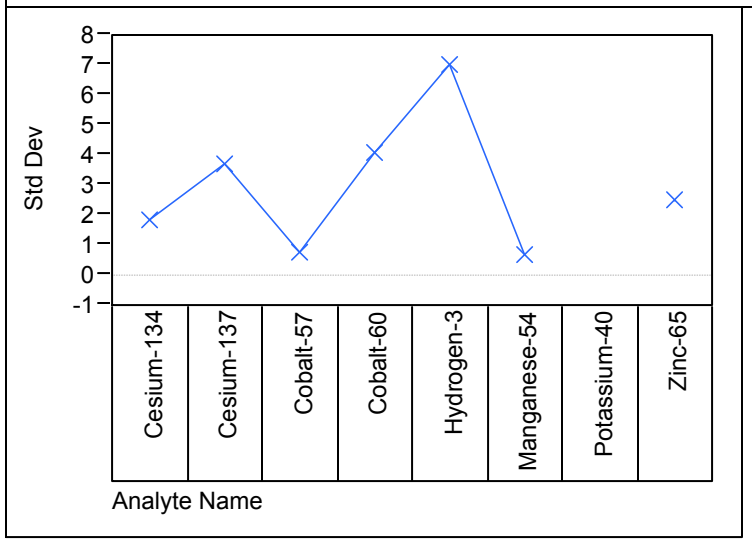
Variability Gauge Lab Code=LAWR01

Variability Chart for Bias

Variability Gauge Lab Code=LAWR01

Variability Chart for Bias



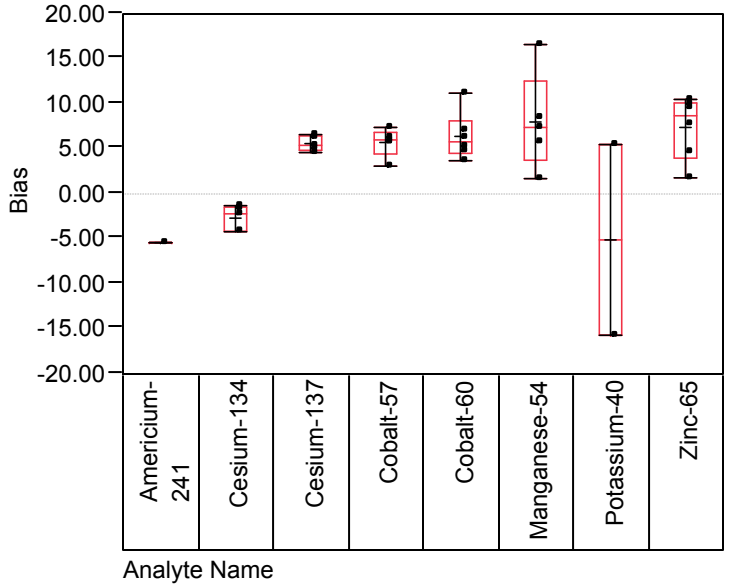


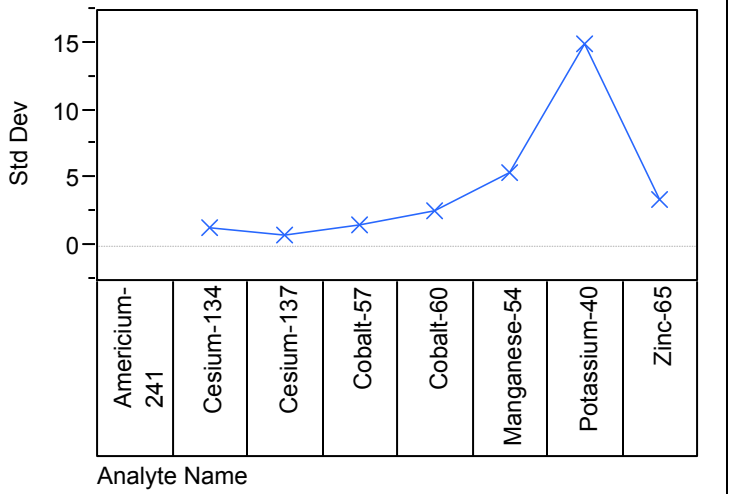
Variability Gauge Lab Code=LAWR02

Variability Chart for Bias

Variability Gauge Lab Code=LAWR02

Variability Chart for Bias



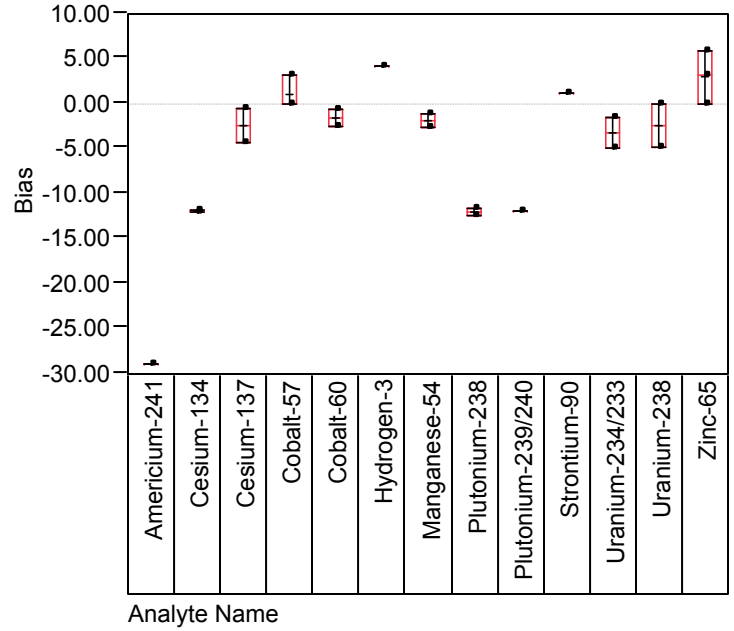


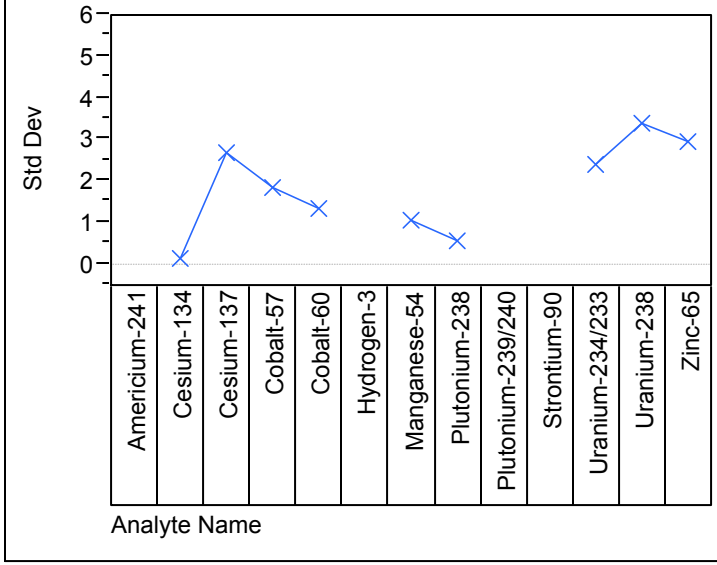
Variability Gauge Lab Code=LDRA99

Variability Chart for Bias

Variability Gauge Lab Code=LDRA99

Variability Chart for Bias



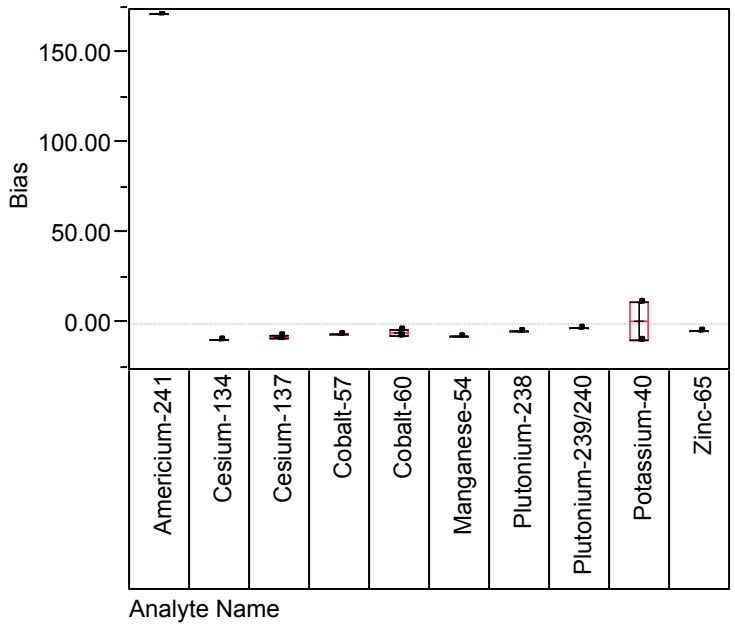


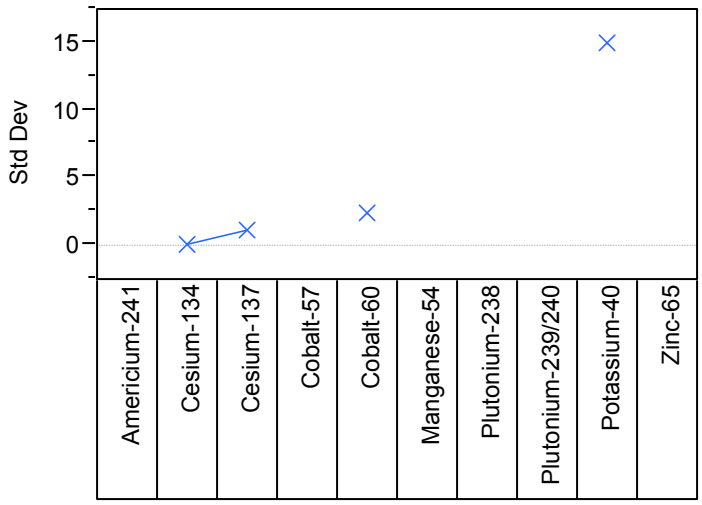
Variability Gauge Lab Code=LECR99

Variability Chart for Bias

Variability Gauge Lab Code=LECR99

Variability Chart for Bias



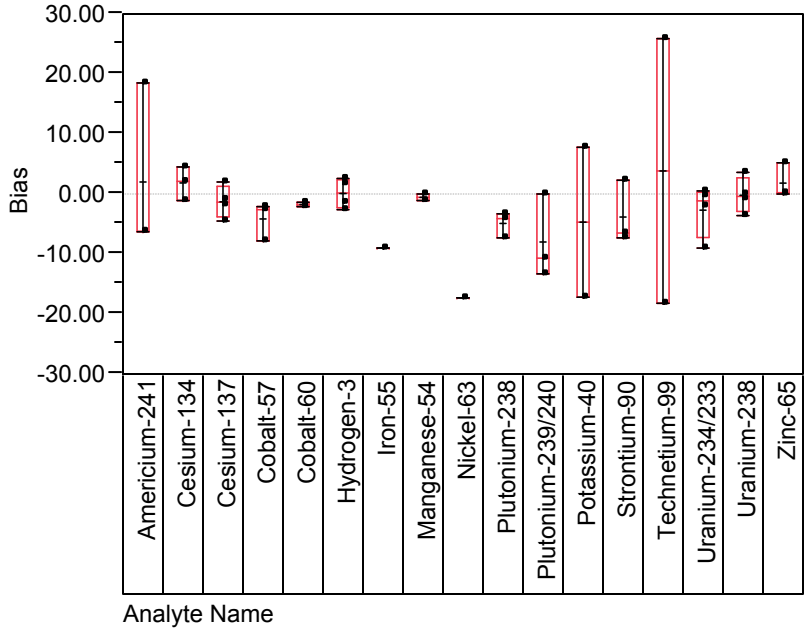


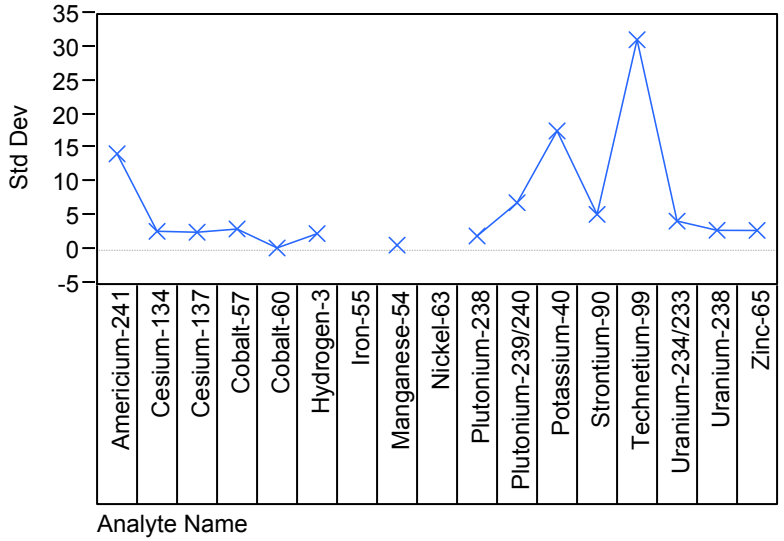
Variability Gauge Lab Code=LGCL99

Variability Chart for Bias

Variability Gauge Lab Code=LGCL99

Variability Chart for Bias



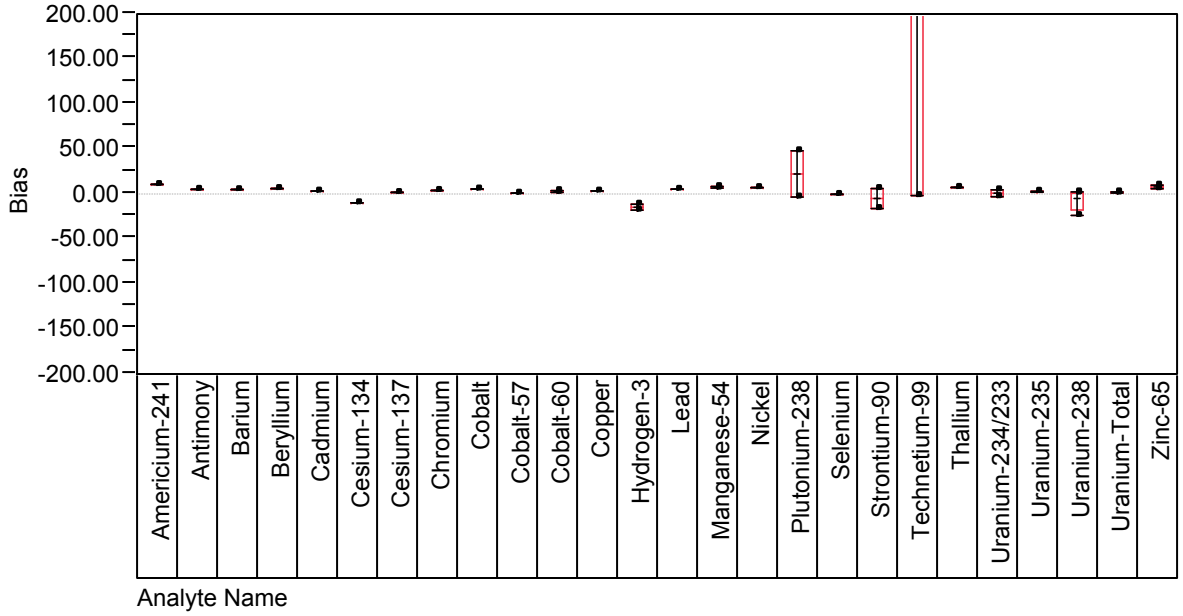


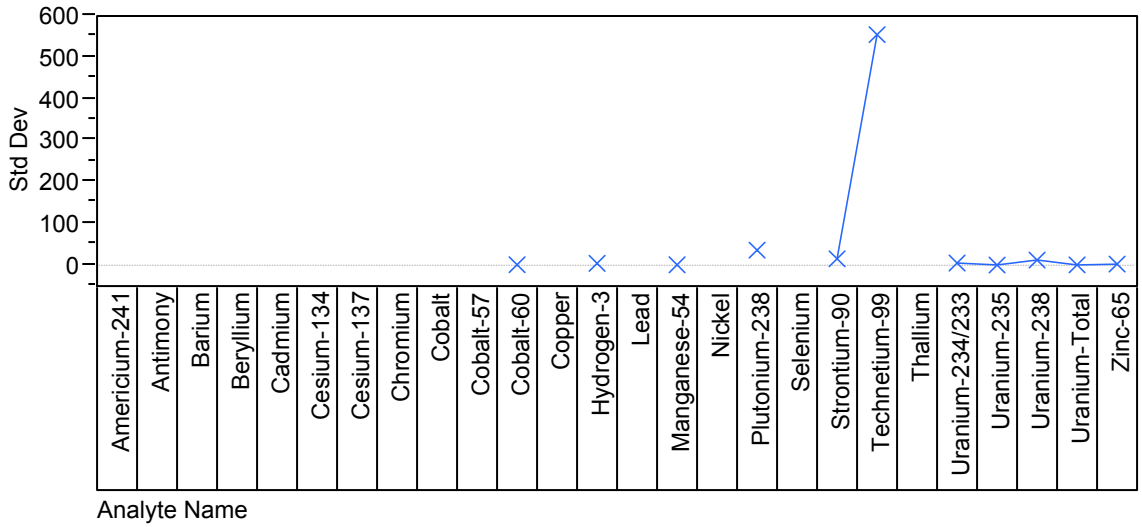
Variability Gauge Lab Code=LOCK01

Variability Chart for Bias

Variability Gauge Lab Code=LOCK01

Variability Chart for Bias



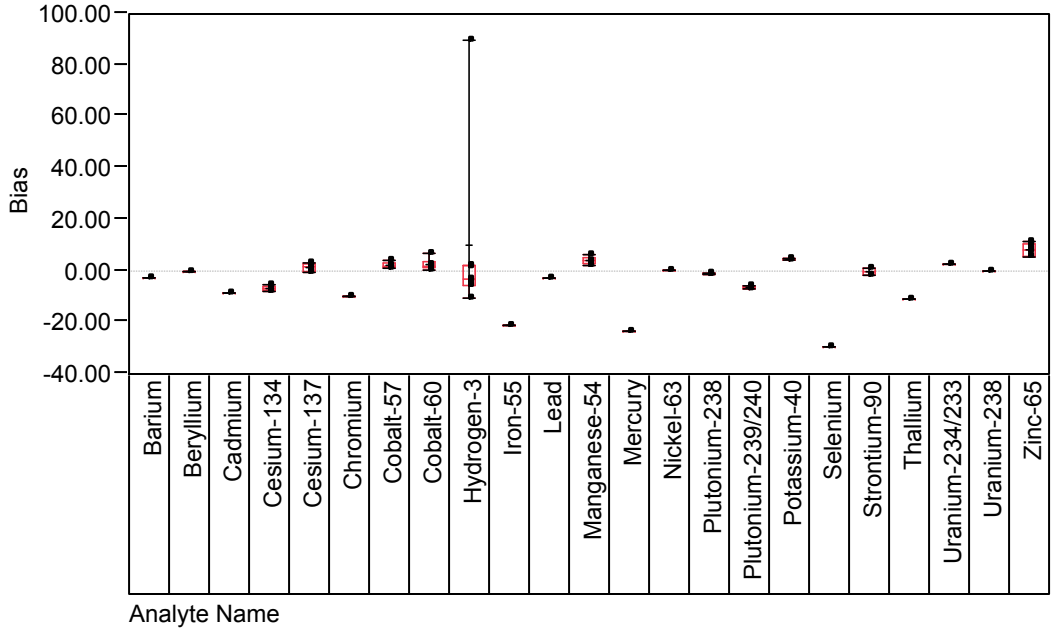


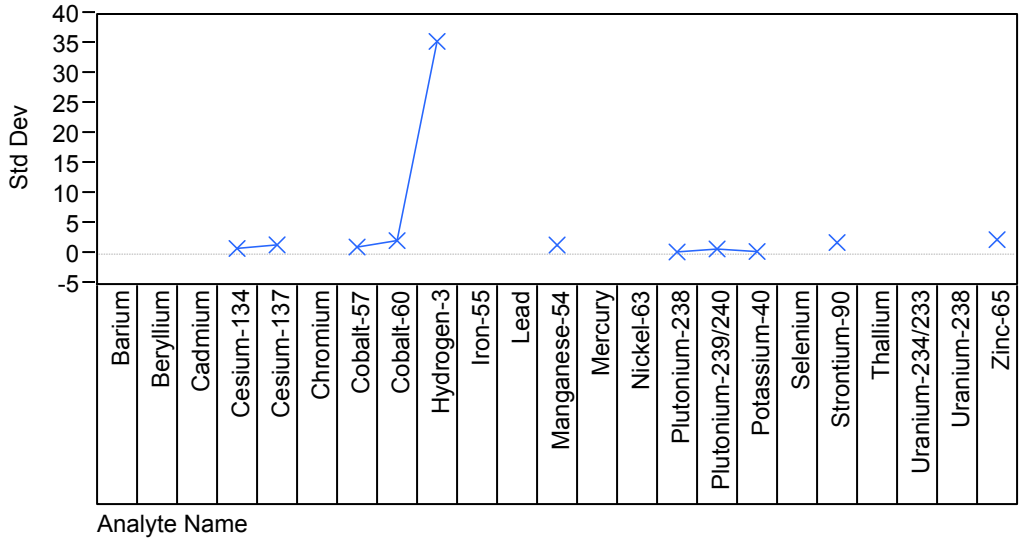
Variability Gauge Lab Code=LOCK03

Variability Chart for Bias

Variability Gauge Lab Code=LOCK03

Variability Chart for Bias



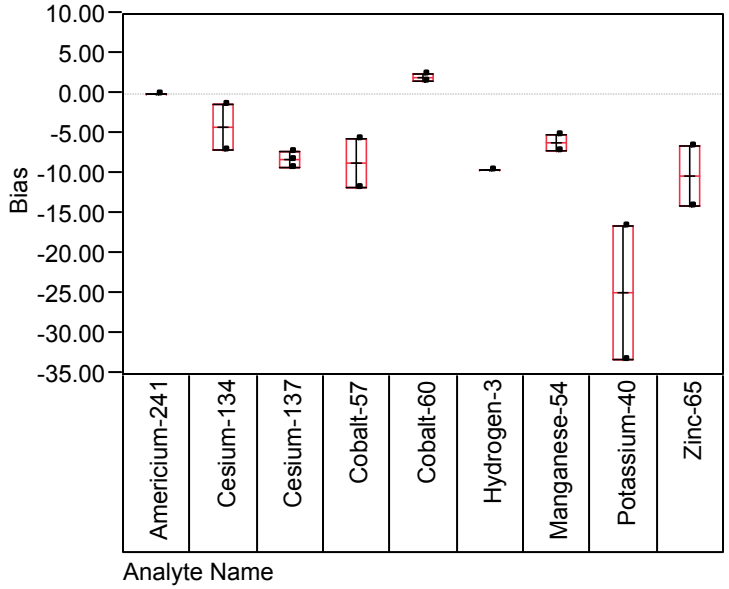


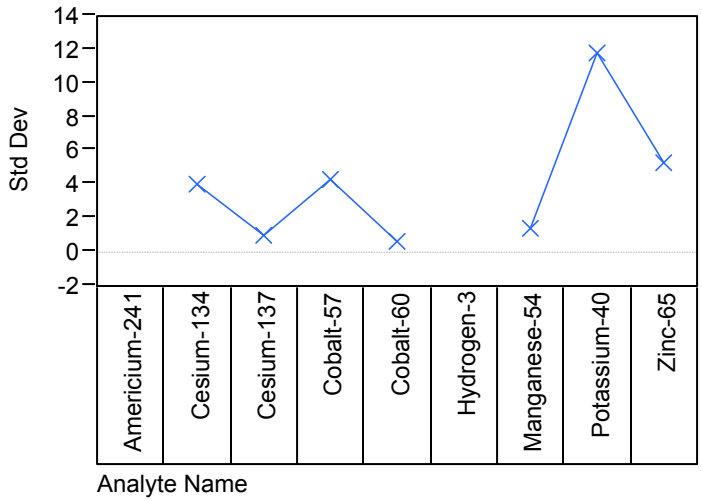
Variability Gauge Lab Code=MAHP59

Variability Chart for Bias

Variability Gauge Lab Code=MAHP59

Variability Chart for Bias



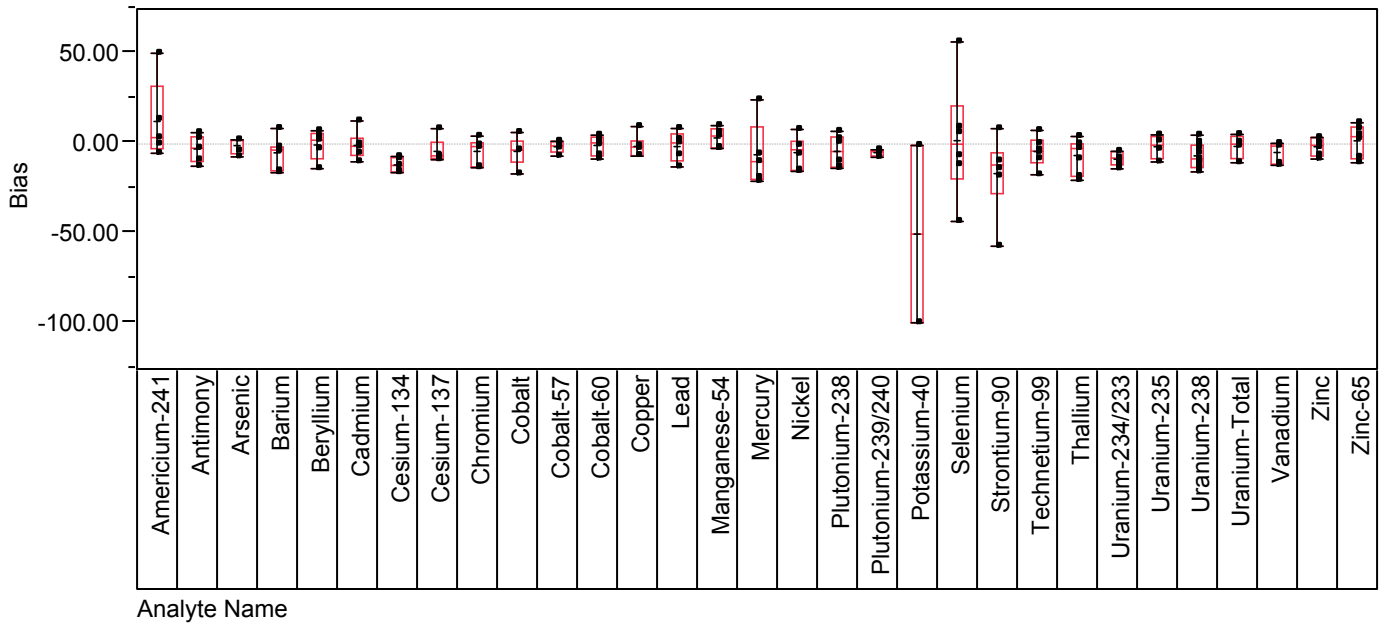


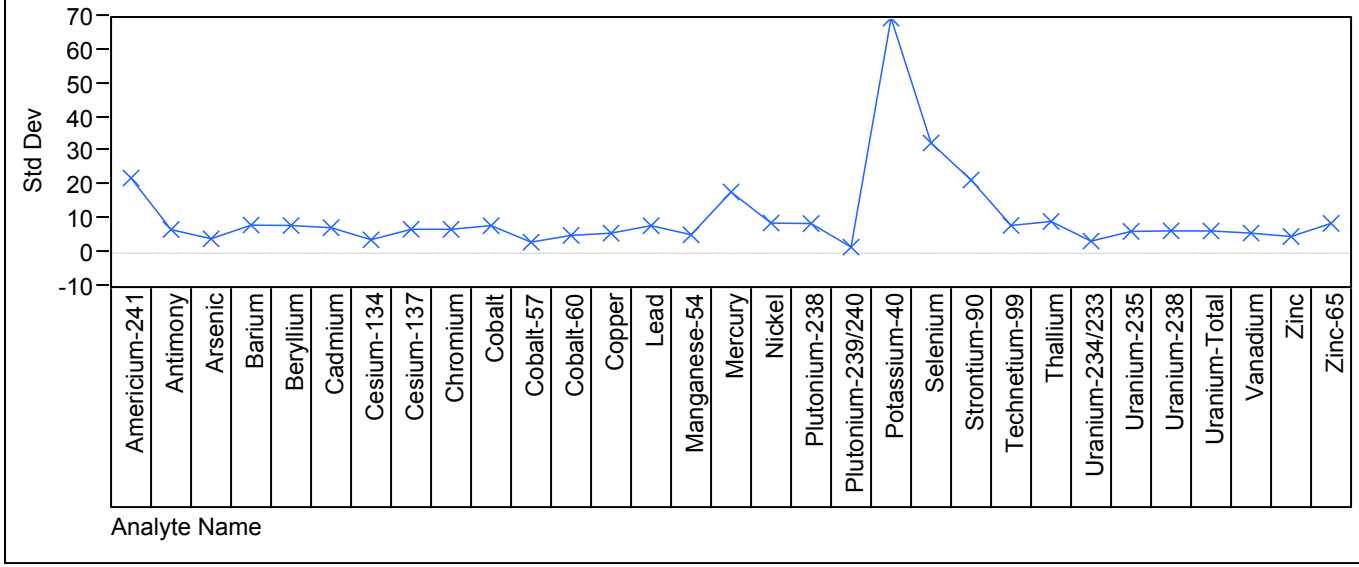
Variability Gauge Lab Code=MART01

Variability Chart for Bias

Variability Gauge Lab Code=MART01

Variability Chart for Bias



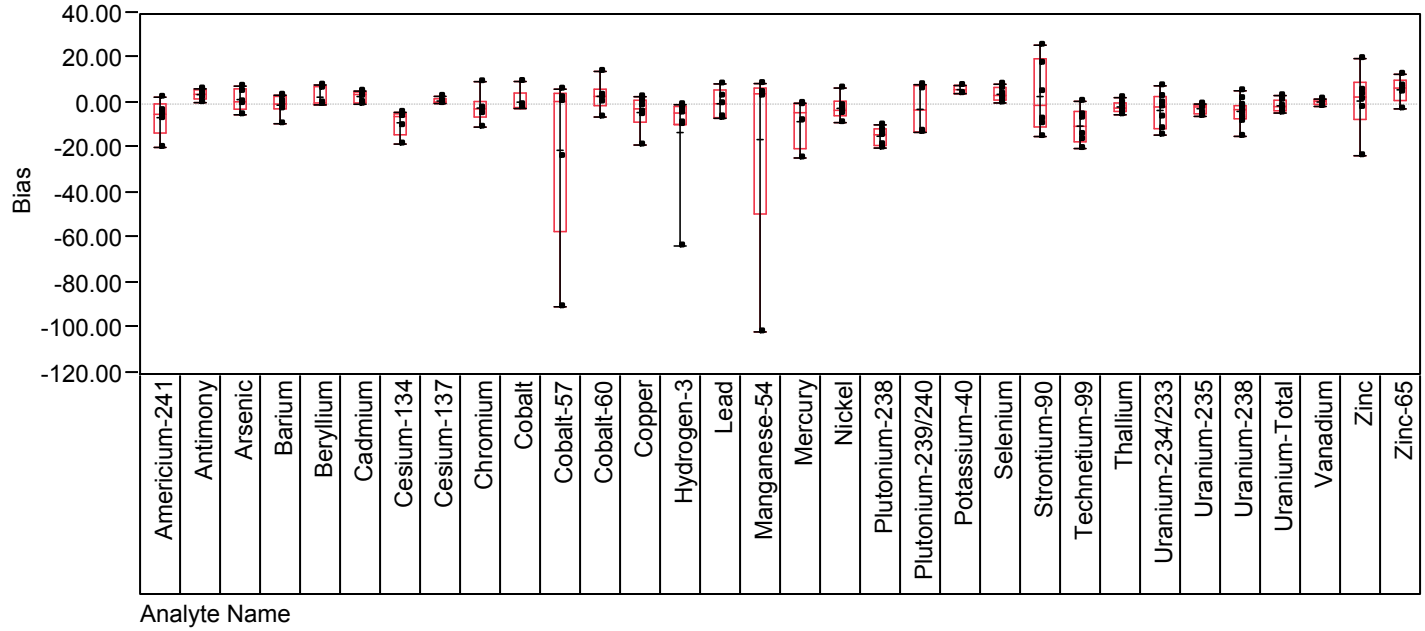


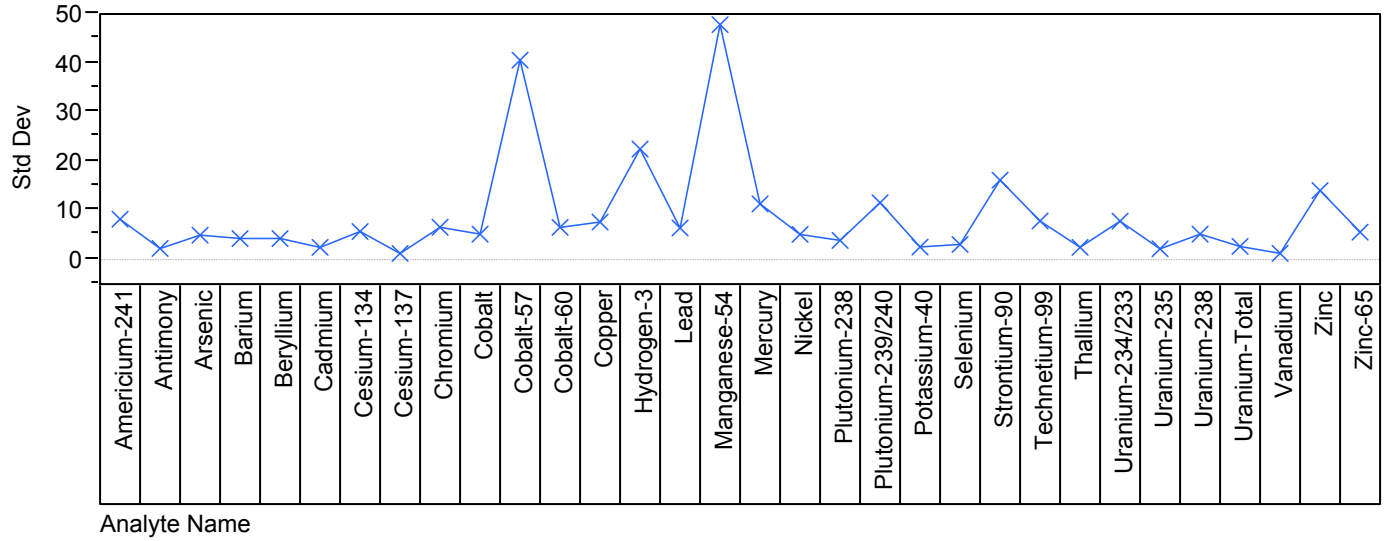
Variability Gauge Lab Code=MART02

Variability Chart for Bias

Variability Gauge Lab Code=MART02

Variability Chart for Bias



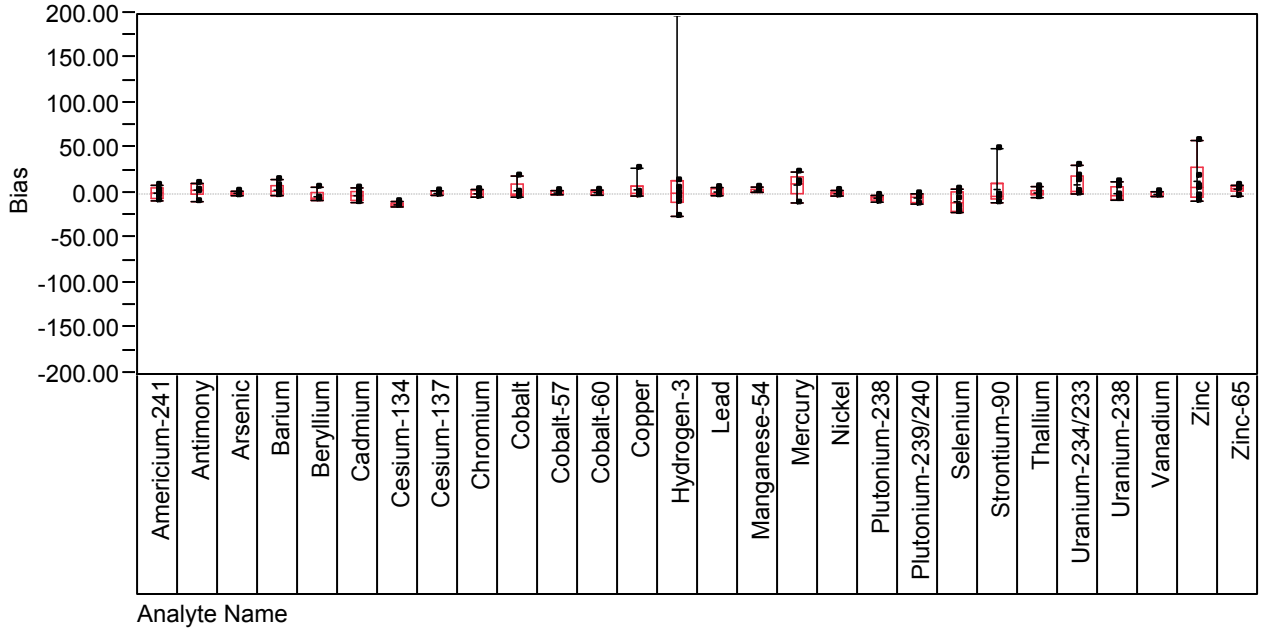


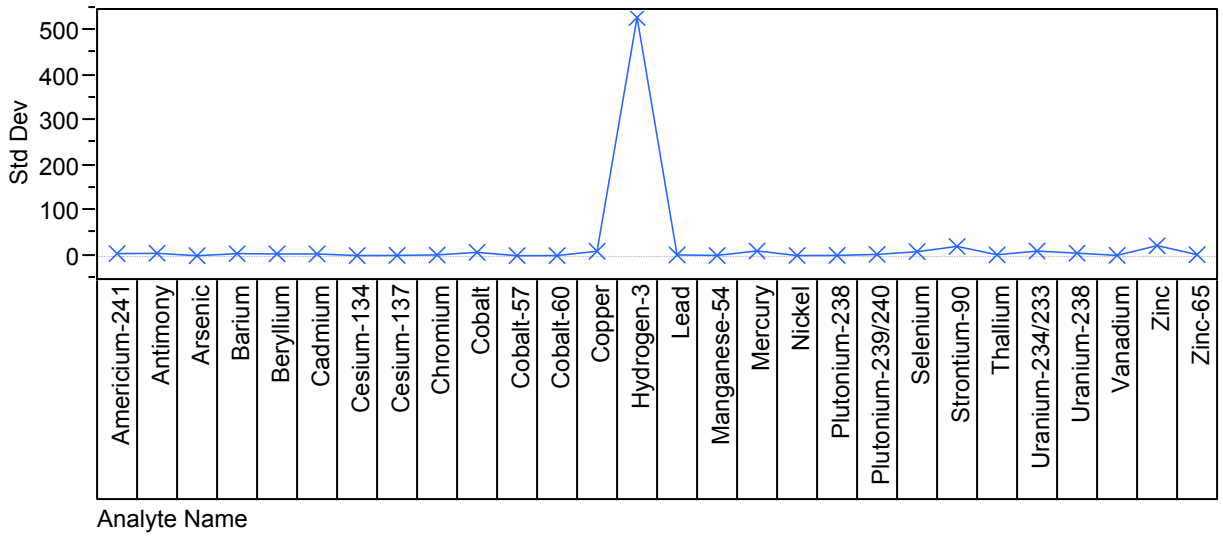
Variability Gauge Lab Code=MART03

Variability Chart for Bias

Variability Gauge Lab Code=MART03

Variability Chart for Bias



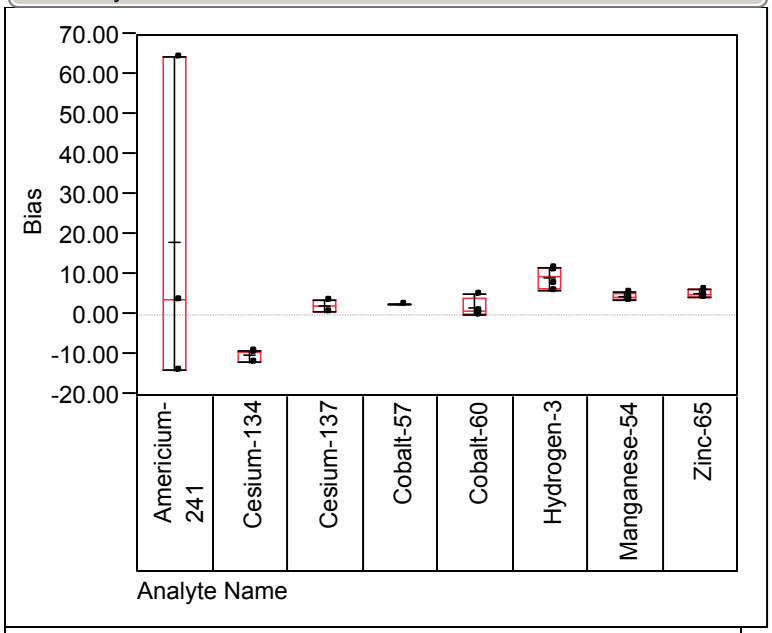


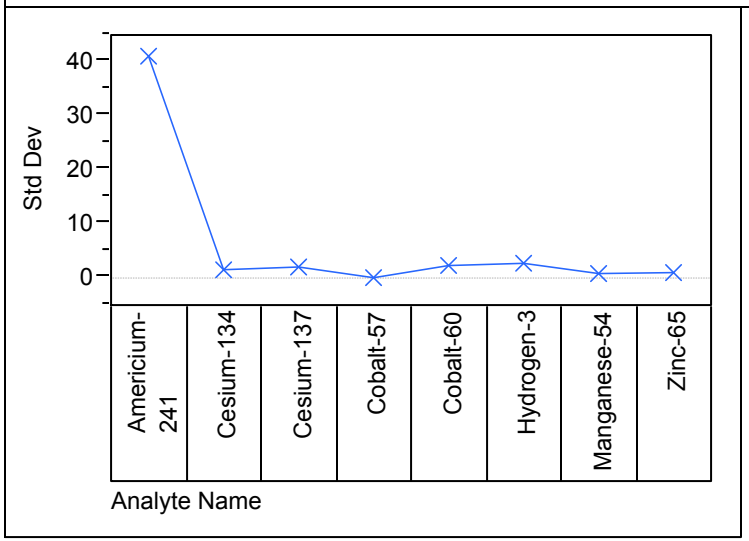
Variability Gauge Lab Code=MDPH01

Variability Chart for Bias

Variability Gauge Lab Code=MDPH01

Variability Chart for Bias



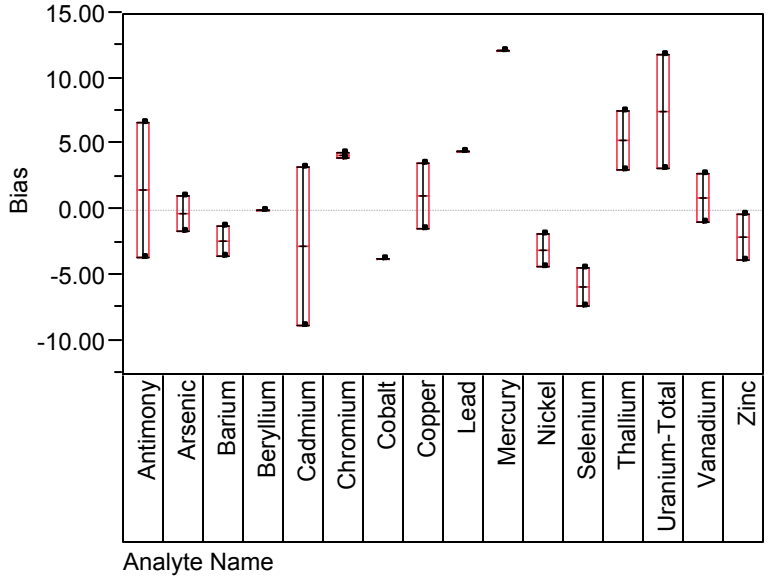


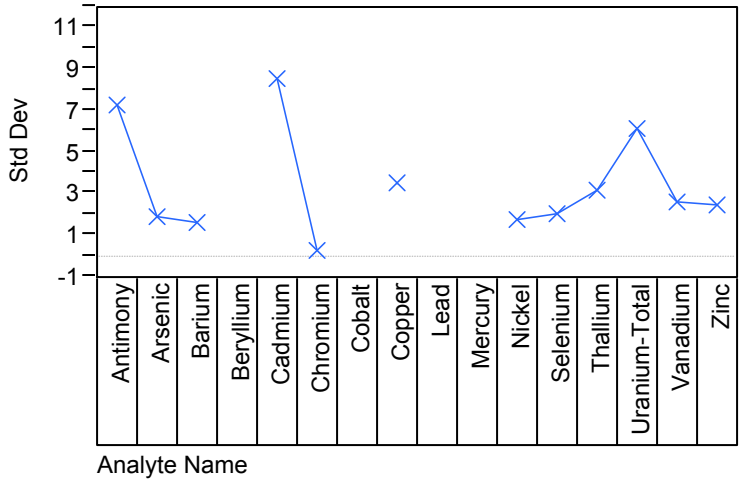
Variability Gauge Lab Code=MLIL01

Variability Chart for Bias

Variability Gauge Lab Code=MLIL01

Variability Chart for Bias



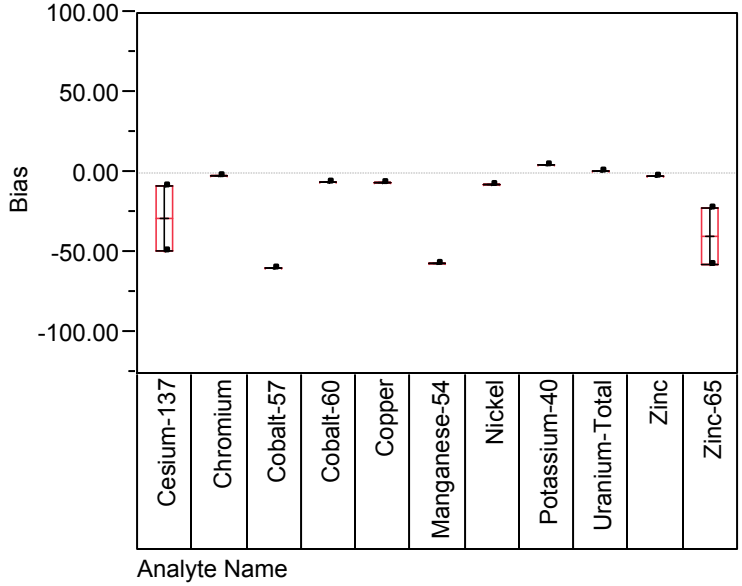


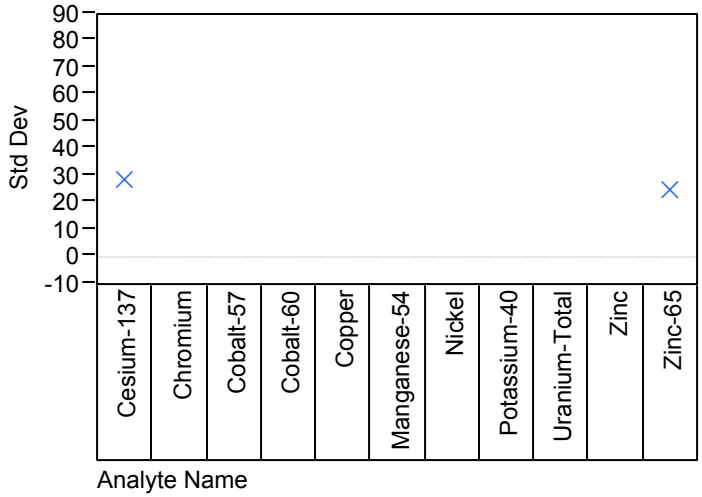
Variability Gauge Lab Code=MSCL01

Variability Chart for Bias

Variability Gauge Lab Code=MSCL01

Variability Chart for Bias



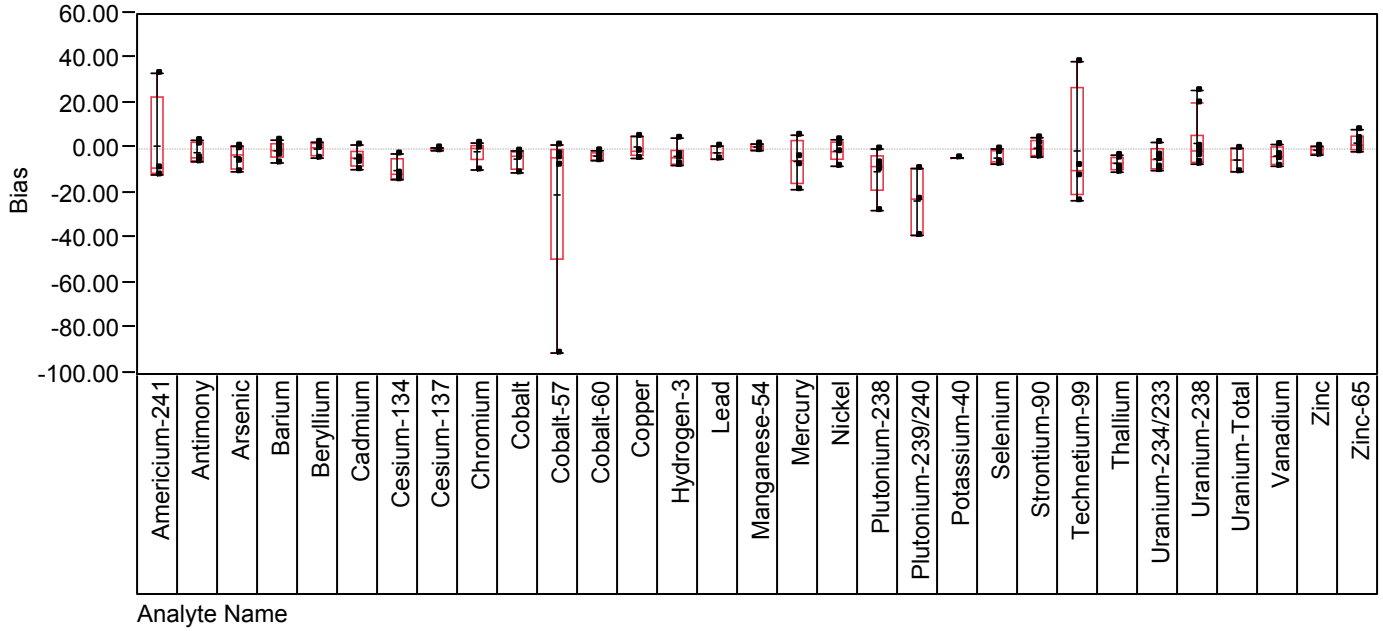


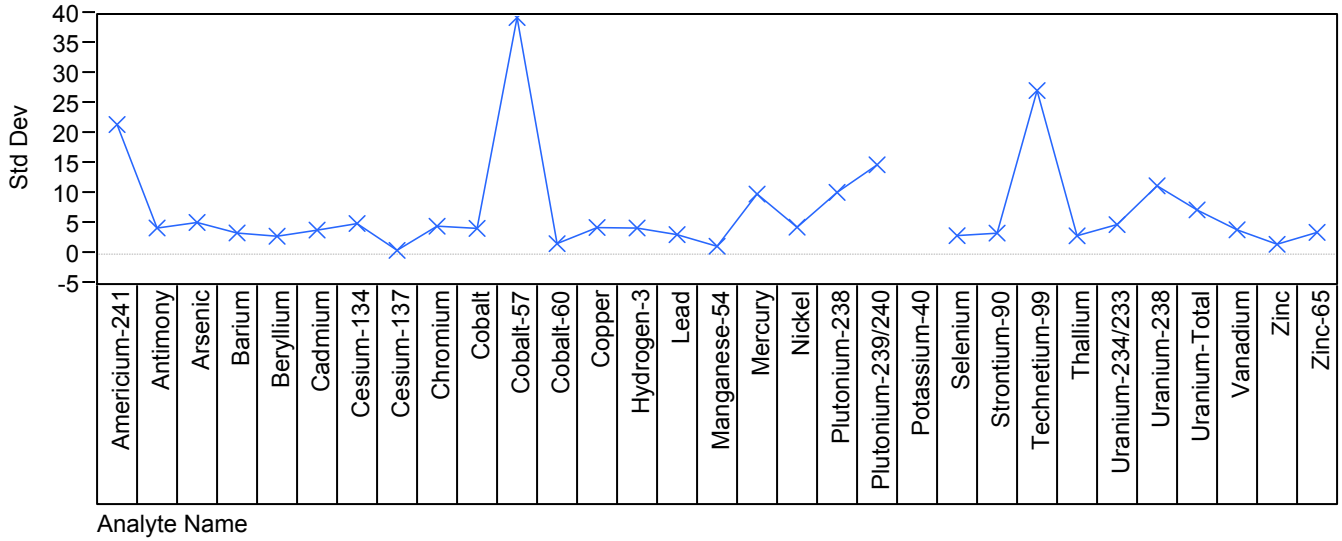
Variability Gauge Lab Code=NARL01

Variability Chart for Bias

Variability Gauge Lab Code=NARL01

Variability Chart for Bias



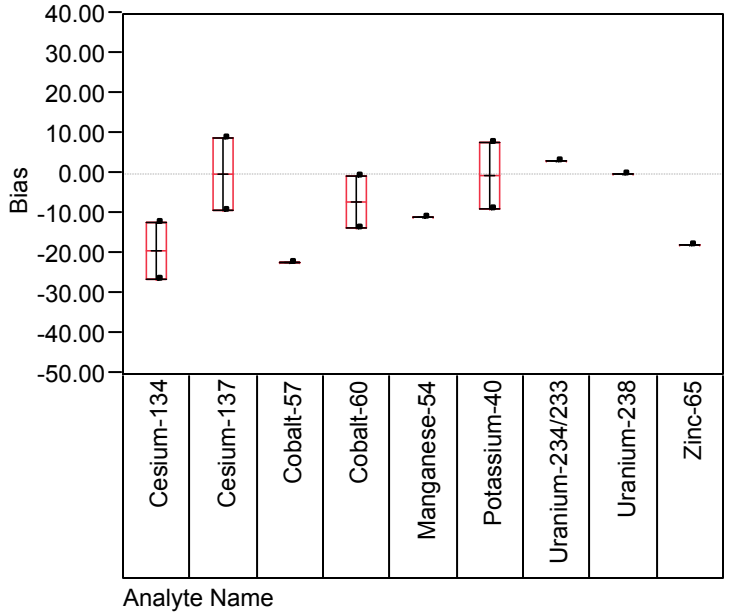


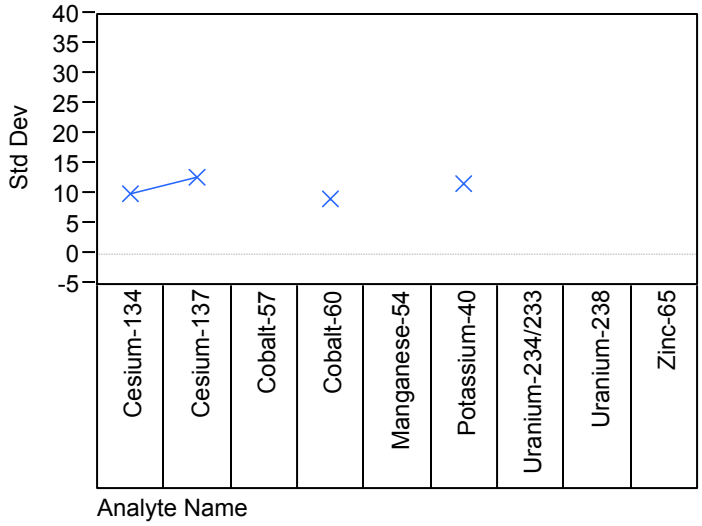
Variability Gauge Lab Code=NCNS99

Variability Chart for Bias

Variability Gauge Lab Code=NCNS99

Variability Chart for Bias



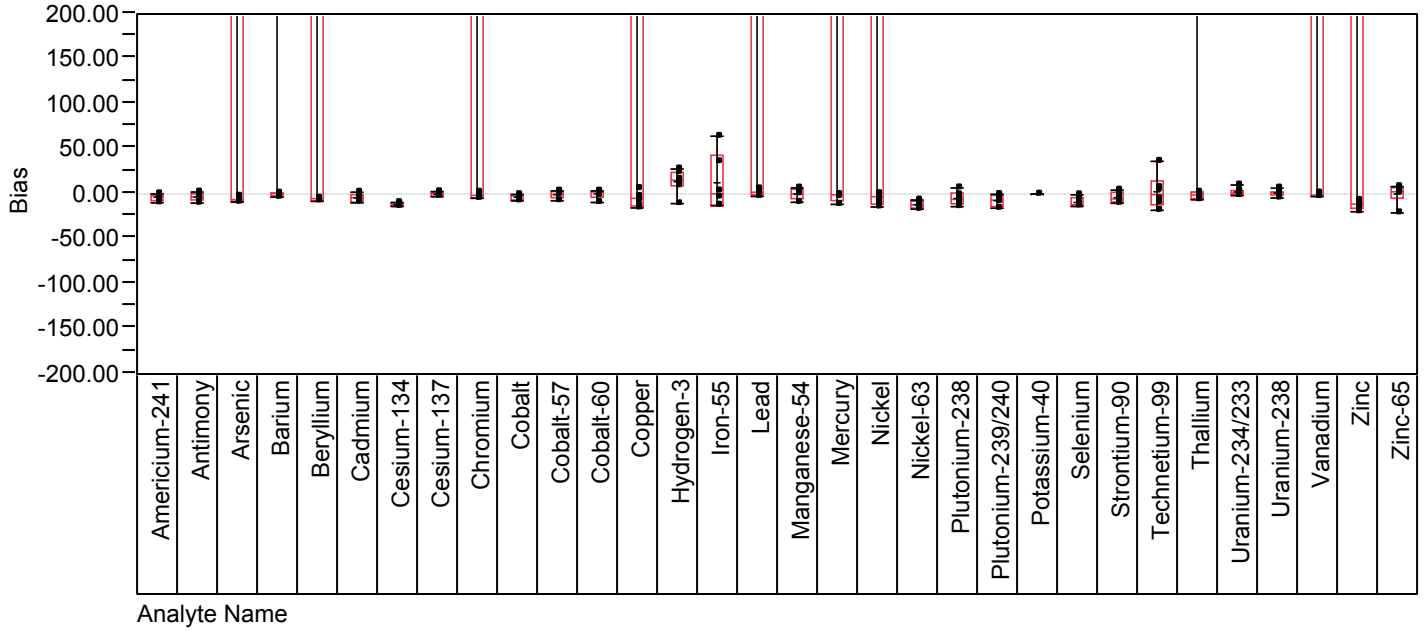


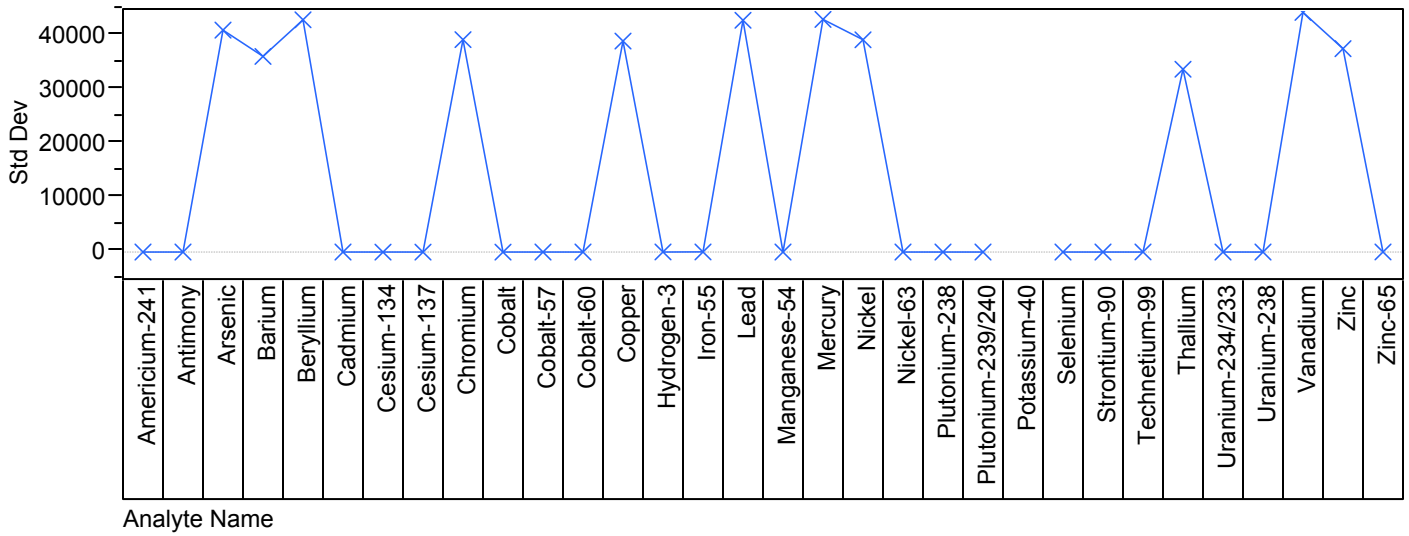
Variability Gauge Lab Code=NESI01

Variability Chart for Bias

Variability Gauge Lab Code=NESI01

Variability Chart for Bias



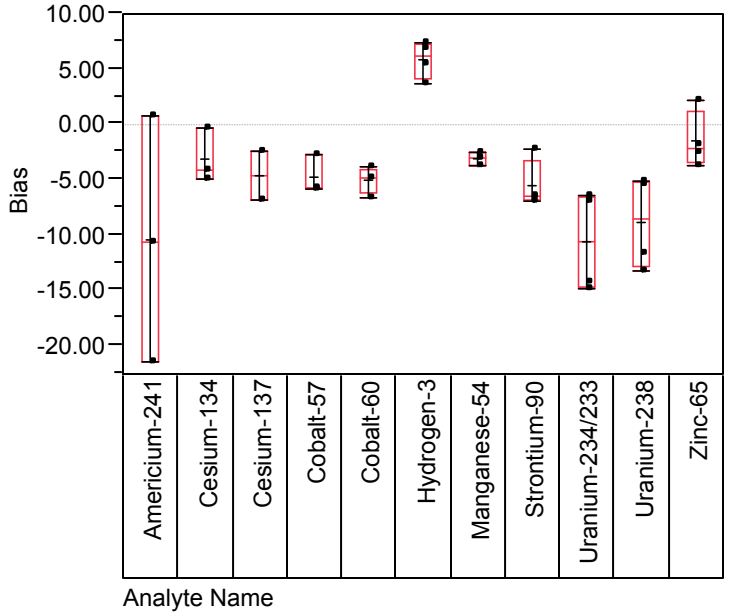


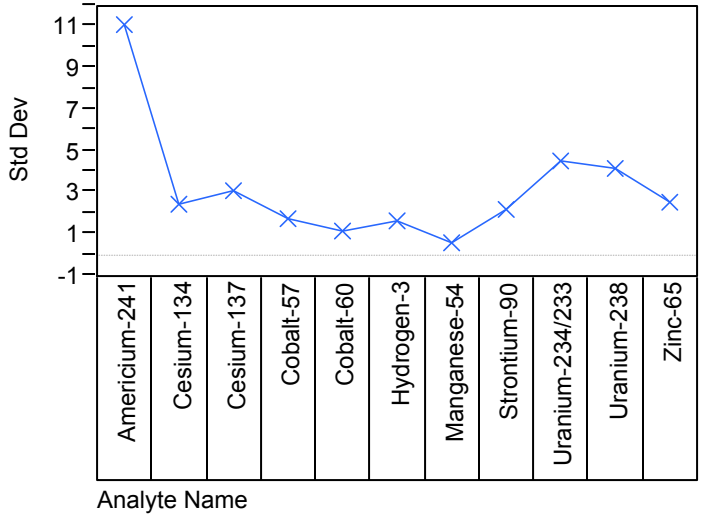
Variability Gauge Lab Code=NJDH01

Variability Chart for Bias

Variability Gauge Lab Code=NJDH01

Variability Chart for Bias



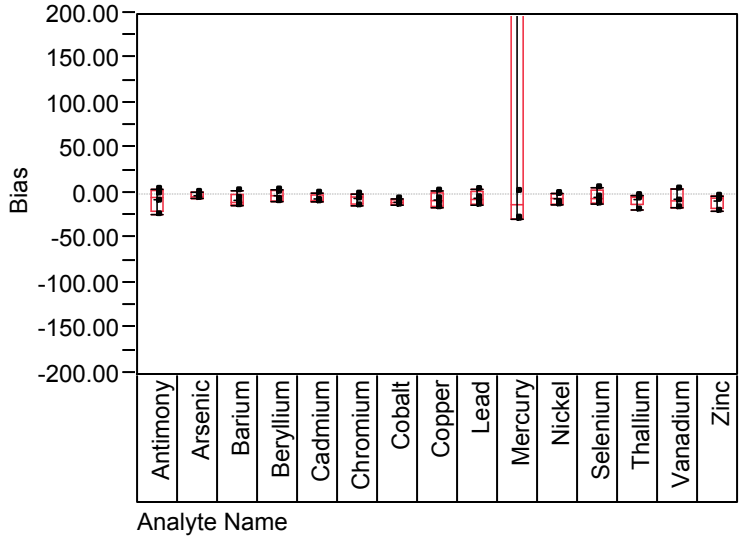


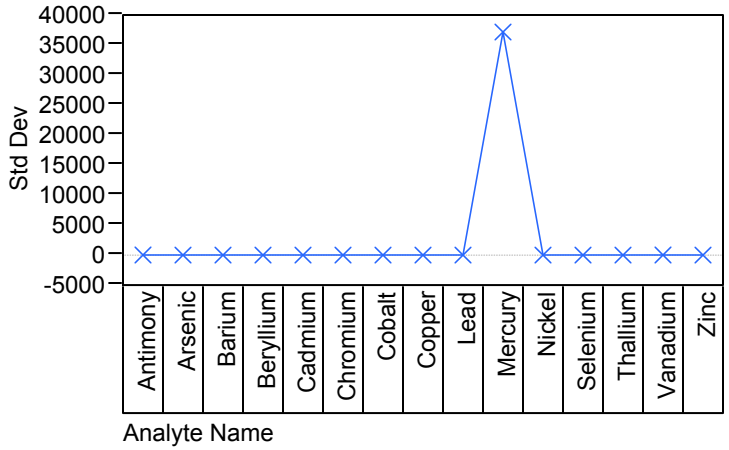
Variability Gauge Lab Code=NMLA01

Variability Chart for Bias

Variability Gauge Lab Code=NMLA01

Variability Chart for Bias



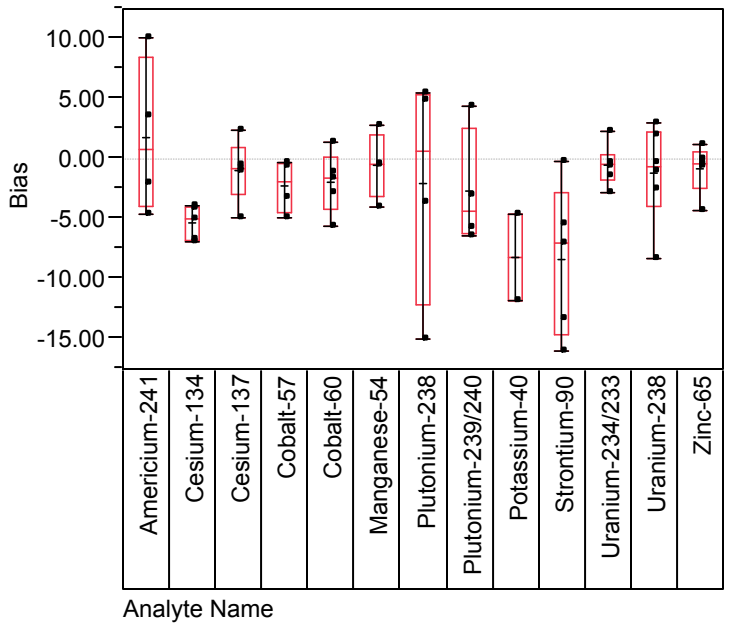


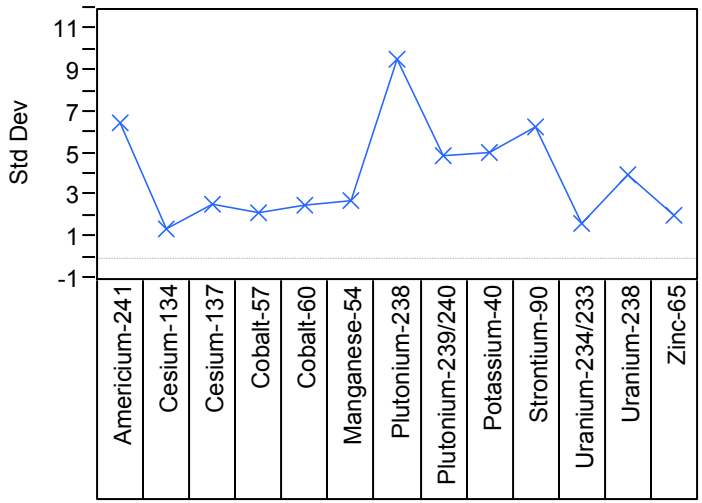
Variability Gauge Lab Code=NRLL99

Variability Chart for Bias

Variability Gauge Lab Code=NRLL99

Variability Chart for Bias



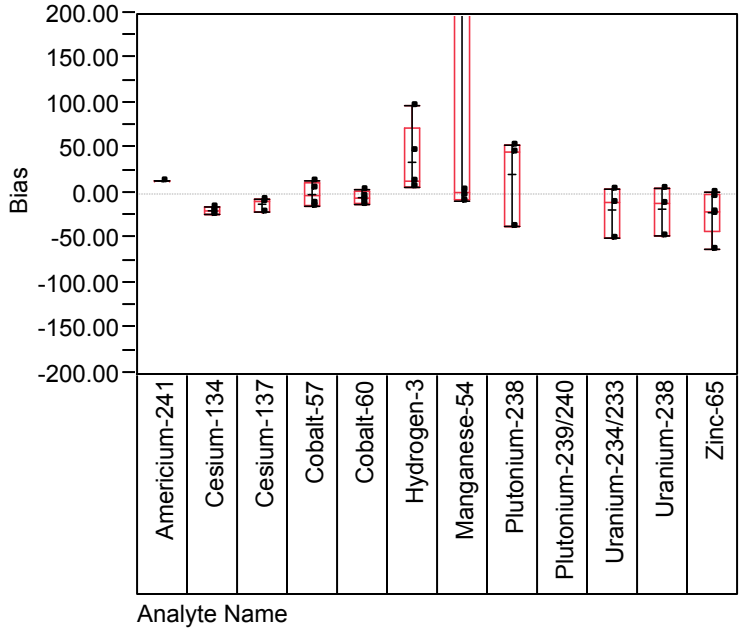


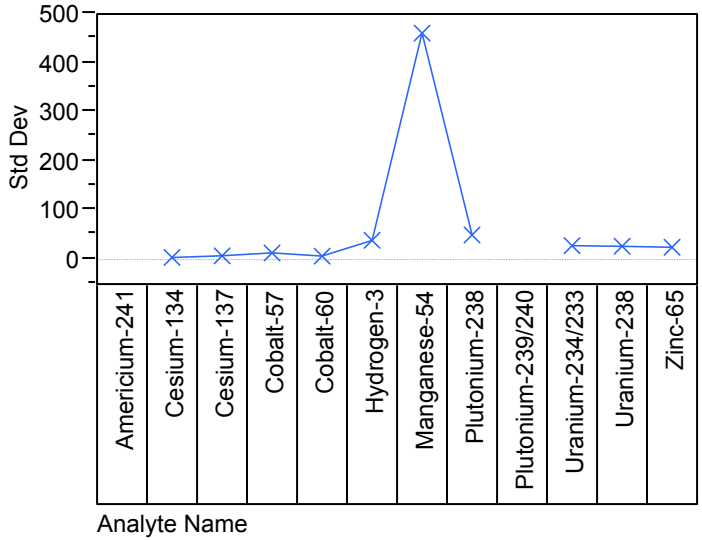
Variability Gauge Lab Code=NTSI01

Variability Chart for Bias

Variability Gauge Lab Code=NTSI01

Variability Chart for Bias



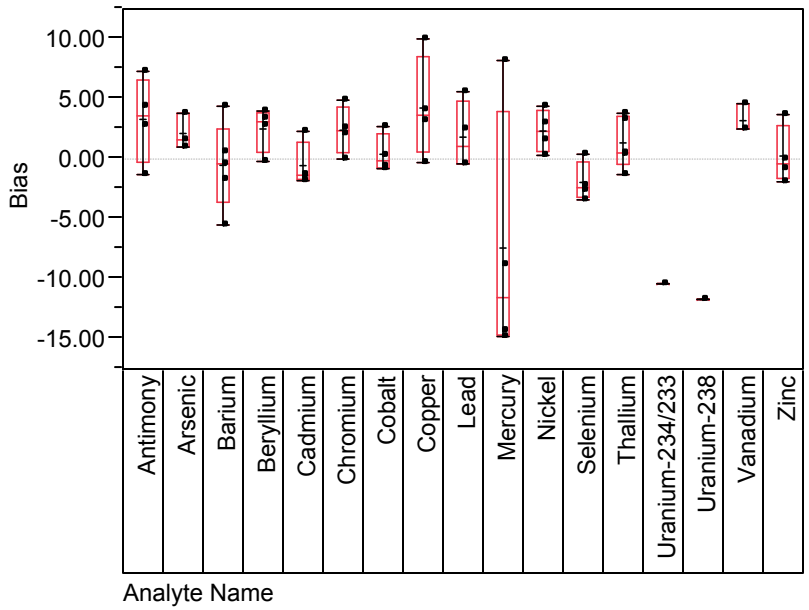


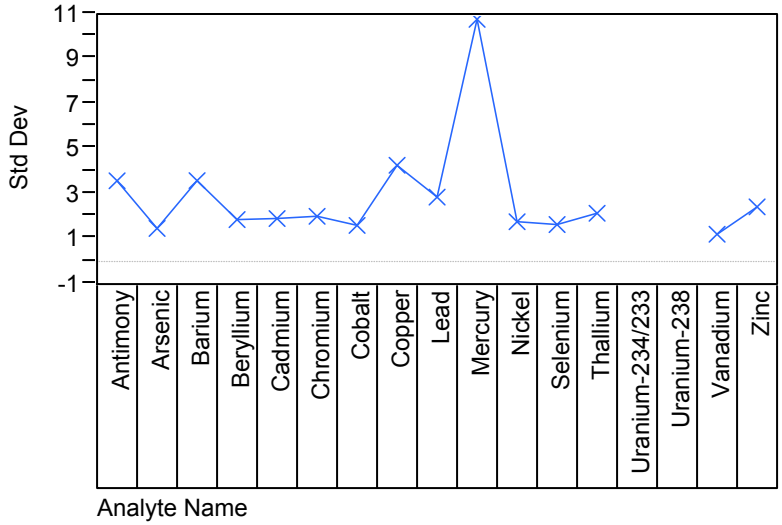
Variability Gauge Lab Code=OBGL01

Variability Chart for Bias

Variability Gauge Lab Code=OBGL01

Variability Chart for Bias



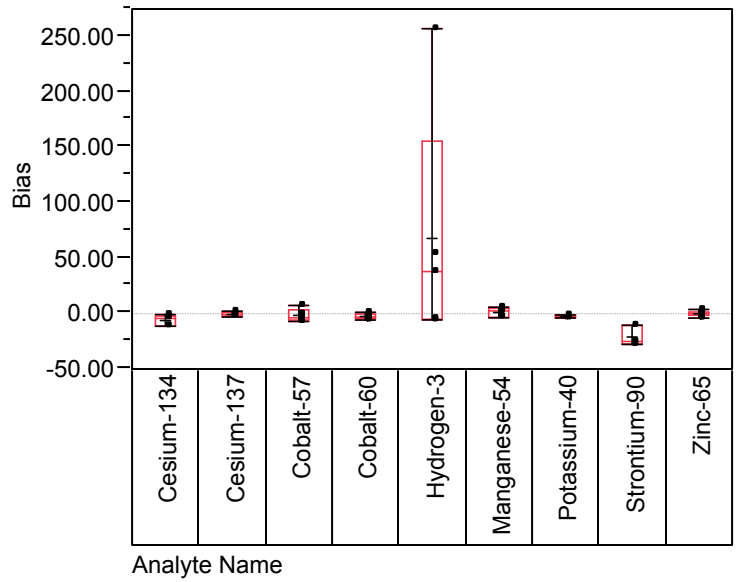


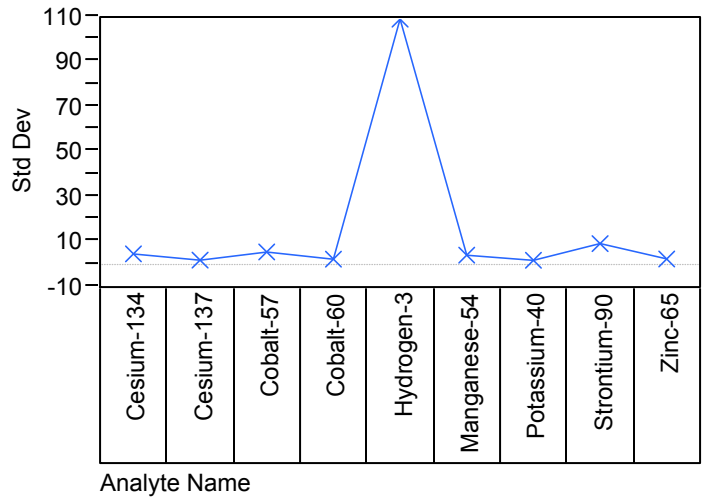
Variability Gauge Lab Code=ODHL01

Variability Chart for Bias

Variability Gauge Lab Code=ODHL01

Variability Chart for Bias



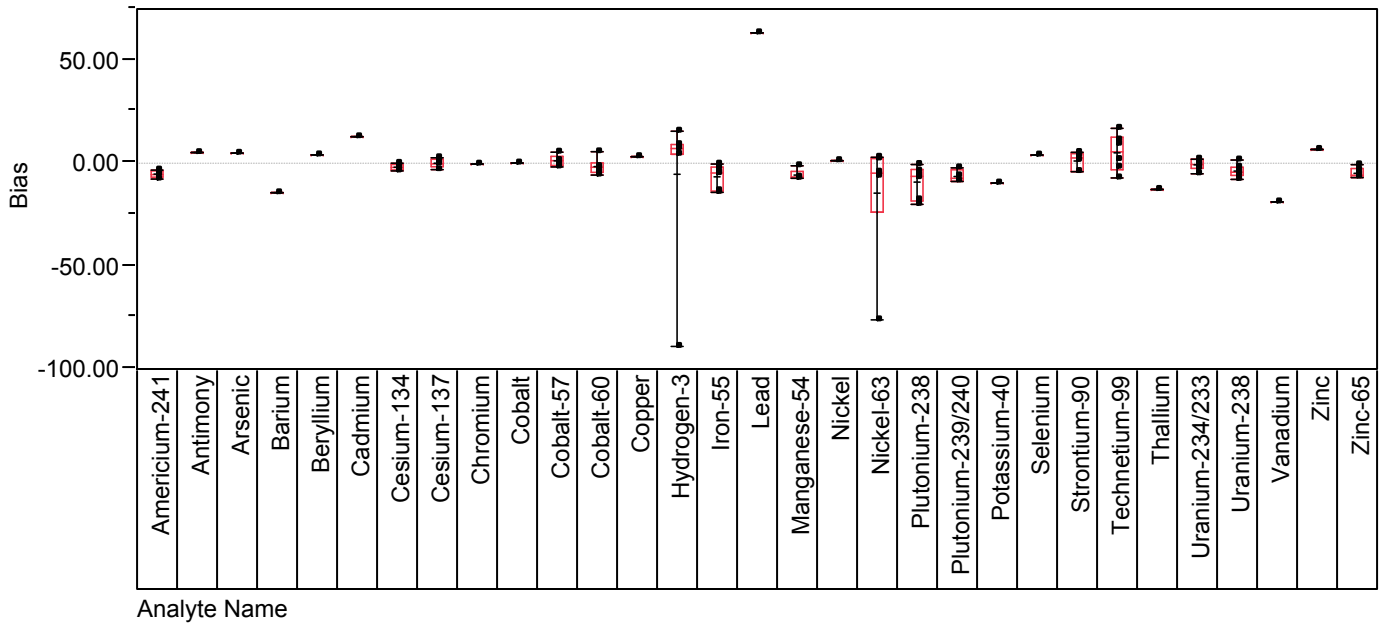


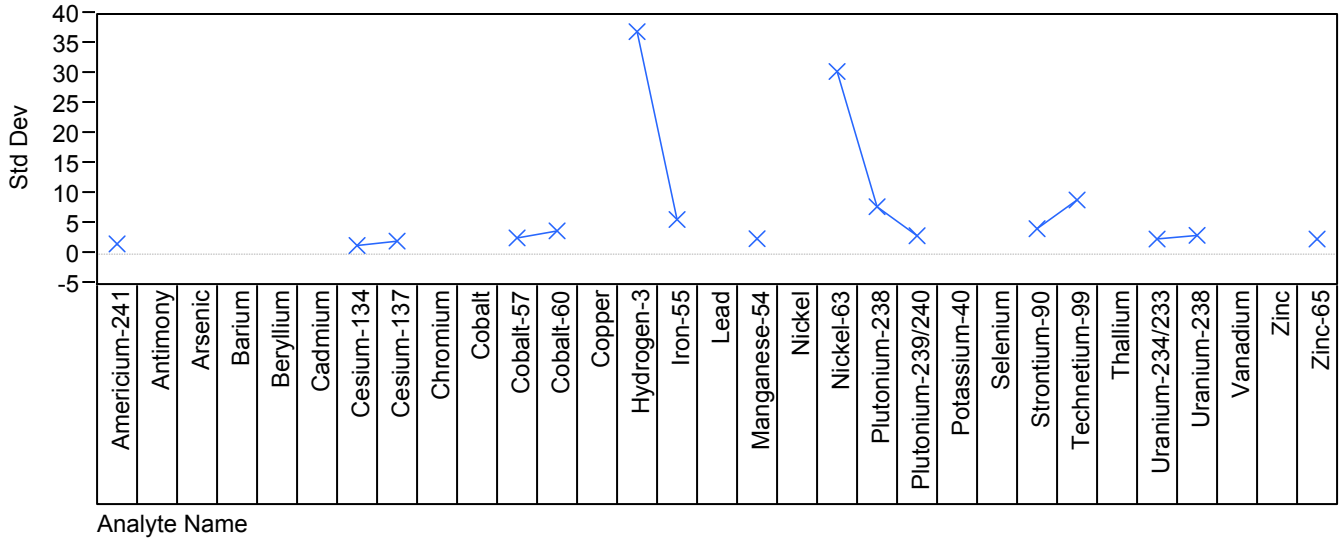
Variability Gauge Lab Code=ORIS01

Variability Chart for Bias

Variability Gauge Lab Code=ORIS01

Variability Chart for Bias



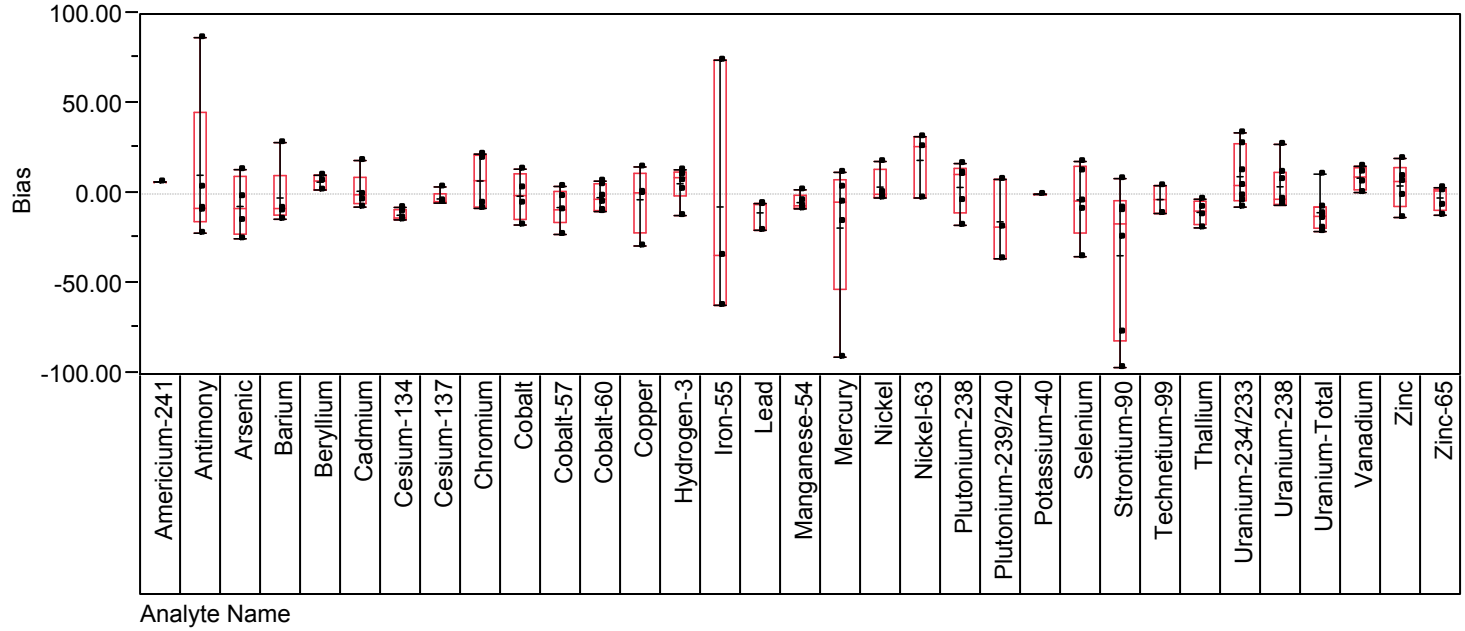


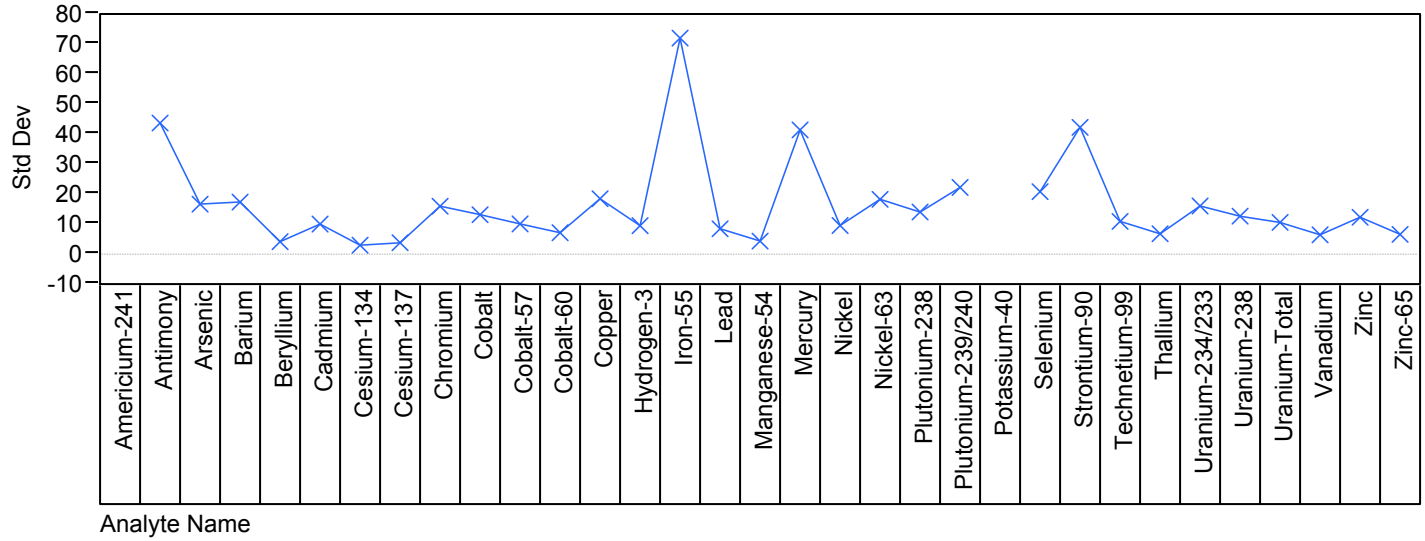
Variability Gauge Lab Code=OTLI01

Variability Chart for Bias

Variability Gauge Lab Code=OTLI01

Variability Chart for Bias



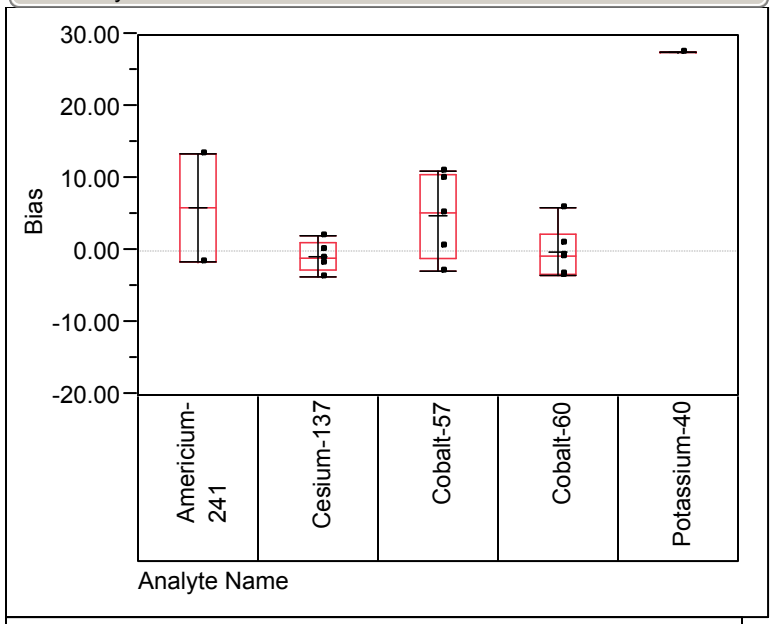


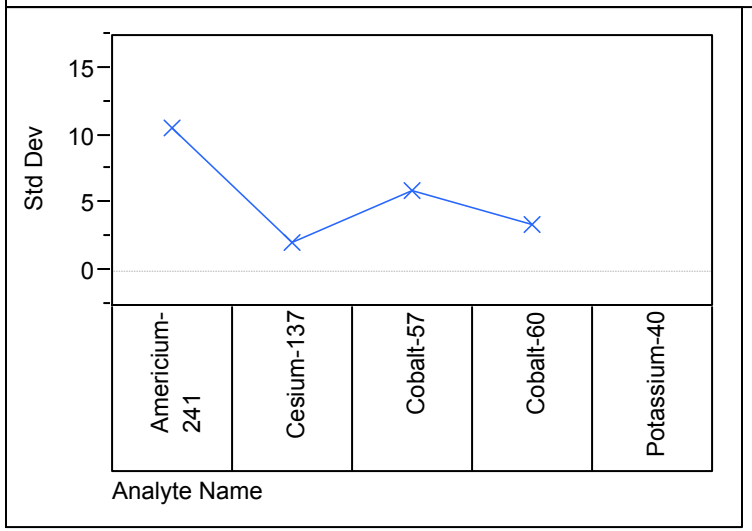
Variability Gauge Lab Code=PBRF01

Variability Chart for Bias

Variability Gauge Lab Code=PBRF01

Variability Chart for Bias



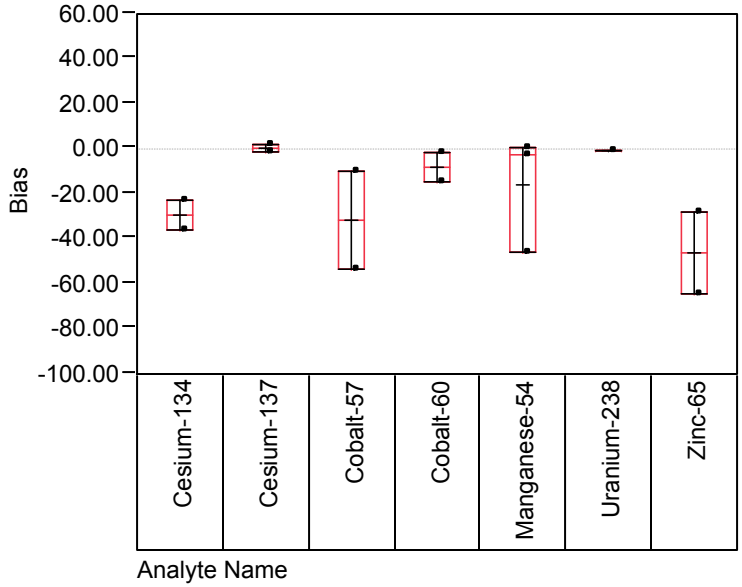


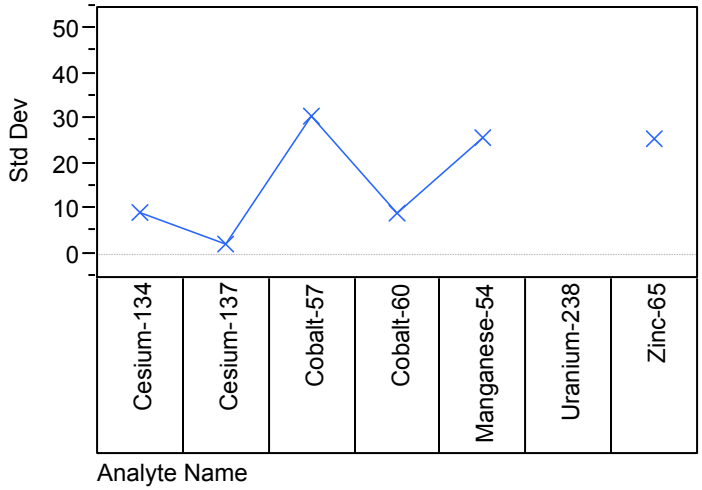
Variability Gauge Lab Code=PESL01

Variability Chart for Bias

Variability Gauge Lab Code=PESL01

Variability Chart for Bias



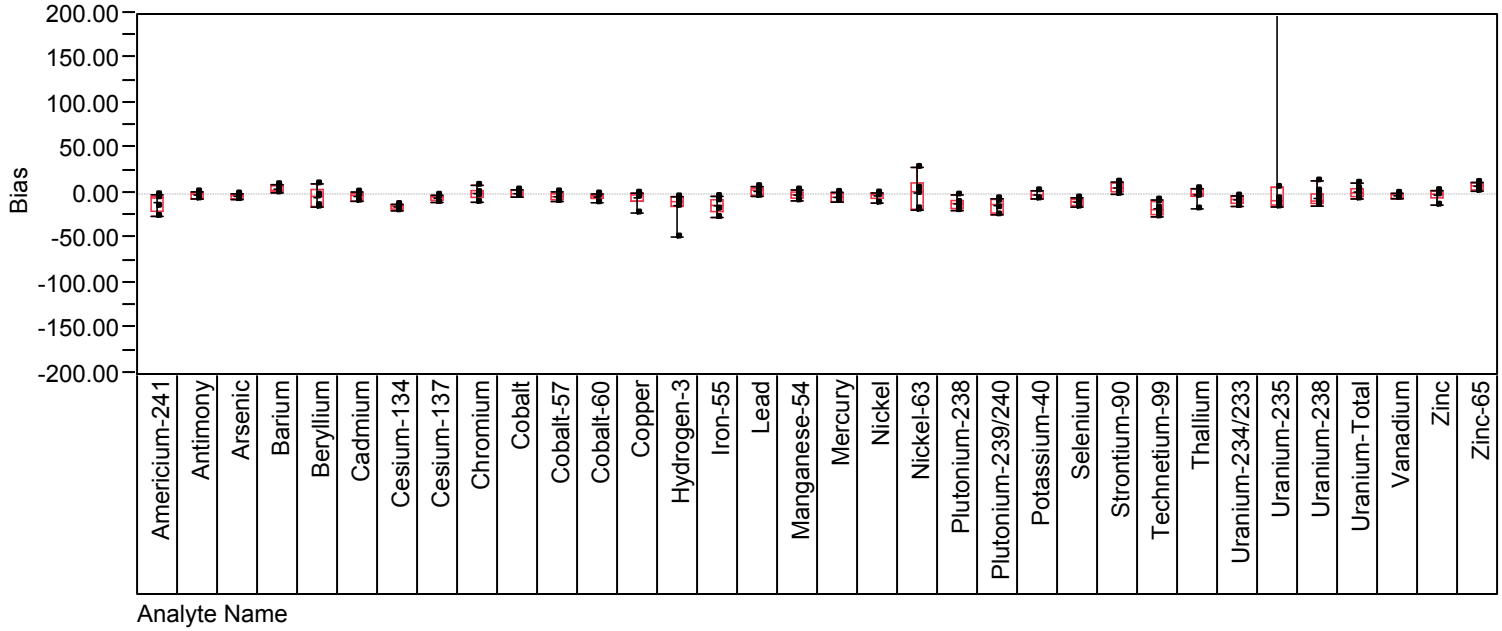


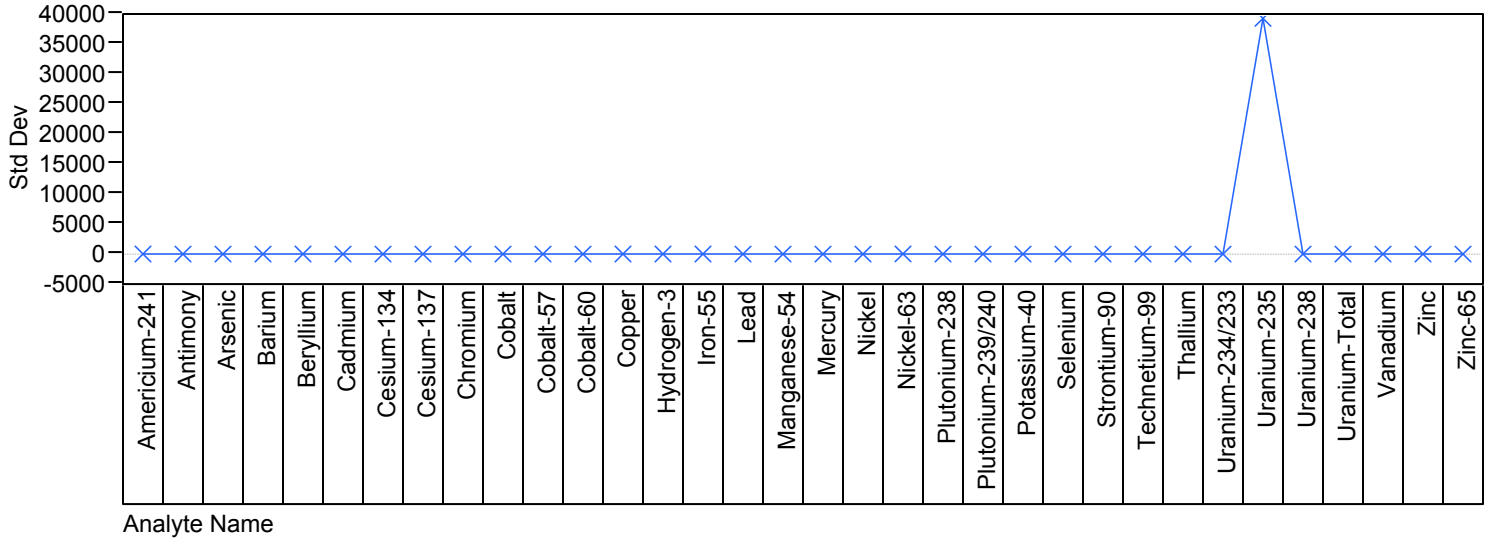
Variability Gauge Lab Code=QUAN01

Variability Chart for Bias

Variability Gauge Lab Code=QUAN01

Variability Chart for Bias



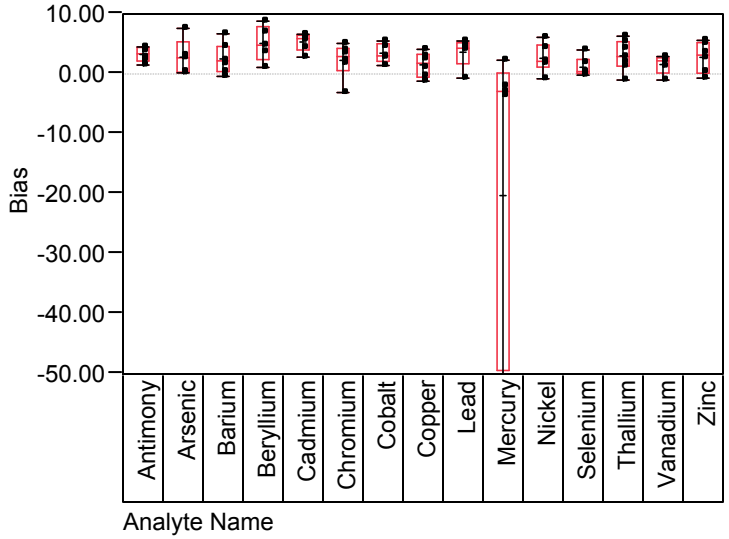


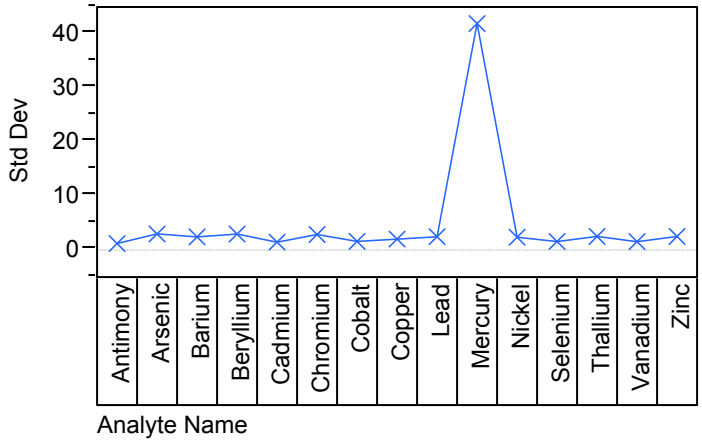
Variability Gauge Lab Code=QUAN02

Variability Chart for Bias

Variability Gauge Lab Code=QUAN02

Variability Chart for Bias



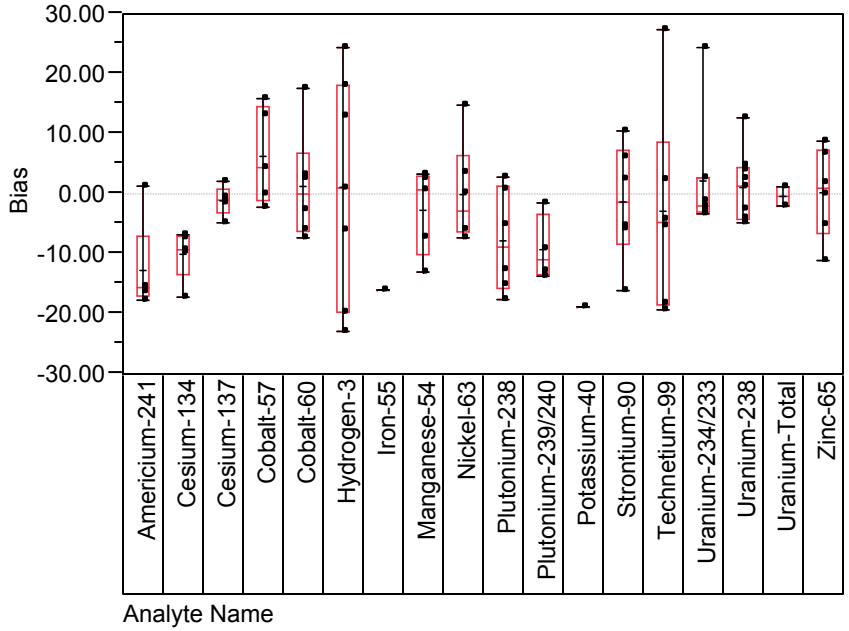


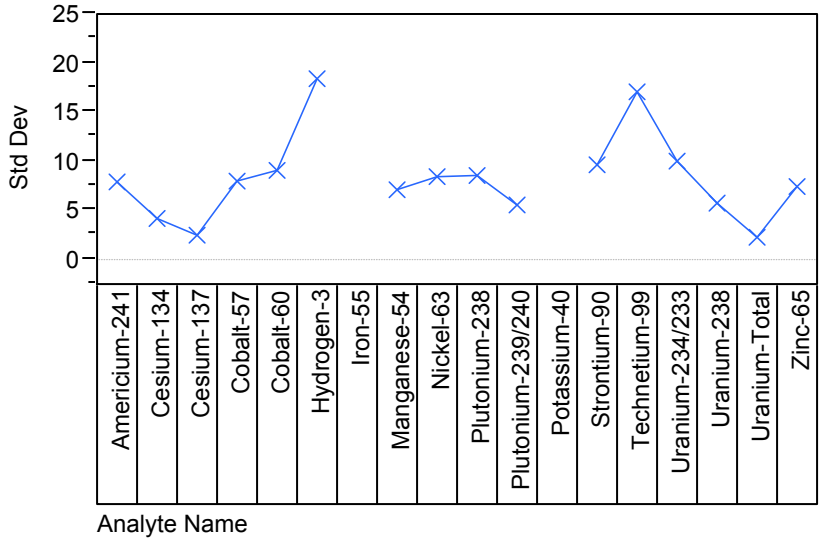
Variability Gauge Lab Code=QUAN03

Variability Chart for Bias

Variability Gauge Lab Code=QUAN03

Variability Chart for Bias



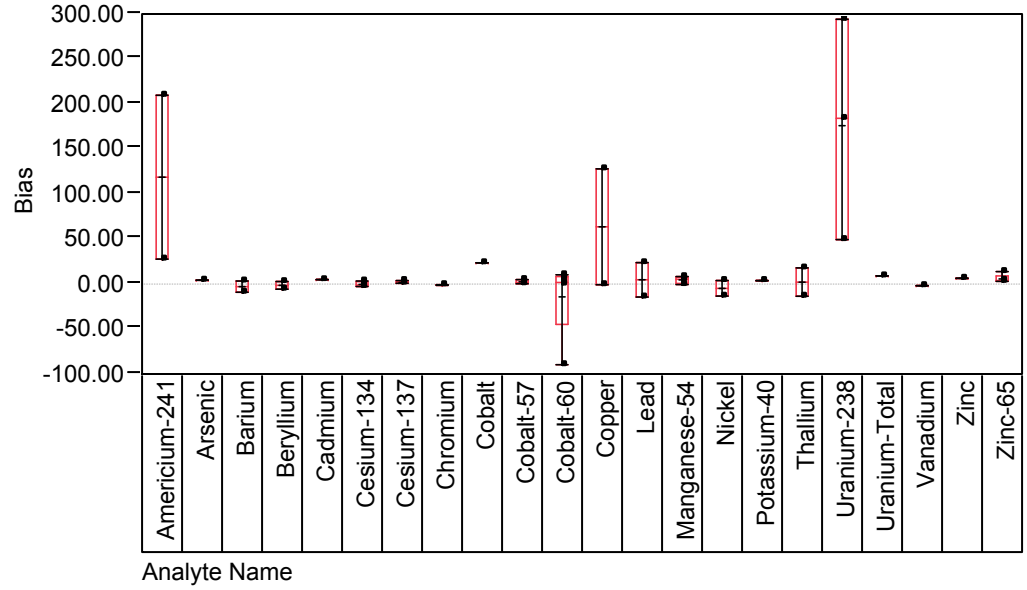


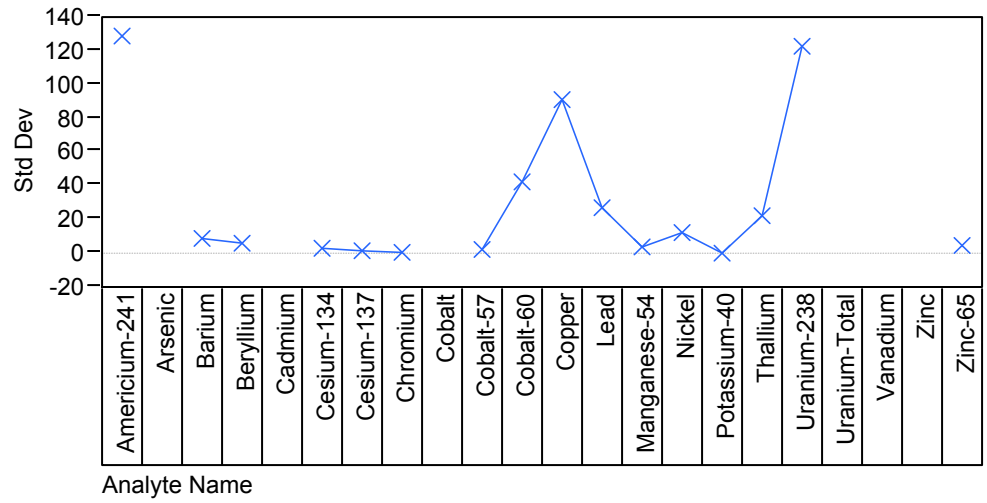
Variability Gauge Lab Code=RMCL99

Variability Chart for Bias

Variability Gauge Lab Code=RMCL99

Variability Chart for Bias



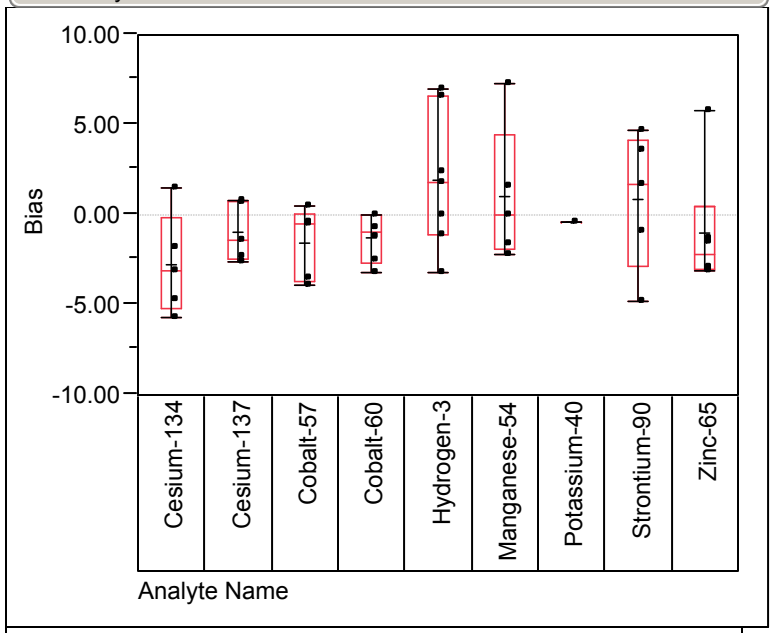


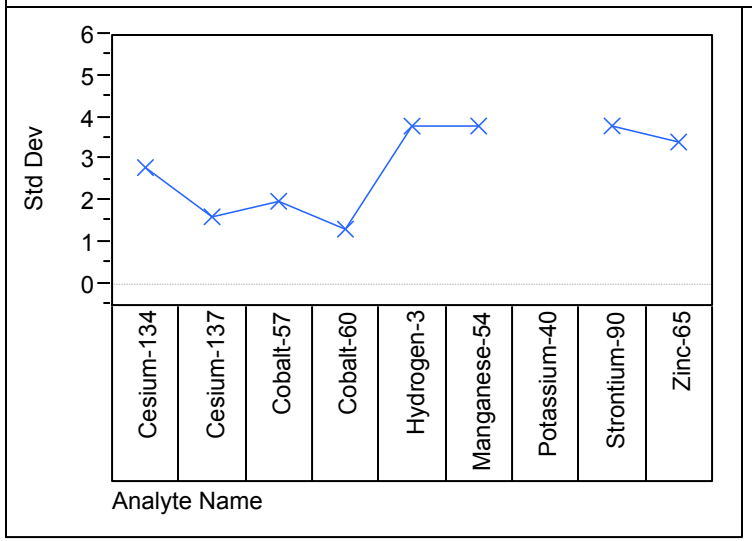
Variability Gauge Lab Code=RPSC01

Variability Chart for Bias

Variability Gauge Lab Code=RPSC01

Variability Chart for Bias



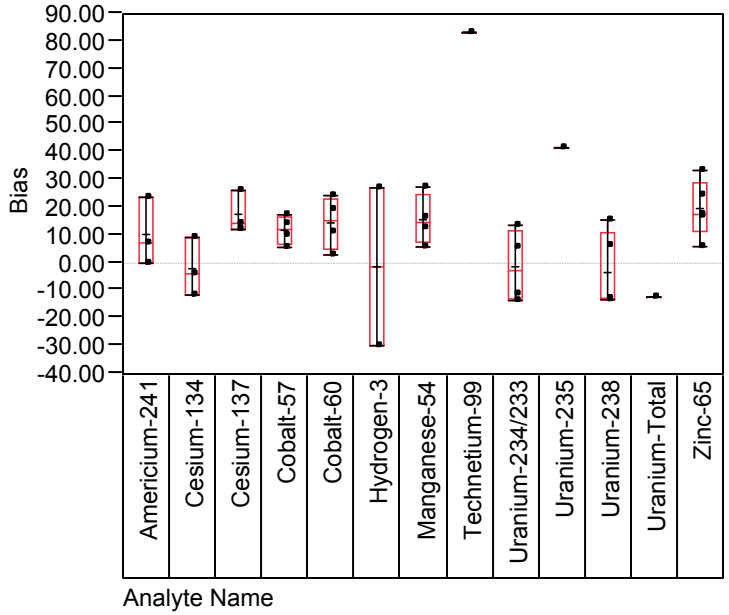


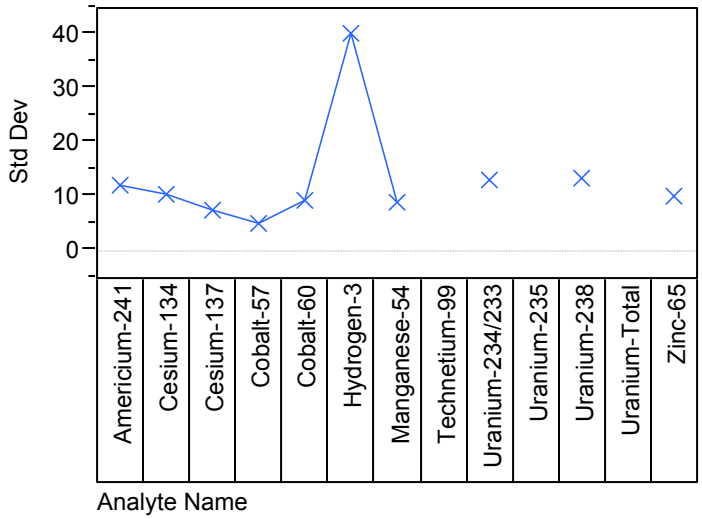
Variability Gauge Lab Code=RSAL01

Variability Chart for Bias

Variability Gauge Lab Code=RSAL01

Variability Chart for Bias



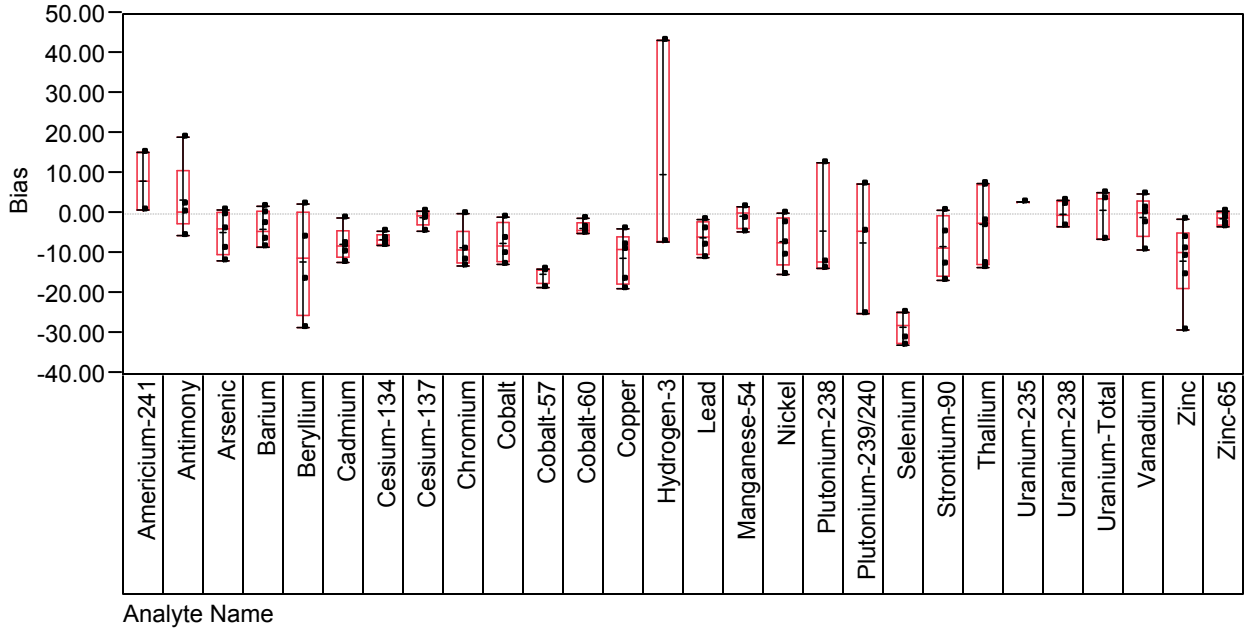


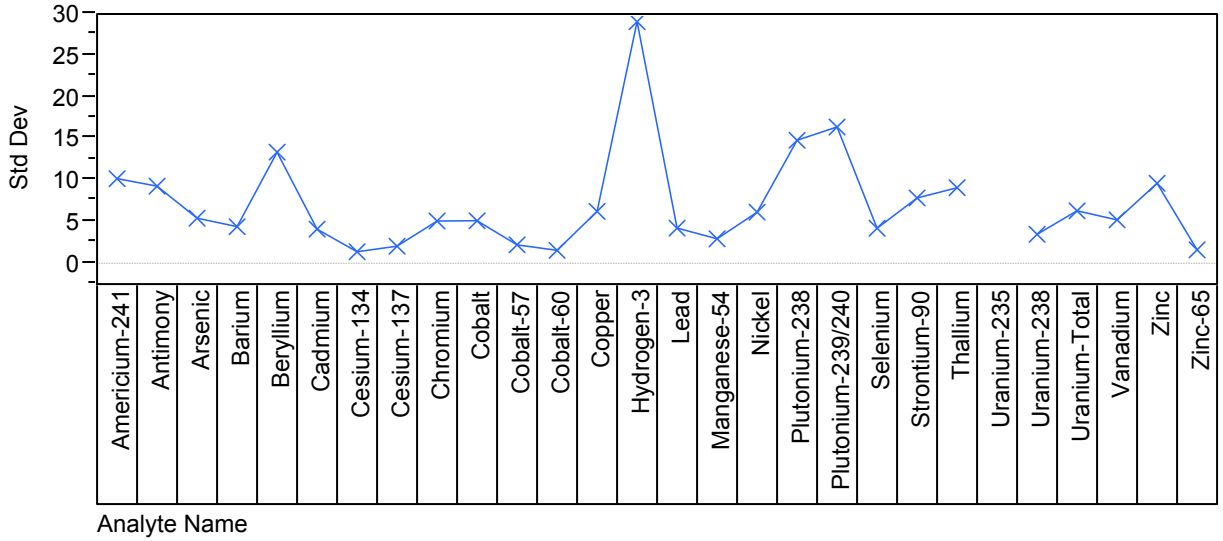
Variability Gauge Lab Code=RSIR99

Variability Chart for Bias

Variability Gauge Lab Code=RSIR99

Variability Chart for Bias



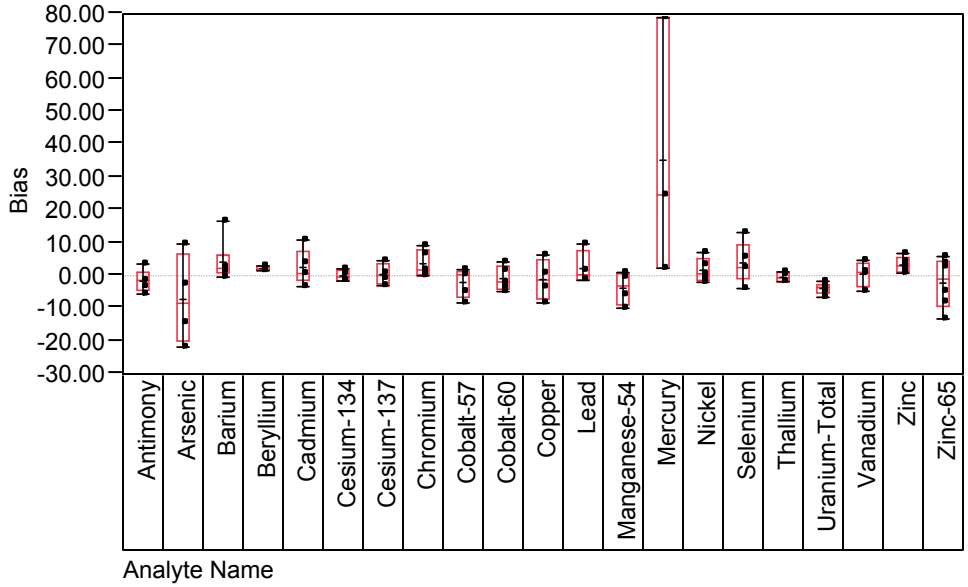


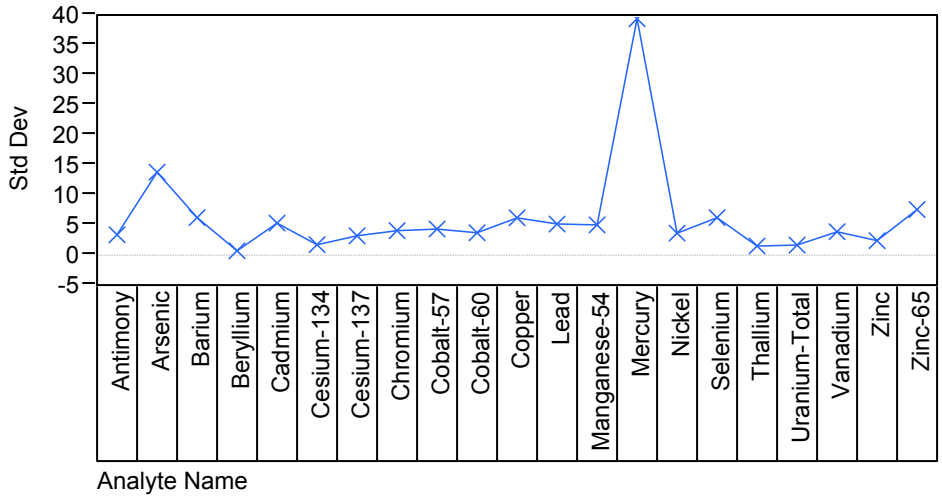
Variability Gauge Lab Code=SAVA01

Variability Chart for Bias

Variability Gauge Lab Code=SAVA01

Variability Chart for Bias



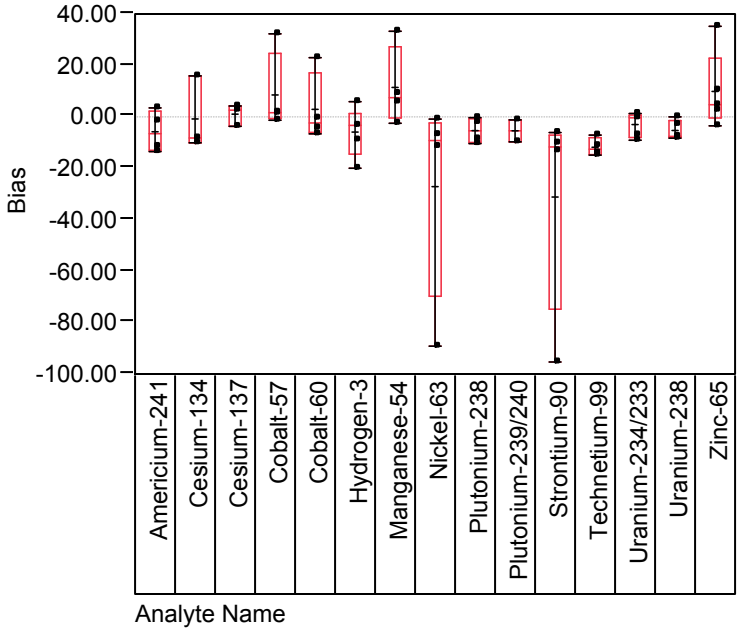


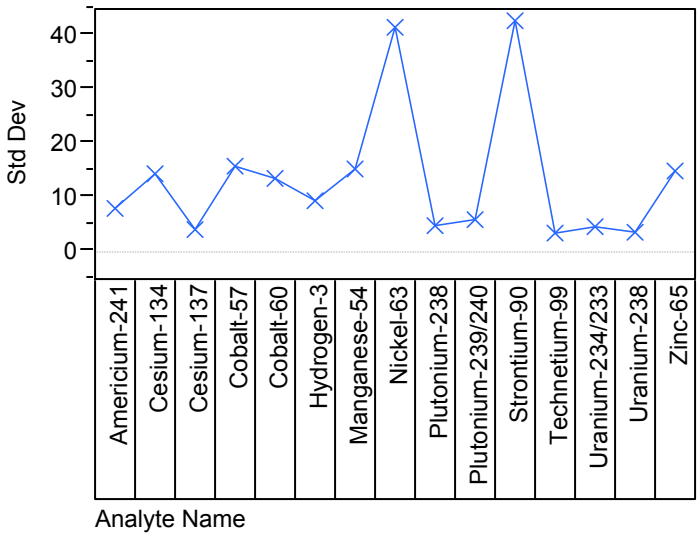
Variability Gauge Lab Code=SCAL01

Variability Chart for Bias

Variability Gauge Lab Code=SCAL01

Variability Chart for Bias



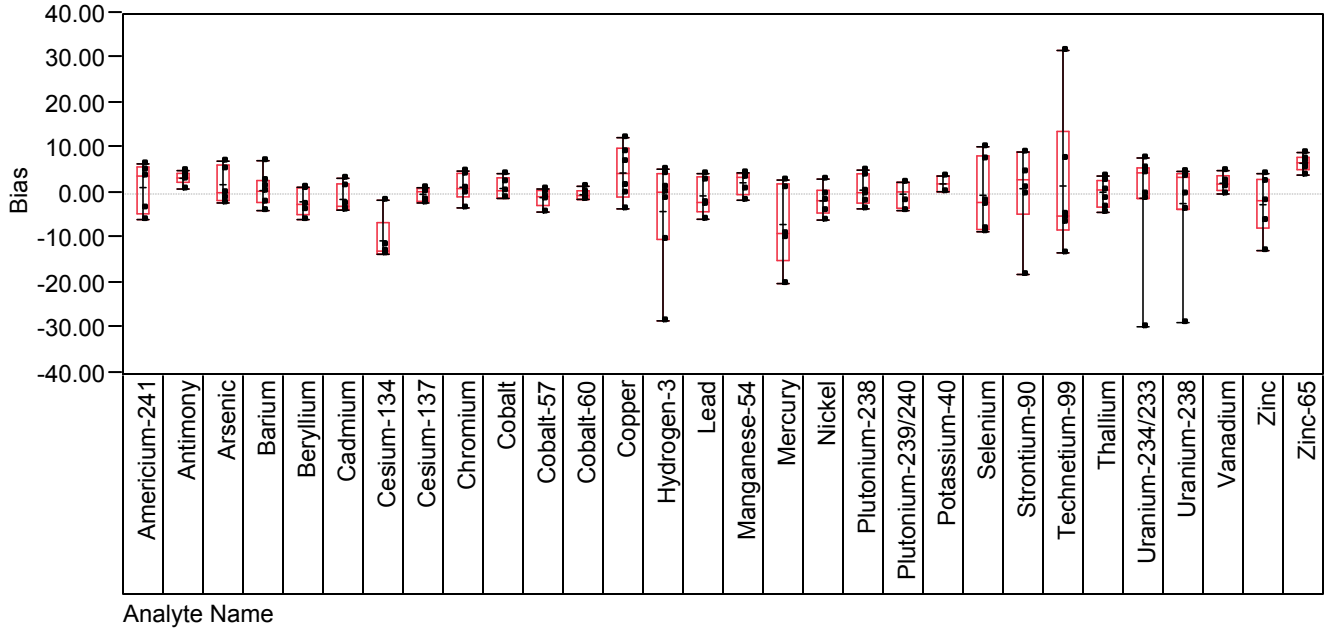


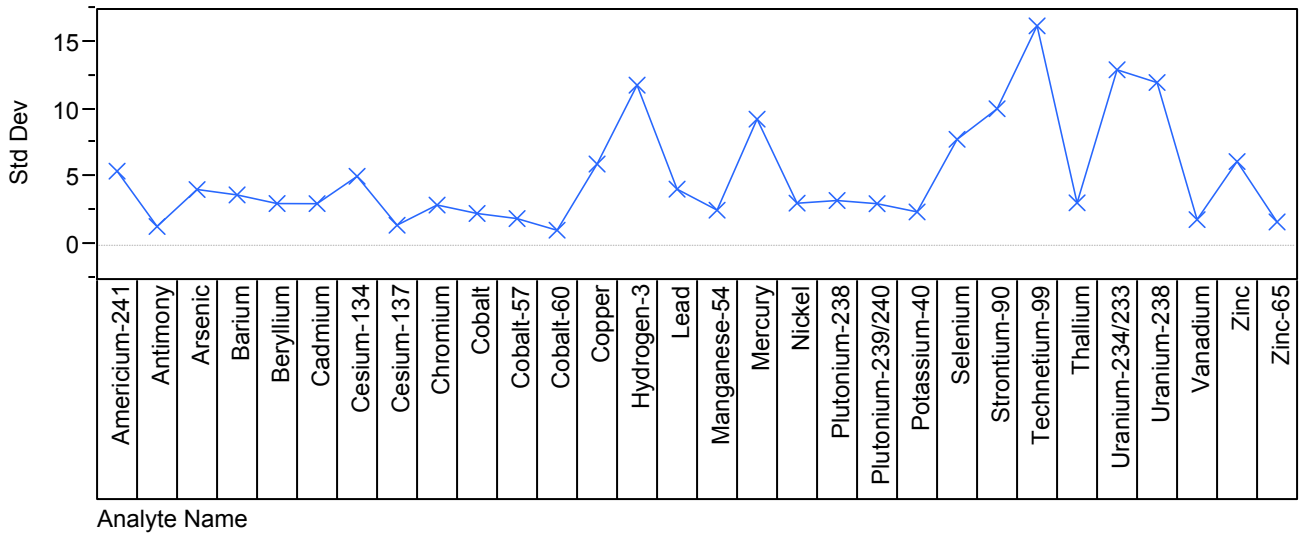
Variability Gauge Lab Code=SEML01

Variability Chart for Bias

Variability Gauge Lab Code=SEML01

Variability Chart for Bias



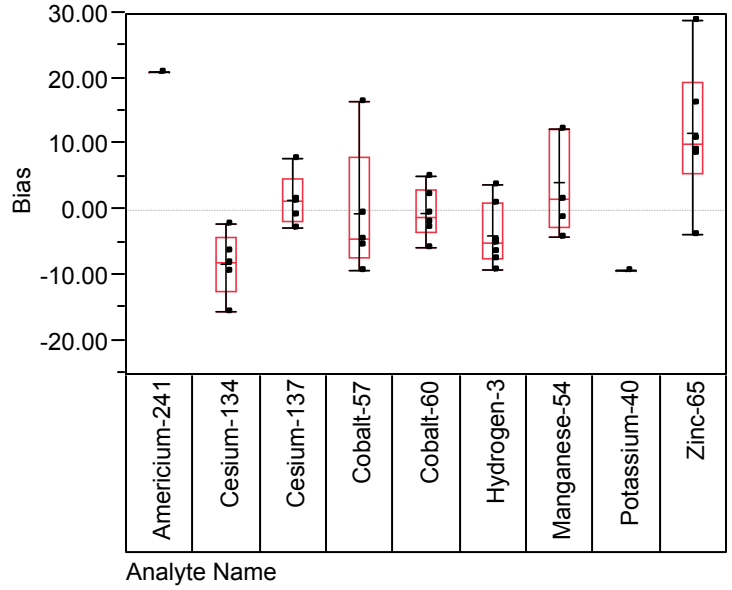


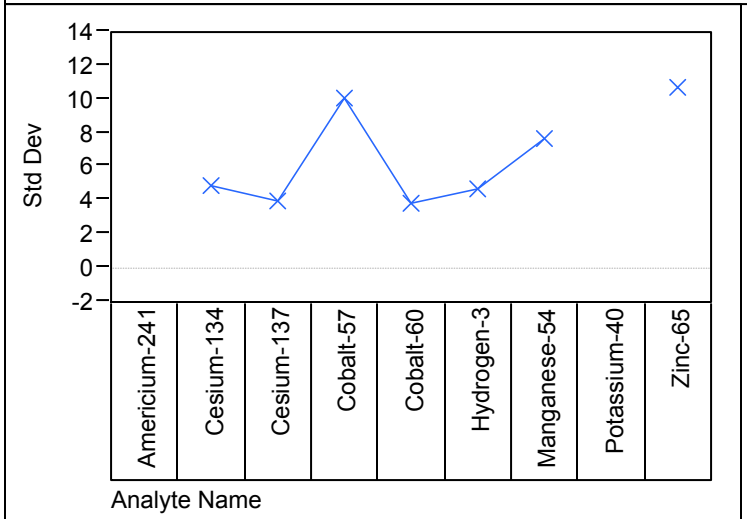
Variability Gauge Lab Code=SLAC01

Variability Chart for Bias

Variability Gauge Lab Code=SLAC01

Variability Chart for Bias



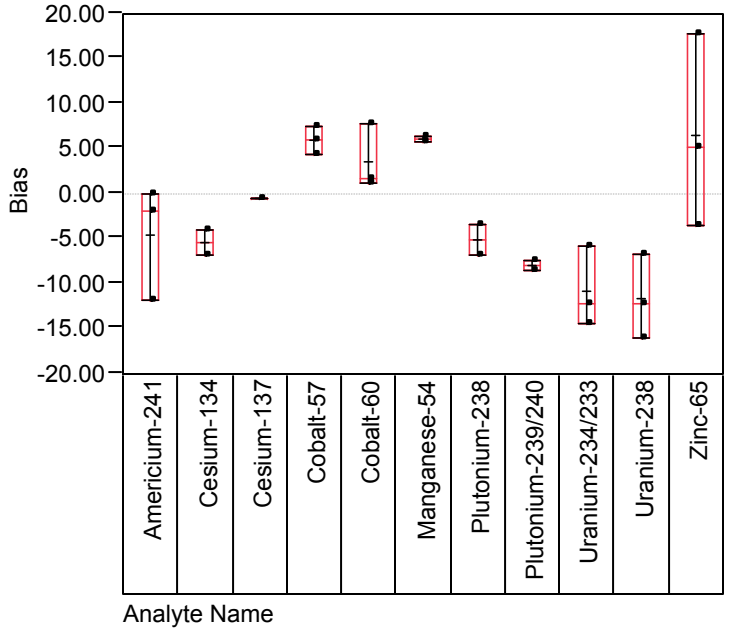


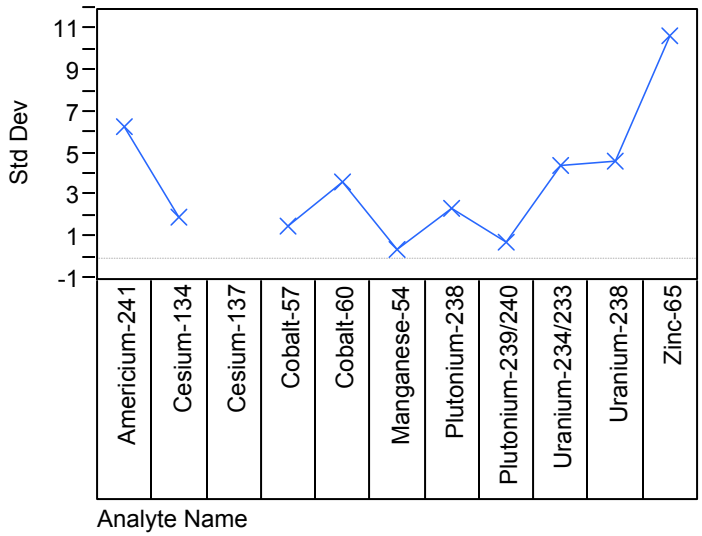
Variability Gauge Lab Code=SLDL01

Variability Chart for Bias

Variability Gauge Lab Code=SLDL01

Variability Chart for Bias



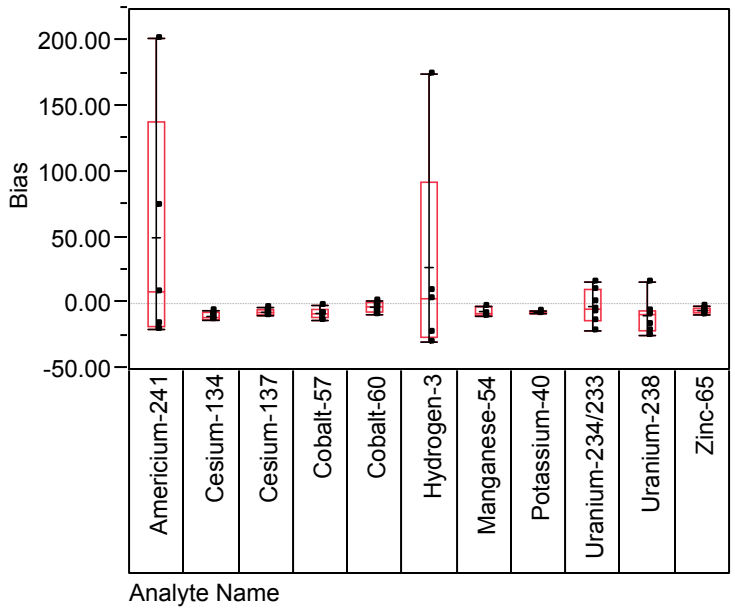


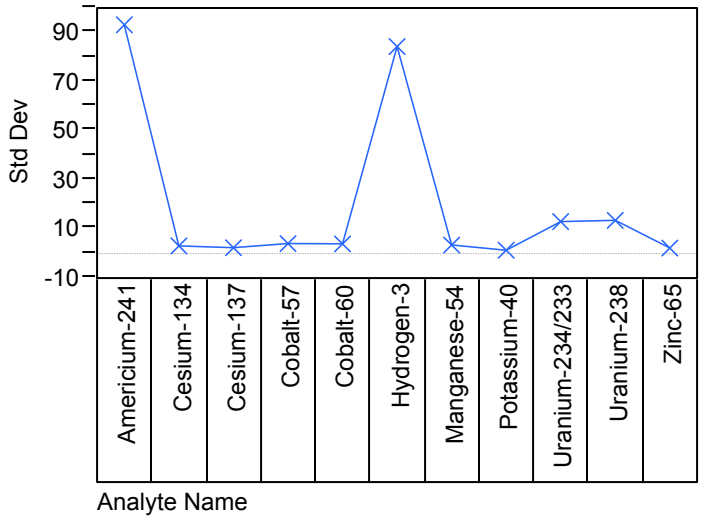
Variability Gauge Lab Code=SNRC99

Variability Chart for Bias

Variability Gauge Lab Code=SNRC99

Variability Chart for Bias



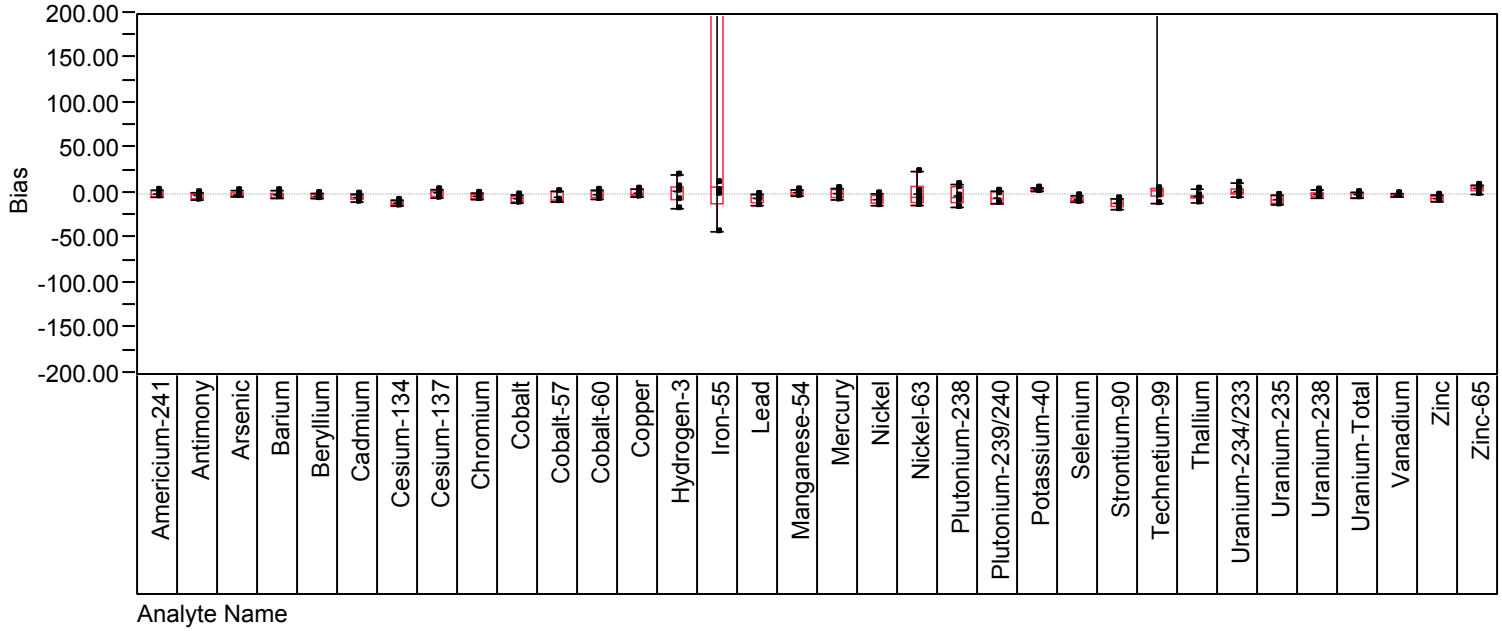


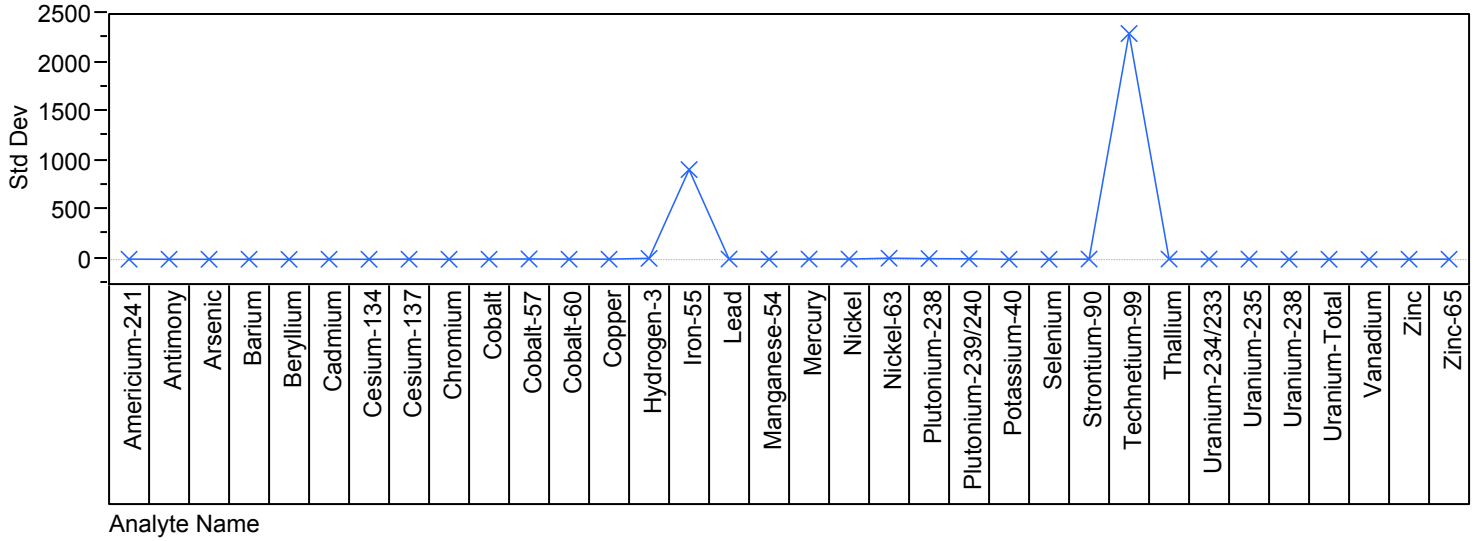
Variability Gauge Lab Code=SOUT01

Variability Chart for Bias

Variability Gauge Lab Code=SOUT01

Variability Chart for Bias



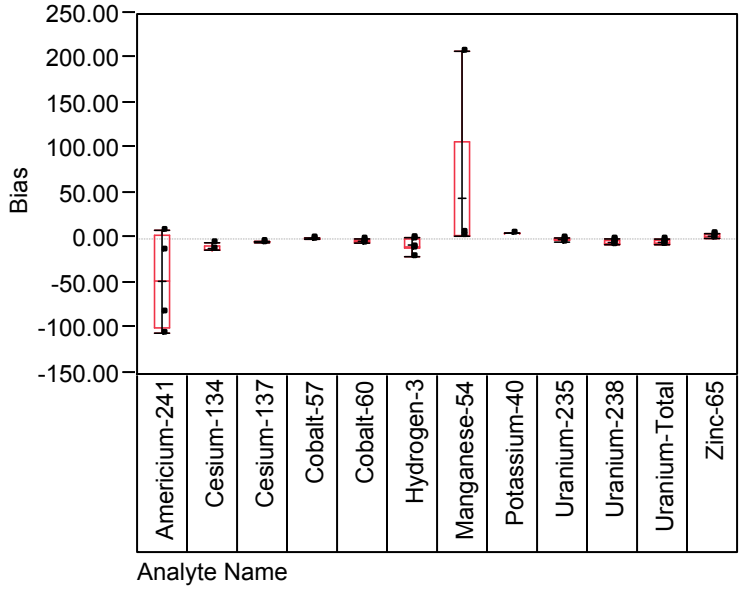


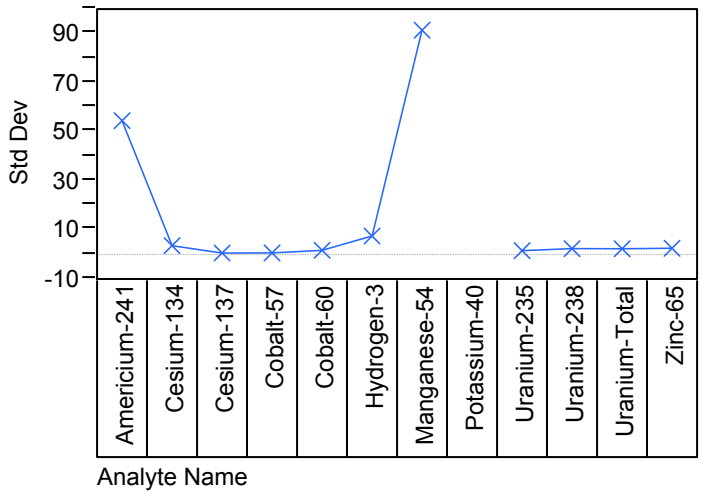
Variability Gauge Lab Code=SRPD01

Variability Chart for Bias

Variability Gauge Lab Code=SRPD01

Variability Chart for Bias



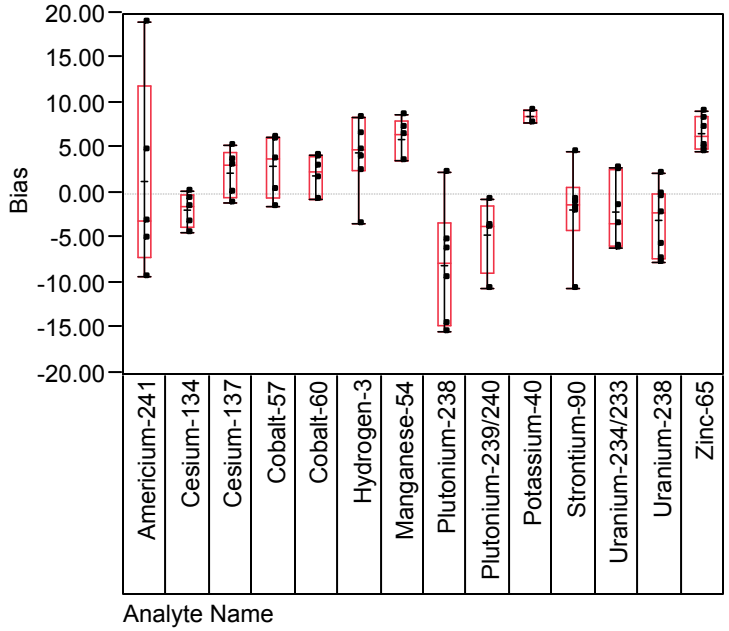


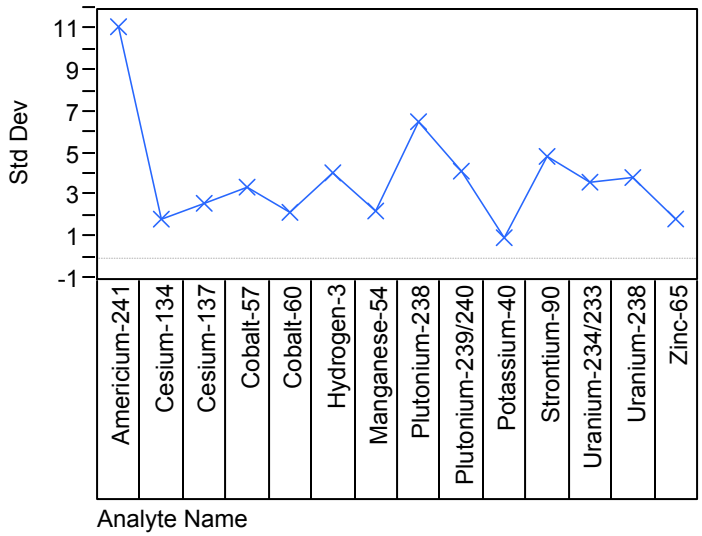
Variability Gauge Lab Code=TDHL01

Variability Chart for Bias

Variability Gauge Lab Code=TDHL01

Variability Chart for Bias



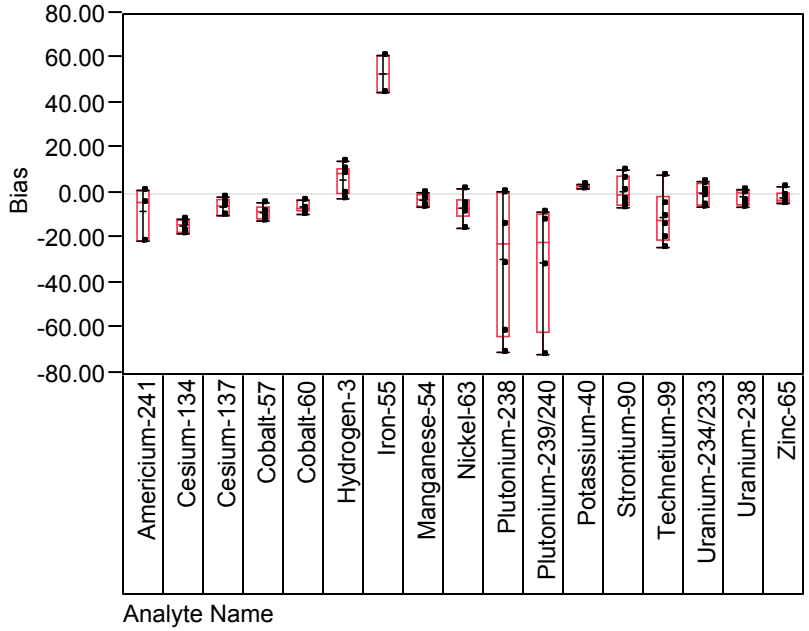


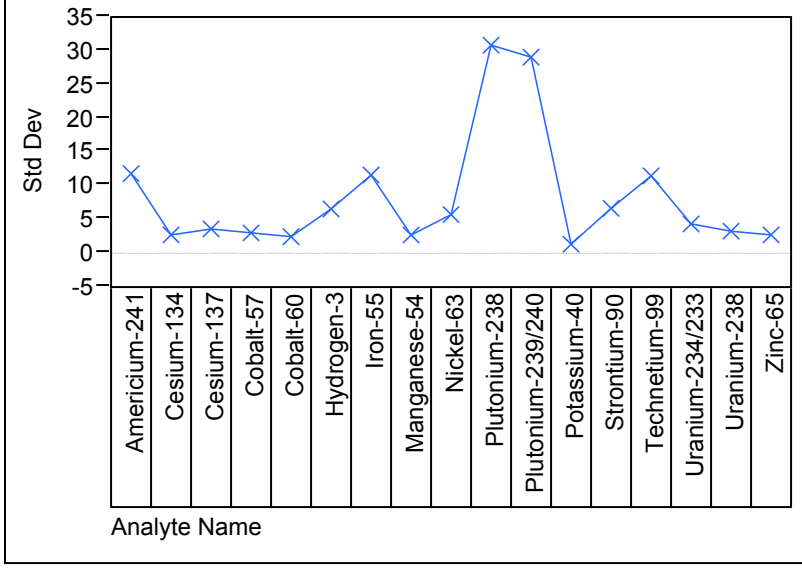
Variability Gauge Lab Code=TELE01

Variability Chart for Bias

Variability Gauge Lab Code=TELE01

Variability Chart for Bias



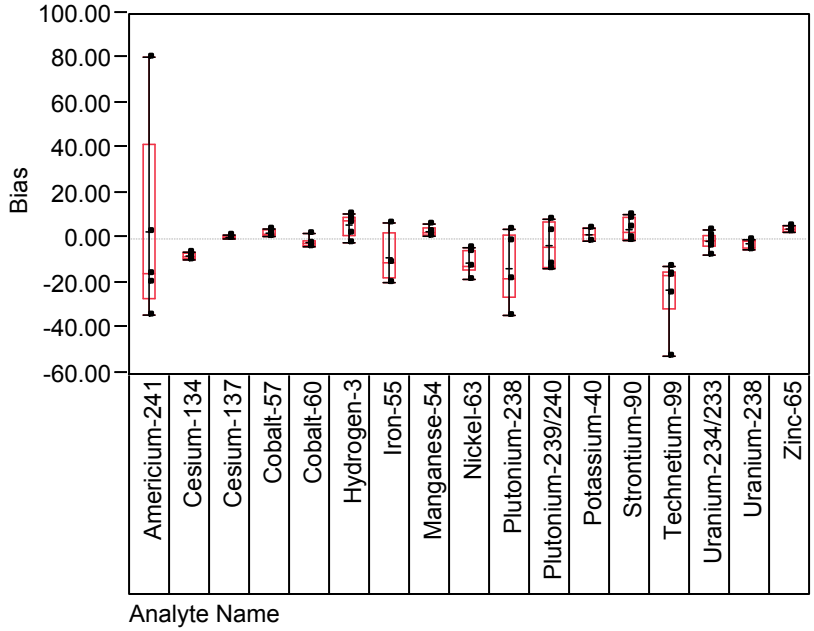


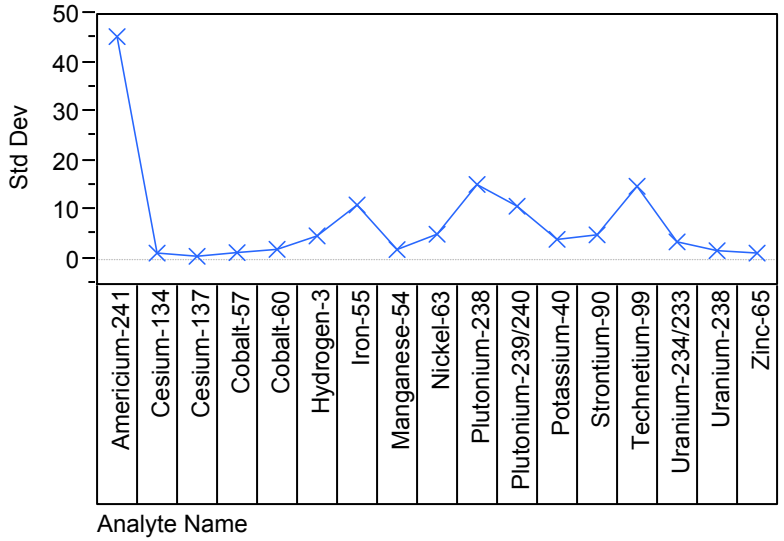
Variability Gauge Lab Code=TELE02

Variability Chart for Bias

Variability Gauge Lab Code=TELE02

Variability Chart for Bias



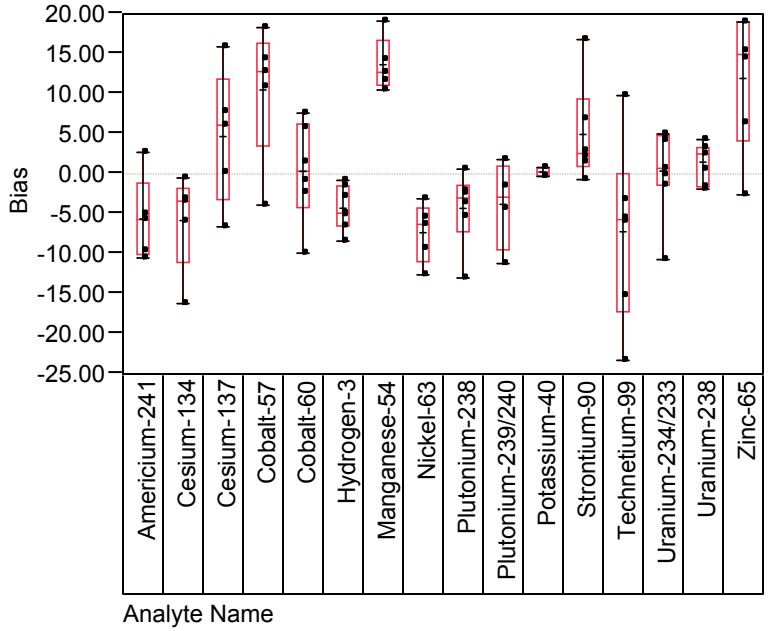


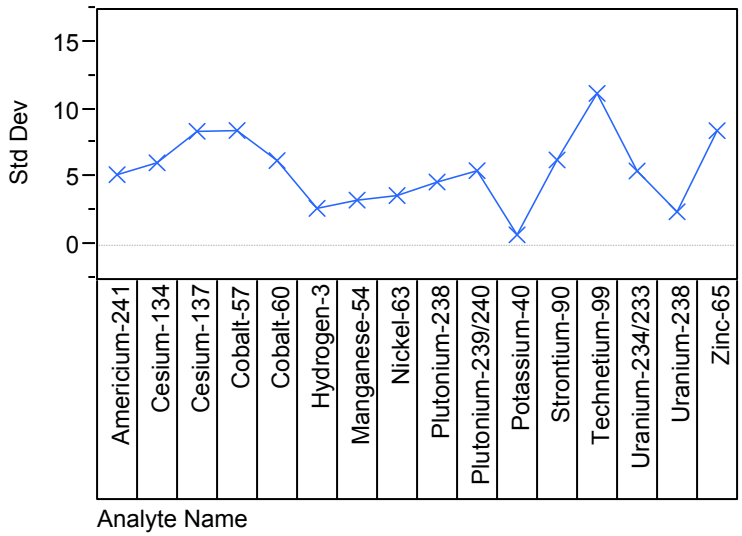
Variability Gauge Lab Code=TMAO01

Variability Chart for Bias

Variability Gauge Lab Code=TMAO01

Variability Chart for Bias



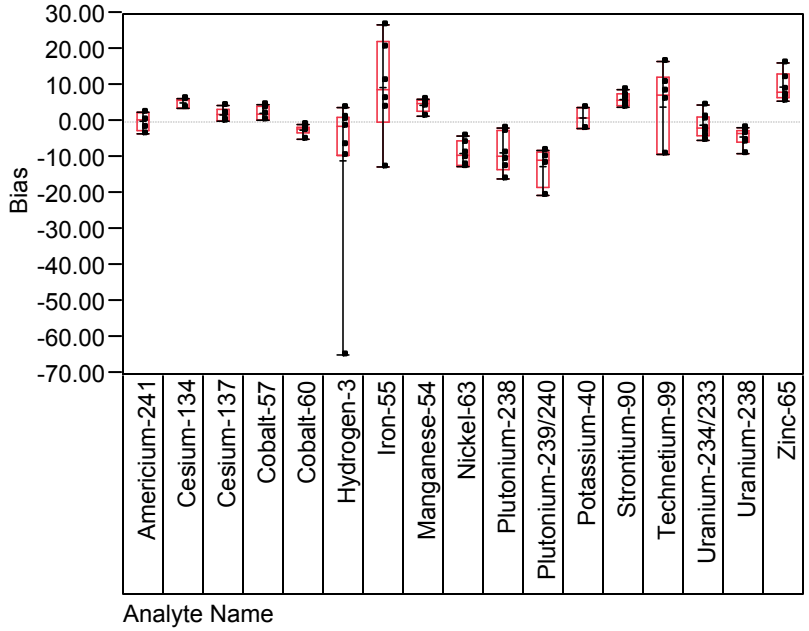


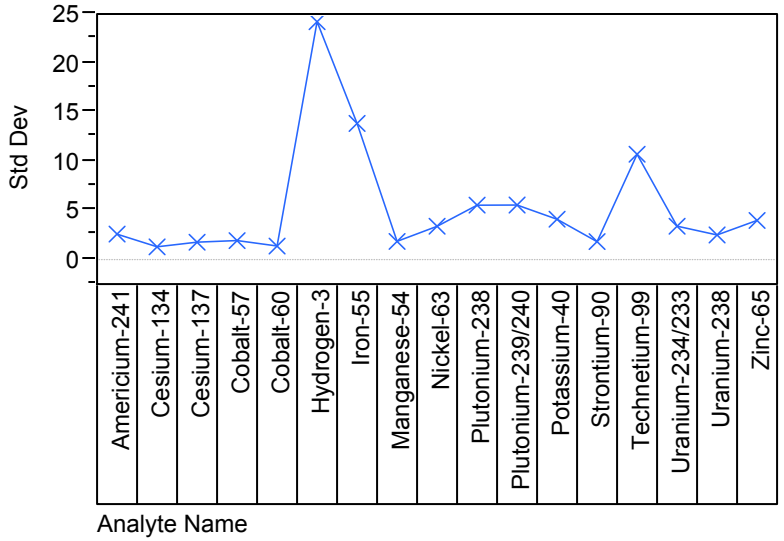
Variability Gauge Lab Code=TMAR01

Variability Chart for Bias

Variability Gauge Lab Code=TMAR01

Variability Chart for Bias



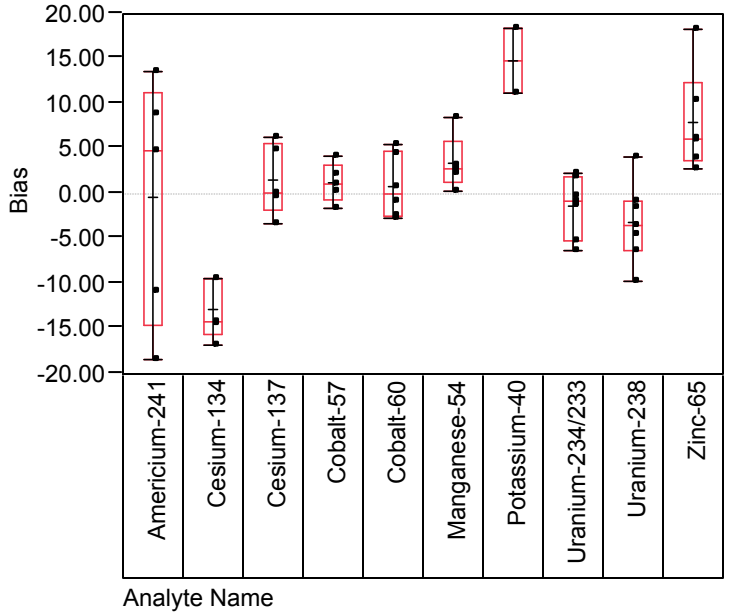


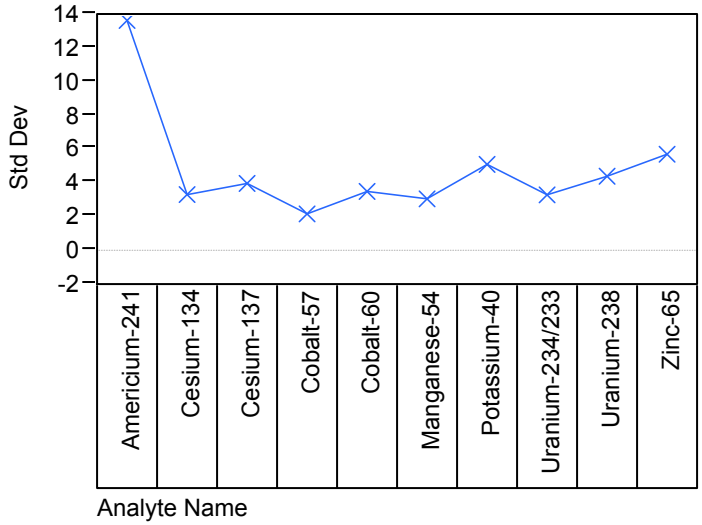
Variability Gauge Lab Code=TNUT01

Variability Chart for Bias

Variability Gauge Lab Code=TNUT01

Variability Chart for Bias



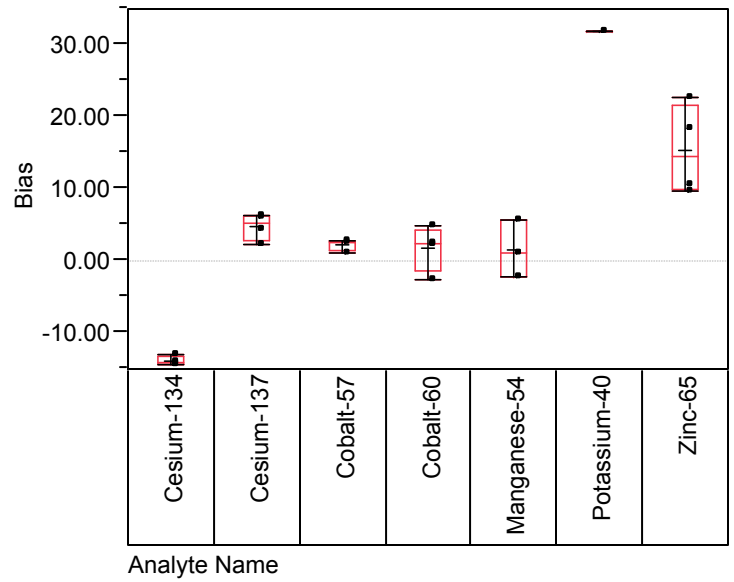


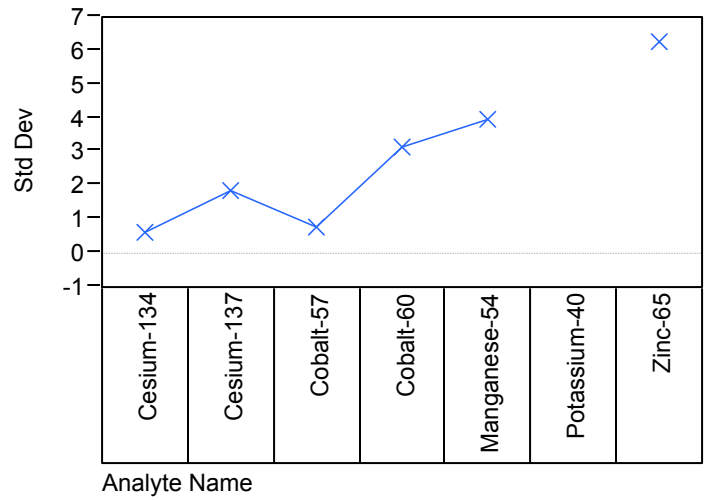
Variability Gauge Lab Code=UNTE01

Variability Chart for Bias

Variability Gauge Lab Code=UNTE01

Variability Chart for Bias



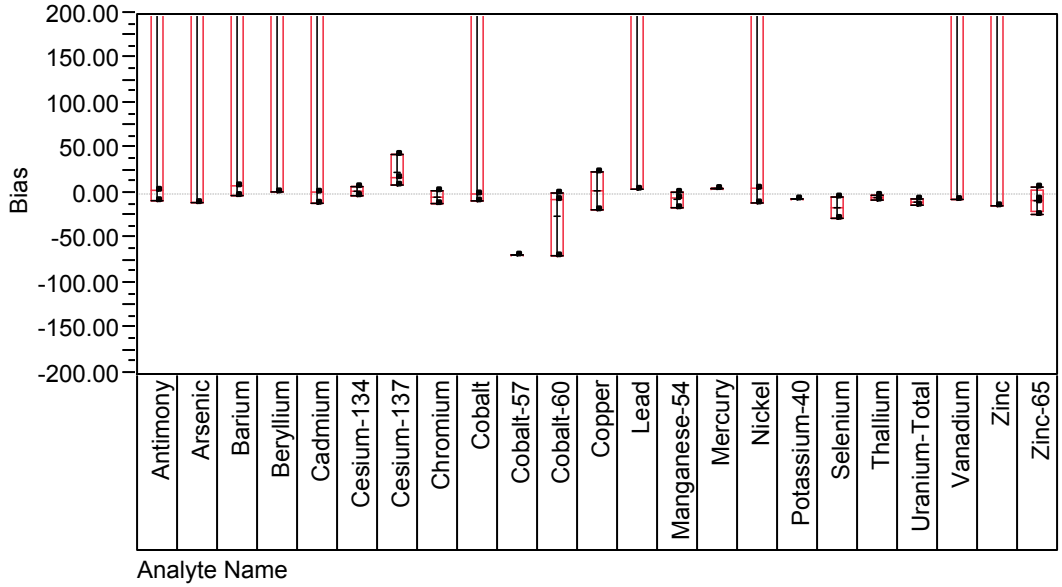


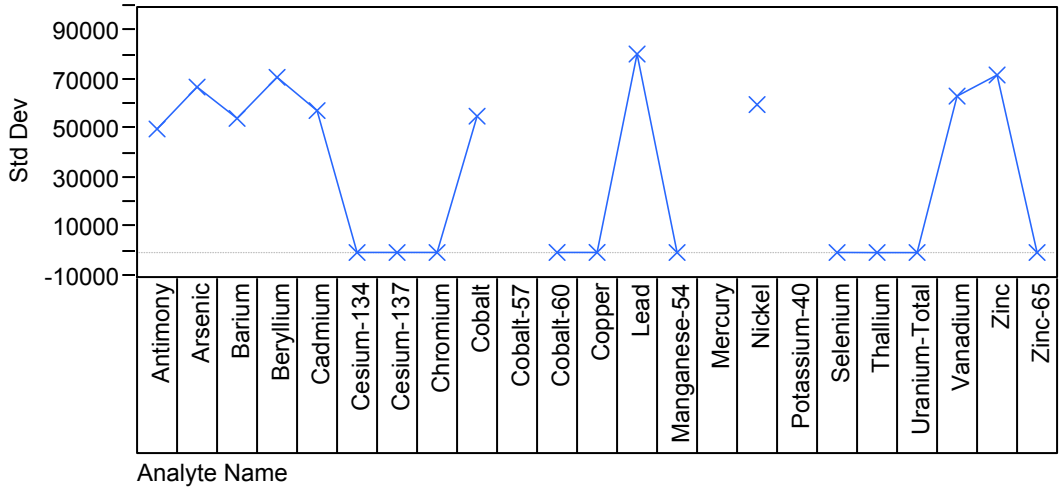
Variability Gauge Lab Code=UQNP99

Variability Chart for Bias

Variability Gauge Lab Code=UQNP99

Variability Chart for Bias



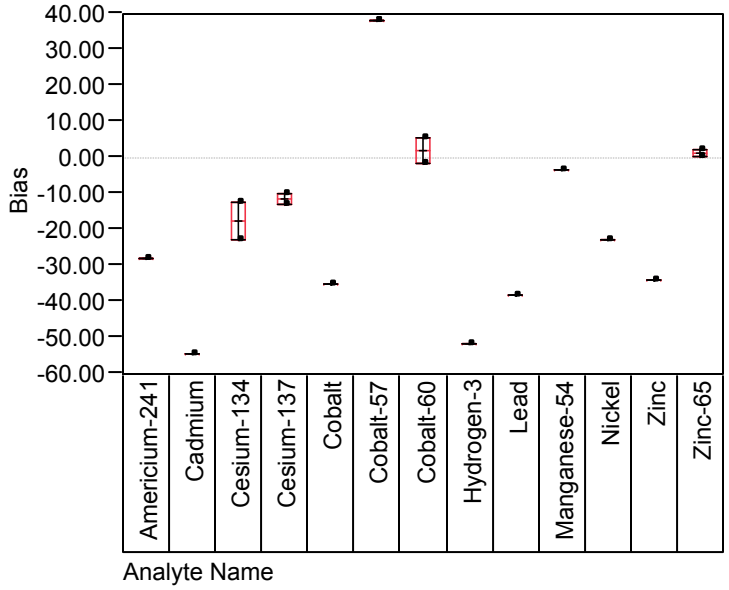


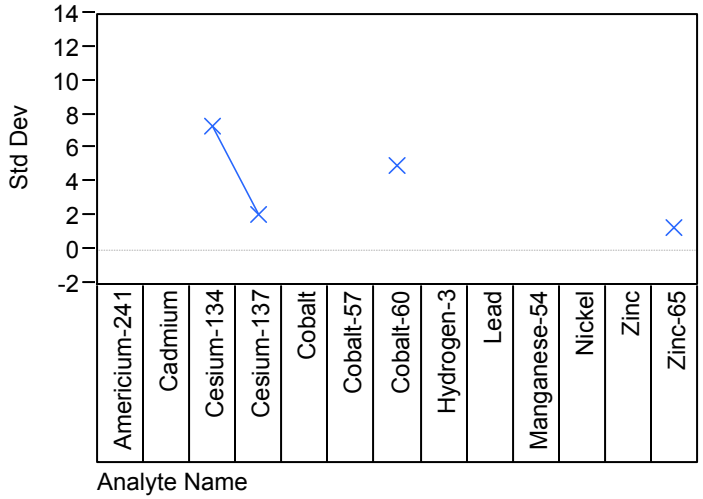
Variability Gauge Lab Code=USED99

Variability Chart for Bias

Variability Gauge Lab Code=USED99

Variability Chart for Bias



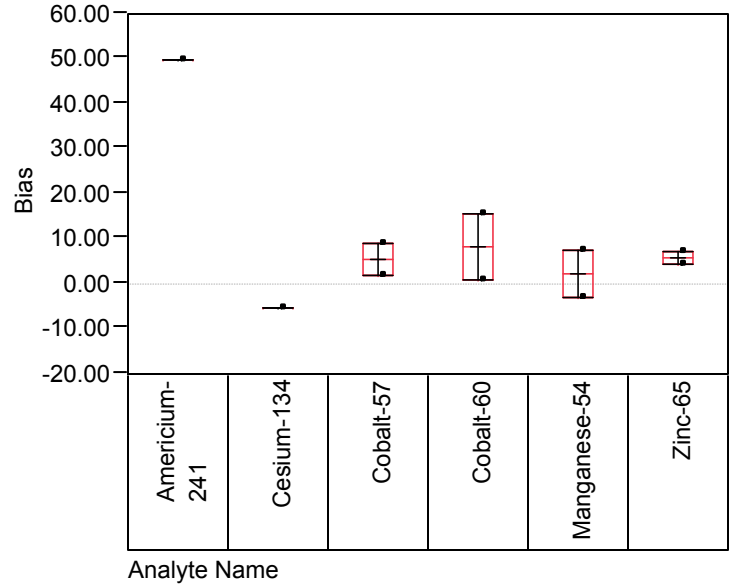


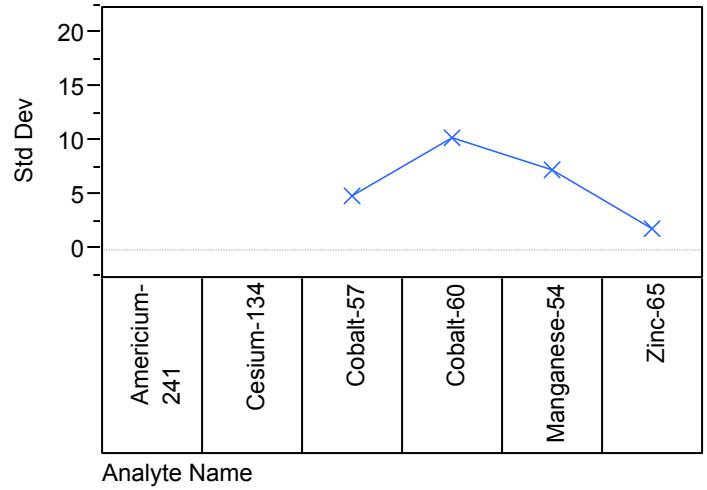
Variability Gauge Lab Code=UTSG01

Variability Chart for Bias

Variability Gauge Lab Code=UTSG01

Variability Chart for Bias



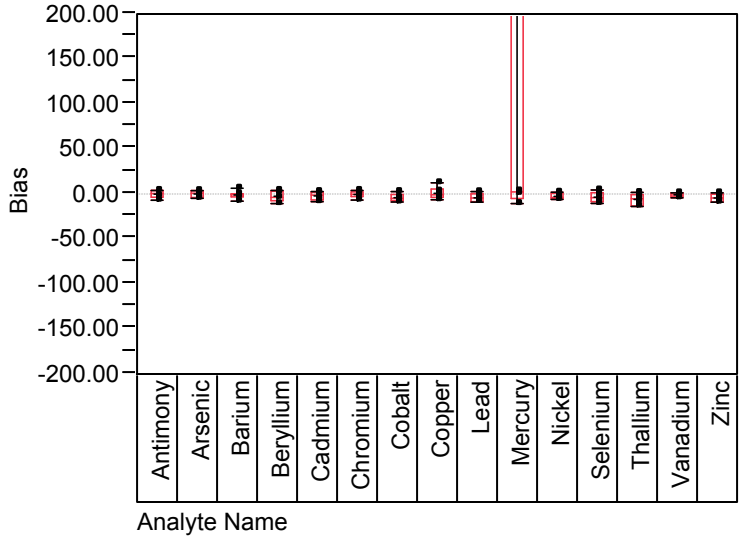


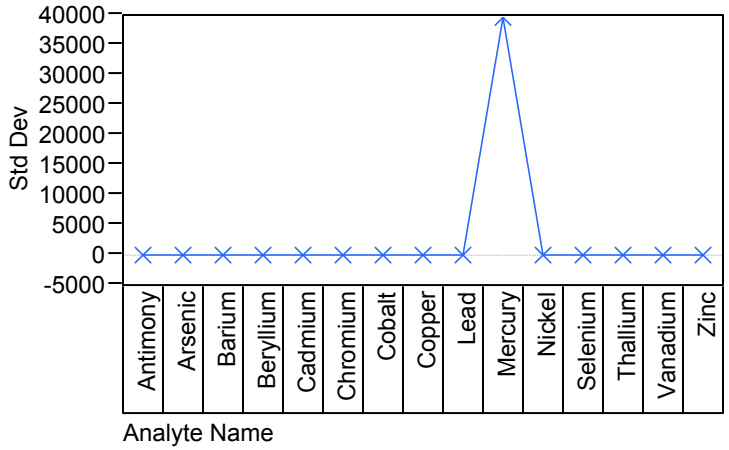
Variability Gauge Lab Code=WEST01

Variability Chart for Bias

Variability Gauge Lab Code=WEST01

Variability Chart for Bias



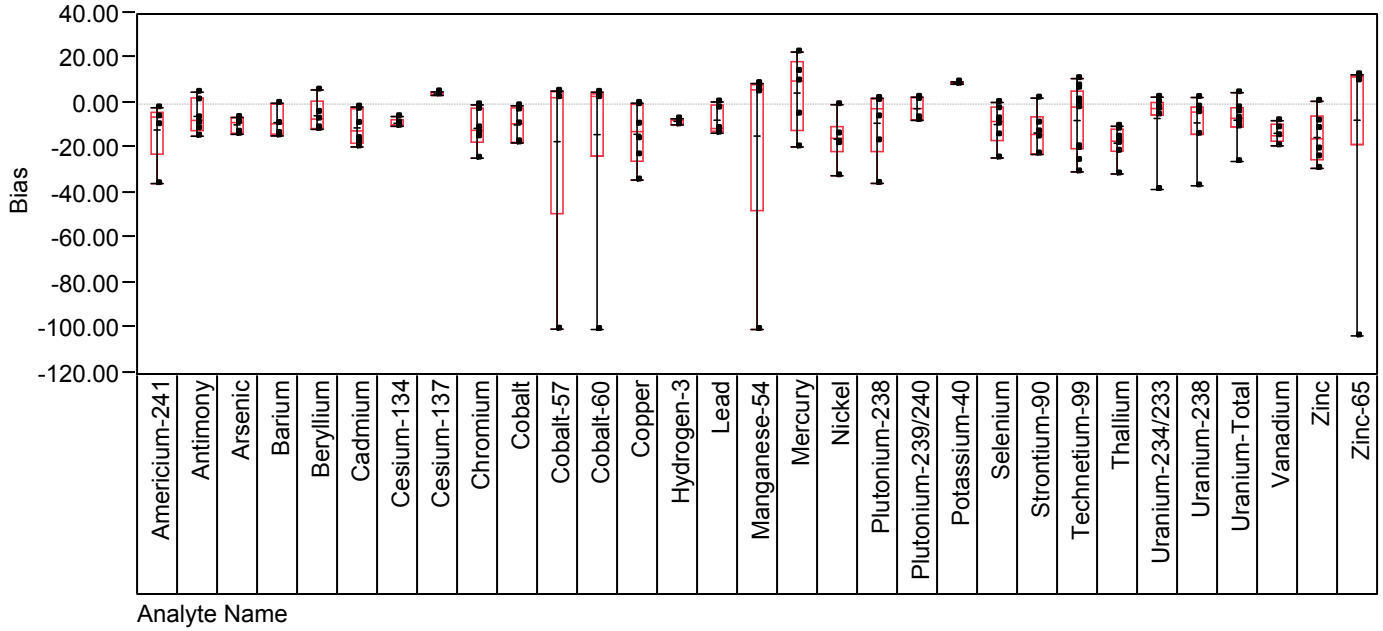


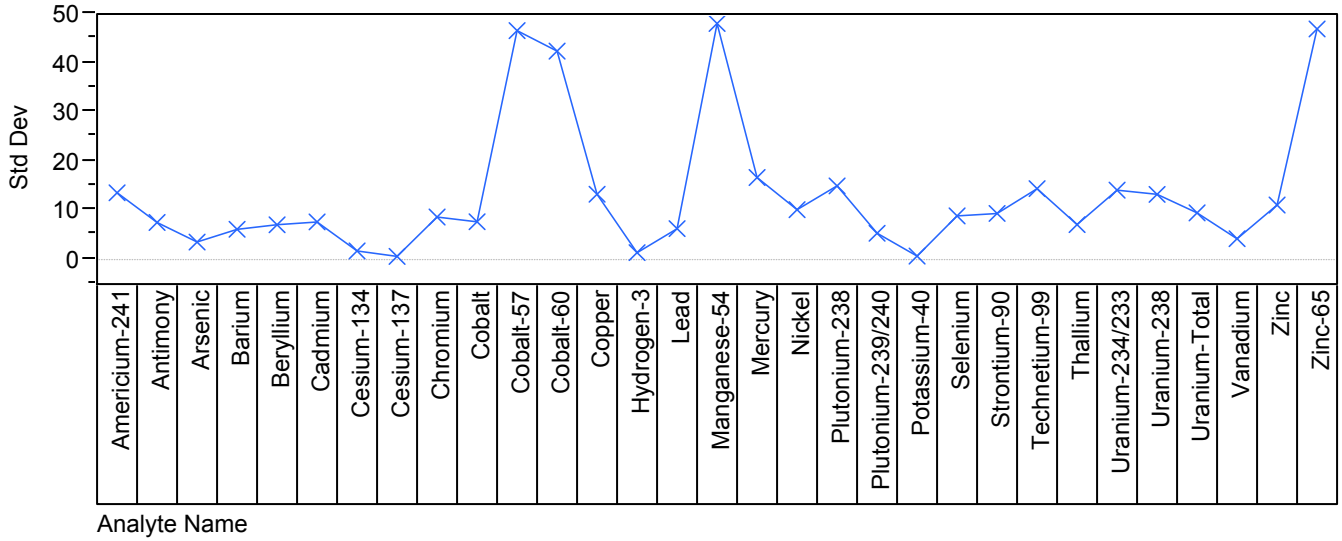
Variability Gauge Lab Code=WEST03

Variability Chart for Bias

Variability Gauge Lab Code=WEST03

Variability Chart for Bias



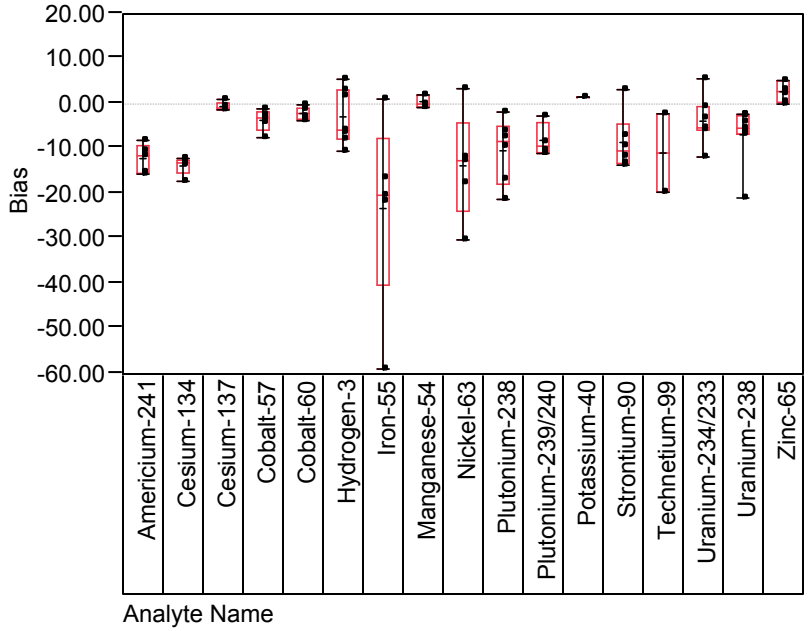


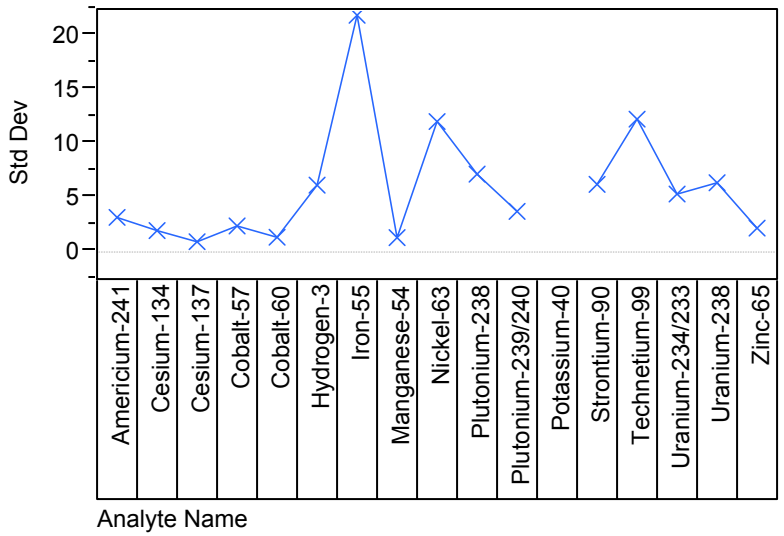
Variability Gauge Lab Code=WEST04

Variability Chart for Bias

Variability Gauge Lab Code=WEST04

Variability Chart for Bias



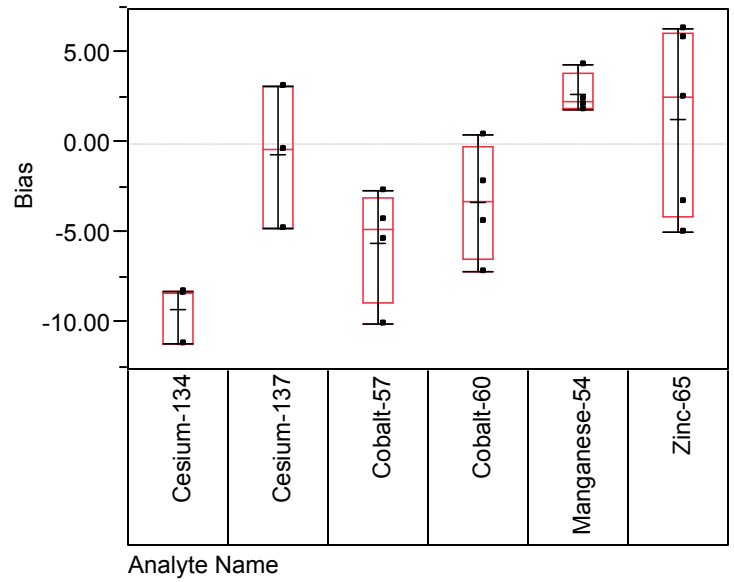


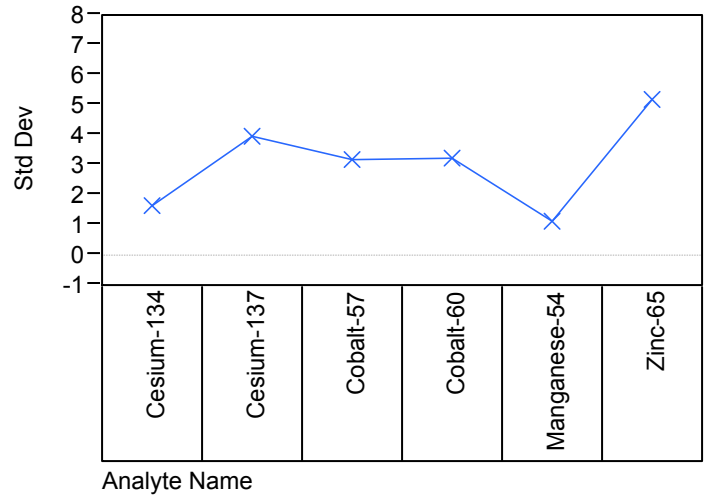
Variability Gauge Lab Code=WIPH01

Variability Chart for Bias

Variability Gauge Lab Code=WIPH01

Variability Chart for Bias



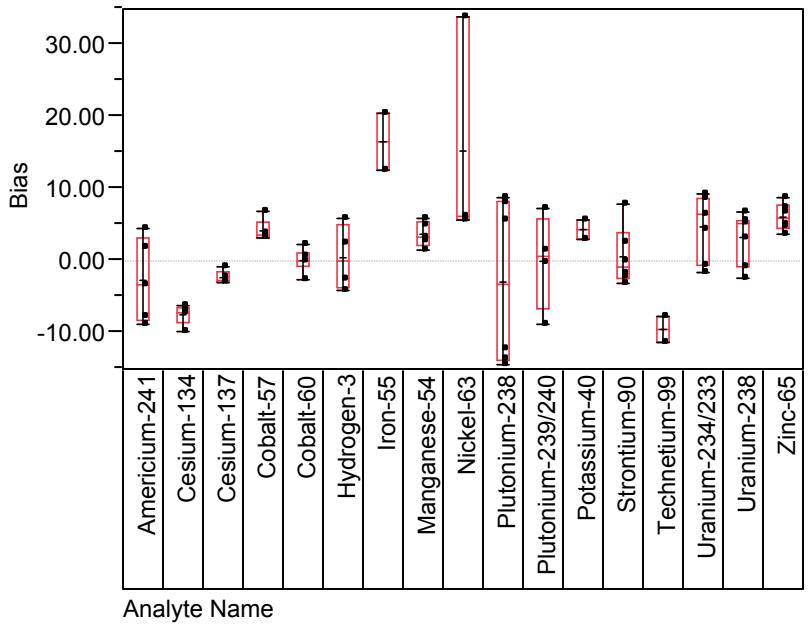


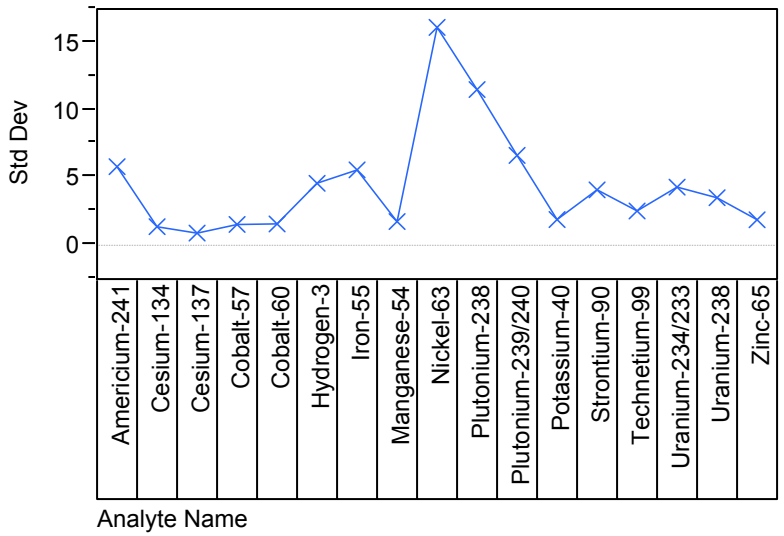
Variability Gauge Lab Code=WIPP01

Variability Chart for Bias

Variability Gauge Lab Code=WIPP01

Variability Chart for Bias



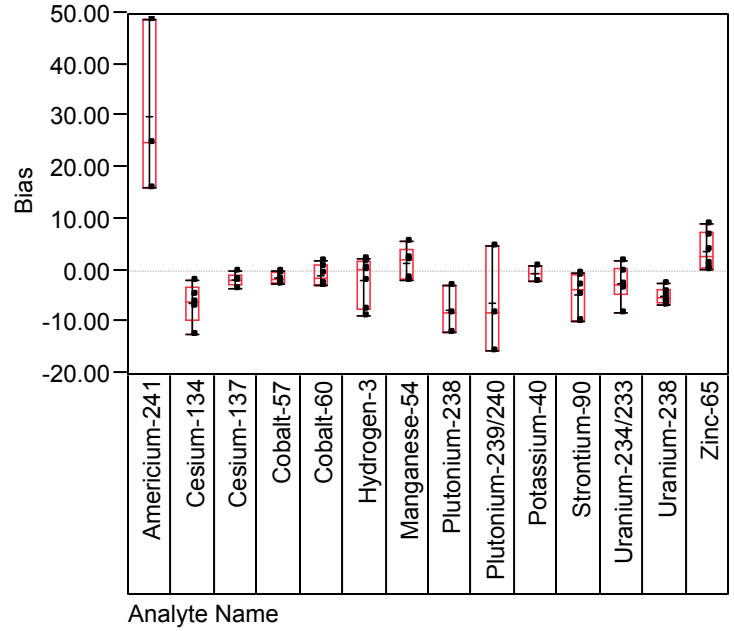


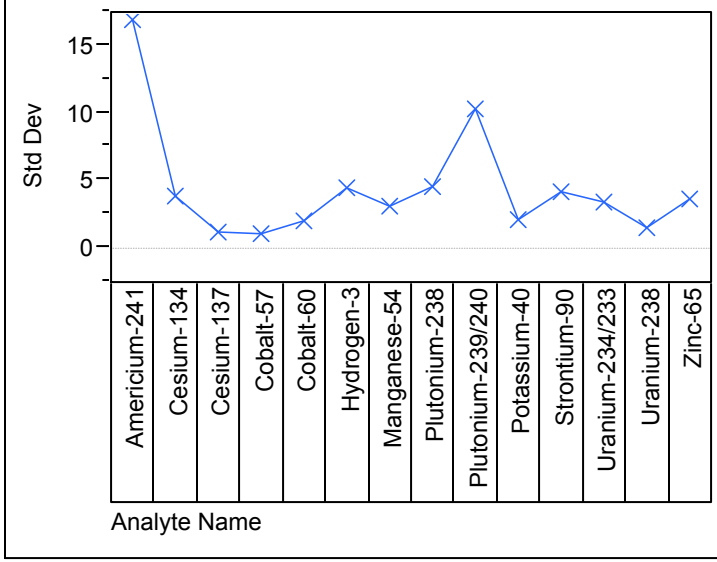
Variability Gauge Lab Code=WSHL01

Variability Chart for Bias

Variability Gauge Lab Code=WSHL01

Variability Chart for Bias



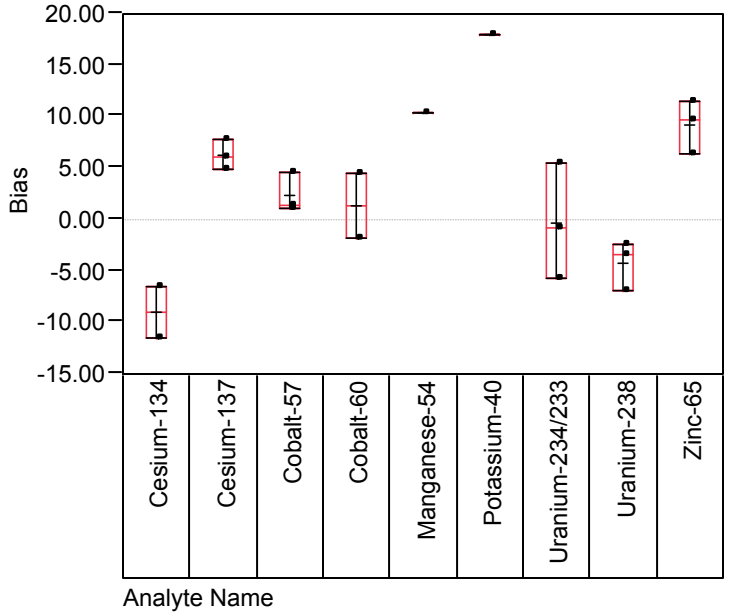


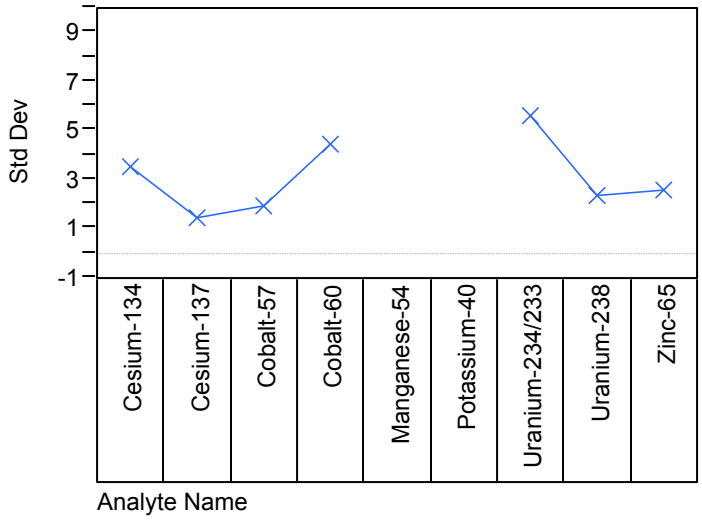
Variability Gauge Lab Code=WSTI01

Variability Chart for Bias

Variability Gauge Lab Code=WSTI01

Variability Chart for Bias



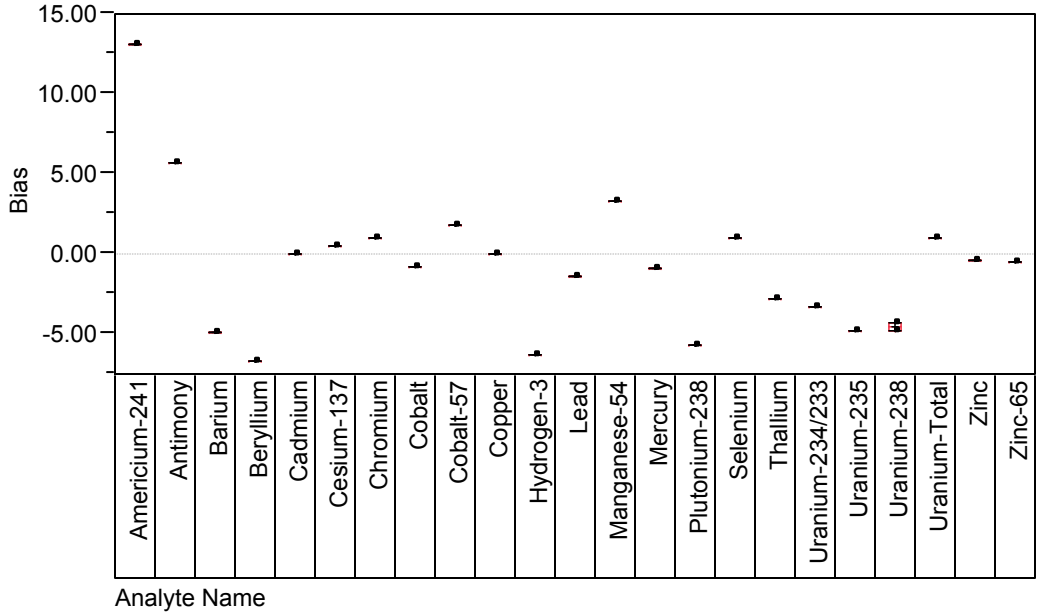


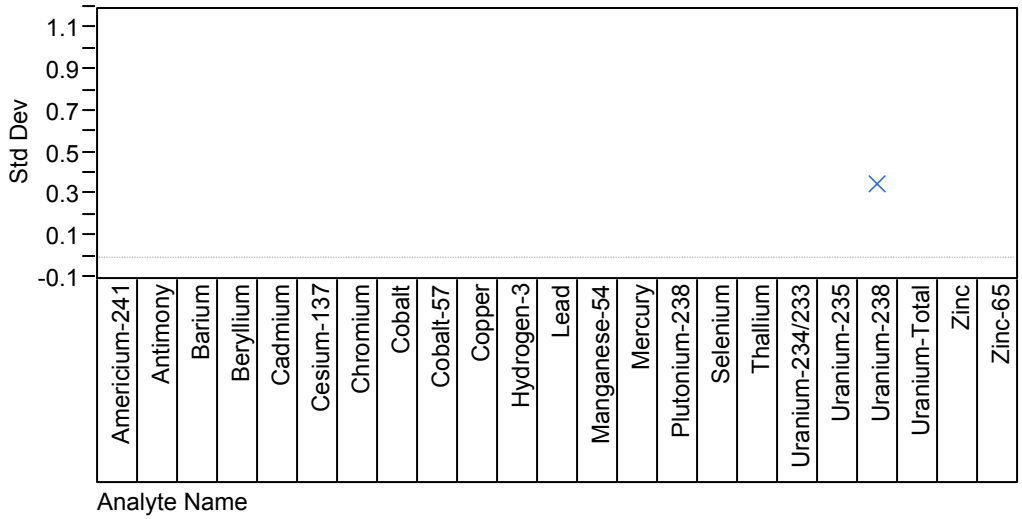
Variability Gauge Lab Code=WSTP99

Variability Chart for Bias

Variability Gauge Lab Code=WSTP99

Variability Chart for Bias



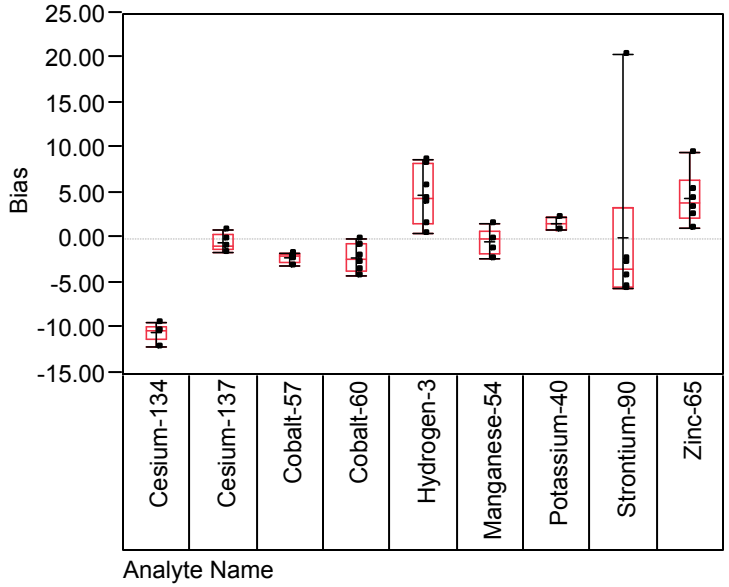


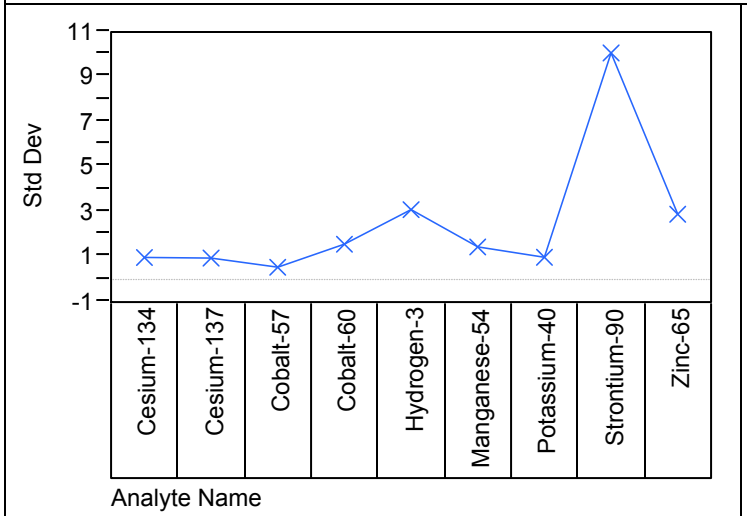
Variability Gauge Lab Code=WVDP01

Variability Chart for Bias

Variability Gauge Lab Code=WVDP01

Variability Chart for Bias



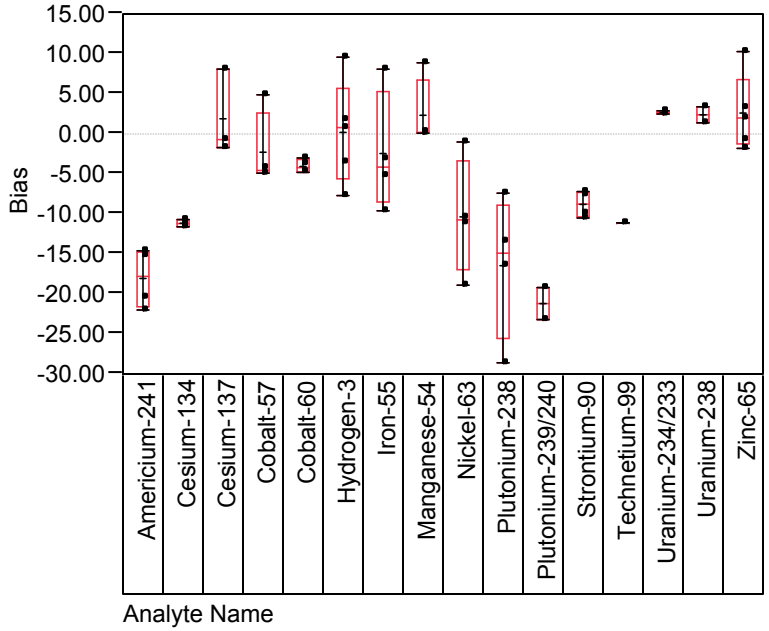


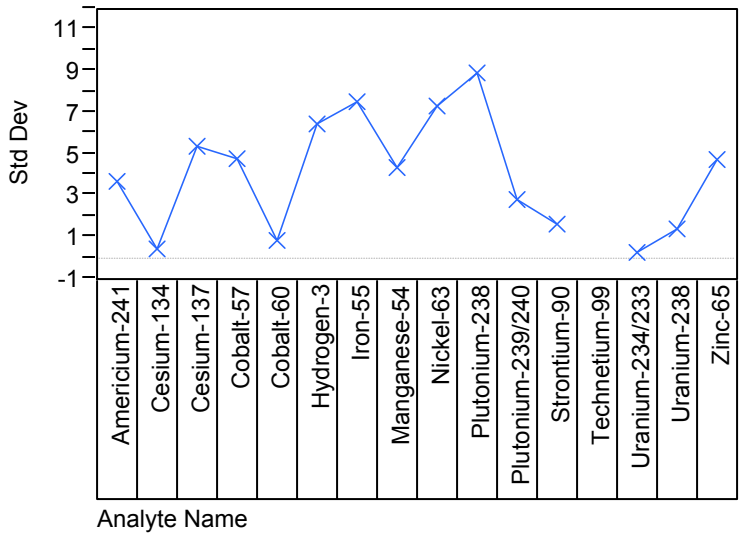
Variability Gauge Lab Code=YAEC01

Variability Chart for Bias

Variability Gauge Lab Code=YAEC01

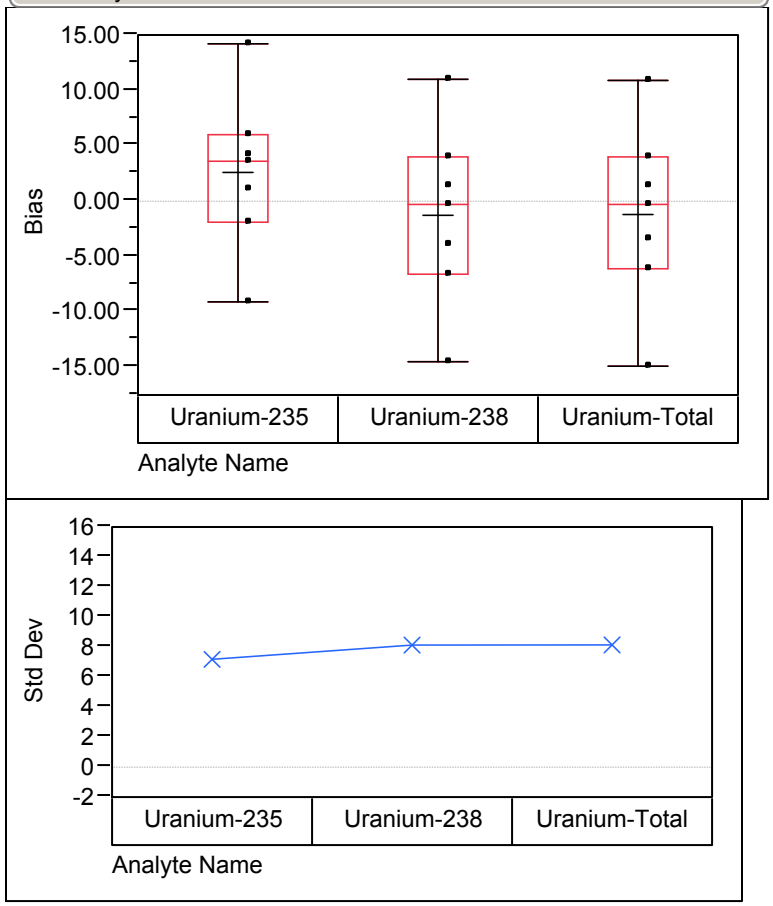
Variability Chart for Bias





Variability Gauge Lab Code=YPGA01

Variability Chart for Bias

Variability Gauge Lab Code=YPGA01

Variability Chart for Bias