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

Query Results

Generated November 13, 2012

Lab Code	Lab Name
1 ADEM01	Alabama Department of Environmental Management
2 ADFC99	Abu Dhabi Food Control Authority Laboratories
3 AFOH01	USAFSAM/OEHHL
4 ANTE01	ALS Environmental
5 AREV01	AREVA - CMC
6 ARSL01	American Radiation Services LLC
7 AY1201	B&W Y-12, Analytical Chemistry Organization Laboratory
8 BCLI01	BC Laboratories, Inc
9 BMRL99	Babcock Marine (Rosyth) Ltd.
10 BRLL01	Brooks Rand Labs, LLC
11 CDHS01	California Department of Public Health
12 CEBM01	Cebam Analytical, Inc
13 CESL01	Lawrence Livermore National Laboratory - EMRL
14 CHMH01	222-S Laboratory
15 CMRC01	Carlsbad Environmental Monitoring and Research Center
16 CORE02	TestAmerica Denver
17 CRCE99	Centre for Radiation, Chemical and Environmental Hazards
18 DAFI01	Davis & Floyd, Inc.
19 DINL99	Departamento Ingeniería Nuclear y Mecánica de Fluidos
20 DPHE01	Colorado Dept. of Public Health & Env. / Laboratory Services Div.
21 EMAX01	EMAX Laboratories, Inc
22 ERCL01	Washington State Public Health Laboratories
23 ERHD99	Radiation Protection Bureau RSD NMS
24 ERLG01	Environmental Radiation Laboratory
25 ERPD99	Ministry Of Health, Radiation Protection Department Lab
26 ESCQ99	Environmental Studies Centre (ESC)
27 ESGL99	Environmental Scientifics Group
28 ETTP01	MCL Inc, ETTP
29 EULC01	EnergySolutions, LLC
30 FDHE01	Florida Dept of Health Environmental Laboratory
31 FDOH01	Florida Dept. of Health, Mobile Environmental Radiological Lab
32 FMEC99	Foods and Water Laboratories Center
33 GENE01	GEL Laboratories, LLC
34 GPCL01	Georgia Power Company Environmental Laboratory
35 HECR01	SC Dept. Health and Environmental Control Radiological Laboratory
36 HERR01	Washington Closure Hanford
37 HPAC99	HPA, CRCE Scotland
38 IAEA99	International Atomic Energy Agency
39 ISUP01	ISU - Department of Physics/Health Physics/EAL
40 IUSF99	Istanbul University, Department of Biology, Radioecology Laboratory
41 JAEC99	Radiation Measurements Laboratory
42 JLNN01	Jefferson Laboratory
43 JNRC99	Jordan Nuclear Regulatory Commission
44 KDHE01	Kansas Dept. of Health & Environment
45 KUFS99	Center for Research in Environmental Radiation
46 LAEC99	Lebanese Atomic Energy Commission - Environmental Radiation
47 LANL01	Los Alamos National Laboratory
48 LAWRO1	LAWRENCE BERKELEY NATIONAL LABORATORY

49	LAWR02	Lawrence Livermore National Laboratory
50	LDRA99	Laboratori de Radiologia Ambiental-Universitat de Barcelona
51	LECR99	Centre for Ecology and Hydrology
52	LGCL99	LGC Ltd
53	LOCK01	AMWTP Analytical Chemistry Laboratory
54	LOCK03	Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
55	MAHP59	Materials Assessment and Health Physics Group
56	MART01	Fluor B&W Ports Analytical Laboratory
57	MART02	United States Enrichment Corporation
58	MART03	Radioactive Material Analysis Laboratory
59	MDPH01	MDPH-Radiation Control Program
60	MLIL01	Microbac Laboratories, Inc
61	MSDH01	Mississippi State Dept of Health
62	NARL01	National Air and Radiation Environmental Laboratory
63	NARL02	USEPA - NAREL - MERL
64	NCNS99	National Center for Nuclear Sciences and Technologies
65	NESI01	B&W Technical Services-Radioisotope & Analytical Chemistry Lab
66	NJDH01	New Jersey Dept. of Health, PHEL, ECLS
67	NOCS99	National Oceanography Centre, Southampton
68	NRLL99	National Radiation Laboratory
69	ODHL01	Ohio Department of Health Laboratory
70	OLML01	Outreach Laboratory Mobile Laboratory
71	ORIS01	ORISE/IEAV
72	OTLI01	Outreach Technologies, Inc.
73	PDRL99	Physics Department Radiological Lab
74	QUAN01	TestAmerica St. Louis
75	QUAN02	TestAmerica Knoxville
76	QUAN03	TestAmerica
77	RMCL99	Royal Scientific Society - Radiation Protection Lab
78	RPSC01	Radiation Protection Service
79	RSAL01	RSA Laboratories, Inc.
80	RSIR99	Instituto de Radioprotecao e Dosimetria - IRD/CNEN
81	SANC99	RadioAnalysis, South Africa Nuclear Energy Corp.
82	SEML01	SRS Environmental Monitoring Laboratory
83	SLAC01	SLAC DOE National Accelerator Laboratory
84	SNRC99	Soreq NRC
85	SOUT01	Southwest Research Institute
86	SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagn
87	TDHL01	Texas Department of State Health Services Laboratory
88	TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERV
89	TELE02	Environmental, Inc., Midwest Lab
90	TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY
91	TMAR01	Eberline Analytical Corp. Richmond CA Lab
92	TNUT01	St. Louis USACE FUSRAP Laboratory
93	UMED99	Uranium Mining and Extraction Directorate
94	USED99	National Center for Nuclear Energy, Sciences and Techniques
95	WEST01	Lionville Laboratory
96	WEST03	Waste Sampling and Characterization Facility, MSA
97	WEST04	PACE ANALYTICAL SERVICES, PITTSBURGH
98	WIPH01	WI, DPH, Radiation Protection Section
99	WIPP01	WIPP Laboratories
100	WSHL01	Wisconsin State Laboratory of Hygiene

101 YPGA01 US Army Yuma Proving Ground / Material Analysis Lab

MaS27 Laboratories Not Reporting Data

- 1 ADEM01 Alabama Department of Environmental Management
- 2 AREV01 AREVA - CMC
- 3 BMRL99 Babcock Marine (Rosyth) Ltd.
- 4 CEBM01 Cebam Analytical, Inc
- 5 RMCL99 Royal Scientific Society - Radiation Protection Lab



Setup and Process Data

MAPEP-12-MaS27

Analyte	Ref. Value	Total Ref.	Uncertainty	F.P.	S.E.
Inorganic					
Uranium-235	0.0533		0.0016		
Uranium-238	21.1		0.6		
Uranium-Total	21.2		0.6		
Antimony	111.5	134	3		
Arsenic	55.7	57.4	1.0		
Barium	896	1190	16		
Beryllium	47.0	47.9	0.9		
Cadmium	15.4	15.5	0.3		
Chromium	99.0	136	1.7		
Cobalt	127	130	2		
Copper	204	221	4		
Lead	97.6	104	1.7		
Mercury	0.172	0.172	0.003		
Nickel	300	305	6		
Selenium	17.7	17.8	0.4		
Silver	95.5	95.5	1.0		
Thallium	91.0	91.3	1.8		
Vanadium	271	306	5		
Zinc	549	575	10		
Technetium-99	0.000748		0.000014		
Radiological					
Cobalt-57	1316		24		
Nickel-63	406		8		
Potassium-40	632		11		
Uranium-234/233	60.3		1.9		
Uranium-238	263		7		
Americium-241	111		2		
Cesium-134	939		14		
Cesium-137	1150		18		
Cobalt-60	531		3		
Iron-55	508		11		
Manganese-54	920		18		
Plutonium-238	105.8		1.7		
Plutonium-239/240	134		2		
Strontium-90	508		10		
Technetium-99	469		9		
Zinc-65	606		12		



Sample Statistical Summary

MAPEP-12-MaS27

Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Inorganic							Units: (mg/kg)
Antimony	24	20	104.3	12.6	111.5	3	78.1 - 145.0
Arsenic	29	29	51.2	3.7	55.7	1.0	39.0 - 72.4
Barium	25	25	871	57	896	16	627 - 1165
Beryllium	27	27	45.5	4.3	47.0	0.9	32.9 - 61.1
Cadmium	27	27	14.8	1.1	15.4	0.3	10.8 - 20.0
Chromium	28	25	96.6	9.8	99.0	1.7	69.3 - 128.7
Cobalt	29	29	119	8	127	2	89 - 165
Copper	28	28	196	17	204	4	143 - 265
Lead	27	27	93.7	6.7	97.6	1.7	68.3 - 126.9
Mercury	23	21	0.169	0.014	0.172	0.003	0.120 - 0.224
Nickel	29	29	289	28	300	6	210 - 390
Selenium	26	25	15.8	2.0	17.7	0.4	12.4 - 23.0
Silver	24	24	88.2	7.7	95.5	1.0	66.9 - 124.2
Technetium-99	4	3		7.48E-4	1.40E-5	5.24E-4 - 9.72E-4	
Thallium	26	25	83.9	5.5	91.0	1.8	63.7 - 118.3
Uranium-235	15	14	0.0486	0.0074	0.0533	0.0016	0.0373 - 0.0693
Uranium-238	18	18	18.9	1.3	21.1	0.6	14.8 - 27.4
Uranium-Total	26	25	18.8	1.4	21.2	0.6	14.8 - 27.6
Vanadium	27	27	252	18	271	5	190 - 352
Zinc	28	28	519	41	549	10	384 - 714
Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/kg)
Americium-241	66	62	108	11	111	2	78 - 144
Cesium-134	84	78	880	80	939	14	657 - 1221
Cesium-137	85	81	1180	85	1150	18	805 - 1495
Cobalt-57	85	80	1353	109	1316	24	921 - 1711
Cobalt-60	85	77	542	36	531	3	372 - 690
Iron-55	12	7	483	59	508	11	356 - 660
Manganese-54	85	79	962	61	920	18	644 - 1196
Nickel-63	20	16	401	53	406	8	284 - 528
Plutonium-238	44	40	103.8	7.9	105.8	1.7	74.1 - 137.5
Plutonium-239/240	44	40	131	10	134	2	94 - 174
Potassium-40	85	79	657	62	632	11	442 - 822
Strontium-90	40	38	488	47	508	10	356 - 660
Technetium-99	27	24	428	59	469	9	328 - 610
Uranium-234/233	45	35	56.6	5.3	60.3	1.9	42.2 - 78.4
Uranium-238	50	44	247	24	263	7	184 - 342
Zinc-65	85	79	649	51	606	12	424 - 788

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";
Additionally, mean for organics in soil is the biweight mean of all the data per NELAC FOPT Table.

Other Flags:

A = Result acceptable Bias <=20%



Mixed Analyte
Performance Evaluation Program

W = Result acceptable with warning $20\% < \text{Bias} < 30\%$

N = Result not acceptable $\text{Bias} > 30\%$

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

Study: MAPEP-12-MaS27: Radiological and inorganic combined soil standard



Inorganic

Analyte	A	W	RW	N
Antimony	18	2		4
Arsenic	27	2		
Barium	25			
Beryllium	27			
Cadmium	27			
Chromium	25		3	
Cobalt	28	1		
Copper	27	1		
Lead	27			
Mercury	20	1		2
Nickel	27	2		
Selenium	19	6		1
Silver	22	2		
Thallium	24	1		1
Uranium-Total	22	3		1
Uranium-235	11	3		1
Uranium-238	15	3		
Vanadium	27			
Zinc	28			
Technetium-99	2	1		1

Radiological

Analyte	A	W	RW	N
Americium-241	61	1		4
Cesium-134	71	7		6
Cesium-137	80	1		4
Cobalt-57	77	3		5
Cobalt-60	76	1		8
Iron-55	6	1		5
Manganese-54	79			6
Nickel-63	15	1		4
Plutonium-238	40			4
Plutonium-239/240	39	1		4
Potassium-40	73	6		6
Strontium-90	36	2		2
Technetium-99	20	4		3
Uranium-234/233	33	2		10
Uranium-238	40	4		6
Zinc-65	72	7		6



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

Laboratory Results For MAPEP-12-MaS27
 (ADFC99) Abu Dhabi Food Control Authority Laboratories
 Radiation Unit
 Abu Dhabi, --

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	114.25	111	A		2.9	78 - 144		14.00
Cesium-134	925.33	939	A		-1.5	657 - 1221		25.86 L
Cesium-137	1182.40	1150	A		2.8	805 - 1495		33.42 L
Cobalt-57	1339.6	1316	A		1.8	921 - 1711		38.22 L
Cobalt-60	549.34	531	A		3.5	372 - 690		14.95 L
Iron-55	NR	508				356 - 660		
Manganese-54	944.43	920	A		2.7	644 - 1196		27.39 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	636.99	632	A		0.8	442 - 822		18.73 L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	611.30	606	A		0.9	424 - 788	18.34	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(AFOH01) USAFSAM/OEHHL

2510 Fifth Street, Area B

Wright-Patterson AFB, OH 45433-7913

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	107	111	A		-3.6	78 - 144	3	L
Cesium-134	866	939	A		-7.8	657 - 1221	6	L
Cesium-137	1240	1150	A		7.8	805 - 1495	10	L
Cobalt-57	1430	1316	A		8.7	921 - 1711	10	L
Cobalt-60	585	531	A		10.2	372 - 690	6	L
Iron-55	NR	508				356 - 660		
Manganese-54	1030	920	A		12.0	644 - 1196	10	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	751	632	A		18.8	442 - 822	19	L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	52.4	60.3	A		-13.1	42.2 - 78.4		3.5
Uranium-238	243	263	A		-7.6	184 - 342		11
Zinc-65	725	606	A		19.6	424 - 788		12 L

Radiological Reference Date: August 1, 2012

Other Flags:

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

N = Result not acceptable Bias > 30%

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NR = Not Reported

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

Laboratory Results For MAPEP-12-MaS27

(ANTE01) ALS Environmental

225 Commerce Drive

Fort Collins, CO 80524-1416

Inorganic						Units: (mg/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	120	111.5	A		7.6	78.1 - 145.0			
Arsenic	51.1	55.7	A		-8.3	39.0 - 72.4			
Barium	953	896	A		6.4	627 - 1165			
Beryllium	41.7	47.0	A		-11.3	32.9 - 61.1			
Cadmium	14.4	15.4	A		-6.5	10.8 - 20.0			
Chromium	118	99.0	A		19.2	69.3 - 128.7			
Cobalt	118	127	A		-7.1	89 - 165			
Copper	194	204	A		-4.9	143 - 265			
Lead	89.6	97.6	A		-8.2	68.3 - 126.9			
Mercury	0.179	0.172	A		4.1	0.120 - 0.224			
Nickel	282	300	A		-6.0	210 - 390			
Selenium	15.6	17.7	A		-11.9	12.4 - 23.0			
Silver	86.6	95.5	A		-9.3	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	81.6	91.0	A		-10.3	63.7 - 118.3			
Uranium-235	0.0528	0.0533	A		-0.9	0.0373 - 0.0693			
Uranium-238	18.9	21.1	A		-10.4	14.8 - 27.4			
Uranium-Total	18.9	21.2	A		-10.8	14.8 - 27.6			
Vanadium	277	271	A		2.2	190 - 352			
Zinc	479	549	A		-12.8	384 - 714			

Radiological						Units: (Bq/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	96.9	111	A		-12.7	78 - 144		7.7	
Cesium-134	826	939	A		-12.0	657 - 1221		48	
Cesium-137	1173	1150	A		2.0	805 - 1495		69	
Cobalt-57	1319	1316	A		0.2	921 - 1711		77	
Cobalt-60	540	531	A		1.7	372 - 690		32	
Iron-55	532	508	A		4.7	356 - 660		62	
Manganese-54	971	920	A		5.5	644 - 1196		57	
Nickel-63	425	406	A		4.7	284 - 528		65	
Plutonium-238	97.5	105.8	A		-7.8	74.1 - 137.5		8.0	
Plutonium-239/240	124.1	134	A		-7.4	94 - 174		9.9	
Potassium-40	632	632	A		0.0	442 - 822		40	
Strontium-90	543	508	A		6.9	356 - 660		64	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	469	N	(28)		328 - 610			
Uranium-234/233	54.0	60.3	A		-10.4	42.2 - 78.4		4.4	
Uranium-238	236	263	A		-10.3	184 - 342		19	
Zinc-65	666	606	A		9.9	424 - 788		39	

Radiological Reference Date: August 1, 2012

Other Flags:

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N = Result not acceptable Bias > 30%

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Notes:

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (ARSL01) American Radiation Services LLC
 2609 North River Road
 Port Allen, LA 70767

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	49.6	55.7	A		-11.0	39.0 - 72.4		
Barium	905	896	A		1.0	627 - 1165		
Beryllium	45.8	47.0	A		-2.6	32.9 - 61.1		
Cadmium	17.3	15.4	A		12.3	10.8 - 20.0		
Chromium	116	99.0	A		17.2	69.3 - 128.7		
Cobalt	127	127	A		0.0	89 - 165		
Copper	170	204	A		-16.7	143 - 265		
Lead	92.6	97.6	A		-5.1	68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	282	300	A		-6.0	210 - 390		
Selenium	17.7	17.7	A		0.0	12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	85.9	91.0	A		-5.6	63.7 - 118.3		
Uranium-235	0.0365	0.0533	N		-31.5	0.0373 - 0.0693		
Uranium-238	20.1	21.1	A		-4.7	14.8 - 27.4		
Uranium-Total	20.1	21.2	A		-5.2	14.8 - 27.6		
Vanadium	296	271	A		9.2	190 - 352		
Zinc	553	549	A		0.7	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	108.438	111	A		-2.3	78 - 144	8.967	
Cesium-134	891.63	939	A		-5.0	657 - 1221	28.824	
Cesium-137	1274.6	1150	A		10.8	805 - 1495	27.094	L
Cobalt-57	1498.3	1316	A		13.9	921 - 1711	50.585	
Cobalt-60	585.06	531	A		10.2	372 - 690	11.843	L
Iron-55	NR	508				356 - 660		
Manganese-54	1060.6	920	A		15.3	644 - 1196	33.987	
Nickel-63	436.97	406	A		7.6	284 - 528	52.660	
Plutonium-238	100.180	105.8	A		-5.3	74.1 - 137.5	9.050	
Plutonium-239/240	139.88	134	A		4.4	94 - 174	11.612	
Potassium-40	748.6	632	A		18.4	442 - 822	28.099	
Strontium-90	446.029	508	A		-12.2	356 - 660	34.993	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	580	469	W		23.7	328 - 610		75
Uranium-234/233	56.865	60.3	A		-5.7	42.2 - 78.4		4.292
Uranium-238	251.425	263	A		-4.4	184 - 342		16.111
Zinc-65	737.55	606	W		21.7	424 - 788		26.414

Radiological Reference Date: August 1, 2012

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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Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27

(AY1201) B&W Y-12, Analytical Chemistry Organization Laboratory

Y12, NSC, Bldg. 9995, Rm 142

Oak Ridge, TN 37831-8189

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	98.0	111.5	A		-12.1	78.1 - 145.0		
Arsenic	53.2	55.7	A		-4.5	39.0 - 72.4		
Barium	859	896	A		-4.1	627 - 1165		
Beryllium	45.0	47.0	A		-4.3	32.9 - 61.1		
Cadmium	15.0	15.4	A		-2.6	10.8 - 20.0		
Chromium	103	99.0	A		4.0	69.3 - 128.7		
Cobalt	120	127	A		-5.5	89 - 165		
Copper	192	204	A		-5.9	143 - 265		
Lead	91.4	97.6	A		-6.4	68.3 - 126.9		
Mercury	0.184	0.172	A		7.0	0.120 - 0.224		
Nickel	281	300	A		-6.3	210 - 390		
Selenium	15.3	17.7	A		-13.6	12.4 - 23.0		
Silver	86.3	95.5	A		-9.6	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	77.9	91.0	A		-14.4	63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	18.19	21.1	A		-13.8	14.8 - 27.4		
Uranium-Total	18.32	21.2	A		-13.6	14.8 - 27.6		
Vanadium	255	271	A		-5.9	190 - 352		
Zinc	521	549	A		-5.1	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	104	111	A		-6.3	78 - 144		11
Cesium-134	NR	939				657 - 1221		
Cesium-137	1230	1150	A		7.0	805 - 1495		45
Cobalt-57	1380	1316	A		4.9	921 - 1711		88
Cobalt-60	545	531	A		2.6	372 - 690		18
Iron-55	NR	508				356 - 660		
Manganese-54	1010	920	A		9.8	644 - 1196		59
Nickel-63	NR	406				284 - 528		
Plutonium-238	107	105.8	A		1.1	74.1 - 137.5		11
Plutonium-239/240	138	134	A		3.0	94 - 174		14
Potassium-40	713	632	A		12.8	442 - 822		52
Strontium-90	540	508	A		6.3	356 - 660		28

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	456	469	A		-2.8	328 - 610		56
Uranium-234/233	58.3	60.3	A		-3.3	42.2 - 78.4		6.4
Uranium-238	241	263	A		-8.4	184 - 342		21
Zinc-65	677	606	A		11.7	424 - 788		35

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(BCLI01) BC Laboratories, Inc

4100 Atlas Court

Bakersfield, CA 93308

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	35.5	111.5	N		-68.2	78.1 - 145.0			
Arsenic	52.0	55.7	A		-6.6	39.0 - 72.4			
Barium	810	896	A		-9.6	627 - 1165			
Beryllium	43.5	47.0	A		-7.4	32.9 - 61.1			
Cadmium	14.5	15.4	A		-5.8	10.8 - 20.0			
Chromium	95.8	99.0	A		-3.2	69.3 - 128.7			
Cobalt	114	127	A		-10.2	89 - 165			
Copper	202	204	A		-1.0	143 - 265			
Lead	91.5	97.6	A		-6.3	68.3 - 126.9			
Mercury	0.240	0.172	N		39.5	0.120 - 0.224			
Nickel	281	300	A		-6.3	210 - 390			
Selenium	15.9	17.7	A		-10.2	12.4 - 23.0			
Silver	90.1	95.5	A		-5.7	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	81.8	91.0	A		-10.1	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	246	271	A		-9.2	190 - 352			
Zinc	484	549	A		-11.8	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(BRLL01) Brooks Rand Labs, LLC

3958 6th Ave. NW

Seattle, WA 98107

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	141	111.5	W		26.5	78.1 - 145.0			
Arsenic	59.5	55.7	A		6.8	39.0 - 72.4			
Barium	939	896	A		4.8	627 - 1165			
Beryllium	52.4	47.0	A		11.5	32.9 - 61.1			
Cadmium	14.9	15.4	A		-3.2	10.8 - 20.0			
Chromium	129	99.0	N		30.3	69.3 - 128.7			
Cobalt	123	127	A		-3.2	89 - 165			
Copper	201	204	A		-1.5	143 - 265			
Lead	100	97.6	A		2.5	68.3 - 126.9			
Mercury	0.178	0.172	A		3.5	0.120 - 0.224			
Nickel	295	300	A		-1.7	210 - 390			
Selenium	16.1	17.7	A		-9.0	12.4 - 23.0			
Silver	94.4	95.5	A		-1.2	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	90.5	91.0	A		-0.5	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	17.2	21.2	A		-18.9	14.8 - 27.6			
Vanadium	238	271	A		-12.2	190 - 352			
Zinc	530	549	A		-3.5	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (CDHS01) California Department of Public Health
 Drinking Water & Radiation Lab.
 Richmond, CA 94804-6403

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	115.0	111	A		3.6	78 - 144	2.97	L
Cesium-134	895	939	A		-4.7	657 - 1221	8.49	L
Cesium-137	1156	1150	A		0.5	805 - 1495	10.7	L
Cobalt-57	1324	1316	A		0.6	921 - 1711	12.2	L
Cobalt-60	539	531	A		1.5	372 - 690	4.70	L
Iron-55	365.5	508	W		-28.1	356 - 660	26.08	
Manganese-54	966	920	A		5.0	644 - 1196	7.56	L
Nickel-63	485.5	406	A		19.6	284 - 528	50.87	
Plutonium-238	115.6	105.8	A		9.3	74.1 - 137.5	2.134	L
Plutonium-239/240	141.0	134	A		5.2	94 - 174	2.461	L
Potassium-40	681	632	A		7.8	442 - 822	7.71	L
Strontium-90	405	508	W		-20.3	356 - 660	18.3	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	630.3	469	N		34.4	328 - 610	18.0	L	
Uranium-234/233	36.5	60.3	N		-39.5	42.2 - 78.4	8.8	H	
Uranium-238	255.1	263	A		-3.0	184 - 342	9.2		
Zinc-65	671	606	A		10.7	424 - 788	5.43	L	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (CESL01) Lawrence Livermore National Laboratory - EMRL
 7000 East Avenue
 Livermore, CA 94551

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	9.87E+01	111	A		-11.1	78 - 144	5.70E+00	
Cesium-134	8.56E+02	939	A		-8.8	657 - 1221	2.15E+01	L
Cesium-137	1.13E+03	1150	A		-1.7	805 - 1495	4.72E+01	
Cobalt-57	1.35E+03	1316	A		2.6	921 - 1711	4.72E+01	
Cobalt-60	NR	531	N	(25)		372 - 690		
Iron-55	NR	508				356 - 660		
Manganese-54	NR	920	N	(28)		644 - 1196		
Nickel-63	NR	406				284 - 528		
Plutonium-238	2.10E+02	105.8	N		98.5	74.1 - 137.5	1.27E+01	
Plutonium-239/240	2.64E+02	134	N		97.0	94 - 174	1.57E+01	
Potassium-40	NR	632	N	(28)		442 - 822		
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606	N	(28)		424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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W = Result accepable with warning 20% < Bias < 30%

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

Laboratory Results For MAPEP-12-MaS27

(CHMH01) 222-S Laboratory

P.O. Box 250, MS T6-10

Richland, WA 99352

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	0.000517	0.000748	N		-30.9	0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	0.038	0.0533	W		-28.7	0.0373 - 0.0693		
Uranium-238	17.3	21.1	A		-18.0	14.8 - 27.4		
Uranium-Total	17.3	21.2	A		-18.4	14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	121	111	A		9.0	78 - 144	42.2	H
Cesium-134	914	939	A		-2.7	657 - 1221	21.9	L
Cesium-137	1190	1150	A		3.5	805 - 1495	27.7	L
Cobalt-57	1470	1316	A		11.7	921 - 1711	31.4	L
Cobalt-60	551	531	A		3.8	372 - 690	13.7	L
Iron-55	NR	508				356 - 660		
Manganese-54	996	920	A		8.3	644 - 1196	25.3	L
Nickel-63	356	406	A		-12.3	284 - 528	82.7	H
Plutonium-238	112	105.8	A		5.9	74.1 - 137.5	37.4	H
Plutonium-239/240	146	134	A		9.0	94 - 174	59.6	H
Potassium-40	587	632	A		-7.1	442 - 822	71.0	
Strontium-90	510	508	A		0.4	356 - 660	30.0	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	400	469	A		-14.7	328 - 610		29.9	
Uranium-234/233	NR	60.3				42.2 - 78.4			
Uranium-238	NR	263				184 - 342			
Zinc-65	646	606	A		6.6	424 - 788		26.9	

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27(CMRC01) Carlsbad Environmental Monitoring and Research Center
1400 University Dr.
Carlsbad, NM 88220

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	9.23E+01	111	A		-16.8	78 - 144	4.48E+00	
Cesium-134	9.40E+02	939	A		0.1	657 - 1221	1.61E+01	L
Cesium-137	1.19E+03	1150	A		3.5	805 - 1495	4.40E+01	
Cobalt-57	1.22E+03	1316	A		-7.3	921 - 1711	3.97E+01	
Cobalt-60	5.60E+02	531	A		5.5	372 - 690	1.28E+01	L
Iron-55	NR	508				356 - 660		
Manganese-54	9.78E+02	920	A		6.3	644 - 1196	2.72E+01	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	9.68E+01	105.8	A		-8.5	74.1 - 137.5	3.10E+00	
Plutonium-239/240	1.21E+02	134	A		-9.7	94 - 174	3.84E+00	
Potassium-40	6.63E+02	632	A		4.9	442 - 822	6.60E+01	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	5.86E+01	60.3	A		-2.8	42.2 - 78.4	3.21E+00	
Uranium-238	2.59E+02	263	A		-1.5	184 - 342	1.38E+01	
Zinc-65	6.69E+02	606	A		10.4	424 - 788	2.05E+01	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(CORE02) TestAmerica Denver

4955 Yarrow St

Arvada, CO 80002

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	103	111.5	A		-7.6	78.1 - 145.0			
Arsenic	52.2	55.7	A		-6.3	39.0 - 72.4			
Barium	935	896	A		4.4	627 - 1165			
Beryllium	48.6	47.0	A		3.4	32.9 - 61.1			
Cadmium	14.8	15.4	A		-3.9	10.8 - 20.0			
Chromium	106	99.0	A		7.1	69.3 - 128.7			
Cobalt	126	127	A		-0.8	89 - 165			
Copper	195	204	A		-4.4	143 - 265			
Lead	99.7	97.6	A		2.2	68.3 - 126.9			
Mercury	0.166	0.172	A		-3.5	0.120 - 0.224			
Nickel	290	300	A		-3.3	210 - 390			
Selenium	16.0	17.7	A		-9.6	12.4 - 23.0			
Silver	102	95.5	A		6.8	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	88.6	91.0	A		-2.6	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	18.8	21.2	A		-11.3	14.8 - 27.6			
Vanadium	261	271	A		-3.7	190 - 352			
Zinc	545	549	A		-0.7	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(CRCE99) Centre for Radiation, Chemical and Environmental Hazards

Health Protection Agency

Didcot, OXON OX11 0RQ

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	95	111	A		-14.4	78 - 144	8	
Cesium-134	910	939	A		-3.1	657 - 1221	70	
Cesium-137	1140	1150	A		-0.9	805 - 1495	90	
Cobalt-57	1320	1316	A		0.3	921 - 1711	100	
Cobalt-60	552	531	A		4.0	372 - 690	43	
Iron-55	NR	508				356 - 660		
Manganese-54	929	920	A		1.0	644 - 1196	70	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	627	632	A		-0.8	442 - 822	62	
Strontium-90	430	508	A		-15.4	356 - 660	15	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	412	469	A		-12.2	328 - 610		25	
Uranium-234/233	31.1	60.3	N		-48.4	42.2 - 78.4		1.6	
Uranium-238	146.5	263	N		-44.3	184 - 342		7	
Zinc-65	634	606	A		4.6	424 - 788		50	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(DAFI01) Davis & Floyd, Inc.

PO Drawer 428

Greenwood, SC 29648

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	87.2	111.5	W		-21.8	78.1 - 145.0			
Arsenic	42.9	55.7	W		-23.0	39.0 - 72.4			
Barium	826	896	A		-7.8	627 - 1165			
Beryllium	45.1	47.0	A		-4.0	32.9 - 61.1			
Cadmium	14.2	15.4	A		-7.8	10.8 - 20.0			
Chromium	97.4	99.0	A		-1.6	69.3 - 128.7			
Cobalt	125	127	A		-1.6	89 - 165			
Copper	197	204	A		-3.4	143 - 265			
Lead	92.4	97.6	A		-5.3	68.3 - 126.9			
Mercury	0.165	0.172	A		-4.1	0.120 - 0.224			
Nickel	302	300	A		0.7	210 - 390			
Selenium	15.9	17.7	A		-10.2	12.4 - 23.0			
Silver	88.0	95.5	A		-7.9	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	90.4	91.0	A		-0.7	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	230	271	A		-15.1	190 - 352			
Zinc	532	549	A		-3.1	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepatable with warning 20% < Bias < 30%

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

Laboratory Results For MAPEP-12-MaS27

(DINL99) Departamento Ingeniería Nuclear y Mecánica de Fluidos

Alameda de Urquijo s/n

Bilbao, Vizcaya 48013

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	120	111	A		8.1	78 - 144	3	L
Cesium-134	881	939	A		-6.2	657 - 1221	17	L
Cesium-137	1080	1150	A		-6.1	805 - 1495	20	L
Cobalt-57	1200	1316	A		-8.8	921 - 1711	22	L
Cobalt-60	521	531	A		-1.9	372 - 690	9.7	L
Iron-55	351	508	N		-30.9	356 - 660	12.3	
Manganese-54	893	920	A		-2.9	644 - 1196	17	L
Nickel-63	371	406	A		-8.6	284 - 528	14	
Plutonium-238	86.9	105.8	A		-17.9	74.1 - 137.5	2.2	L
Plutonium-239/240	111	134	A		-17.2	94 - 174	2.7	L
Potassium-40	576	632	A		-8.9	442 - 822	15.2	L
Strontium-90	453	508	A		-10.8	356 - 660	6	L

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	54.7	60.3	A		-9.3	42.2 - 78.4		2.2
Uranium-238	243	263	A		-7.6	184 - 342		8.5
Zinc-65	594	606	A		-2.0	424 - 788	12	L

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(DPHE01) Colorado Dept. of Public Health & Env. / Laboratory Services Div.

8100 Lowry Blvd

Denver, CO 80230

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	52.4	55.7	A		-5.9	39.0 - 72.4		
Barium	899	896	A		0.3	627 - 1165		
Beryllium	37.7	47.0	A		-19.8	32.9 - 61.1		
Cadmium	15.1	15.4	A		-1.9	10.8 - 20.0		
Chromium	102	99.0	A		3.0	69.3 - 128.7		
Cobalt	122	127	A		-3.9	89 - 165		
Copper	207	204	A		1.5	143 - 265		
Lead	104	97.6	A		6.6	68.3 - 126.9		
Mercury	0.13	0.172	W		-24.4	0.120 - 0.224		
Nickel	293	300	A		-2.3	210 - 390		
Selenium	16.5	17.7	A		-6.8	12.4 - 23.0		
Silver	68.2	95.5	W		-28.6	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	93.8	91.0	A		3.1	63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	20.7	21.2	A		-2.4	14.8 - 27.6		
Vanadium	265	271	A		-2.2	190 - 352		
Zinc	532	549	A		-3.1	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	96.74	111	A		-12.8	78 - 144		10.17
Cesium-134	745.9	939	W		-20.6	657 - 1221		23.1
Cesium-137	1172.56	1150	A		2.0	805 - 1495	23.35	L
Cobalt-57	195.5	1316	N		-85.1	921 - 1711		6.3
Cobalt-60	522.6	531	A		-1.6	372 - 690		16.1
Iron-55	NR	508				356 - 660		
Manganese-54	952.45	920	A		3.5	644 - 1196		29.85
Nickel-63	575.2	406	N		41.7	284 - 528		21.4
Plutonium-238	112.8	105.8	A		6.6	74.1 - 137.5		5.7
Plutonium-239/240	138.4	134	A		3.3	94 - 174		6.5
Potassium-40	675.21	632	A		6.8	442 - 822		22.72
Strontium-90	439.9	508	A		-13.4	356 - 660	206.6	H

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	397.2	469	A		-15.3	328 - 610		20.6	
Uranium-234/233	59.2	60.3	A		-1.8	42.2 - 78.4		12.2 H	
Uranium-238	263.8	263	A		0.3	184 - 342		52.7	
Zinc-65	621.2	606	A		2.5	424 - 788		19.4	

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27

(EMAX01) EMAX Laboratories, Inc

1835 W. 205th St.

Torrance, CA 90501

Inorganic						Units: (mg/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	76.7	111.5	N		-31.2	78.1 - 145.0			
Arsenic	54.1	55.7	A		-2.9	39.0 - 72.4			
Barium	860	896	A		-4.0	627 - 1165			
Beryllium	47.8	47.0	A		1.7	32.9 - 61.1			
Cadmium	14.9	15.4	A		-3.2	10.8 - 20.0			
Chromium	97.9	99.0	A		-1.1	69.3 - 128.7			
Cobalt	122	127	A		-3.9	89 - 165			
Copper	207	204	A		1.5	143 - 265			
Lead	92.4	97.6	A		-5.3	68.3 - 126.9			
Mercury	0.172	0.172	A		0.0	0.120 - 0.224			
Nickel	302	300	A		0.7	210 - 390			
Selenium	16.6	17.7	A		-6.2	12.4 - 23.0			
Silver	92.2	95.5	A		-3.5	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	79.0	91.0	A		-13.2	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	20.7	21.2	A		-2.4	14.8 - 27.6			
Vanadium	256	271	A		-5.5	190 - 352			
Zinc	571	549	A		4.0	384 - 714			

Radiological						Units: (Bq/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepatable 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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (ERCL01) Washington State Public Health Laboratories
 1610 N.E. 150 th Srteet
 Shoreline, WA 98155-9701

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	48.4	55.7	A		-13.1	39.0 - 72.4		4.8
Barium	NR	896				627 - 1165		
Beryllium	48.5	47.0	A		3.2	32.9 - 61.1		4.8
Cadmium	16.4	15.4	A		6.5	10.8 - 20.0		1.6
Chromium	141	99.0	N		42.4	69.3 - 128.7		14
Cobalt	124	127	A		-2.4	89 - 165		12
Copper	205	204	A		0.5	143 - 265		21
Lead	108	97.6	A		10.7	68.3 - 126.9		11
Mercury	NR	0.172				0.120 - 0.224		
Nickel	306	300	A		2.0	210 - 390		31
Selenium	13.5	17.7	W		-23.7	12.4 - 23.0		1.4
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	87.5	91.0	A		-3.8	63.7 - 118.3		8.8
Uranium-235	0.0562	0.0533	A		5.4	0.0373 - 0.0693		0.0056
Uranium-238	20.8	21.1	A		-1.4	14.8 - 27.4		2.1
Uranium-Total	20.9	21.2	A		-1.4	14.8 - 27.6		2.1
Vanadium	NR	271				190 - 352		
Zinc	540	549	A		-1.6	384 - 714		54

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	106	111	A		-4.5	78 - 144		5.5
Cesium-134	917	939	A		-2.3	657 - 1221		50
Cesium-137	1220	1150	A		6.1	805 - 1495		40
Cobalt-57	1400	1316	A		6.4	921 - 1711		60
Cobalt-60	576	531	A		8.5	372 - 690		13 L
Iron-55	NR	508				356 - 660		
Manganese-54	1010	920	A		9.8	644 - 1196		100
Nickel-63	508	406	W		25.1	284 - 528		20
Plutonium-238	104	105.8	A		-1.7	74.1 - 137.5		4.8
Plutonium-239/240	127	134	A		-5.2	94 - 174		5.6
Potassium-40	721	632	A		14.1	442 - 822		27
Strontium-90	460	508	A		-9.4	356 - 660		28

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	397	469	A		-15.4	328 - 610	2	L	
Uranium-234/233	56.0	60.3	A		-7.1	42.2 - 78.4		4.0	
Uranium-238	227	263	A		-13.7	184 - 342		12	
Zinc-65	698	606	A		15.2	424 - 788		24	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

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

Laboratory Results For MAPEP-12-MaS27
 (ERHD99) Radiation Protection Bureau RSD NMS
 775 Brookfield Road AL6302D1
 Ottawa, Ontario K1A 1C1

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	91.44	111	A		-17.6	78 - 144		3.85
Cesium-134	908.26	939	A		-3.3	657 - 1221		13.70 L
Cesium-137	1246.34	1150	A		8.4	805 - 1495		44.33
Cobalt-57	1398.09	1316	A		6.2	921 - 1711		33.62 L
Cobalt-60	566.12	531	A		6.6	372 - 690		14.67 L
Iron-55	NR	508				356 - 660		
Manganese-54	1020.26	920	A		10.9	644 - 1196		33.14
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	687.23	632	A		8.7	442 - 822		30.93
Strontium-90	450.005	508	A		-11.4	356 - 660		124.556 H

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	54.606	60.3	A		-9.4	42.2 - 78.4		3.922
Uranium-238	244.720	263	A		-7.0	184 - 342		13.899
Zinc-65	682.22	606	A		12.6	424 - 788		25.53

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (ERLG01) Environmental Radiation Laboratory
 Georgia Institute of Tech.
 Atlanta, GA 30332

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	145	111	N		30.6	78 - 144		10
Cesium-134	900	939	A		-4.2	657 - 1221		30
Cesium-137	1100	1150	A		-4.3	805 - 1495		80
Cobalt-57	1300	1316	A		-1.2	921 - 1711		210
Cobalt-60	500	531	A		-5.8	372 - 690		30
Iron-55	NR	508				356 - 660		
Manganese-54	880	920	A		-4.3	644 - 1196		100
Nickel-63	NR	406				284 - 528		
Plutonium-238	105	105.8	A		-0.8	74.1 - 137.5		12
Plutonium-239/240	133	134	A		-0.7	94 - 174		15
Potassium-40	590	632	A		-6.6	442 - 822		50
Strontium-90	550	508	A		8.3	356 - 660	10	L

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	63	60.3	A		4.5	42.2 - 78.4		5
Uranium-238	265	263	A		0.8	184 - 342		30
Zinc-65	570	606	A		-5.9	424 - 788	140	H

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (ERPD99) Ministry Of Health, Radiation Protection Department Lab
 Al-Awqaf Complex-Tower#12
 Sharq, Kuwait 656

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	797	939	A		-15.1	657 - 1221	70	
Cesium-137	1164	1150	A		1.2	805 - 1495	100	
Cobalt-57	1300	1316	A		-1.2	921 - 1711	120	
Cobalt-60	537	531	A		1.1	372 - 690	50	
Iron-55	NR	508				356 - 660		
Manganese-54	955	920	A		3.8	644 - 1196	80	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	735	632	A		16.3	442 - 822	70	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	668	606	A		10.2	424 - 788		50

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (ESCQ99) Environmental Studies Centre (ESC)
 Qatar University
 Doha, Doha 2713

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	146.45	111.5	N		31.3	78.1 - 145.0	1.85	L	
Arsenic	51.87	55.7	A		-6.9	39.0 - 72.4		2.25	
Barium	NR	896				627 - 1165			
Beryllium	50.46	47.0	A		7.4	32.9 - 61.1	0.04	L	
Cadmium	15.10	15.4	A		-1.9	10.8 - 20.0	0.41	L	
Chromium	100.66	99.0	A		1.7	69.3 - 128.7	2.81	L	
Cobalt	132.65	127	A		4.4	89 - 165	1.98	L	
Copper	214.45	204	A		5.1	143 - 265	2.83	L	
Lead	101.47	97.6	A		4.0	68.3 - 126.9	2.13	L	
Mercury	NR	0.172				0.120 - 0.224			
Nickel	351.01	300	A		17.0	210 - 390	1.85	L	
Selenium	NR	17.7				12.4 - 23.0			
Silver	92.79	95.5	A		-2.8	66.9 - 124.2	2.12	L	
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	NR	91.0				63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	262.44	271	A		-3.2	190 - 352	3.47	L	
Zinc	542.62	549	A		-1.2	384 - 714	2.05	L	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepatable with warning 20% < Bias < 30%

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

Laboratory Results For MAPEP-12-MaS27

(ESGL99) Environmental Sciences Group

Unit 12 Moorbrook

DIdcot, Oxfordshire OX11 8QT

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	131.1	111	A		18.1	78 - 144	6.4	
Cesium-134	965	939	A		2.8	657 - 1221	35	
Cesium-137	1271	1150	A		10.5	805 - 1495	48	
Cobalt-57	1489	1316	A		13.1	921 - 1711	57	
Cobalt-60	606	531	A		14.1	372 - 690	25	
Iron-55	NR	508				356 - 660		
Manganese-54	1024	920	A		11.3	644 - 1196	39	
Nickel-63	NR	406				284 - 528		
Plutonium-238	108.9	105.8	A		2.9	74.1 - 137.5	5.7	
Plutonium-239/240	132.0	134	A		-1.5	94 - 174	6.6	
Potassium-40	665	632	A		5.2	442 - 822	46	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	38.4	60.3	N		-36.3	42.2 - 78.4		3.9
Uranium-238	322	263	W		22.4	184 - 342		34
Zinc-65	681	606	A		12.4	424 - 788		30

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

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

Laboratory Results For MAPEP-12-MaS27

(ETTP01) MCL Inc, ETTP

Bldg K1006

Oak Ridge, TN 37830

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	111	111.5	A		-0.4	78.1 - 145.0		
Arsenic	48.8	55.7	A		-12.4	39.0 - 72.4		
Barium	915	896	A		2.1	627 - 1165		
Beryllium	42.0	47.0	A		-10.6	32.9 - 61.1		
Cadmium	16.2	15.4	A		5.2	10.8 - 20.0		
Chromium	92.6	99.0	A		-6.5	69.3 - 128.7		
Cobalt	116	127	A		-8.7	89 - 165		
Copper	202	204	A		-1.0	143 - 265		
Lead	98.0	97.6	A		0.4	68.3 - 126.9		
Mercury	0.188	0.172	A		9.3	0.120 - 0.224		
Nickel	292	300	A		-2.7	210 - 390		
Selenium	18.2	17.7	A		2.8	12.4 - 23.0		
Silver	90.6	95.5	A		-5.1	66.9 - 124.2		
Technetium-99	0.0005954	0.000748	W		-20.4	0.000524 - 0.000972		
Thallium	89.7	91.0	A		-1.4	63.7 - 118.3		
Uranium-235	0.041	0.0533	W		-23.1	0.0373 - 0.0693		
Uranium-238	19.656	21.1	A		-6.8	14.8 - 27.4		
Uranium-Total	19.697	21.2	A		-7.1	14.8 - 27.6		
Vanadium	266	271	A		-1.8	190 - 352		
Zinc	568	549	A		3.5	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	947	939	A		0.9	657 - 1221	35.0	
Cesium-137	1123	1150	A		-2.3	805 - 1495	34.3	
Cobalt-57	1272.	1316	A		-3.3	921 - 1711	30.2	L
Cobalt-60	529	531	A		-0.4	372 - 690	13.1	L
Iron-55	NR	508				356 - 660		
Manganese-54	939	920	A		2.1	644 - 1196	26.6	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	632.7	632	A		0.1	442 - 822	96.1	
Strontium-90	NR	508				356 - 660		

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	432.5	469	A		-7.8	328 - 610		15.5	
Uranium-234/233	NR	60.3				42.2 - 78.4			
Uranium-238	NR	263				184 - 342			
Zinc-65	652	606	A		7.6	424 - 788		29.7	

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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NR = Not Reported

Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27

(EULC01) EnergySolutions, LLC

I-80, Exit 46

Clive, UT 84029

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	110.11	111	A		-0.8	78 - 144	25.21	H
Cesium-134	786.62	939	A		-16.2	657 - 1221	44.92	
Cesium-137	1084.1	1150	A		-5.7	805 - 1495	133.5	
Cobalt-57	1316.46	1316	A		0.0	921 - 1711	185.81	
Cobalt-60	469.9	531	A		-11.5	372 - 690	29.3	
Iron-55	NR	508				356 - 660		
Manganese-54	869.5	920	A		-5.5	644 - 1196	94.79	
Nickel-63	NR	406				284 - 528		
Plutonium-238	115.9	105.8	A		9.5	74.1 - 137.5	4.53	
Plutonium-239/240	162.52	134	W		21.3	94 - 174	5.67	
Potassium-40	555.74	632	A		-12.1	442 - 822	73.48	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	40.73	60.3	N		-32.5	42.2 - 78.4		2.94
Uranium-238	222	263	A		-15.6	184 - 342		11.86
Zinc-65	557.22	606	A		-8.1	424 - 788		53.13

Radiological Reference Date: August 1, 2012

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Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (FDHE01) Florida Dept of Health Environmental Laboratory
 PO Box 680069
 Orlando, FL 32868-0069

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	940.11	939	A		0.1	657 - 1221	39.83	
Cesium-137	1158.87	1150	A		0.8	805 - 1495	55.44	
Cobalt-57	1317.05	1316	A		0.1	921 - 1711	67.01	
Cobalt-60	540.54	531	A		1.8	372 - 690	23.41	
Iron-55	NR	508				356 - 660		
Manganese-54	960.09	920	A		4.4	644 - 1196	45.17	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	661.22	632	A		4.6	442 - 822	40.83	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	657.47	606	A		8.5	424 - 788	32.14	

Radiological Reference Date: August 1, 2012

Other Flags:

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Notes:

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

Laboratory Results For MAPEP-12-MaS27(FDOH01) Florida Dept. of Health, Mobile Environmental Radiological Lab
PO Box 680069
Orlando, FL 32868-0069

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	770.51	939	A		-17.9	657 - 1221	12.68	L
Cesium-137	1141.29	1150	A		-0.8	805 - 1495	26.99	L
Cobalt-57	1395.34	1316	A		6.0	921 - 1711	28.13	L
Cobalt-60	503.06	531	A		-5.3	372 - 690	9.68	L
Iron-55	NR	508				356 - 660		
Manganese-54	941.03	920	A		2.3	644 - 1196	21.34	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	644.90	632	A		2.0	442 - 822	19.40	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	641.60	606	A		5.9	424 - 788	17.06	L

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (FMEC99) Foods and Water Laboratories Center
 Ministry of Regional Municipalities and Water Resources
 Muscat, seeb 111

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	93.02	111	A		-16.2	78 - 144		4.58
Cesium-134	858.94	939	A		-8.5	657 - 1221		23.19 L
Cesium-137	1047.77	1150	A		-8.9	805 - 1495		36.25
Cobalt-57	1281.13	1316	A		-2.7	921 - 1711		48.81
Cobalt-60	484.57	531	A		-8.7	372 - 690		22.44
Iron-55	NR	508				356 - 660		
Manganese-54	941.52	920	A		2.3	644 - 1196		26.74 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	599.7	632	A		-5.1	442 - 822		13.73 L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	231.38	263	A		-12.0	184 - 342	5.33	L
Zinc-65	582.55	606	A		-3.9	424 - 788	10.60	L

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(GENE01) GEL Laboratories, LLC

2040 Savage Road

Charleston, SC 29407

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	106	111.5	A		-4.9	78.1 - 145.0		
Arsenic	48.7	55.7	A		-12.6	39.0 - 72.4		
Barium	785	896	A		-12.4	627 - 1165		
Beryllium	43.5	47.0	A		-7.4	32.9 - 61.1		
Cadmium	13.0	15.4	A		-15.6	10.8 - 20.0		
Chromium	90.5	99.0	A		-8.6	69.3 - 128.7		
Cobalt	110	127	A		-13.4	89 - 165		
Copper	202	204	A		-1.0	143 - 265		
Lead	84.4	97.6	A		-13.5	68.3 - 126.9		
Mercury	0.172	0.172	A		0.0	0.120 - 0.224		
Nickel	260	300	A		-13.3	210 - 390		
Selenium	14.0	17.7	W		-20.9	12.4 - 23.0		
Silver	89.3	95.5	A		-6.5	66.9 - 124.2		
Technetium-99	0.000613	0.000748	A		-18.0	0.000524 - 0.000972	0.0000423	
Thallium	77.4	91.0	A		-14.9	63.7 - 118.3		
Uranium-235	0.0516	0.0533	A		-3.2	0.0373 - 0.0693	0.00561	
Uranium-238	19.6	21.1	A		-7.1	14.8 - 27.4	0.999	
Uranium-Total	19.65	21.2	A		-7.3	14.8 - 27.6	0.999	
Vanadium	248	271	A		-8.5	190 - 352		
Zinc	462	549	A		-15.8	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	106.67	111	A		-3.9	78 - 144	8.25	
Cesium-134	839.5	939	A		-10.6	657 - 1221	40.0	
Cesium-137	1230	1150	A		7.0	805 - 1495	52.5	
Cobalt-57	1605	1316	W		22.0	921 - 1711	75.6	
Cobalt-60	551.5	531	A		3.9	372 - 690	23.55	
Iron-55	459.3	508	A		-9.6	356 - 660	39.8	
Manganese-54	1015	920	A		10.3	644 - 1196	49.4	
Nickel-63	463.7	406	A		14.2	284 - 528	20.2	
Plutonium-238	104.6	105.8	A		-1.1	74.1 - 137.5	3.58	
Plutonium-239/240	132.33	134	A		-1.2	94 - 174	4.06	
Potassium-40	723	632	A		14.4	442 - 822	33.15	
Strontium-90	476.7	508	A		-6.2	356 - 660	4.6	L

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	385.3	469	A		-17.8	328 - 610		14.7	
Uranium-234/233	51.6	60.3	A		-14.4	42.2 - 78.4		1.89	
Uranium-238	238.33	263	A		-9.4	184 - 342	3.98	L	
Zinc-65	721.5	606	A		19.1	424 - 788		34.35	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (GPCL01) Georgia Power Company Environmental Laboratory
 5131 Maner Road
 Smyrna, GA 30080

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	798.78	939	A		-14.9	657 - 1221		44.4
Cesium-137	1145.48	1150	A		-0.4	805 - 1495		52.7
Cobalt-57	1234.48	1316	A		-6.2	921 - 1711		90.8
Cobalt-60	518.13	531	A		-2.4	372 - 690		15.2 L
Iron-55	NR	508				356 - 660		
Manganese-54	931.85	920	A		1.3	644 - 1196		48.0
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	677.72	632	A		7.2	442 - 822		33.0
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	652.27	606	A		7.6	424 - 788		37.6

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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RW = Report Warning

NR = Not Reported

Notes:

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27(HECR01) SC Dept. Health and Environmental Control Radiological Laboratory
2600 Bull St.
Columbia, SC 29201

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	837.4	939	A		-10.8	657 - 1221		31.4
Cesium-137	1142	1150	A		-0.7	805 - 1495		97
Cobalt-57	1284	1316	A		-2.4	921 - 1711		63
Cobalt-60	525.0	531	A		-1.1	372 - 690		20.9
Iron-55	NR	508				356 - 660		
Manganese-54	951.6	920	A		3.4	644 - 1196		74.5
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	678.2	632	A		7.3	442 - 822		42.7
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	662.3	606	A		9.3	424 - 788		41.4

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(HERR01) Washington Closure Hanford

Radiological Counting Facility

Richland, WA 99352

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	98.5	111	A		-11.3	78 - 144		3.25
Cesium-134	727	939	W		-22.6	657 - 1221		10.5 L
Cesium-137	1160	1150	A		0.9	805 - 1495		30.5 L
Cobalt-57	1380	1316	A		4.9	921 - 1711		35.2 L
Cobalt-60	546	531	A		2.8	372 - 690		10.6 L
Iron-55	NR	508				356 - 660		
Manganese-54	986	920	A		7.2	644 - 1196		25.4 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	667	632	A		5.5	442 - 822		27.6
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	240.5	263	A		-8.6	184 - 342		15.5
Zinc-65	687	606	A		13.4	424 - 788	17.6	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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Notes:

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

Laboratory Results For MAPEP-12-MaS27

(HPAC99) HPA, CRCE Scotland

155 Hardgate Road

Glasgow, Scotland G514LS

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	NR	111.5				78.1 - 145.0			
Arsenic	57	55.7	A		2.3	39.0 - 72.4		4.3	
Barium	969	896	A		8.1	627 - 1165		150	
Beryllium	52	47.0	A		10.6	32.9 - 61.1		11 H	
Cadmium	16.1	15.4	A		4.5	10.8 - 20.0		2.1	
Chromium	106	99.0	A		7.1	69.3 - 128.7		22 H	
Cobalt	124	127	A		-2.4	89 - 165		19	
Copper	194	204	A		-4.9	143 - 265		30	
Lead	96	97.6	A		-1.6	68.3 - 126.9		15	
Mercury	0.190	0.172	A		10.5	0.120 - 0.224		0.029	
Nickel	296	300	A		-1.3	210 - 390		60 H	
Selenium	NR	17.7				12.4 - 23.0			
Silver	NR	95.5				66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	89	91.0	A		-2.2	63.7 - 118.3		12	
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	275	271	A		1.5	190 - 352		21	
Zinc	561	549	A		2.2	384 - 714		56	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	0.108	111	N		-99.9	78 - 144		0.0070	
Cesium-134	638	939	N		-32.1	657 - 1221		31	
Cesium-137	935	1150	A		-18.7	805 - 1495		43	
Cobalt-57	1292	1316	A		-1.8	921 - 1711		66	
Cobalt-60	1164	531	N		119.2	372 - 690		56	
Iron-55	NR	508				356 - 660			
Manganese-54	941	920	A		2.3	644 - 1196		44	
Nickel-63	NR	406				284 - 528			
Plutonium-238	105.5	105.8	A		-0.3	74.1 - 137.5		3.8	
Plutonium-239/240	128.3	134	A		-4.3	94 - 174		4.5	
Potassium-40	633	632	A		0.2	442 - 822		35	
Strontium-90	541	508	A		6.5	356 - 660		29.4	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	402	469	A		-14.3	328 - 610		21	
Uranium-234/233	NR	60.3	N	(28)		42.2 - 78.4			
Uranium-238	NR	263	N	(28)		184 - 342			
Zinc-65	560	606	A		-7.6	424 - 788		27	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (IAEA99) International Atomic Energy Agency
 Agency's Laboratories Seibersdorf
 Seibersdorf, Austria A-2444

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	112.9	111	A		1.7	78 - 144		4.1
Cesium-134	770	939	A		-18.0	657 - 1221		48
Cesium-137	1202	1150	A		4.5	805 - 1495	35	L
Cobalt-57	1384	1316	A		5.2	921 - 1711		40
Cobalt-60	567	531	A		6.8	372 - 690		16
Iron-55	NR	508				356 - 660		
Manganese-54	981	920	A		6.6	644 - 1196		28
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	564	632	A		-10.8	442 - 822		30
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	629	606	A		3.8	424 - 788	18	L

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (ISUP01) ISU - Department of Physics/Health Physics/EAL
 785 S. 8th Ave, Rm 120
 Pocatello, ID 83209-8106

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	729.38	939	W		-22.3	657 - 1221	21.74	L
Cesium-137	1045.50	1150	A		-9.1	805 - 1495	36.84	
Cobalt-57	1213.27	1316	A		-7.8	921 - 1711	41.53	
Cobalt-60	500.67	531	A		-5.7	372 - 690	16.20	
Iron-55	NR	508				356 - 660		
Manganese-54	863.59	920	A		-6.1	644 - 1196	29.70	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	614.58	632	A		-2.8	442 - 822	24.82	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	603.99	606	A		-0.3	424 - 788		21.07

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27

(IUSF99) Istanbul University, Department of Biology, Radioecology Laboratory

Istanbul University, Faculty of Science

Vezneciler, Istanbul 34134

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	285.16	939	N		-69.6	657 - 1221	7.9	L
Cesium-137	387.23	1150	N		-66.3	805 - 1495	11.58	L
Cobalt-57	NR	1316	N	(25)		921 - 1711		
Cobalt-60	164.35	531	N		-69.0	372 - 690	4.83	L
Iron-55	NR	508				356 - 660		
Manganese-54	304.94	920	N		-66.9	644 - 1196	7.48	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	196.57	632	N		-68.9	442 - 822	6.31	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	196.91	606	N		-67.5	424 - 788	4.64	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (JAEC99) Radiation Measurements Laboratory
 Jordan Atomic Energy Commission
 Amman, Jordan 70 (11934)

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	131.41	111	A		18.4	78 - 144	16.10	
Cesium-134	917.4	939	A		-2.3	657 - 1221	73.392	
Cesium-137	1082.5	1150	A		-5.9	805 - 1495	86.6	
Cobalt-57	1206	1316	A		-8.4	921 - 1711	96.48	
Cobalt-60	493	531	A		-7.2	372 - 690	39.44	
Iron-55	NR	508				356 - 660		
Manganese-54	891.5	920	A		-3.1	644 - 1196	71.32	
Nickel-63	NR	406				284 - 528		
Plutonium-238	238.05	105.8	N		125.0	74.1 - 137.5	43.25	
Plutonium-239/240	137.5	134	A		2.6	94 - 174	25.20	
Potassium-40	629.25	632	A		-0.4	442 - 822	50.34	
Strontium-90	480.15	508	A		-5.5	356 - 660	31.95	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	59.61	60.3	A		-1.1	42.2 - 78.4		9.34
Uranium-238	257.54	263	A		-2.1	184 - 342		39.27
Zinc-65	585.25	606	A		-3.4	424 - 788		46.82

Radiological Reference Date: August 1, 2012

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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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(JLNN01) Jefferson Laboratory

12000 Jefferson Ave

Newport News, VA 23606

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	109	111	A		-1.8	78 - 144		4
Cesium-134	892	939	A		-5.0	657 - 1221		11 L
Cesium-137	1210	1150	A		5.2	805 - 1495		37
Cobalt-57	1450	1316	A		10.2	921 - 1711		36 L
Cobalt-60	568	531	A		7.0	372 - 690		11 L
Iron-55	NR	508				356 - 660		
Manganese-54	1010	920	A		9.8	644 - 1196		26 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	670	632	A		6.0	442 - 822		24
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	682	606	A		12.5	424 - 788	18	L

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (JNRC99) Jordan Nuclear Regulatory Commission
 Supportive and Technical Services
 Amman, Amman 11183

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	297	939	N		-68.4	657 - 1221		6 L
Cesium-137	361	1150	N		-68.6	805 - 1495		5 L
Cobalt-57	411	1316	N		-68.8	921 - 1711		10 L
Cobalt-60	178	531	N		-66.5	372 - 690		4 L
Iron-55	NR	508				356 - 660		
Manganese-54	289	920	N		-68.6	644 - 1196		9
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	198	632	N		-68.7	442 - 822		7
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	192	606	N		-68.3	424 - 788	3	L

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (KDHE01) Kansas Dept. of Health & Environment
 Forbes Bldg. 740
 Topeka, KS 66620

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	109	111	A		-1.8	78 - 144	8	
Cesium-134	945	939	A		0.6	657 - 1221	12	L
Cesium-137	1320	1150	A		14.8	805 - 1495	40	
Cobalt-57	1290	1316	A		-2.0	921 - 1711	30	L
Cobalt-60	176	531	N		-66.9	372 - 690	4	L
Iron-55	NR	508				356 - 660		
Manganese-54	905	920	A		-1.6	644 - 1196	28	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	641	632	A		1.4	442 - 822	28	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	593	606	A		-2.1	424 - 788	16	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

N = Result not acceptable Bias > 30%

L = Uncertainty potentially too low (for information purposes only)

H = Uncertainty potentially too high (for information purposes only)

RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(KUFS99) Center for Research in Environmental Radiation

Kuwait University - Faculty of Science

Khaldia, Kuwait 13060

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	112.0	111	A		0.9	78 - 144	1.07	L
Cesium-134	921.97	939	A		-1.8	657 - 1221	1.5	L
Cesium-137	1341.70	1150	A		16.7	805 - 1495	1.7	L
Cobalt-57	1643.63	1316	W		24.9	921 - 1711	3.69	L
Cobalt-60	481.97	531	A		-9.2	372 - 690	1.08	L
Iron-55	NR	508				356 - 660		
Manganese-54	916.03	920	A		-0.4	644 - 1196	1.37	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	608.30	632	A		-3.8	442 - 822	3.74	L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	232.4	263	A		-11.6	184 - 342	3.13	L
Zinc-65	599.21	606	A		-1.1	424 - 788	1.33	L

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27(LAEC99) Lebanese Atomic Energy Commission - Environmental Radiation
National Council for Scientific Research
Beirut, Beirut 1107 2260

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	938	939	A		-0.1	657 - 1221	20	L
Cesium-137	1156	1150	A		0.5	805 - 1495	20	L
Cobalt-57	1288	1316	A		-2.1	921 - 1711	24	L
Cobalt-60	558	531	A		5.1	372 - 690	11	L
Iron-55	NR	508				356 - 660		
Manganese-54	953	920	A		3.6	644 - 1196	16	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	102.98	105.8	A		-2.7	74.1 - 137.5	4.07	
Plutonium-239/240	126.79	134	A		-5.4	94 - 174	4.83	
Potassium-40	682	632	A		7.9	442 - 822	16	L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	31.12	60.3	N		-48.4	42.2 - 78.4		1.32
Uranium-238	150.56	263	N		-42.8	184 - 342		4.59
Zinc-65	664	606	A		9.6	424 - 788	12	L

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(LANL01) Los Alamos National Laboratory

Mail Stop J514

Los Alamos, NM 87545

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	107	111	A		-3.6	78 - 144	6	
Cesium-134	917	939	A		-2.3	657 - 1221	78	
Cesium-137	1310	1150	A		13.9	805 - 1495	70	
Cobalt-57	1520	1316	A		15.5	921 - 1711	80	
Cobalt-60	597	531	A		12.4	372 - 690	38	
Iron-55	NR	508				356 - 660		
Manganese-54	1070	920	A		16.3	644 - 1196	60	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	NR	632	N	(25)		442 - 822		
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	728	606	W		20.1	424 - 788		48

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
(LAWR01) LAWRENCE BERKELEY NATIONAL LABORATORY
1 CYCLOTRON RD.
BERKELEY, CA 94720

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	910	939	A		-3.1	657 - 1221		52.7
Cesium-137	1230	1150	A		7.0	805 - 1495		70.4
Cobalt-57	1430	1316	A		8.7	921 - 1711		88.4
Cobalt-60	595	531	A		12.1	372 - 690		34.3
Iron-55	NR	508				356 - 660		
Manganese-54	1020	920	A		10.9	644 - 1196		56.9
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	762	632	W		20.6	442 - 822		48
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	715	606	A		18.0	424 - 788		41.6

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (LAWR02) Lawrence Livermore National Laboratory
 7000 East Avenue
 Livermore, CA 94551

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	108	111	A		-2.7	78 - 144	5	
Cesium-134	822	939	A		-12.5	657 - 1221	25	
Cesium-137	1117	1150	A		-2.9	805 - 1495	34	
Cobalt-57	1338	1316	A		1.7	921 - 1711	41	
Cobalt-60	511	531	A		-3.8	372 - 690	16	
Iron-55	NR	508				356 - 660		
Manganese-54	900	920	A		-2.2	644 - 1196	27	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	598	632	A		-5.4	442 - 822	20	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	590	606	A		-2.6	424 - 788		18

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(LDRA99) Laboratori de Radiologia Ambiental-Universitat de Barcelona

Facultat de Quimica

Barcelona, Catalunya 08028

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	114	111	A		2.7	78 - 144		9
Cesium-134	860	939	A		-8.4	657 - 1221		70
Cesium-137	1190	1150	A		3.5	805 - 1495		90
Cobalt-57	1400	1316	A		6.4	921 - 1711		100
Cobalt-60	550	531	A		3.6	372 - 690		40
Iron-55	NR	508				356 - 660		
Manganese-54	980	920	A		6.5	644 - 1196		70
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8	N	(28)		74.1 - 137.5		
Plutonium-239/240	NR	134	N	(28)		94 - 174		
Potassium-40	670	632	A		6.0	442 - 822		50
Strontium-90	519	508	A		2.2	356 - 660		22

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3	N	(28)		42.2 - 78.4		
Uranium-238	NR	263	N	(28)		184 - 342		
Zinc-65	670	606	A		10.6	424 - 788		50

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (LECR99) Centre for Ecology and Hydrology
 Lancaster Environment Centre
 Lancaster, Lancashire LA1 4AP

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	102	111	A		-8.1	78 - 144	7	
Cesium-134	956	939	A		1.8	657 - 1221	6.1	L
Cesium-137	1170	1150	A		1.7	805 - 1495	17.9	L
Cobalt-57	1360	1316	A		3.3	921 - 1711	20.9	L
Cobalt-60	555	531	A		4.5	372 - 690	44.8	
Iron-55	NR	508				356 - 660		
Manganese-54	947	920	A		2.9	644 - 1196	7.9	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	661	632	A		4.6	442 - 822	76.0	
Strontium-90	NR	508				356 - 660		

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	480	469	A		2.3	328 - 610		23	
Uranium-234/233	NR	60.3				42.2 - 78.4			
Uranium-238	NR	263				184 - 342			
Zinc-65	637	606	A		5.1	424 - 788	10.1	L	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(LGCL99) LGC Ltd

Queens Road

Teddington, Middlesex TW11 0LY

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	105.1	111	A		-5.3	78 - 144	7.67	
Cesium-134	927.1	939	A		-1.3	657 - 1221	107.3	
Cesium-137	1127	1150	A		-2.0	805 - 1495	71	
Cobalt-57	1232	1316	A		-6.4	921 - 1711	83	
Cobalt-60	529	531	A		-0.4	372 - 690	33	
Iron-55	NR	508				356 - 660		
Manganese-54	914	920	A		-0.7	644 - 1196	56	
Nickel-63	NR	406				284 - 528		
Plutonium-238	101	105.8	A		-4.5	74.1 - 137.5	10.1	
Plutonium-239/240	132.1	134	A		-1.4	94 - 174	12.61	
Potassium-40	671	632	A		6.2	442 - 822	40	
Strontium-90	471.3	508	A		-7.2	356 - 660	34.03	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	58.4	60.3	A		-3.2	42.2 - 78.4		6.48
Uranium-238	251.6	263	A		-4.3	184 - 342		20.46
Zinc-65	638	606	A		5.3	424 - 788		39

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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RW = Report Warning

NR = Not Reported

Notes:

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (LOCK01) AMWTP Analytical Chemistry Laboratory
 Idaho Treatment Group
 Idaho Falls, ID 83401

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	0.0448	0.0533	A		-15.9	0.0373 - 0.0693	0.01	H
Uranium-238	15.9	21.1	W		-24.6	14.8 - 27.4	3	
Uranium-Total	16.0	21.2	W		-24.5	14.8 - 27.6	3	
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	123	111	A		10.8	78 - 144	11	
Cesium-134	985	939	A		4.9	657 - 1221	32	
Cesium-137	1270	1150	A		10.4	805 - 1495	41	
Cobalt-57	1470	1316	A		11.7	921 - 1711	35	L
Cobalt-60	601	531	A		13.2	372 - 690	19	
Iron-55	NR	508				356 - 660		
Manganese-54	1030	920	A		12.0	644 - 1196	33	
Nickel-63	NR	406				284 - 528		
Plutonium-238	102	105.8	A		-3.6	74.1 - 137.5	5	
Plutonium-239/240	131	134	A		-2.2	94 - 174	6	
Potassium-40	784	632	W		24.1	442 - 822	44	
Strontium-90	524	508	A		3.2	356 - 660	32	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	62.3	60.3	A		3.3	42.2 - 78.4		5
Uranium-238	251	263	A		-4.6	184 - 342		16
Zinc-65	705	606	A		16.3	424 - 788		25

Radiological Reference Date: August 1, 2012

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)

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NR = Not Reported

Notes:

(5) = Total Metal

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

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

INL/Battelle Energy Alliance, LLC

Idaho Falls, ID 83415-7111

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	124	111	A		11.7	78 - 144		13
Cesium-134	910	939	A		-3.1	657 - 1221		65
Cesium-137	1163	1150	A		1.1	805 - 1495		80
Cobalt-57	1447	1316	A		10.0	921 - 1711		100
Cobalt-60	537	531	A		1.1	372 - 690		39
Iron-55	NR	508				356 - 660		
Manganese-54	942	920	A		2.4	644 - 1196		67
Nickel-63	NR	406				284 - 528		
Plutonium-238	106	105.8	A		0.2	74.1 - 137.5		13
Plutonium-239/240	136	134	A		1.5	94 - 174		16
Potassium-40	624	632	A		-1.3	442 - 822		47
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	56.8	60.3	A		-5.8	42.2 - 78.4		8.0
Uranium-238	239	263	A		-9.1	184 - 342		33
Zinc-65	627	606	A		3.5	424 - 788		45

Radiological Reference Date: August 1, 2012

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)

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NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (MAHP59) Materials Assessment and Health Physics Group
 Imperial College Reactor Centre
 Ascot, Berkshire SL5 7TE

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	118	111	A		6.3	78 - 144	7	
Cesium-134	897	939	A		-4.5	657 - 1221	30	
Cesium-137	1104	1150	A		-4.0	805 - 1495	35	
Cobalt-57	1308	1316	A		-0.6	921 - 1711	52	
Cobalt-60	555	531	A		4.5	372 - 690	17	
Iron-55	NR	508				356 - 660		
Manganese-54	906	920	A		-1.5	644 - 1196	28	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	624	632	A		-1.3	442 - 822	29	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	601	606	A		-0.8	424 - 788		21

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (MART01) Fluor B&W Ports Analytical Laboratory
 Lab COC, Bldg. X-710, Rm 222
 Piketon, OH 45661-

Inorganic						Units: (mg/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	93.0	111.5	A		-16.6	78.1 - 145.0			
Arsenic	50.4	55.7	A		-9.5	39.0 - 72.4			
Barium	773	896	A		-13.7	627 - 1165			
Beryllium	42.3	47.0	A		-10.0	32.9 - 61.1			
Cadmium	13.7	15.4	A		-11.0	10.8 - 20.0			
Chromium	42.0	99.0	N		-57.6	69.3 - 128.7			
Cobalt	111	127	A		-12.6	89 - 165			
Copper	176	204	A		-13.7	143 - 265			
Lead	84.0	97.6	A		-13.9	68.3 - 126.9			
Mercury	0.174	0.172	A		1.2	0.120 - 0.224			
Nickel	265	300	A		-11.7	210 - 390			
Selenium	12.9	17.7	W		-27.1	12.4 - 23.0			
Silver	69.9	95.5	W		-26.8	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	76.3	91.0	A		-16.2	63.7 - 118.3			
Uranium-235	0.0383	0.0533	W		-28.1	0.0373 - 0.0693			
Uranium-238	16.5	21.1	W		-21.8	14.8 - 27.4			
Uranium-Total	16.5	21.2	W		-22.2	14.8 - 27.6			
Vanadium	251	271	A		-7.4	190 - 352			
Zinc	523	549	A		-4.7	384 - 714			

Radiological						Units: (Bq/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	83.7	111	W		-24.6	78 - 144		5.05	
Cesium-134	804	939	A		-14.4	657 - 1221		11.98 L	
Cesium-137	1130	1150	A		-1.7	805 - 1495		20.66 L	
Cobalt-57	1250	1316	A		-5.0	921 - 1711		24.74 L	
Cobalt-60	536.9	531	A		1.1	372 - 690		7.084 L	
Iron-55	NR	508				356 - 660			
Manganese-54	930	920	A		1.1	644 - 1196		17.41 L	
Nickel-63	NR	406				284 - 528			
Plutonium-238	101.7	105.8	A		-3.9	74.1 - 137.5		7.28	
Plutonium-239/240	121.3	134	A		-9.5	94 - 174		8.6	
Potassium-40	668	632	A		5.7	442 - 822		44.77	
Strontium-90	337	508	N		-33.7	356 - 660		16.5	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	361	469	W		-23.0	328 - 610	7.4925	L	
Uranium-234/233	43.16	60.3	W		-28.4	42.2 - 78.4		3.205	
Uranium-238	201.9	263	W		-23.2	184 - 342		13.545	
Zinc-65	639	606	A		5.4	424 - 788		14.68 L	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (MART02) United States Enrichment Corporation
 PO Box 1410
 Paducah, KY 42002

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	106	111.5	A		-4.9	78.1 - 145.0		
Arsenic	54.1	55.7	A		-2.9	39.0 - 72.4		
Barium	835	896	A		-6.8	627 - 1165		
Beryllium	47.3	47.0	A		0.6	32.9 - 61.1		
Cadmium	15.7	15.4	A		1.9	10.8 - 20.0		
Chromium	80.3	99.0	A		-18.9	69.3 - 128.7		
Cobalt	124	127	A		-2.4	89 - 165		
Copper	185	204	A		-9.3	143 - 265		
Lead	92.3	97.6	A		-5.4	68.3 - 126.9		
Mercury	0.155	0.172	A		-9.9	0.120 - 0.224		
Nickel	288	300	A		-4.0	210 - 390		
Selenium	16.0	17.7	A		-9.6	12.4 - 23.0		
Silver	91.1	95.5	A		-4.6	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	82.9	91.0	A		-8.9	63.7 - 118.3		
Uranium-235	0.048	0.0533	A		-9.9	0.0373 - 0.0693		
Uranium-238	19.2	21.1	A		-9.0	14.8 - 27.4		
Uranium-Total	18.8	21.2	A		-11.3	14.8 - 27.6		
Vanadium	241	271	A		-11.1	190 - 352		
Zinc	598	549	A		8.9	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	101	111	A		-9.0	78 - 144	18.2	
Cesium-134	921	939	A		-1.9	657 - 1221	95.07	
Cesium-137	1260	1150	A		9.6	805 - 1495	147.2	
Cobalt-57	1280	1316	A		-2.7	921 - 1711	133.4	
Cobalt-60	589	531	A		10.9	372 - 690	61.66	
Iron-55	NR	508				356 - 660		
Manganese-54	1030	920	A		12.0	644 - 1196	116.0	
Nickel-63	NR	406				284 - 528		
Plutonium-238	97.2	105.8	A		-8.1	74.1 - 137.5	19	
Plutonium-239/240	126	134	A		-6.0	94 - 174	24.2	
Potassium-40	709	632	A		12.2	442 - 822	81.69	
Strontium-90	455	508	A		-10.4	356 - 660	57.5	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	559	469	A		19.2	328 - 610		19.2
Uranium-234/233	41.8	60.3	N		-30.7	42.2 - 78.4		9.35 H
Uranium-238	171	263	N		-35.0	184 - 342		31.3
Zinc-65	689	606	A		13.7	424 - 788		75.97

Radiological Reference Date: August 1, 2012

Other Flags:

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NR = Not Reported

Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27
 (MART03) Radioactive Material Analysis Laboratory
 ORNL
 Oak Ridge, TN 37831-6223

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	0.179	0.172	A		4.1	0.120 - 0.224		0.02
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	881	939	A		-6.2	657 - 1221		14.4 L
Cesium-137	1277	1150	A		11.0	805 - 1495		35 L
Cobalt-57	1516	1316	A		15.2	921 - 1711		72.8
Cobalt-60	593	531	A		11.7	372 - 690		11 L
Iron-55	NR	508				356 - 660		
Manganese-54	1060	920	A		15.2	644 - 1196		25 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	777	632	W		22.9	442 - 822		42.6
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	729	606	W		20.3	424 - 788		25

Radiological Reference Date: August 1, 2012

Other Flags:

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

N = Result not acceptable Bias > 30%

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NR = Not Reported

Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27
 (MDPH01) MDPH-Radiation Control Program
 MERL-Room 002
 Jamaica Plain, MA 02130-3597

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	884.30	939	A		-5.8	657 - 1221	10.43	L
Cesium-137	1180.30	1150	A		2.6	805 - 1495	30.60	L
Cobalt-57	1409.70	1316	A		7.1	921 - 1711	36.19	L
Cobalt-60	543.90	531	A		2.4	372 - 690	10.47	L
Iron-55	NR	508				356 - 660		
Manganese-54	965.70	920	A		5.0	644 - 1196	24.57	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	673.40	632	A		6.6	442 - 822	25.42	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	643.80	606	A		6.2	424 - 788	15.06	L

Radiological Reference Date: August 1, 2012

Other Flags:

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Notes:

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

Laboratory Results For MAPEP-12-MaS27

(MLIL01) Microbac Laboratories, Inc

158 Starlite Drive

Marietta, OH 45750

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	94.4	111.5	A		-15.3	78.1 - 145.0			
Arsenic	44.5	55.7	W		-20.1	39.0 - 72.4			
Barium	873	896	A		-2.6	627 - 1165			
Beryllium	42.7	47.0	A		-9.1	32.9 - 61.1			
Cadmium	13.8	15.4	A		-10.4	10.8 - 20.0			
Chromium	90.7	99.0	A		-8.4	69.3 - 128.7			
Cobalt	111	127	A		-12.6	89 - 165			
Copper	184	204	A		-9.8	143 - 265			
Lead	88.0	97.6	A		-9.8	68.3 - 126.9			
Mercury	0.152	0.172	A		-11.6	0.120 - 0.224			
Nickel	264	300	A		-12.0	210 - 390			
Selenium	13.8	17.7	W		-22.0	12.4 - 23.0			
Silver	93.0	95.5	A		-2.6	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	79.6	91.0	A		-12.5	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	16.2	21.2	W		-23.6	14.8 - 27.6			
Vanadium	233	271	A		-14.0	190 - 352			
Zinc	478	549	A		-12.9	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(MSDH01) Mississippi State Dept of Health

Radiological Environmental Laboratory

Jackson, MS 39213

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	124.58	111	A		12.2	78 - 144		12.48
Cesium-134	1160.4	939	W		23.6	657 - 1221		22.0 L
Cesium-137	1515.2	1150	N		31.8	805 - 1495		29.1 L
Cobalt-57	1768.3	1316	N		34.4	921 - 1711		44.2 L
Cobalt-60	690.68	531	N		30.1	372 - 690		13.13 L
Iron-55	NR	508				356 - 660		
Manganese-54	1223.3	920	N		33.0	644 - 1196		24.1 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	901.06	632	N		42.6	442 - 822		39.30
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	812.47	606	N		34.1	424 - 788	29.72	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (NARL01) National Air and Radiation Environmental Laboratory
 540 S. Morris Ave.
 Montgomery, AL 36115-2601

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	72.6	111.5	N		-34.9	78.1 - 145.0		
Arsenic	47.6	55.7	A		-14.5	39.0 - 72.4		
Barium	900	896	A		0.4	627 - 1165		
Beryllium	44.4	47.0	A		-5.5	32.9 - 61.1		
Cadmium	14.3	15.4	A		-7.1	10.8 - 20.0		
Chromium	93.6	99.0	A		-5.5	69.3 - 128.7		
Cobalt	122	127	A		-3.9	89 - 165		
Copper	191	204	A		-6.4	143 - 265		
Lead	94.8	97.6	A		-2.9	68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	304	300	A		1.3	210 - 390		
Selenium	15.3	17.7	A		-13.6	12.4 - 23.0		
Silver	89.6	95.5	A		-6.2	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	81.6	91.0	A		-10.3	63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	17.4	21.2	A		-17.9	14.8 - 27.6		
Vanadium	259	271	A		-4.4	190 - 352		
Zinc	551	549	A		0.4	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	101	111	A		-9.0	78 - 144	10.6	
Cesium-134	1050	939	A		11.8	657 - 1221	46.2	
Cesium-137	1330	1150	A		15.7	805 - 1495	71.5	
Cobalt-57	1570	1316	A		19.3	921 - 1711	86.7	
Cobalt-60	557	531	A		4.9	372 - 690	30.1	
Iron-55	NR	508				356 - 660		
Manganese-54	1080	920	A		17.4	644 - 1196	58.4	
Nickel-63	NR	406				284 - 528		
Plutonium-238	98.8	105.8	A		-6.6	74.1 - 137.5	8.6	
Plutonium-239/240	123	134	A		-8.2	94 - 174	10	
Potassium-40	758	632	A		19.9	442 - 822	42	
Strontium-90	500	508	A		-1.6	356 - 660	43.9	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	50.6	60.3	A		-16.1	42.2 - 78.4		5.46
Uranium-238	219	263	A		-16.7	184 - 342		15.6
Zinc-65	728	606	W		20.1	424 - 788		39.4

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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RW = Report Warning

NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27

(NARL02) USEPA - NAREL - MERL

540 S Morris Ave

Montgomery, AL 36115

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	124	111	A		11.7	78 - 144	6.72	
Cesium-134	1050	939	A		11.8	657 - 1221	20.4	L
Cesium-137	1330	1150	A		15.7	805 - 1495	61.6	
Cobalt-57	1470	1316	A		11.7	921 - 1711	52.0	
Cobalt-60	651	531	W		22.6	372 - 690	18.8	L
Iron-55	NR	508				356 - 660		
Manganese-54	1090	920	A		18.5	644 - 1196	53.8	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	709	632	A		12.2	442 - 822	34.8	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	774	606	W		27.7	424 - 788	33.9	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(NCNS99) National Center for Nuclear Sciences and Technologies

Technopole Sidi

Thabet Ariana, Ariana 2020

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	122.57	111	A		10.4	78 - 144		12.86
Cesium-134	788.04	939	A		-16.1	657 - 1221		3.46 L
Cesium-137	1217.54	1150	A		5.9	805 - 1495		4.50 L
Cobalt-57	1135.87	1316	A		-13.7	921 - 1711		3.18 L
Cobalt-60	533.67	531	A		0.5	372 - 690		3.36 L
Iron-55	NR	508				356 - 660		
Manganese-54	902.26	920	A		-1.9	644 - 1196		4.13 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	661.98	632	A		4.7	442 - 822		12.04 L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	574.67	606	A		-5.2	424 - 788	5.22	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepable with warning 20% < Bias < 30%

N = Result not acceptable Bias > 30%

L = Uncertainty potentially too low (for information purposes only)

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RW = Report Warning

NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27

(NESI01) B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory

Lynchburg Technology Center

Lynchburg, VA 24504-5447

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	112	111.5	A		0.4	78.1 - 145.0		
Arsenic	54.3	55.7	A		-2.5	39.0 - 72.4		
Barium	904	896	A		0.9	627 - 1165		
Beryllium	46.4	47.0	A		-1.3	32.9 - 61.1		
Cadmium	15.3	15.4	A		-0.6	10.8 - 20.0		
Chromium	87.2	99.0	A		-11.9	69.3 - 128.7		
Cobalt	110	127	A		-13.4	89 - 165		
Copper	183	204	A		-10.3	143 - 265		
Lead	99.7	97.6	A		2.2	68.3 - 126.9		
Mercury	0.157	0.172	A		-8.7	0.120 - 0.224		
Nickel	261	300	A		-13.0	210 - 390		
Selenium	20.9	17.7	A		18.1	12.4 - 23.0		
Silver	90.3	95.5	A		-5.4	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	84.1	91.0	A		-7.6	63.7 - 118.3		
Uranium-235	< 0.115	0.0533	A			0.0373 - 0.0693		
Uranium-238	18.1	21.1	A		-14.2	14.8 - 27.4		
Uranium-Total	18.2	21.2	A		-14.2	14.8 - 27.6		
Vanadium	224	271	A		-17.3	190 - 352		
Zinc	481	549	A		-12.4	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	108.4	111	A		-2.3	78 - 144	6.5	
Cesium-134	955	939	A		1.7	657 - 1221	48.2	
Cesium-137	1256	1150	A		9.2	805 - 1495	58.1	
Cobalt-57	1380	1316	A		4.9	921 - 1711	236	
Cobalt-60	575	531	A		8.3	372 - 690	27.7	
Iron-55	520	508	A		2.4	356 - 660	72.3	
Manganese-54	1058	920	A		15.0	644 - 1196	53.8	
Nickel-63	438	406	A		7.9	284 - 528	63.3	
Plutonium-238	111.3	105.8	A		5.2	74.1 - 137.5	6.1	
Plutonium-239/240	128.2	134	A		-4.3	94 - 174	5.2	
Potassium-40	601	632	A		-4.9	442 - 822	34.1	
Strontium-90	501	508	A		-1.4	356 - 660	44.7	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	501	469	A		6.8	328 - 610		29.5
Uranium-234/233	100.3	60.3	N		66.3	42.2 - 78.4		7.53
Uranium-238	285.3	263	A		8.5	184 - 342		14.6
Zinc-65	738	606	W		21.8	424 - 788		36.7

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27
 (NJDH01) New Jersey Dept. of Health, PHEL, ECLS
 3 Schwarzkopf Drive
 West Trenton, NJ 08628

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	101	111	A		-9.0	78 - 144		14
Cesium-134	860	939	A		-8.4	657 - 1221		60
Cesium-137	1190	1150	A		3.5	805 - 1495		90
Cobalt-57	1340	1316	A		1.8	921 - 1711		150
Cobalt-60	544	531	A		2.4	372 - 690	14	L
Iron-55	NR	508				356 - 660		
Manganese-54	944	920	A		2.6	644 - 1196		40
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	647	632	A		2.4	442 - 822		24
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	284	263	A		8.0	184 - 342	23	
Zinc-65	613	606	A		1.2	424 - 788	12	L

Radiological Reference Date: August 1, 2012

Other Flags:

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NR = Not Reported

Notes:

(5) = Total Metal

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

Laboratory Results For MAPEP-12-MaS27
 (NOCS99) National Oceanography Centre, Southampton
 GAU-Radioanalytical
 Southampton, Hampshire SO14 3ZH

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	110	111	A		-0.9	78 - 144	6	
Cesium-134	848	939	A		-9.7	657 - 1221	26	
Cesium-137	1066	1150	A		-7.3	805 - 1495	28	L
Cobalt-57	1200	1316	A		-8.8	921 - 1711	32	L
Cobalt-60	513	531	A		-3.4	372 - 690	14	L
Iron-55	470	508	A		-7.5	356 - 660	27	
Manganese-54	866	920	A		-5.9	644 - 1196	23	L
Nickel-63	410	406	A		1.0	284 - 528	20	
Plutonium-238	110	105.8	A		4.0	74.1 - 137.5	3	L
Plutonium-239/240	139	134	A		3.7	94 - 174	4	L
Potassium-40	492	632	W		-22.2	442 - 822	16	
Strontium-90	423	508	A		-16.7	356 - 660	24	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	410	469	A		-12.6	328 - 610		22	
Uranium-234/233	60	60.3	A		-0.5	42.2 - 78.4		4	
Uranium-238	252	263	A		-4.2	184 - 342		15	
Zinc-65	562	606	A		-7.3	424 - 788		16 L	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(NRLL99) National Radiation Laboratory

PO Box 25099

Christchurch, Christchurch 8144

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	110.4	111	A		-0.5	78 - 144	3.9	
Cesium-134	877	939	A		-6.6	657 - 1221	28	
Cesium-137	1134	1150	A		-1.4	805 - 1495	43	
Cobalt-57	1327	1316	A		0.8	921 - 1711	77	
Cobalt-60	529	531	A		-0.4	372 - 690	28	
Iron-55	NR	508				356 - 660		
Manganese-54	928	920	A		0.9	644 - 1196	50	
Nickel-63	NR	406				284 - 528		
Plutonium-238	104.1	105.8	A		-1.6	74.1 - 137.5	3.2	
Plutonium-239/240	126.5	134	A		-5.6	94 - 174	3.8	
Potassium-40	615	632	A		-2.7	442 - 822	47	
Strontium-90	570	508	A		12.2	356 - 660	33	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	57.1	60.3	A		-5.3	42.2 - 78.4		2.6
Uranium-238	254	263	A		-3.4	184 - 342		10
Zinc-65	619	606	A		2.1	424 - 788		41

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (ODHL01) Ohio Department of Health Laboratory
 8995 E Main Street
 Reynoldsburg, OH 43068

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	851	939	A		-9.4	657 - 1221	16.502	L
Cesium-137	1206.2	1150	A		4.9	805 - 1495	52.91	
Cobalt-57	1517	1316	A		15.3	921 - 1711	63.27	
Cobalt-60	510.6	531	A		-3.8	372 - 690	8.769	L
Iron-55	NR	508				356 - 660		
Manganese-54	973.1	920	A		5.8	644 - 1196	34.817	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	614.2	632	A		-2.8	442 - 822	18.278	L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	625.3	606	A		3.2	424 - 788	15.799	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (OLML01) Outreach Laboratory Mobile Laboratory
 311 N. Aspen Ave
 Broken Arrow, OK 74012

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	901	939	A		-4.0	657 - 1221		30.0
Cesium-137	1220	1150	A		6.1	805 - 1495		56.9
Cobalt-57	1230	1316	A		-6.5	921 - 1711		68.8
Cobalt-60	593	531	A		11.7	372 - 690		17.8
Iron-55	NR	508				356 - 660		
Manganese-54	987	920	A		7.3	644 - 1196		45.2
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	764	632	W		20.9	442 - 822		60.7
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	715	606	A		18.0	424 - 788		34.8

Radiological Reference Date: August 1, 2012

Other Flags:

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NR = Not Reported

Notes:

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

Laboratory Results For MAPEP-12-MaS27

(ORIS01) ORISE/IEAV

PO Box 117

Oak Ridge, TN 37831-0117

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	95.0	111.5	A		-14.8	78.1 - 145.0		
Arsenic	52.2	55.7	A		-6.3	39.0 - 72.4		
Barium	855	896	A		-4.6	627 - 1165		
Beryllium	46.0	47.0	A		-2.1	32.9 - 61.1		
Cadmium	15.0	15.4	A		-2.6	10.8 - 20.0		
Chromium	102	99.0	A		3.0	69.3 - 128.7		
Cobalt	128	127	A		0.8	89 - 165		
Copper	201	204	A		-1.5	143 - 265		
Lead	96.1	97.6	A		-1.5	68.3 - 126.9		
Mercury	0.154	0.172	A		-10.5	0.120 - 0.224		
Nickel	310	300	A		3.3	210 - 390		
Selenium	17.3	17.7	A		-2.3	12.4 - 23.0		
Silver	87.1	95.5	A		-8.8	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	80.9	91.0	A		-11.1	63.7 - 118.3		
Uranium-235	0.0594	0.0533	A		11.4	0.0373 - 0.0693		
Uranium-238	20.3	21.1	A		-3.8	14.8 - 27.4		
Uranium-Total	20.4	21.2	A		-3.8	14.8 - 27.6		
Vanadium	237	271	A		-12.5	190 - 352		
Zinc	535	549	A		-2.6	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	106.4	111	A		-4.1	78 - 144	4.3	
Cesium-134	877	939	A		-6.6	657 - 1221	39	
Cesium-137	1084	1150	A		-5.7	805 - 1495	52	
Cobalt-57	1250	1316	A		-5.0	921 - 1711	58	
Cobalt-60	502	531	A		-5.5	372 - 690	18	
Iron-55	508	508	A		0.0	356 - 660	38	
Manganese-54	894	920	A		-2.8	644 - 1196	38	
Nickel-63	769	406	N		89.4	284 - 528	37	
Plutonium-238	105.6	105.8	A		-0.2	74.1 - 137.5	5.3	
Plutonium-239/240	130.7	134	A		-2.5	94 - 174	6.4	
Potassium-40	616	632	A		-2.5	442 - 822	31	
Strontium-90	464	508	A		-8.7	356 - 660	15	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	430	469	A		-8.3	328 - 610		13	
Uranium-234/233	60.1	60.3	A		-0.3	42.2 - 78.4		4.3	
Uranium-238	250	263	A		-4.9	184 - 342		15	
Zinc-65	589	606	A		-2.8	424 - 788		20	

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27

(OTLI01) Outreach Technologies, Inc.

311 N. Aspen

Broken Arrow, OK 74012-

Inorganic						Units: (mg/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	89.4	111.5	A		-19.8	78.1 - 145.0			
Arsenic	49.7	55.7	A		-10.8	39.0 - 72.4			
Barium	936	896	A		4.5	627 - 1165			
Beryllium	54.3	47.0	A		15.5	32.9 - 61.1			
Cadmium	14.0	15.4	A		-9.1	10.8 - 20.0			
Chromium	85.8	99.0	A		-13.3	69.3 - 128.7			
Cobalt	108	127	A		-15.0	89 - 165			
Copper	196	204	A		-3.9	143 - 265			
Lead	84.1	97.6	A		-13.8	68.3 - 126.9			
Mercury	0.162	0.172	A		-5.8	0.120 - 0.224			
Nickel	250	300	A		-16.7	210 - 390			
Selenium	12.6	17.7	W		-28.8	12.4 - 23.0			
Silver	80.6	95.5	A		-15.6	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	43.5	91.0	N		-52.2	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	18.6	21.2	A		-12.3	14.8 - 27.6			
Vanadium	245	271	A		-9.6	190 - 352			
Zinc	452	549	A		-17.7	384 - 714			

Radiological						Units: (Bq/kg)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	92.3	111	A		-16.8	78 - 144	20	H	
Cesium-134	899	939	A		-4.3	657 - 1221	35.4		
Cesium-137	1180	1150	A		2.6	805 - 1495	67.0		
Cobalt-57	1260	1316	A		-4.3	921 - 1711	60.3		
Cobalt-60	536	531	A		0.9	372 - 690	18.8		
Iron-55	702	508	N		38.2	356 - 660	17.5	L	
Manganese-54	966	920	A		5.0	644 - 1196	48.8		
Nickel-63	831	406	N		104.7	284 - 528	319	H	
Plutonium-238	93.2	105.8	A		-11.9	74.1 - 137.5	4.58		
Plutonium-239/240	92.1	134	N		-31.3	94 - 174	4.49		
Potassium-40	718	632	A		13.6	442 - 822	64.4		
Strontium-90	448	508	A		-11.8	356 - 660	32.6		

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	335	469	W		-28.6	328 - 610		36.3	
Uranium-234/233	56.1	60.3	A		-7.0	42.2 - 78.4		9.13	
Uranium-238	233	263	A		-11.4	184 - 342		18.4	
Zinc-65	640	606	A		5.6	424 - 788		34.3	

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27
 (PDRL99) Physics Department Radiological Lab
 Kuwait University, Physics Dept
 Kuwait City, Kuwait 103060

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	4.739	111	N		-95.7	78 - 144	0.82	
Cesium-134	505.833	939	N		-46.1	657 - 1221	2.14	L
Cesium-137	720.68	1150	N		-37.3	805 - 1495	2.49	L
Cobalt-57	315.75	1316	N		-76.0	921 - 1711	.56	L
Cobalt-60	352.4	531	N		-33.6	372 - 690	2.04	L
Iron-55	NR	508				356 - 660		
Manganese-54	420.81	920	N		-54.3	644 - 1196	1.68	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	448.48	632	W		-29.0	442 - 822	7.57	L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	34.62	263	N		-86.8	184 - 342		3.12
Zinc-65	301.518	606	N		-50.2	424 - 788	2.613	L

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27

(QUAN01) TestAmerica St. Louis

13715 Rider Trail North

Earth City, MO 63045-

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	98.4	111.5	A		-11.7	78.1 - 145.0		
Arsenic	54.5	55.7	A		-2.2	39.0 - 72.4		
Barium	877	896	A		-2.1	627 - 1165		
Beryllium	47.0	47.0	A		0.0	32.9 - 61.1		
Cadmium	15.3	15.4	A		-0.6	10.8 - 20.0		
Chromium	97.1	99.0	A		-1.9	69.3 - 128.7		
Cobalt	131	127	A		3.2	89 - 165		
Copper	203	204	A		-0.5	143 - 265		
Lead	97.7	97.6	A		0.1	68.3 - 126.9		
Mercury	0.173	0.172	A		0.6	0.120 - 0.224		
Nickel	313	300	A		4.3	210 - 390		
Selenium	19.6	17.7	A		10.7	12.4 - 23.0		
Silver	95.3	95.5	A		-0.2	66.9 - 124.2		
Technetium-99	0.000663	0.000748	A		-11.4	0.000524 - 0.000972		
Thallium	85.5	91.0	A		-6.0	63.7 - 118.3		
Uranium-235	0.044	0.0533	A		-17.4	0.0373 - 0.0693		
Uranium-238	19.2	21.1	A		-9.0	14.8 - 27.4		
Uranium-Total	18.5	21.2	A		-12.7	14.8 - 27.6		
Vanadium	238	271	A		-12.2	190 - 352		
Zinc	543	549	A		-1.1	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	98.4	111	A		-11.4	78 - 144	6.78	
Cesium-134	890	939	A		-5.2	657 - 1221	46.3	
Cesium-137	1200	1150	A		4.3	805 - 1495	62.8	
Cobalt-57	1350	1316	A		2.6	921 - 1711	71.1	
Cobalt-60	551	531	A		3.8	372 - 690	27.7	
Iron-55	1110	508	N		118.5	356 - 660	79.5	
Manganese-54	983	920	A		6.8	644 - 1196	50.7	
Nickel-63	336	406	A		-17.2	284 - 528	24.6	
Plutonium-238	98.0	105.8	A		-7.4	74.1 - 137.5	5.85	
Plutonium-239/240	117	134	A		-12.7	94 - 174	6.69	
Potassium-40	679	632	A		7.4	442 - 822	36.0	
Strontium-90	510	508	A		0.4	356 - 660	23.1	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	378	469	A		-19.4	328 - 610		22.23	
Uranium-234/233	51.0	60.3	A		-15.4	42.2 - 78.4		3.56	
Uranium-238	225	263	A		-14.4	184 - 342		11.2	
Zinc-65	674	606	A		11.2	424 - 788		34.1	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(QUAN02) TestAmerica Knoxville

5815 Middlebrook Pike

Knoxville, TN 37921-

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	107	111.5	A		-4.0	78.1 - 145.0			
Arsenic	51.7	55.7	A		-7.2	39.0 - 72.4			
Barium	839	896	A		-6.4	627 - 1165			
Beryllium	49.4	47.0	A		5.1	32.9 - 61.1			
Cadmium	15.0	15.4	A		-2.6	10.8 - 20.0			
Chromium	107	99.0	A		8.1	69.3 - 128.7			
Cobalt	123	127	A		-3.2	89 - 165			
Copper	199	204	A		-2.5	143 - 265			
Lead	96.5	97.6	A		-1.1	68.3 - 126.9			
Mercury	0.174	0.172	A		1.2	0.120 - 0.224			
Nickel	297	300	A		-1.0	210 - 390			
Selenium	16.4	17.7	A		-7.3	12.4 - 23.0			
Silver	92.2	95.5	A		-3.5	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	88.5	91.0	A		-2.7	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	264	271	A		-2.6	190 - 352			
Zinc	524	549	A		-4.6	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27

(QUAN03) TestAmerica

2800 GEORGE WASHINGTON WAY

RICHLAND, WA 99354-

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	16.5	21.1	W		-21.8	14.8 - 27.4	0.102	L
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	94.1	111	A		-15.2	78 - 144	7.0	
Cesium-134	907	939	A		-3.4	657 - 1221	50.8	
Cesium-137	1212	1150	A		5.4	805 - 1495	69.3	
Cobalt-57	1359	1316	A		3.3	921 - 1711	74.7	
Cobalt-60	559	531	A		5.3	372 - 690	30.3	
Iron-55	1750	508	N		244.5	356 - 660	151	
Manganese-54	986	920	A		7.2	644 - 1196	54.7	
Nickel-63	590	406	N		45.3	284 - 528	85.7	
Plutonium-238	104	105.8	A		-1.7	74.1 - 137.5	7.74	
Plutonium-239/240	131	134	A		-2.2	94 - 174	9.60	
Potassium-40	633	632	A		0.2	442 - 822	35.7	
Strontium-90	485	508	A		-4.5	356 - 660	36.8	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	390	469	A		-16.8	328 - 610		11.8	
Uranium-234/233	53.5	60.3	A		-11.3	42.2 - 78.4		4.01	
Uranium-238	245	263	A		-6.8	184 - 342		17.3	
Zinc-65	653	606	A		7.8	424 - 788		35.7	

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(RPSC01) Radiation Protection Service

Ontario Ministry of Labour

Weston, Ontario M9P 3T1

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	668	939	W		-28.9	657 - 1221		27
Cesium-137	1031	1150	A		-10.3	805 - 1495		41
Cobalt-57	1209	1316	A		-8.1	921 - 1711		48
Cobalt-60	425	531	A		-20.0	372 - 690		26
Iron-55	NR	508				356 - 660		
Manganese-54	801	920	A		-12.9	644 - 1196		34
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	598	632	A		-5.4	442 - 822		52
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	536	606	A		-11.6	424 - 788		42

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(RSAL01) RSA Laboratories, Inc.

PO Box 61

Hebron, CT 06248

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	129.41	111	A		16.6	78 - 144	8.50	
Cesium-134	980.99	939	A		4.5	657 - 1221	24.92	L
Cesium-137	1277.78	1150	A		11.1	805 - 1495	32.21	L
Cobalt-57	1391.93	1316	A		5.8	921 - 1711	33.96	L
Cobalt-60	552.04	531	A		4.0	372 - 690	14.23	L
Iron-55	NR	508				356 - 660		
Manganese-54	920.29	920	A		0.0	644 - 1196	23.42	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	713.85	632	A		13.0	442 - 822	29.21	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	658.50	606	A		8.7	424 - 788	19.47	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepable 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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(RSIR99) Instituto de Radioprotecao e Dosimetria - IRD/CNEN

Avenida Salvador Allende S/no.

RJ, Rio de Janeiro 22780-160

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	138.6	134	A	(5)	3.4	93.8 - 174.2	7.5		
Arsenic	53.7	57.4	A	(5)	-6.4	40.2 - 74.6	1.8		
Barium	1153.1	1190	A	(5)	-3.1	833 - 1547	82.0		
Beryllium	55.0	47.9	A	(5)	14.8	33.5 - 62.3	3.5		
Cadmium	14.9	15.5	A	(5)	-3.9	10.9 - 20.2	0.9		
Chromium	127.9	136	A	(5)	-6.0	95.2 - 176.8	2.4	L	
Cobalt	116.0	130	A	(5)	-10.8	91 - 169	4.9		
Copper	187.0	221	A	(5)	-15.4	155 - 287	13.8		
Lead	97.0	104	A	(5)	-6.7	72.8 - 135.2	3.5		
Mercury	NR	0.172				0.120 - 0.224			
Nickel	279.7	305	A	(5)	-8.3	214 - 397	21.3		
Selenium	20.6	17.8	A	(5)	15.7	12.5 - 23.1	1.5		
Silver	89.0	95.5	A	(5)	-6.8	66.9 - 124.2	7.9		
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	85.3	91.3	A	(5)	-6.6	63.9 - 118.7	5.1		
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	18.9	21.1	A		-10.4	14.8 - 27.4	0.8		
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	294.2	306	A	(5)	-3.9	214 - 398	13.7		
Zinc	548.4	575	A	(5)	-4.6	403 - 748	14.8	L	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	108.7	111	A		-2.1	78 - 144	4.6		
Cesium-134	737	939	W		-21.5	657 - 1221	24		
Cesium-137	1111	1150	A		-3.4	805 - 1495	40		
Cobalt-57	1310	1316	A		-0.5	921 - 1711	46		
Cobalt-60	545	531	A		2.6	372 - 690	18		
Iron-55	NR	508				356 - 660			
Manganese-54	929	920	A		1.0	644 - 1196	33		
Nickel-63	NR	406				284 - 528			
Plutonium-238	91.3	105.8	A		-13.7	74.1 - 137.5	8.7		
Plutonium-239/240	109	134	A		-18.7	94 - 174	10		
Potassium-40	712	632	A		12.7	442 - 822	30		
Strontium-90	571.0	508	A		12.4	356 - 660	28		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	677	606	A		11.7	424 - 788		24

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte


**Mixed Analyte
Performance Evaluation Program**

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

Laboratory Results For MAPEP-12-MaS27

(SANC99) RadioAnalysis, South Africa Nuclear Energy Corp.

Building 1600, Pelindaba Site

Pretoria, Gauteng 0001

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	132	134	A	(5)	-1.5	93.8 - 174.2	6		
Arsenic	56.2	57.4	A	(5)	-2.1	40.2 - 74.6	1.0	L	
Barium	NR	896				627 - 1165			
Beryllium	NR	47.0				32.9 - 61.1			
Cadmium	NR	15.4				10.8 - 20.0			
Chromium	NR	99.0				69.3 - 128.7			
Cobalt	133	130	A	(5)	2.3	91 - 169	4		
Copper	NR	204				143 - 265			
Lead	NR	97.6				68.3 - 126.9			
Mercury	NR	0.172				0.120 - 0.224			
Nickel	337	305	A	(5)	10.5	214 - 397	46		
Selenium	3.90	17.8	N	(5)	-78.1	12.5 - 23.1	0.33		
Silver	NR	95.5				66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	NR	91.0				63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	8.72	21.2	N		-58.9	14.8 - 27.6	0.109	L	
Vanadium	NR	271				190 - 352			
Zinc	534	575	A	(5)	-7.1	403 - 748	16	L	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	49.9	111	N		-55.0	78 - 144	2.1		
Cesium-134	837	939	A		-10.9	657 - 1221	13	L	
Cesium-137	1100	1150	A		-4.3	805 - 1495	20	L	
Cobalt-57	1290	1316	A		-2.0	921 - 1711	30	L	
Cobalt-60	492	531	A		-7.3	372 - 690	7	L	
Iron-55	NR	508				356 - 660			
Manganese-54	885	920	A		-3.8	644 - 1196	12	L	
Nickel-63	NR	406				284 - 528			
Plutonium-238	55.7	105.8	N		-47.4	74.1 - 137.5	1.5	L	
Plutonium-239/240	47.2	134	N		-64.8	94 - 174	1.4	L	
Potassium-40	557	632	A		-11.9	442 - 822	31		
Strontium-90	568	508	A		11.8	356 - 660	19		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	582	606	A		-4.0	424 - 788	9	L

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27
 (SEML01) SRS Environmental Monitoring Laboratory
 Bldg 735-B
 Aiken, SC 29808

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	116.8	111	A		5.2	78 - 144	9.3	
Cesium-134	1319	939	N		40.5	657 - 1221	75	
Cesium-137	1458	1150	W		26.8	805 - 1495	84	
Cobalt-57	1686	1316	W		28.1	921 - 1711	93	
Cobalt-60	701	531	N		32.0	372 - 690	37	
Iron-55	NR	508				356 - 660		
Manganese-54	1216	920	N		32.2	644 - 1196	155	
Nickel-63	NR	406				284 - 528		
Plutonium-238	109.2	105.8	A		3.2	74.1 - 137.5	8.7	
Plutonium-239/240	137.3	134	A		2.5	94 - 174	11.0	
Potassium-40	834	632	N		32.0	442 - 822	55	
Strontium-90	504.4	508	A		-0.7	356 - 660	14.2	L

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	69.2	60.3	A		14.8	42.2 - 78.4		5.5
Uranium-238	326.2	263	W		24.0	184 - 342		26.1
Zinc-65	835	606	N		37.8	424 - 788		65

Radiological Reference Date: August 1, 2012

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)

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Notes:

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(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (SLAC01) SLAC DOE National Accelerator Laboratory
 2575 Sand Hill Road
 Menlo Park, CA 94025

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	857	939	A		-8.7	657 - 1221	129	
Cesium-137	1145	1150	A		-0.4	805 - 1495	172	
Cobalt-57	1300	1316	A		-1.2	921 - 1711	195	
Cobalt-60	536	531	A		0.9	372 - 690	80	
Iron-55	NR	508				356 - 660		
Manganese-54	936	920	A		1.7	644 - 1196	140	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	670	632	A		6.0	442 - 822	100	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	651	606	A		7.4	424 - 788		98

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(SNRC99) Soreq NRC

Radioactivity Measurement Section

Yavne, Israel 81800

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	110.7	111	A		-0.3	78 - 144		7.9
Cesium-134	883.1	939	A		-6.0	657 - 1221		19.8 L
Cesium-137	1086.2	1150	A		-5.5	805 - 1495		23.7 L
Cobalt-57	1237.1	1316	A		-6.0	921 - 1711		22.8 L
Cobalt-60	533.4	531	A		0.5	372 - 690		11.1 L
Iron-55	NR	508				356 - 660		
Manganese-54	878.1	920	A		-4.6	644 - 1196		19.0 L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	600.5	632	A		-5.0	442 - 822		15.8 L
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	604.3	606	A		-0.3	424 - 788	12.1	L

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(SOUT01) Southwest Research Institute

6220 Culebra Rd.

San Antonio, TX 78228-0510

Inorganic							Units: (mg/kg)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	104	111.5	A		-6.7	78.1 - 145.0	5.41	
Arsenic	48.4	55.7	A		-13.1	39.0 - 72.4	2.52	
Barium	828	896	A		-7.6	627 - 1165	43.1	
Beryllium	43.4	47.0	A		-7.7	32.9 - 61.1	2.26	
Cadmium	13.2	15.4	A		-14.3	10.8 - 20.0	0.686	
Chromium	90.2	99.0	A		-8.9	69.3 - 128.7	4.69	
Cobalt	116	127	A		-8.7	89 - 165	6.03	
Copper	195	204	A		-4.4	143 - 265	10.1	
Lead	85.5	97.6	A		-12.4	68.3 - 126.9	4.45	
Mercury	0.173	0.172	A		0.6	0.120 - 0.224	0.009	
Nickel	263	300	A		-12.3	210 - 390	13.7	
Selenium	14.9	17.7	A		-15.8	12.4 - 23.0	0.775	
Silver	86.4	95.5	A		-9.5	66.9 - 124.2	4.49	
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	81.2	91.0	A		-10.8	63.7 - 118.3	4.22	
Uranium-235	0.0516	0.0533	A		-3.2	0.0373 - 0.0693	0.00423	
Uranium-238	19.2	21.1	A		-9.0	14.8 - 27.4	1.30	
Uranium-Total	19.3	21.2	A		-9.0	14.8 - 27.6	1.30	
Vanadium	239	271	A		-11.8	190 - 352	12.4	
Zinc	485	549	A		-11.7	384 - 714	25.2	

Radiological							Units: (Bq/kg)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	110	111	A		-0.9	78 - 144	9.33	
Cesium-134	922	939	A		-1.8	657 - 1221	13.1	L
Cesium-137	1237	1150	A		7.6	805 - 1495	55.2	
Cobalt-57	1437	1316	A		9.2	921 - 1711	29.1	L
Cobalt-60	563	531	A		6.0	372 - 690	11.2	L
Iron-55	524	508	A		3.2	356 - 660	56.6	
Manganese-54	1022	920	A		11.1	644 - 1196	34.9	
Nickel-63	366	406	A		-9.9	284 - 528	23.0	
Plutonium-238	121	105.8	A		14.4	74.1 - 137.5	8.37	
Plutonium-239/240	140	134	A		4.5	94 - 174	9.48	
Potassium-40	689	632	A		9.0	442 - 822	22.3	
Strontium-90	459	508	A		-9.6	356 - 660	28.3	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	404	469	A		-13.9	328 - 610		23.9	
Uranium-234/233	58.1	60.3	A		-3.6	42.2 - 78.4		4.26	
Uranium-238	262	263	A		-0.4	184 - 342		17.4	
Zinc-65	693	606	A		14.4	424 - 788		20.4 L	

Radiological Reference Date: August 1, 2012

Other Flags:

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NR = Not Reported

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

Laboratory Results For MAPEP-12-MaS27

(SRPD01) Sandia National Laboratories, Radiation Protection Sample Diagnostics
 PO Box 5800, MS1103
 Albuquerque, NM 87185-1103

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	.055	0.0533	A		3.2	0.0373 - 0.0693	.002	
Uranium-238	20.00	21.1	A		-5.2	14.8 - 27.4	.636	
Uranium-Total	20.055	21.2	A		-5.4	14.8 - 27.6	.636	
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	101	111	A		-9.0	78 - 144	9	
Cesium-134	968	939	A		3.1	657 - 1221	64	
Cesium-137	1202.9	1150	A		4.6	805 - 1495	79.8	
Cobalt-57	1347.1	1316	A		2.4	921 - 1711	92.2	
Cobalt-60	542.3	531	A		2.1	372 - 690	35.4	
Iron-55	NR	508				356 - 660		
Manganese-54	981	920	A		6.6	644 - 1196	65	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	660	632	A		4.4	442 - 822	46	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	649	606	A		7.1	424 - 788		43

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (TDHL01) Texas Department of State Health Services Laboratory
 1100 W 49th Street
 Austin, TX 78756

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	106	111	A		-4.5	78 - 144	8	
Cesium-134	896	939	A		-4.6	657 - 1221	11	L
Cesium-137	1106	1150	A		-3.8	805 - 1495	31	L
Cobalt-57	1246	1316	A		-5.3	921 - 1711	26	L
Cobalt-60	520	531	A		-2.1	372 - 690	9	L
Iron-55	NR	508				356 - 660		
Manganese-54	911	920	A		-1.0	644 - 1196	22	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	91.3	105.8	A		-13.7	74.1 - 137.5	8.7	
Plutonium-239/240	117	134	A		-12.7	94 - 174	11	
Potassium-40	625	632	A		-1.1	442 - 822	19	
Strontium-90	565	508	A		11.2	356 - 660	21	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	NR	469				328 - 610			
Uranium-234/233	59	60.3	A		-2.2	42.2 - 78.4		5	
Uranium-238	248	263	A		-5.7	184 - 342		17	
Zinc-65	625	606	A		3.1	424 - 788	15	L	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(TELE01) TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES

2508 Quality Lane

Knoxville, TN 37931-6819

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	102	111	A		-8.1	78 - 144		15.3
Cesium-134	880	939	A		-6.3	657 - 1221		12.5 L
Cesium-137	1220	1150	A		6.1	805 - 1495		4.83 L
Cobalt-57	1330	1316	A		1.1	921 - 1711		3.63 L
Cobalt-60	552	531	A		4.0	372 - 690		2.39 L
Iron-55	NR	508				356 - 660		
Manganese-54	1000	920	A		8.7	644 - 1196		4.64 L
Nickel-63	360	406	A		-11.3	284 - 528		24.2
Plutonium-238	101	105.8	A		-4.5	74.1 - 137.5		8.74
Plutonium-239/240	124	134	A		-7.5	94 - 174		10.4
Potassium-40	674	632	A		6.6	442 - 822		13.9 L
Strontium-90	528	508	A		3.9	356 - 660		10.3 L

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	431	469	A		-8.1	328 - 610		27.1	
Uranium-234/233	50.7	60.3	A		-15.9	42.2 - 78.4		14.5 H	
Uranium-238	238	263	A		-9.5	184 - 342		58.5 H	
Zinc-65	665	606	A		9.7	424 - 788		6.83 L	

Radiological Reference Date: August 1, 2012

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

Laboratory Results For MAPEP-12-MaS27
 (TELE02) Environmental, Inc., Midwest Lab
 700 Landwehr Road
 Northbrook, IL 60062-

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	129.3	111	A		16.5	78 - 144		12.7
Cesium-134	933.6	939	A		-0.6	657 - 1221		5.82 L
Cesium-137	1319.8	1150	A		14.8	805 - 1495		5.5 L
Cobalt-57	1528	1316	A		16.1	921 - 1711		4.1 L
Cobalt-60	592.0	531	A		11.5	372 - 690		3.2 L
Iron-55	NR	508				356 - 660		
Manganese-54	1083.2	920	A		17.7	644 - 1196		5.2 L
Nickel-63	376.2	406	A		-7.3	284 - 528		20.6
Plutonium-238	118.7	105.8	A		12.2	74.1 - 137.5		9.3
Plutonium-239/240	140.7	134	A		5.0	94 - 174		9.9
Potassium-40	737.3	632	A		16.7	442 - 822		17.7 L
Strontium-90	483.52	508	A		-4.8	356 - 660		16.47

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	304.7	469	N		-35.0	328 - 610		15.8	
Uranium-234/233	55.8	60.3	A		-7.5	42.2 - 78.4		4.2	
Uranium-238	231.2	263	A		-12.1	184 - 342		8.6	
Zinc-65	696.1	606	A		14.9	424 - 788		7.0 L	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (TMAO01) EBERLINE SERVICES OAK RIDGE LABORATORY
 601 SCARBORO RD
 OAK RIDGE, TN 37830-

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	103.13	111	A		-7.1	78 - 144	19.65	
Cesium-134	928.07	939	A		-1.2	657 - 1221	58.24	
Cesium-137	1158.99	1150	A		0.8	805 - 1495	163.18	
Cobalt-57	1308.14	1316	A		-0.6	921 - 1711	197.86	
Cobalt-60	532.32	531	A		0.2	372 - 690	47.83	
Iron-55	NR	508				356 - 660		
Manganese-54	920.21	920	A		0.0	644 - 1196	121.91	
Nickel-63	349.21	406	A		-14.0	284 - 528	86.70	H
Plutonium-238	102.30	105.8	A		-3.3	74.1 - 137.5	19.52	
Plutonium-239/240	131.17	134	A		-2.1	94 - 174	24.93	
Potassium-40	619.83	632	A		-1.9	442 - 822	99.85	
Strontium-90	464.23	508	A		-8.6	356 - 660	28.06	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	460.89	469	A		-1.7	328 - 610		33.89	
Uranium-234/233	51.32	60.3	A		-14.9	42.2 - 78.4		12.75 H	
Uranium-238	242.93	263	A		-7.6	184 - 342		38.49	
Zinc-65	599.97	606	A		-1.0	424 - 788		91.70	

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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RW = Report Warning

NR = Not Reported

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

Laboratory Results For MAPEP-12-MaS27
 (TMAR01) Eberline Analytical Corp. Richmond CA Lab
 2030 Wright Ave
 Richmond, CA 94804-3849

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	103	111	A		-7.2	78 - 144	8.2	
Cesium-134	784	939	A		-16.5	657 - 1221	94	
Cesium-137	1062	1150	A		-7.7	805 - 1495	72	
Cobalt-57	1217	1316	A		-7.5	921 - 1711	91	
Cobalt-60	503	531	A		-5.3	372 - 690	33	
Iron-55	NR	508				356 - 660		
Manganese-54	877	920	A		-4.7	644 - 1196	79	
Nickel-63	353	406	A		-13.1	284 - 528	71	H
Plutonium-238	98	105.8	A		-7.4	74.1 - 137.5	16	
Plutonium-239/240	123	134	A		-8.2	94 - 174	14	
Potassium-40	598	632	A		-5.4	442 - 822	68	
Strontium-90	428	508	A		-15.7	356 - 660	50	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	472	469	A		0.6	328 - 610		51	
Uranium-234/233	48	60.3	W		-20.4	42.2 - 78.4		3.8	
Uranium-238	207	263	W		-21.3	184 - 342		15	
Zinc-65	608	606	A		0.3	424 - 788		62	

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (TNUT01) St. Louis USACE FUSRAP Laboratory
 8945 LATTY AVE
 BERKELEY, MO 63134-

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	102.40	111	A		-7.7	78 - 144	5.90	
Cesium-134	834.03	939	A		-11.2	657 - 1221	13.15	L
Cesium-137	1243.67	1150	A		8.1	805 - 1495	36.05	L
Cobalt-57	1411.67	1316	A		7.3	921 - 1711	28.63	L
Cobalt-60	567.93	531	A		7.0	372 - 690	16.24	L
Iron-55	NR	508				356 - 660		
Manganese-54	1038.00	920	A		12.8	644 - 1196	26.14	L
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	726.50	632	A		15.0	442 - 822	29.62	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	69.90	60.3	A		15.9	42.2 - 78.4		11.85
Uranium-238	263.05	263	A		0.0	184 - 342		33.10
Zinc-65	698.17	606	A		15.2	424 - 788	20.16	L

Radiological Reference Date: August 1, 2012

Other Flags:

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Notes:

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

Laboratory Results For MAPEP-12-MaS27
 (UMED99) Uranium Mining and Extraction Directorate
 Jordan Atomic Energy Commission
 Amman, Amman 11934

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	NR	111.5				78.1 - 145.0			
Arsenic	56	55.7	A		0.5	39.0 - 72.4		5	
Barium	NR	896				627 - 1165			
Beryllium	NR	47.0				32.9 - 61.1			
Cadmium	NR	15.4				10.8 - 20.0			
Chromium	82	99.0	A	(5)	-17.2	69.3 - 128.7		5	
Cobalt	125	130	A	(5)	-3.8	91 - 169		13	
Copper	251	204	W		23.0	143 - 265		17	
Lead	NR	97.6				68.3 - 126.9			
Mercury	NR	0.172				0.120 - 0.224			
Nickel	368	300	W		22.7	210 - 390		29	
Selenium	NR	17.7				12.4 - 23.0			
Silver	NR	95.5				66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	NR	91.0				63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	20.8	21.2	A		-1.9	14.8 - 27.6		2.1	
Vanadium	279	271	A		3.0	190 - 352		18	
Zinc	NR	549				384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27

(USED99) National Center for Nuclear Energy, Sciences and Techniques

CNESTEN BP 1382

RABAT, RABAT RP 10001

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	701.65	939	W		-25.3	657 - 1221	70.42	
Cesium-137	1083.30	1150	A		-5.8	805 - 1495	110.14	
Cobalt-57	1232.84	1316	A		-6.3	921 - 1711	125.94	
Cobalt-60	488.52	531	A		-8.0	372 - 690	49.25	
Iron-55	NR	508				356 - 660		
Manganese-54	887.93	920	A		-3.5	644 - 1196	90.44	
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	607.03	632	A		-4.0	442 - 822	62.66	
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	59.30	60.3	A		-1.7	42.2 - 78.4		8.63
Uranium-238	218.82	263	A		-16.8	184 - 342		22.87
Zinc-65	588.91	606	A		-2.8	424 - 788		59.94

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27(WEST01) Lionville Laboratory
264 Welsh Pool Road
Exton, PA 19341-1313

Inorganic							Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Antimony	99.1	111.5	A		-11.1	78.1 - 145.0			
Arsenic	45.6	55.7	A		-18.1	39.0 - 72.4			
Barium	766	896	A		-14.5	627 - 1165			
Beryllium	38.8	47.0	A		-17.4	32.9 - 61.1			
Cadmium	12.6	15.4	A		-18.2	10.8 - 20.0			
Chromium	90.0	99.0	A		-9.1	69.3 - 128.7			
Cobalt	100	127	W		-21.3	89 - 165			
Copper	167	204	A		-18.1	143 - 265			
Lead	80.1	97.6	A		-17.9	68.3 - 126.9			
Mercury	0.169	0.172	A		-1.7	0.120 - 0.224			
Nickel	239	300	W		-20.3	210 - 390			
Selenium	13.7	17.7	W		-22.6	12.4 - 23.0			
Silver	78.8	95.5	A		-17.5	66.9 - 124.2			
Technetium-99	NR	0.000748				0.000524 - 0.000972			
Thallium	71.3	91.0	W		-21.6	63.7 - 118.3			
Uranium-235	NR	0.0533				0.0373 - 0.0693			
Uranium-238	NR	21.1				14.8 - 27.4			
Uranium-Total	NR	21.2				14.8 - 27.6			
Vanadium	232	271	A		-14.4	190 - 352			
Zinc	442	549	A		-19.5	384 - 714			

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Americium-241	NR	111				78 - 144			
Cesium-134	NR	939				657 - 1221			
Cesium-137	NR	1150				805 - 1495			
Cobalt-57	NR	1316				921 - 1711			
Cobalt-60	NR	531				372 - 690			
Iron-55	NR	508				356 - 660			
Manganese-54	NR	920				644 - 1196			
Nickel-63	NR	406				284 - 528			
Plutonium-238	NR	105.8				74.1 - 137.5			
Plutonium-239/240	NR	134				94 - 174			
Potassium-40	NR	632				442 - 822			
Strontium-90	NR	508				356 - 660			

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (WEST03) Waste Sampling and Characterization Facility, MSA
 PO Box 650, S3-30
 Richland, WA 99352

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	113	111.5	A		1.3	78.1 - 145.0		
Arsenic	50.4	55.7	A		-9.5	39.0 - 72.4		
Barium	853	896	A		-4.8	627 - 1165		
Beryllium	38.1	47.0	A		-18.9	32.9 - 61.1		
Cadmium	15.4	15.4	A		0.0	10.8 - 20.0		
Chromium	86.7	99.0	A		-12.4	69.3 - 128.7		
Cobalt	112	127	A		-11.8	89 - 165		
Copper	168	204	A		-17.6	143 - 265		
Lead	96.7	97.6	A		-0.9	68.3 - 126.9		
Mercury	0.234	0.172	N		36.0	0.120 - 0.224		
Nickel	262	300	A		-12.7	210 - 390		
Selenium	15.5	17.7	A		-12.4	12.4 - 23.0		
Silver	93.2	95.5	A		-2.4	66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	89.1	91.0	A		-2.1	63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	18.2	21.2	A		-14.2	14.8 - 27.6		
Vanadium	230	271	A		-15.1	190 - 352		
Zinc	466	549	A		-15.1	384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	95.5	111	A		-14.0	78 - 144	12.5	
Cesium-134	643	939	N		-31.5	657 - 1221	24.0	
Cesium-137	1130	1150	A		-1.7	805 - 1495	96.9	
Cobalt-57	1320	1316	A		0.3	921 - 1711	61.2	
Cobalt-60	541	531	A		1.9	372 - 690	25.2	
Iron-55	NR	508				356 - 660		
Manganese-54	1050	920	A		14.1	644 - 1196	91.2	
Nickel-63	NR	406				284 - 528		
Plutonium-238	110	105.8	A		4.0	74.1 - 137.5	14.1	
Plutonium-239/240	132	134	A		-1.5	94 - 174	17.0	
Potassium-40	744	632	A		17.7	442 - 822	50.3	
Strontium-90	489	508	A		-3.7	356 - 660	42.0	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	364	469	W		-22.4	328 - 610		36.9	
Uranium-234/233	38.7	60.3	N		-35.8	42.2 - 78.4		5.3	
Uranium-238	230	263	A		-12.5	184 - 342		30.1	
Zinc-65	752	606	W		24.1	424 - 788		52.7	

Radiological Reference Date: August 1, 2012

Other Flags:

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

Laboratory Results For MAPEP-12-MaS27
 (WEST04) PACE ANALYTICAL SERVICES, PITTSBURGH
 1638 Roseytown Road
 Greensburg, PA 15601

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	102.1	111	A		-8.0	78 - 144	21.83	H
Cesium-134	846.0	939	A		-9.9	657 - 1221	3.496	L
Cesium-137	1295	1150	A		12.6	805 - 1495	5.163	L
Cobalt-57	1433	1316	A		8.9	921 - 1711	3.818	L
Cobalt-60	564.4	531	A		6.3	372 - 690	3.066	L
Iron-55	1021	508	N		101.0	356 - 660	150.7	
Manganese-54	1066	920	A		15.9	644 - 1196	4.704	L
Nickel-63	379.6	406	A		-6.5	284 - 528	54.63	
Plutonium-238	105.3	105.8	A		-0.5	74.1 - 137.5	17.52	
Plutonium-239/240	134.5	134	A		0.4	94 - 174	21.81	
Potassium-40	738.9	632	A		16.9	442 - 822	15.29	L
Strontium-90	398.1	508	W		-21.6	356 - 660	64.75	

Radiological							Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag	
Technetium-99	443.1	469	A		-5.5	328 - 610	78.68		
Uranium-234/233	53.84	60.3	A		-10.7	42.2 - 78.4		9.29	
Uranium-238	232.7	263	A		-11.5	184 - 342		34.34	
Zinc-65	686.6	606	A		13.3	424 - 788	5.596	L	

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

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

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NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (WIPH01) WI, DPH, Radiation Protection Section
 1 West Wilson
 Madison, WI 53703

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	957	939	A		1.9	657 - 1221		57
Cesium-137	1218	1150	A		5.9	805 - 1495		73
Cobalt-57	1394	1316	A		5.9	921 - 1711		84
Cobalt-60	564	531	A		6.2	372 - 690		34
Iron-55	NR	508				356 - 660		
Manganese-54	979	920	A		6.4	644 - 1196		59
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	646	632	A		2.2	442 - 822		50
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	643	606	A		6.1	424 - 788		39

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27

(WIPP01) WIPP Laboratories

1400 University Drive

Carlsbad, NM 88220

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	1.04E+02	111	A		-6.3	78 - 144	1.71E+01	
Cesium-134	8.09E+02	939	A		-13.8	657 - 1221	5.25E+01	
Cesium-137	1.08E+03	1150	A		-6.1	805 - 1495	6.95E+01	
Cobalt-57	1.38E+03	1316	A		4.9	921 - 1711	9.77E+01	
Cobalt-60	5.13E+02	531	A		-3.4	372 - 690	3.35E+01	
Iron-55	NR	508				356 - 660		
Manganese-54	9.21E+02	920	A		0.1	644 - 1196	5.98E+01	
Nickel-63	NR	406				284 - 528		
Plutonium-238	1.09E+02	105.8	A		3.0	74.1 - 137.5	6.64E+00	
Plutonium-239/240	1.36E+02	134	A		1.5	94 - 174	8.10E+00	
Potassium-40	6.43E+02	632	A		1.7	442 - 822	4.46E+01	
Strontium-90	5.02E+02	508	A		-1.2	356 - 660	3.41E+01	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	5.87E+01	60.3	A		-2.7	42.2 - 78.4	7.34E+00	
Uranium-238	2.61E+02	263	A		-0.8	184 - 342	3.14E+01	
Zinc-65	6.18E+02	606	A		2.0	424 - 788	4.01E+01	

Radiological Reference Date: August 1, 2012

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)

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RW = Report Warning

NR = Not Reported

Notes:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (WSHL01) Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive
 Madison, WI 53718

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	NR	0.0533				0.0373 - 0.0693		
Uranium-238	NR	21.1				14.8 - 27.4		
Uranium-Total	NR	21.2				14.8 - 27.6		
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	90.45	111	A		-18.5	78 - 144	9.779	
Cesium-134	859	939	A		-8.5	657 - 1221	25.5	L
Cesium-137	1140	1150	A		-0.9	805 - 1495	54.4	
Cobalt-57	1290	1316	A		-2.0	921 - 1711	53.3	
Cobalt-60	526	531	A		-0.9	372 - 690	54.8	
Iron-55	NR	508				356 - 660		
Manganese-54	915	920	A		-0.5	644 - 1196	75.3	
Nickel-63	NR	406				284 - 528		
Plutonium-238	86.73	105.8	A		-18.0	74.1 - 137.5	10.02	
Plutonium-239/240	137.0	134	A		2.2	94 - 174	12.01	
Potassium-40	622	632	A		-1.6	442 - 822	96.7	
Strontium-90	333.4	508	N		-34.4	356 - 660	35.0	

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	58.66	60.3	A		-2.7	42.2 - 78.4		6.162
Uranium-238	246.2	263	A		-6.4	184 - 342		20.51
Zinc-65	617	606	A		1.8	424 - 788		85.4

Radiological Reference Date: August 1, 2012

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:

(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte



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

Laboratory Results For MAPEP-12-MaS27
 (YPGA01) US Army Yuma Proving Ground / Material Analysis Lab
 301 C. Street
 Yuma, AZ 85365

Inorganic						Units: (mg/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Antimony	NR	111.5				78.1 - 145.0		
Arsenic	NR	55.7				39.0 - 72.4		
Barium	NR	896				627 - 1165		
Beryllium	NR	47.0				32.9 - 61.1		
Cadmium	NR	15.4				10.8 - 20.0		
Chromium	NR	99.0				69.3 - 128.7		
Cobalt	NR	127				89 - 165		
Copper	NR	204				143 - 265		
Lead	NR	97.6				68.3 - 126.9		
Mercury	NR	0.172				0.120 - 0.224		
Nickel	NR	300				210 - 390		
Selenium	NR	17.7				12.4 - 23.0		
Silver	NR	95.5				66.9 - 124.2		
Technetium-99	NR	0.000748				0.000524 - 0.000972		
Thallium	NR	91.0				63.7 - 118.3		
Uranium-235	0.05	0.0533	A		-6.2	0.0373 - 0.0693	0.02	H
Uranium-238	18.88	21.1	A		-10.5	14.8 - 27.4	0.02	L
Uranium-Total	18.9	21.2	A		-10.8	14.8 - 27.6		1.8
Vanadium	NR	271				190 - 352		
Zinc	NR	549				384 - 714		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	111				78 - 144		
Cesium-134	NR	939				657 - 1221		
Cesium-137	NR	1150				805 - 1495		
Cobalt-57	NR	1316				921 - 1711		
Cobalt-60	NR	531				372 - 690		
Iron-55	NR	508				356 - 660		
Manganese-54	NR	920				644 - 1196		
Nickel-63	NR	406				284 - 528		
Plutonium-238	NR	105.8				74.1 - 137.5		
Plutonium-239/240	NR	134				94 - 174		
Potassium-40	NR	632				442 - 822		
Strontium-90	NR	508				356 - 660		

Radiological						Units: (Bq/kg)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Technetium-99	NR	469				328 - 610		
Uranium-234/233	NR	60.3				42.2 - 78.4		
Uranium-238	NR	263				184 - 342		
Zinc-65	NR	606				424 - 788		

Radiological Reference Date: August 1, 2012

Other Flags:

A = Result acceptable Bias <=20%

W = Result accepatable 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:

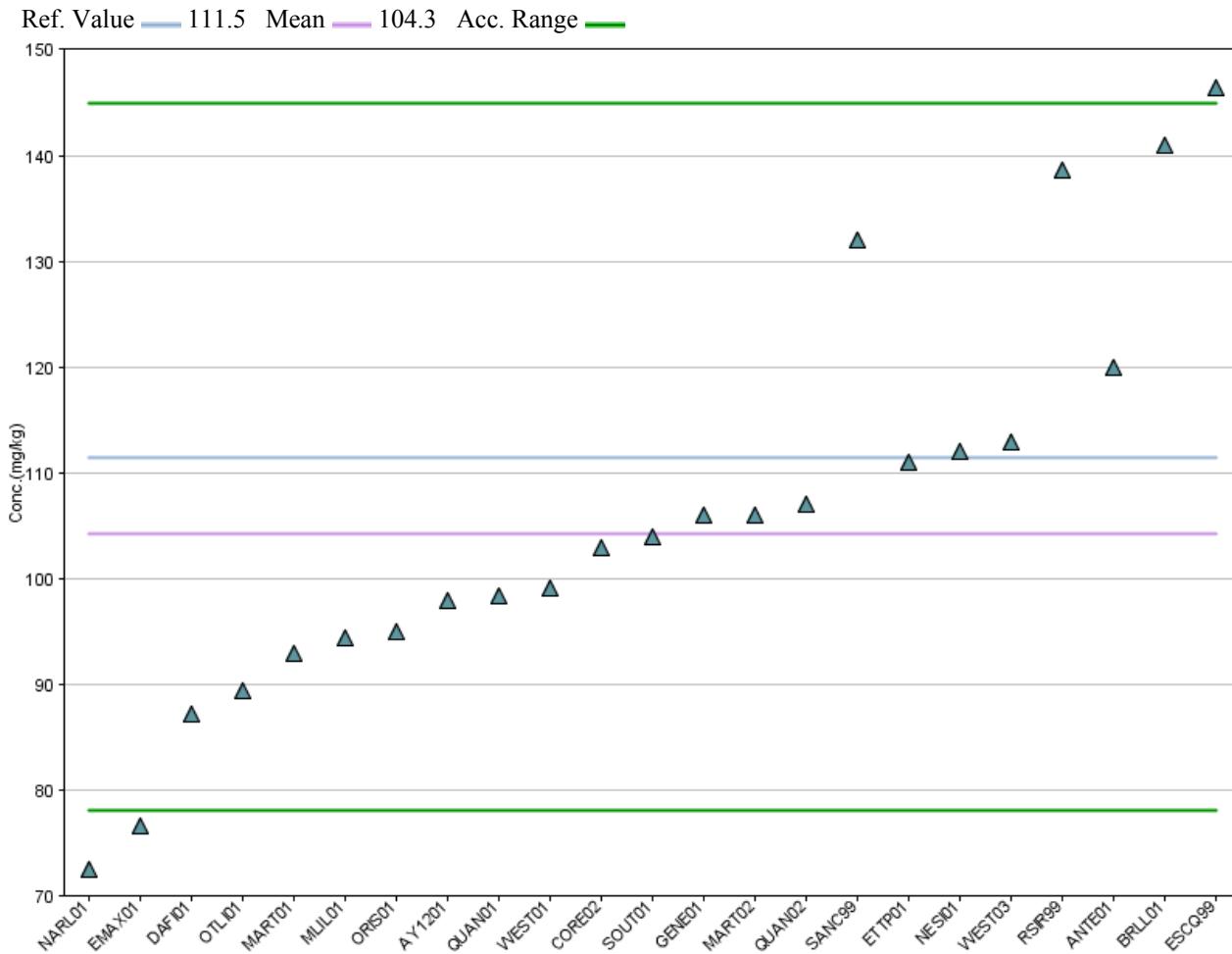
(5) = Total Metal

(25) = Result not reported with other gamma results

(28) = Not Reporting Previously Reported Analyte

Antimony

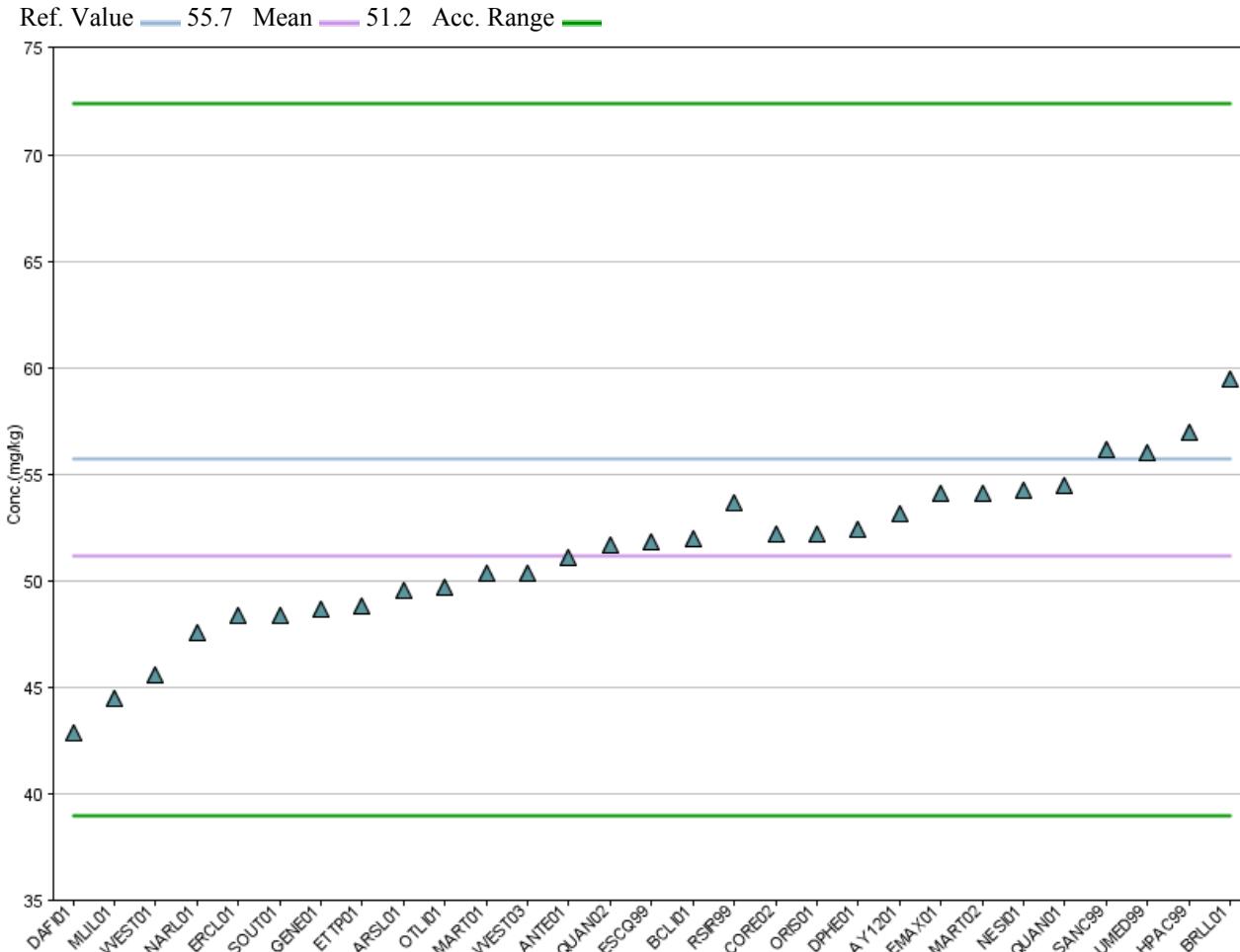
MAPEP-12-MaS27



Note: This chart shows only data points with values between 41.30 and 167.30 (± 5 Standard Deviations)

Arsenic

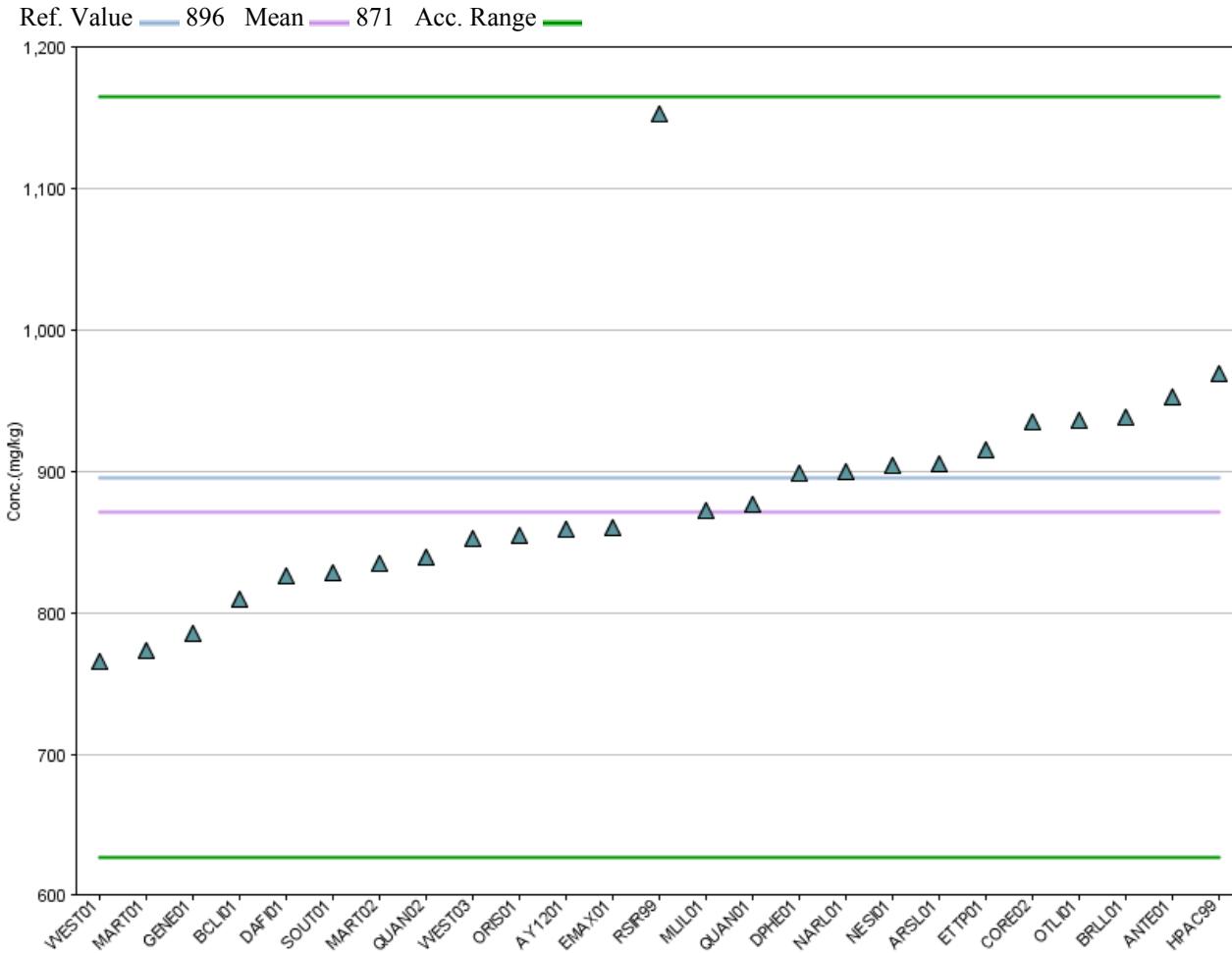
MAPEP-12-MaS27



Note: This chart shows only data points with values between 32.70 and 69.70 (± 5 Standard Deviations)

Barium

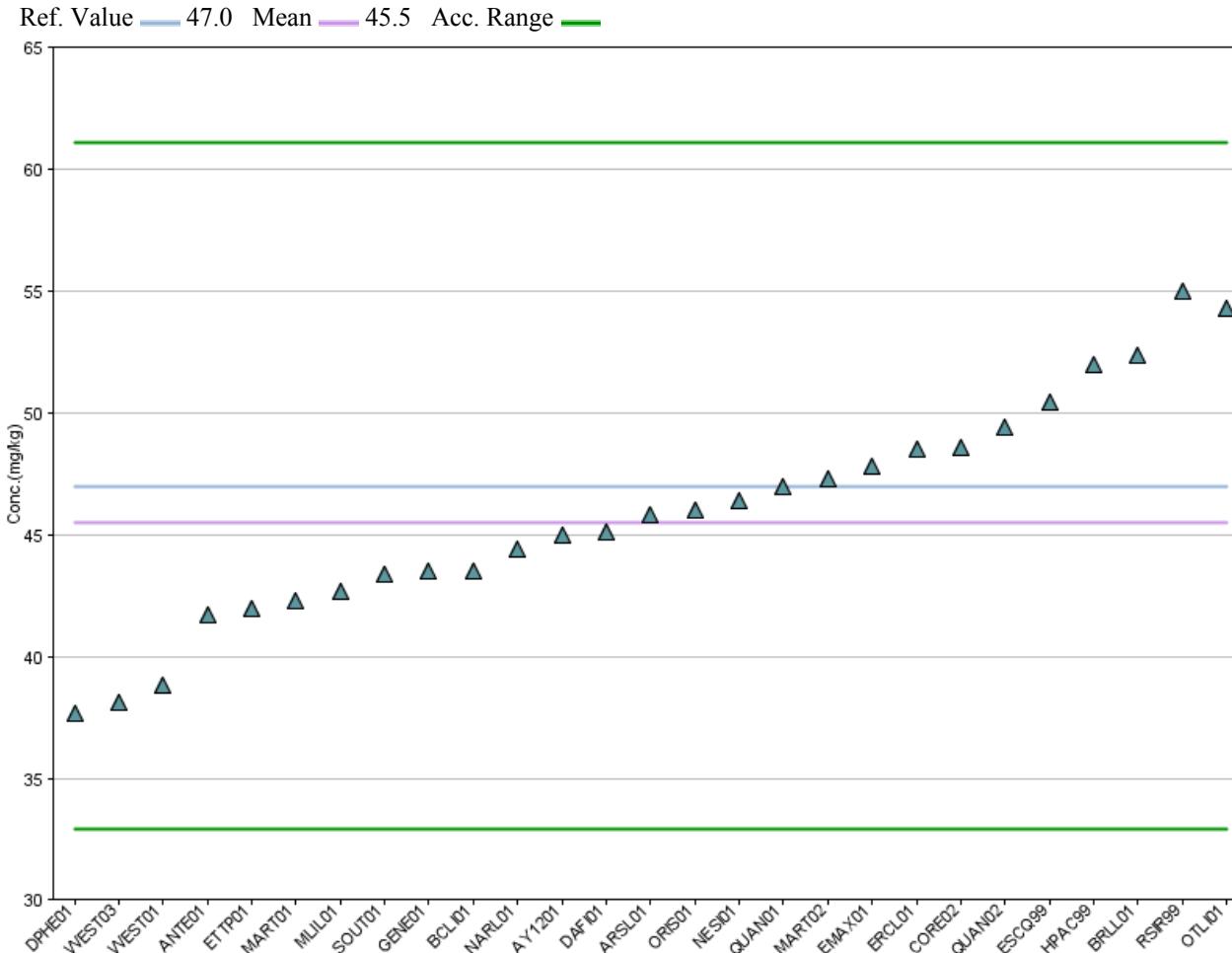
MAPEP-12-MaS27



Note: This chart shows only data points with values between 586.00 and 1,156.00 (± 5 Standard Deviations)

Beryllium

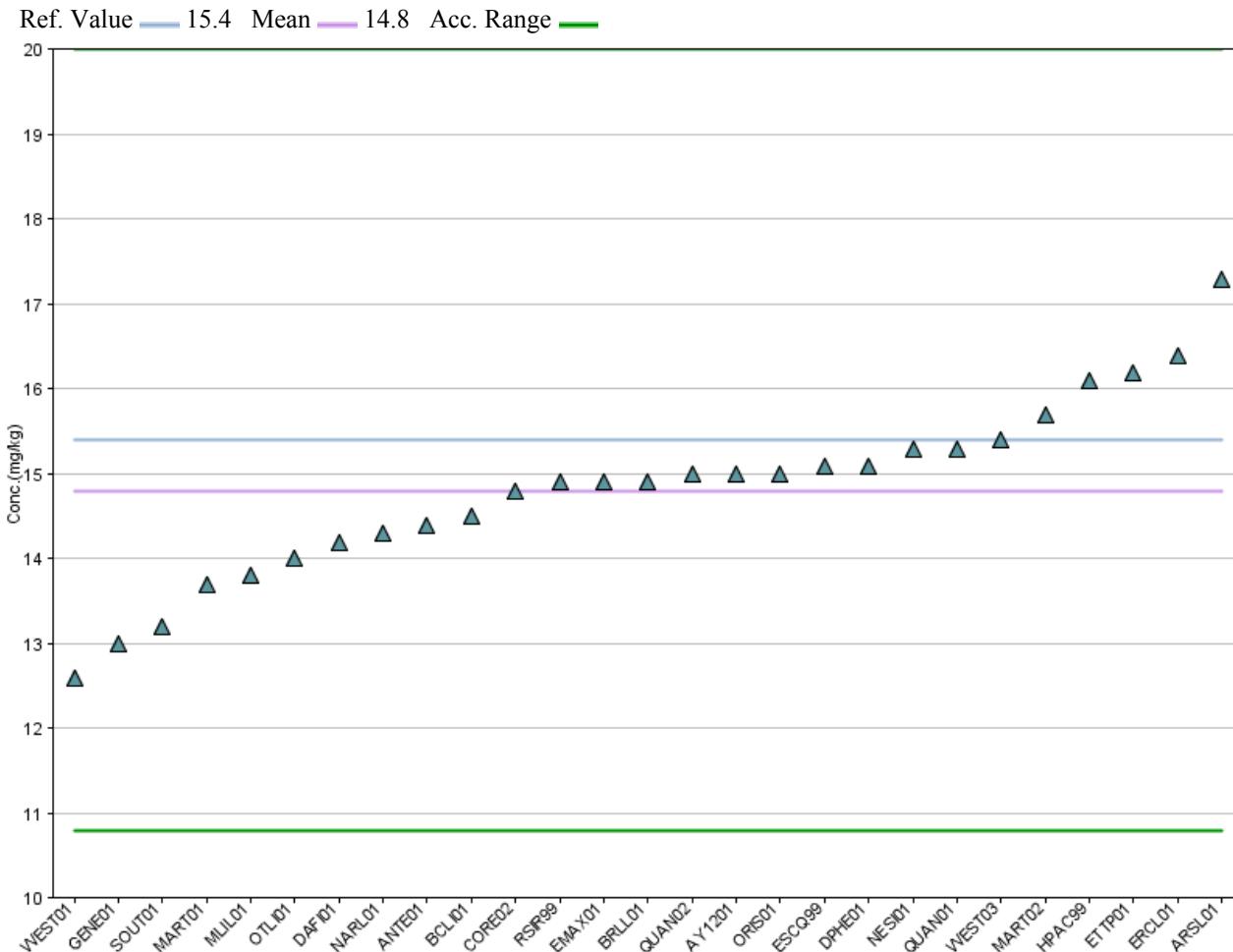
MAPEP-12-MaS27



Note: This chart shows only data points with values between 24.00 and 67.00 (± 5 Standard Deviations)

Cadmium

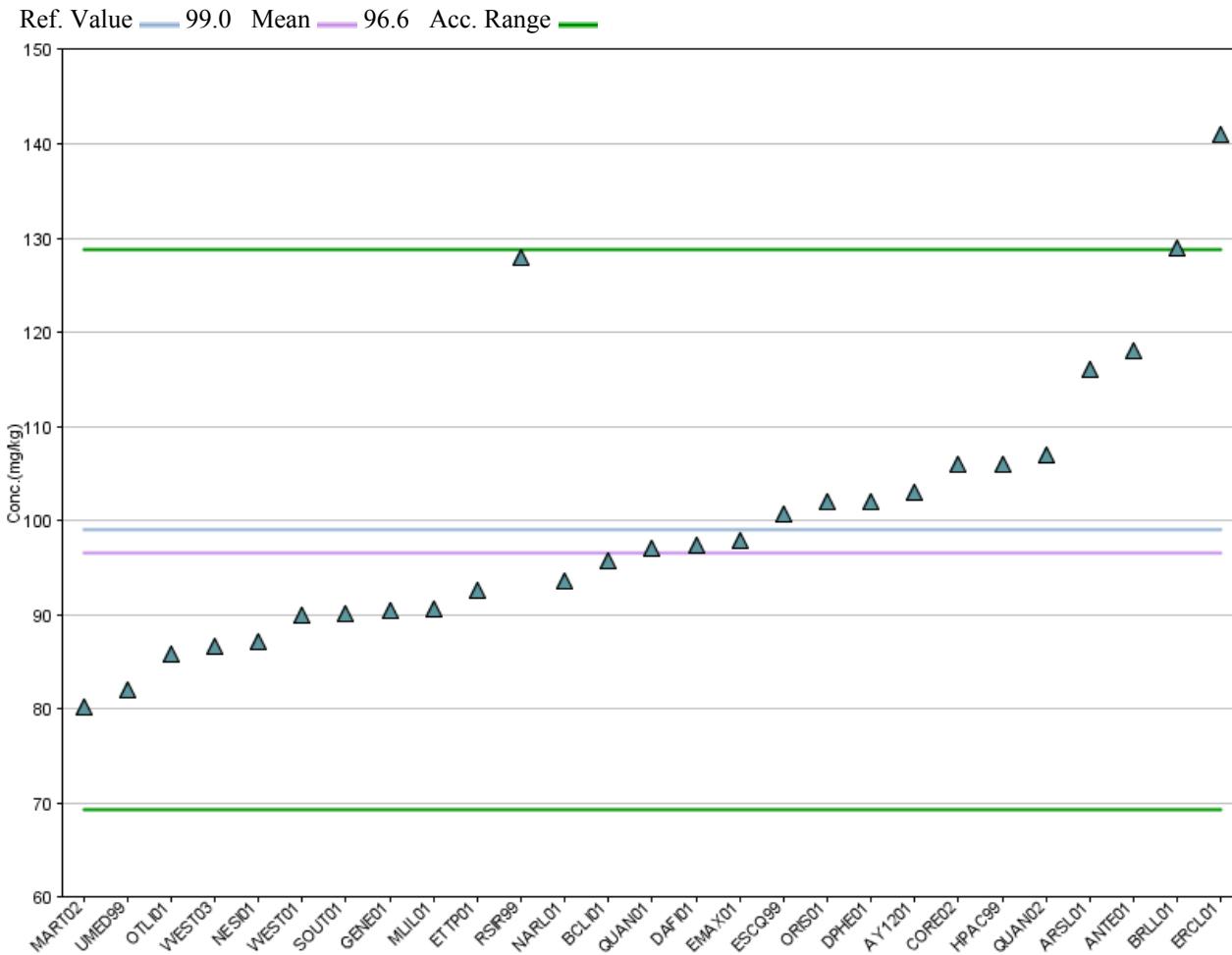
MAPEP-12-MaS27



Note: This chart shows only data points with values between 9.30 and 20.30 (± 5 Standard Deviations)

Chromium

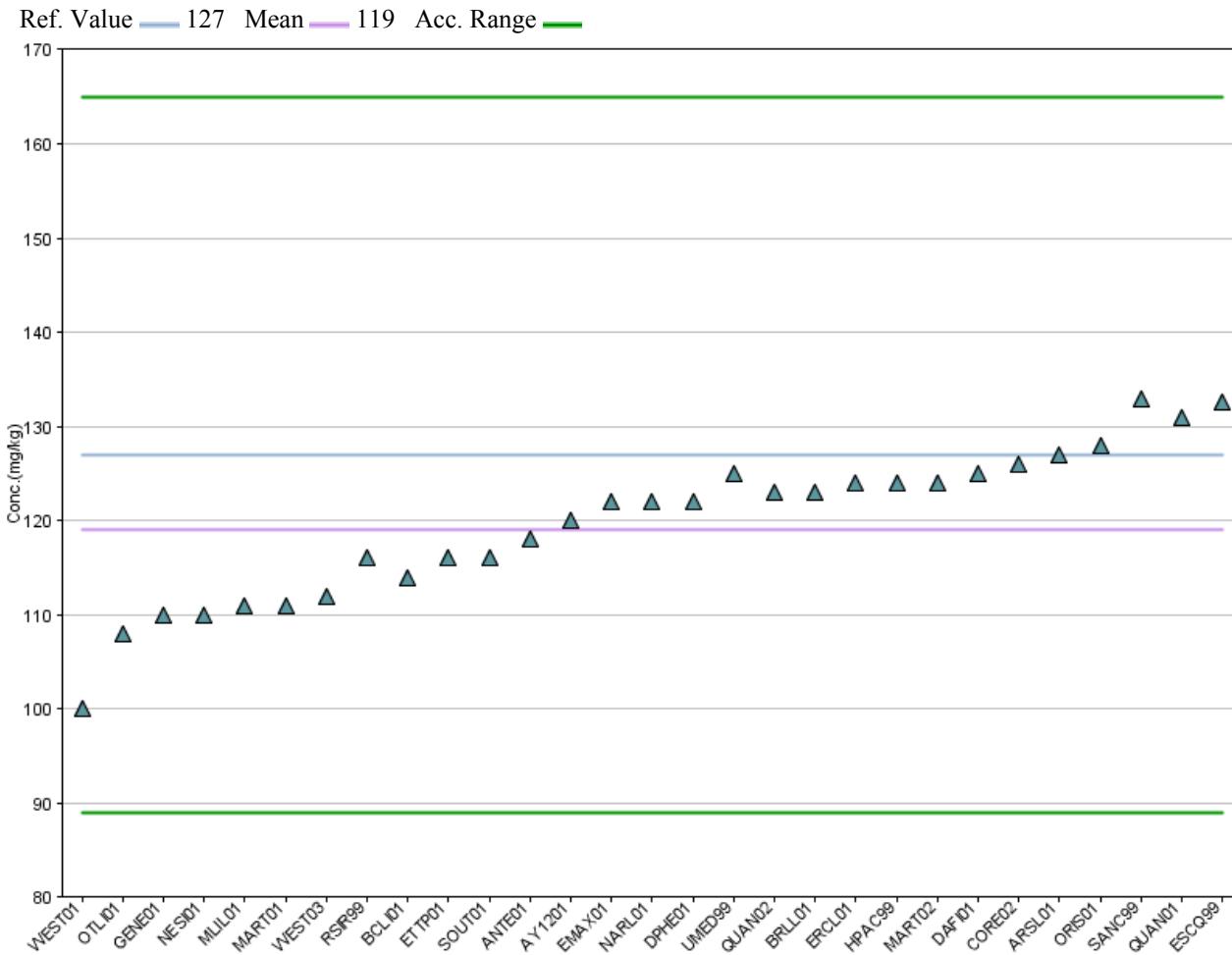
MAPEP-12-MaS27



Note: This chart shows only data points with values between 47.60 and 145.60 (± 5 Standard Deviations)

Cobalt

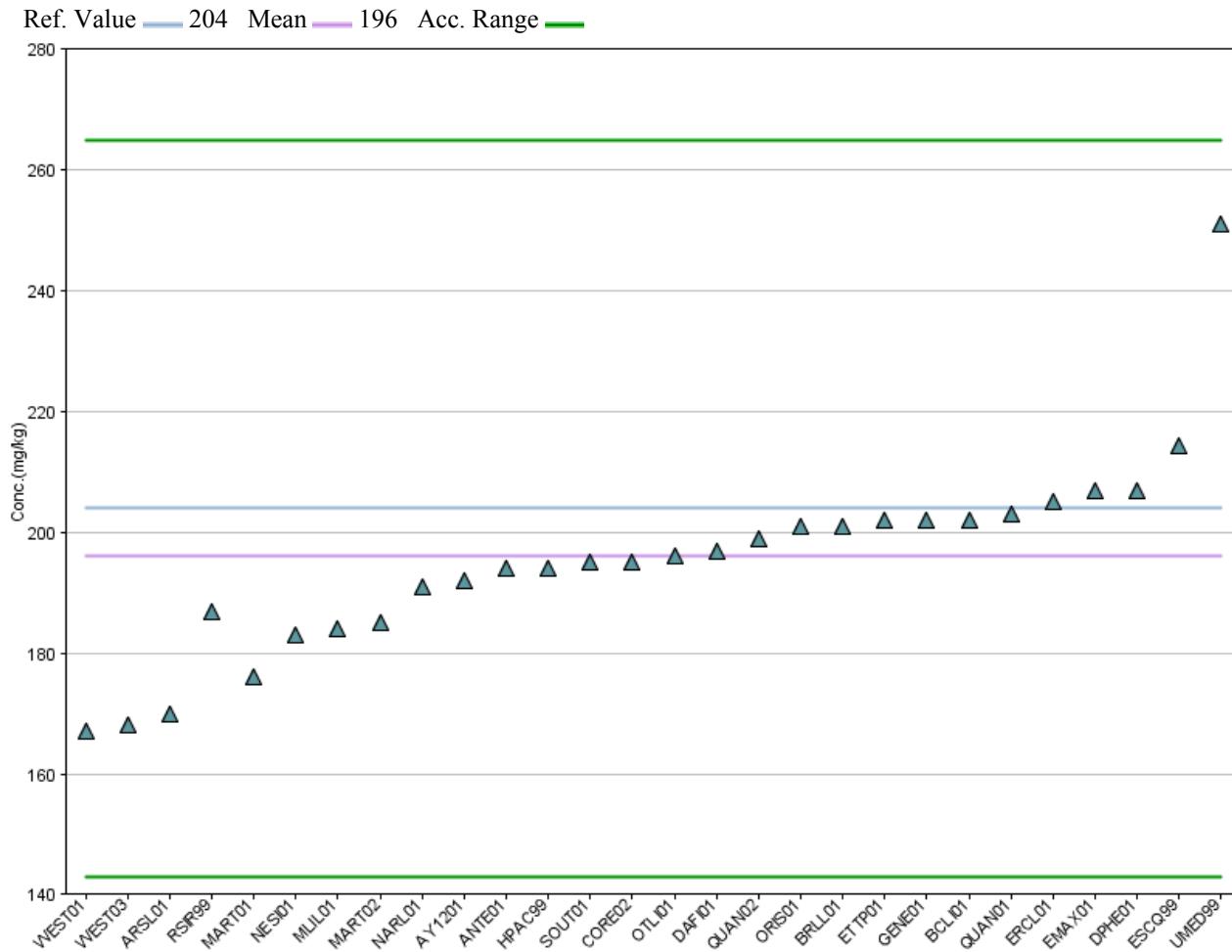
MAPEP-12-MaS27



Note: This chart shows only data points with values between 79.00 and 159.00 (± 5 Standard Deviations)

Copper

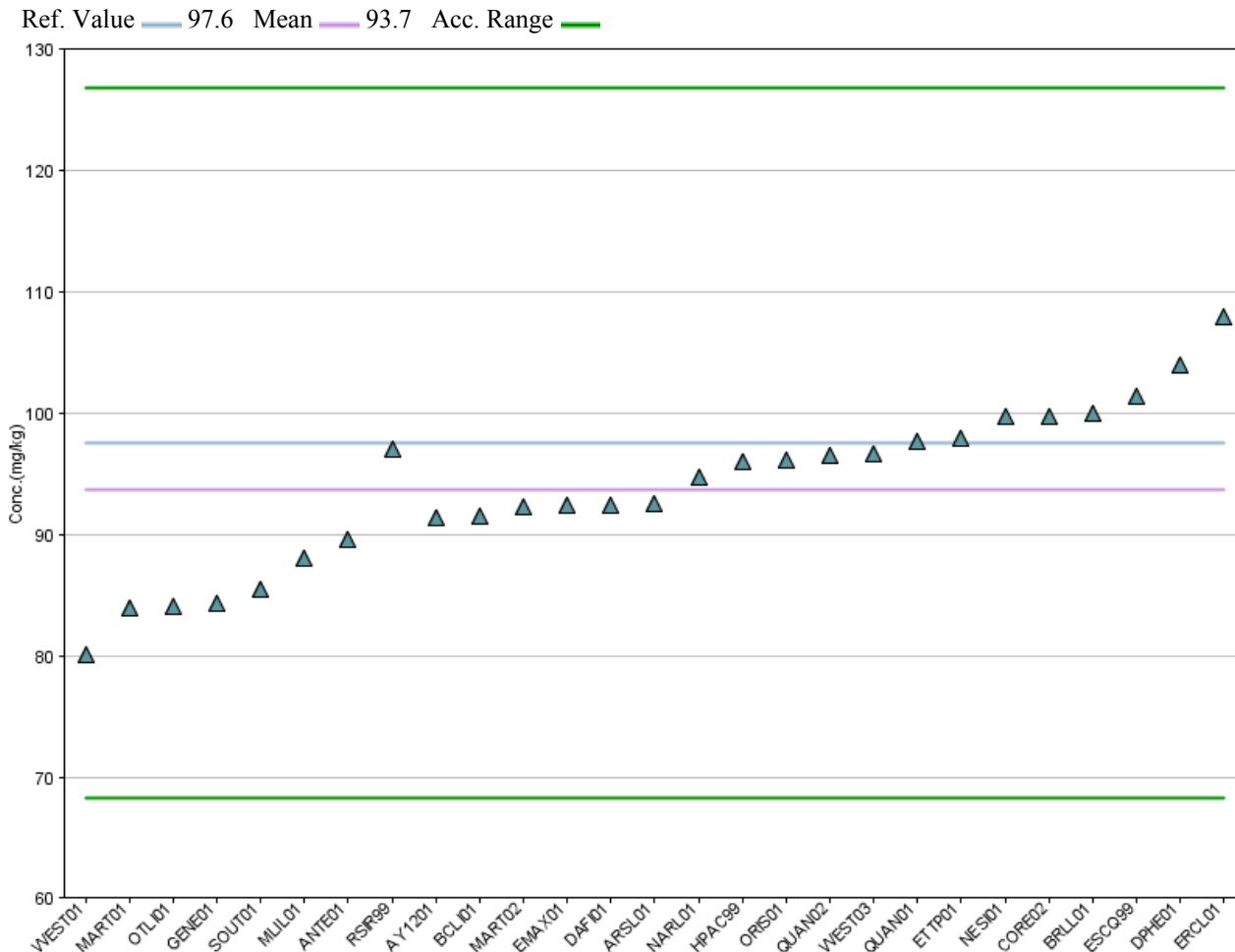
MAPEP-12-MaS27



Note: This chart shows only data points with values between 111.00 and 281.00 (± 5 Standard Deviations)

Lead

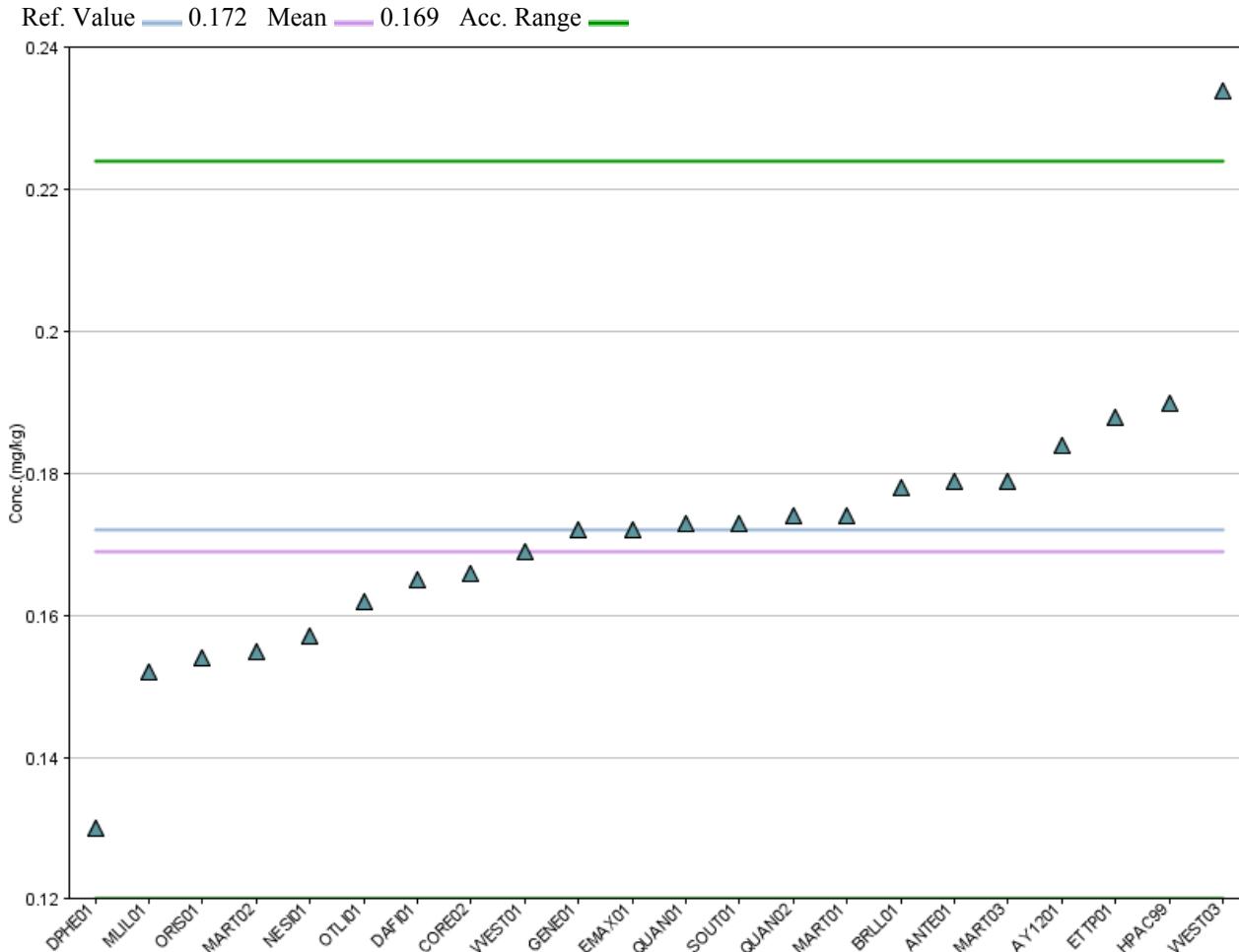
MAPEP-12-MaS27



Note: This chart shows only data points with values between 60.20 and 127.20 (± 5 Standard Deviations)

Mercury

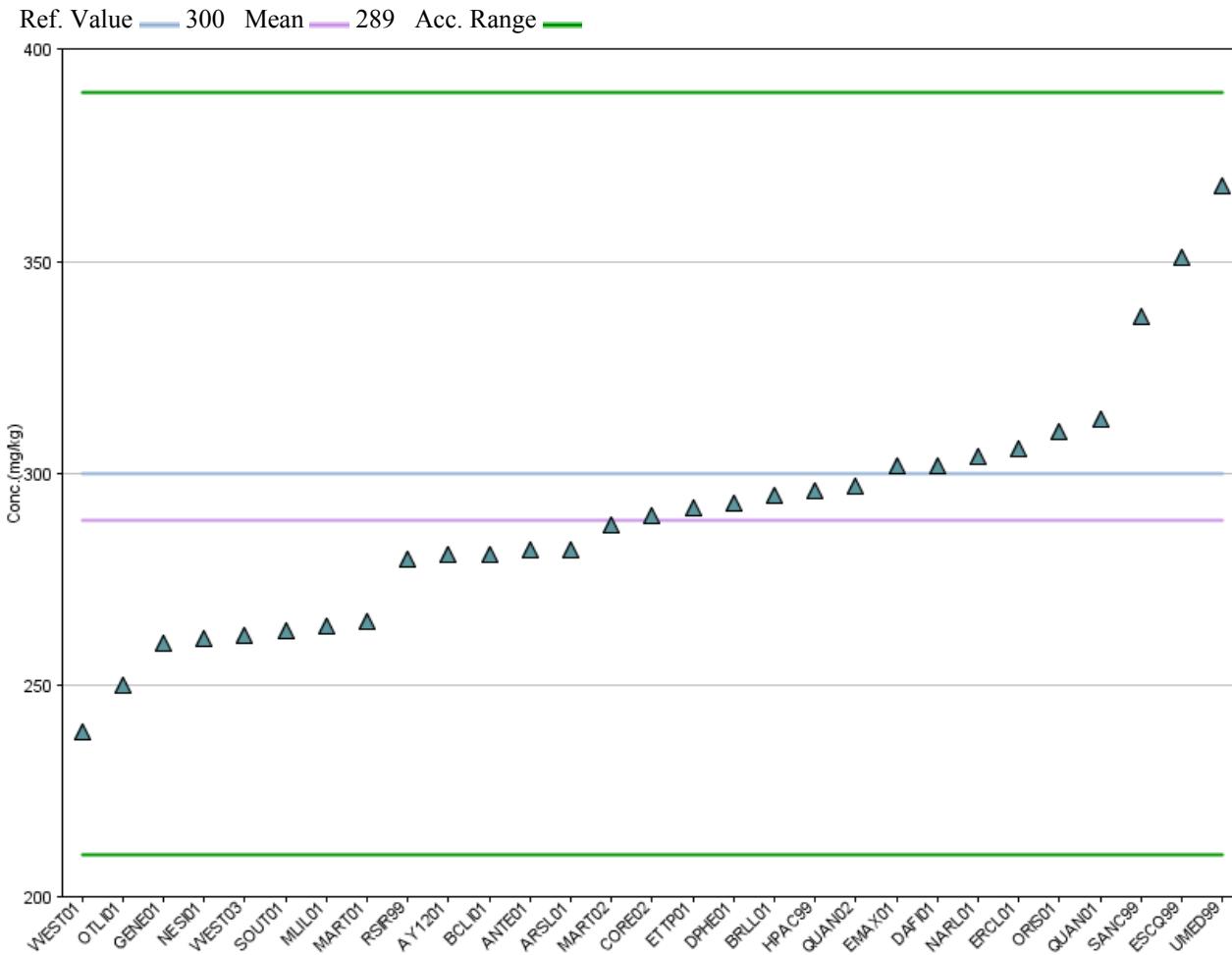
MAPEP-12-MaS27



Note: This chart shows only data points with values between 0.10 and 0.24 (± 5 Standard Deviations)

Nickel

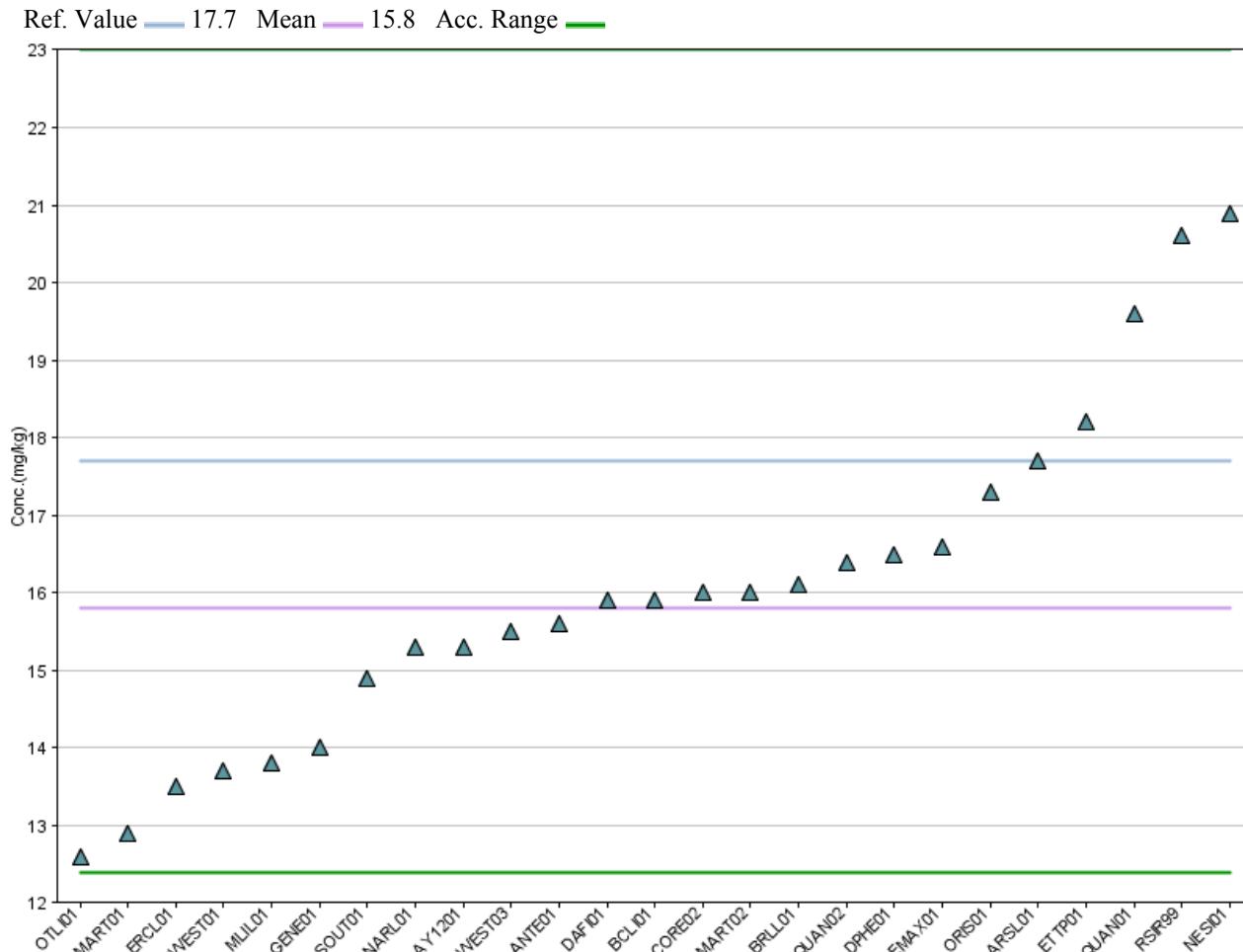
MAPEP-12-MaS27



Note: This chart shows only data points with values between 149.00 and 429.00 (± 5 Standard Deviations)

Selenium

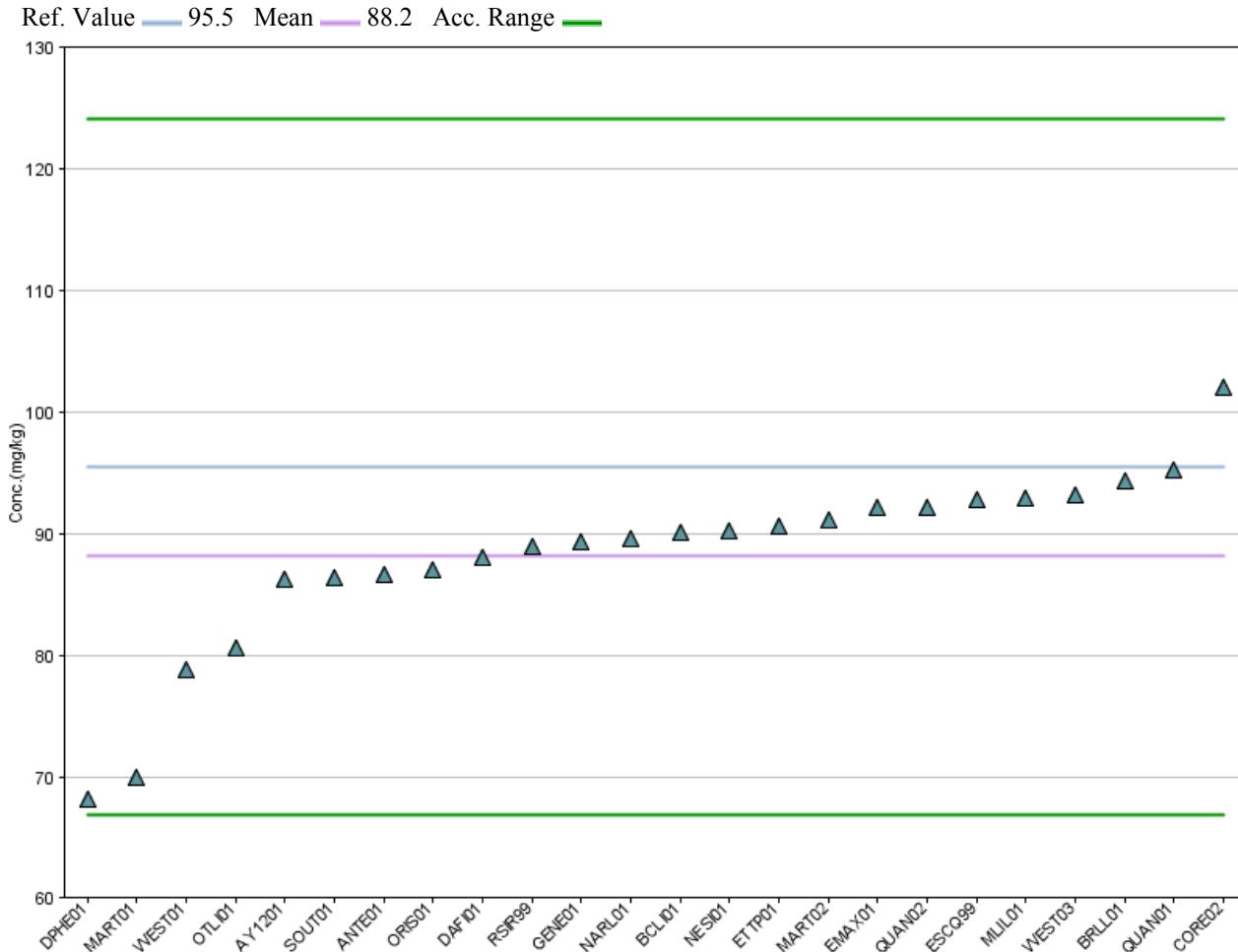
MAPEP-12-MaS27



Note: This chart shows only data points with values between 5.80 and 25.80 (± 5 Standard Deviations)

Silver

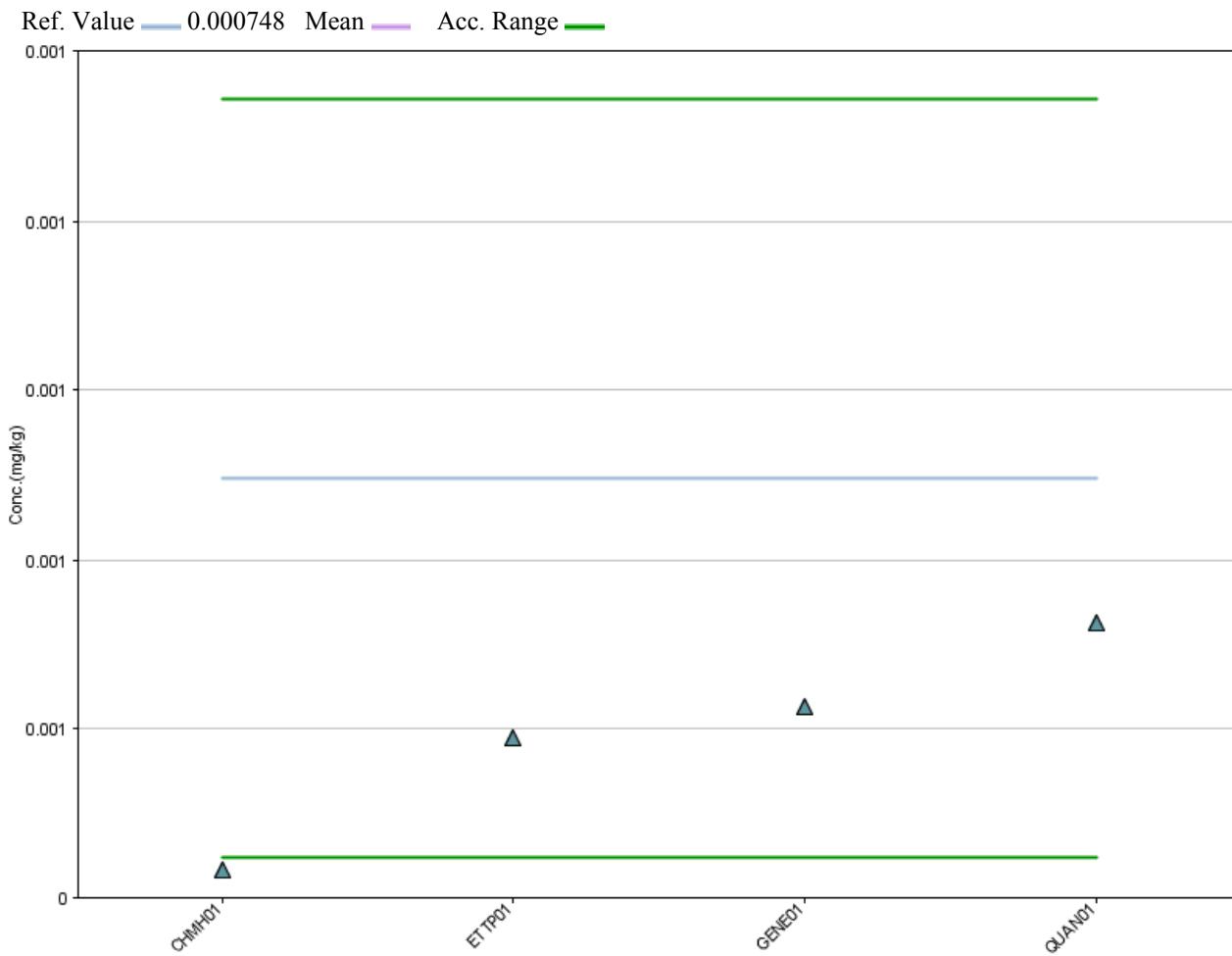
MAPEP-12-MaS27



Note: This chart shows only data points with values between 49.70 and 126.70 (± 5 Standard Deviations)

Technetium-99

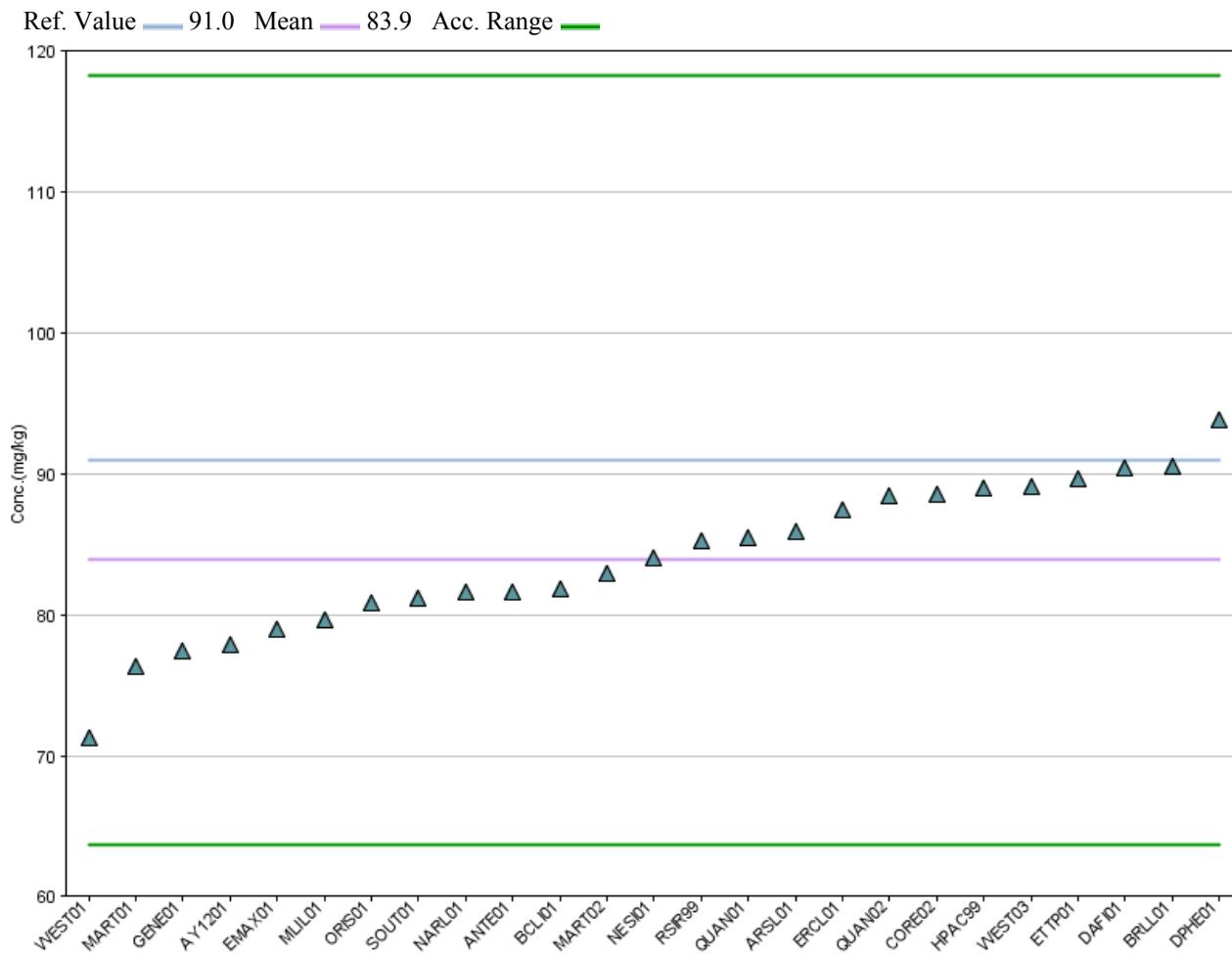
MAPEP-12-MaS27



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

Thallium

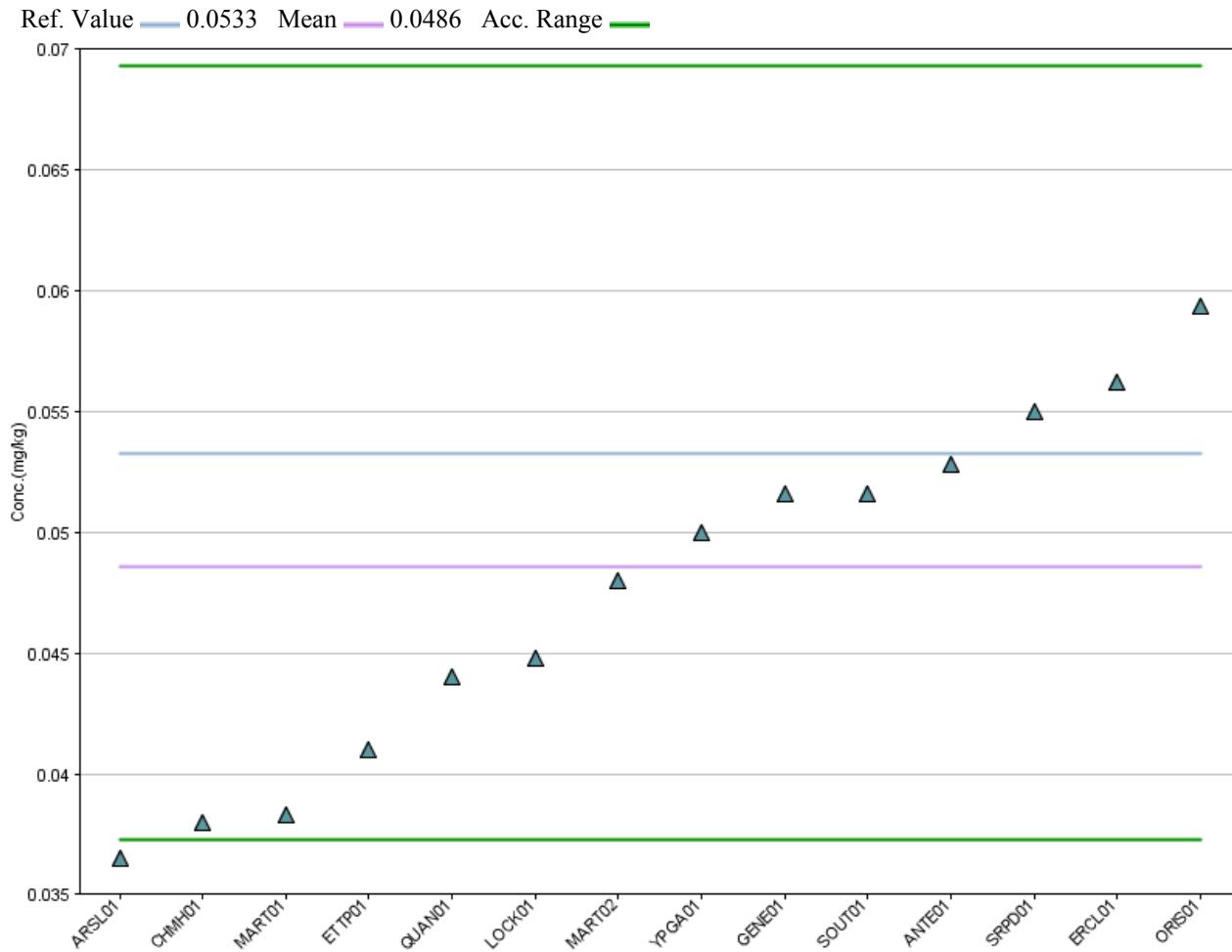
MAPEP-12-MaS27



Note: This chart shows only data points with values between 56.40 and 111.40 (± 5 Standard Deviations)

Uranium-235

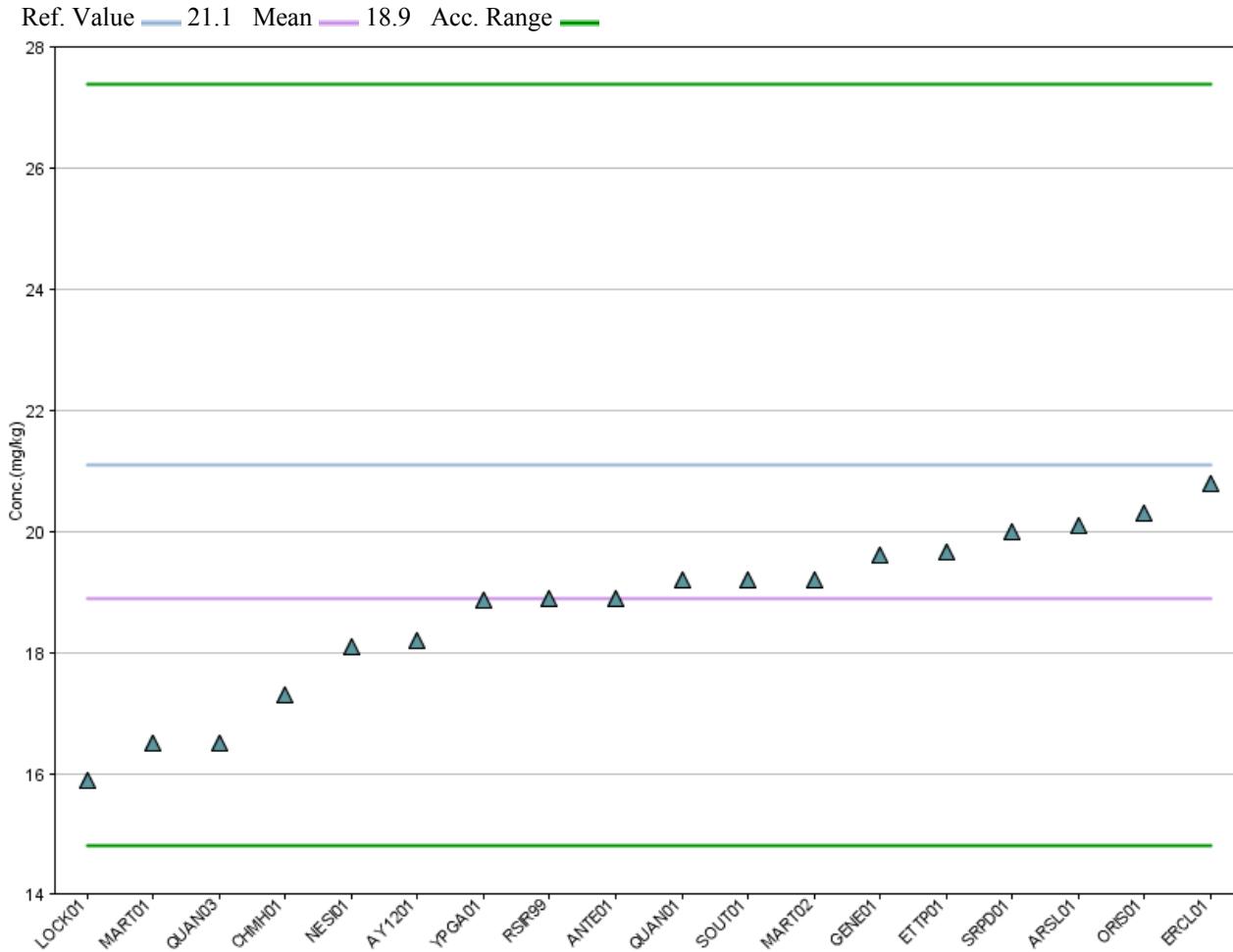
MAPEP-12-MaS27



Note: This chart shows only data points with values between 0.01 and 0.09 (± 5 Standard Deviations)

Uranium-238

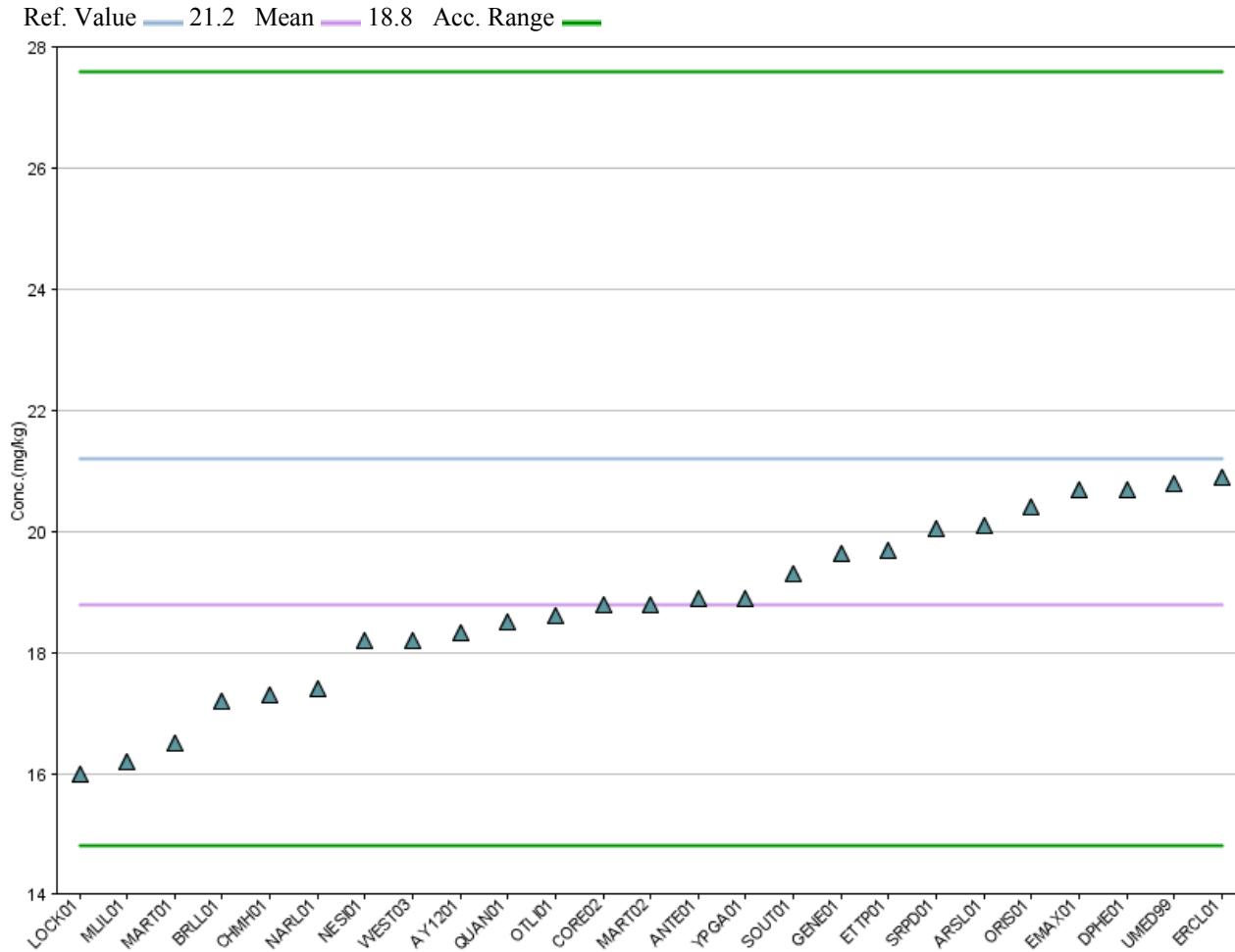
MAPEP-12-MaS27



Note: This chart shows only data points with values between 12.40 and 25.40 (± 5 Standard Deviations)

Uranium-Total

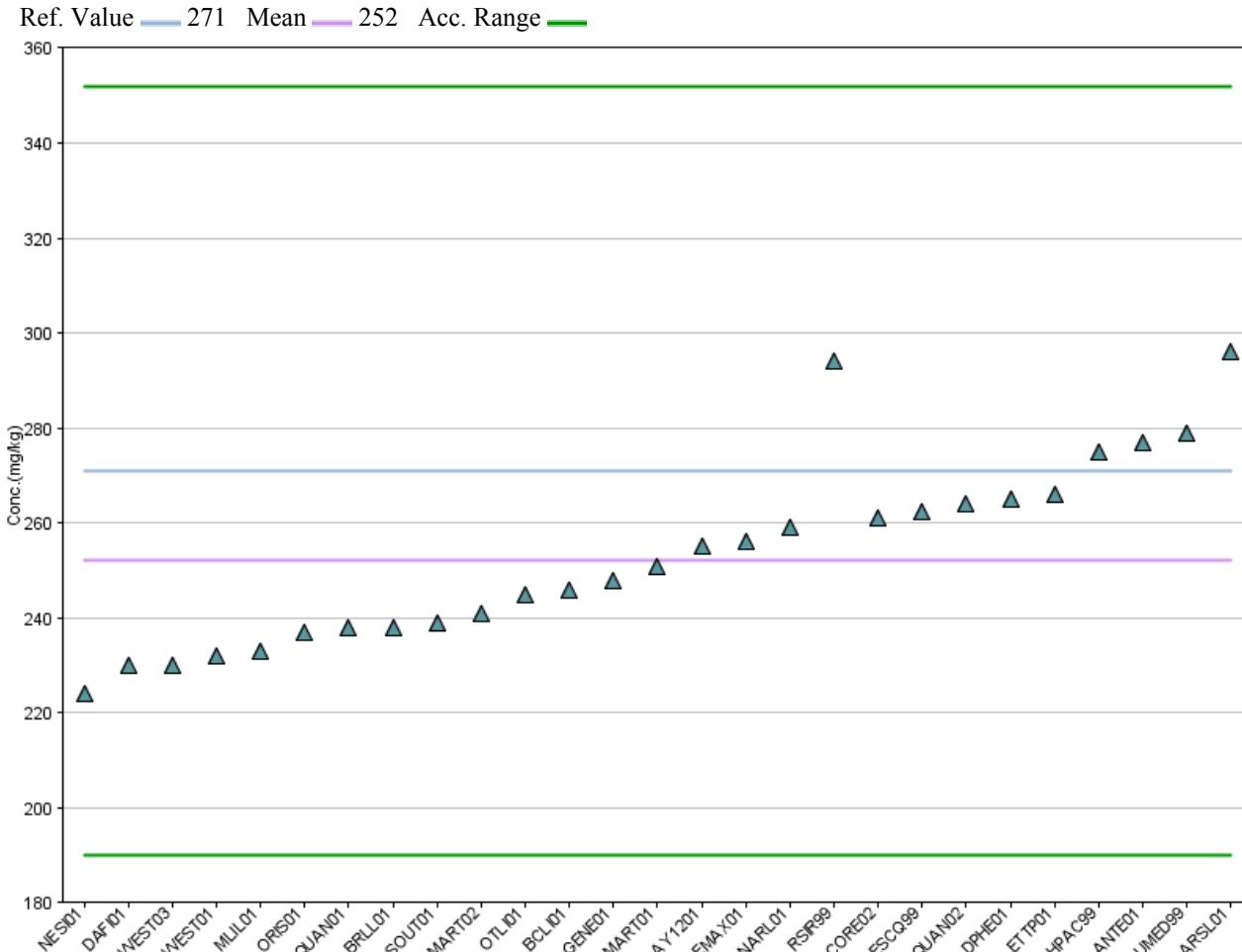
MAPEP-12-MaS27



Note: This chart shows only data points with values between 11.80 and 25.80 (± 5 Standard Deviations)

Vanadium

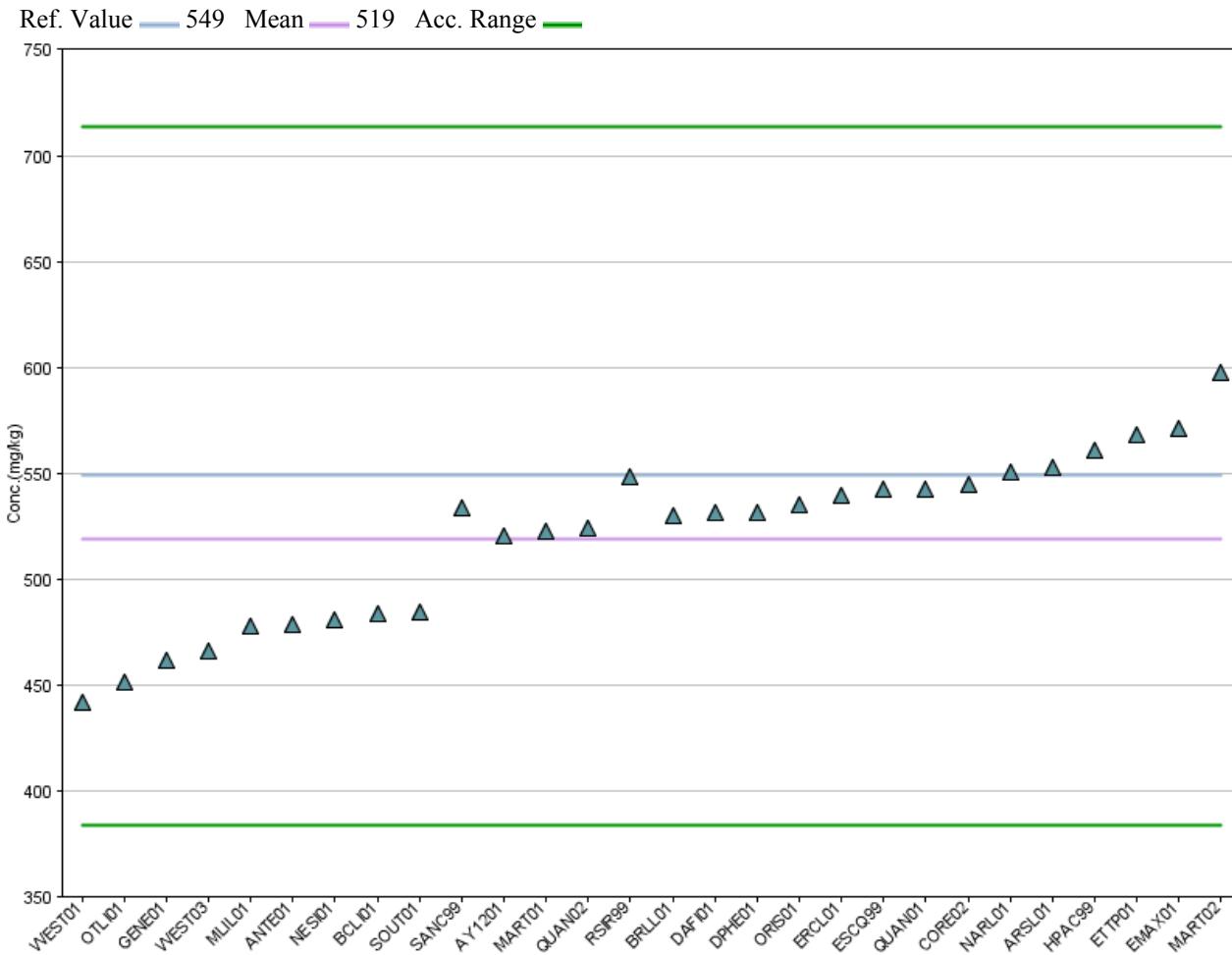
MAPEP-12-MaS27



Note: This chart shows only data points with values between 162.00 and 342.00 (± 5 Standard Deviations)

Zinc

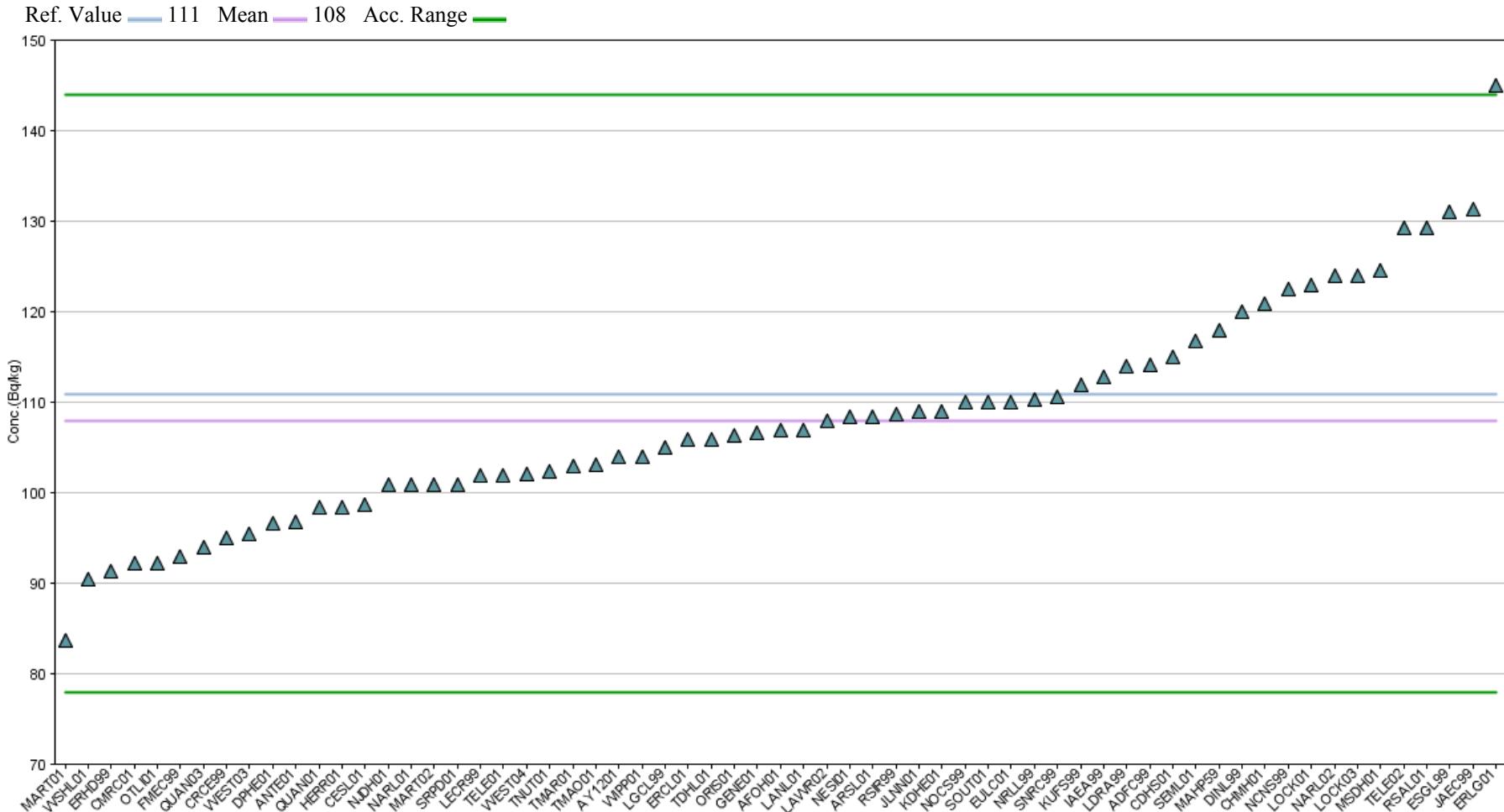
MAPEP-12-MaS27



Note: This chart shows only data points with values between 314.00 and 724.00 (± 5 Standard Deviations)

Americium-241

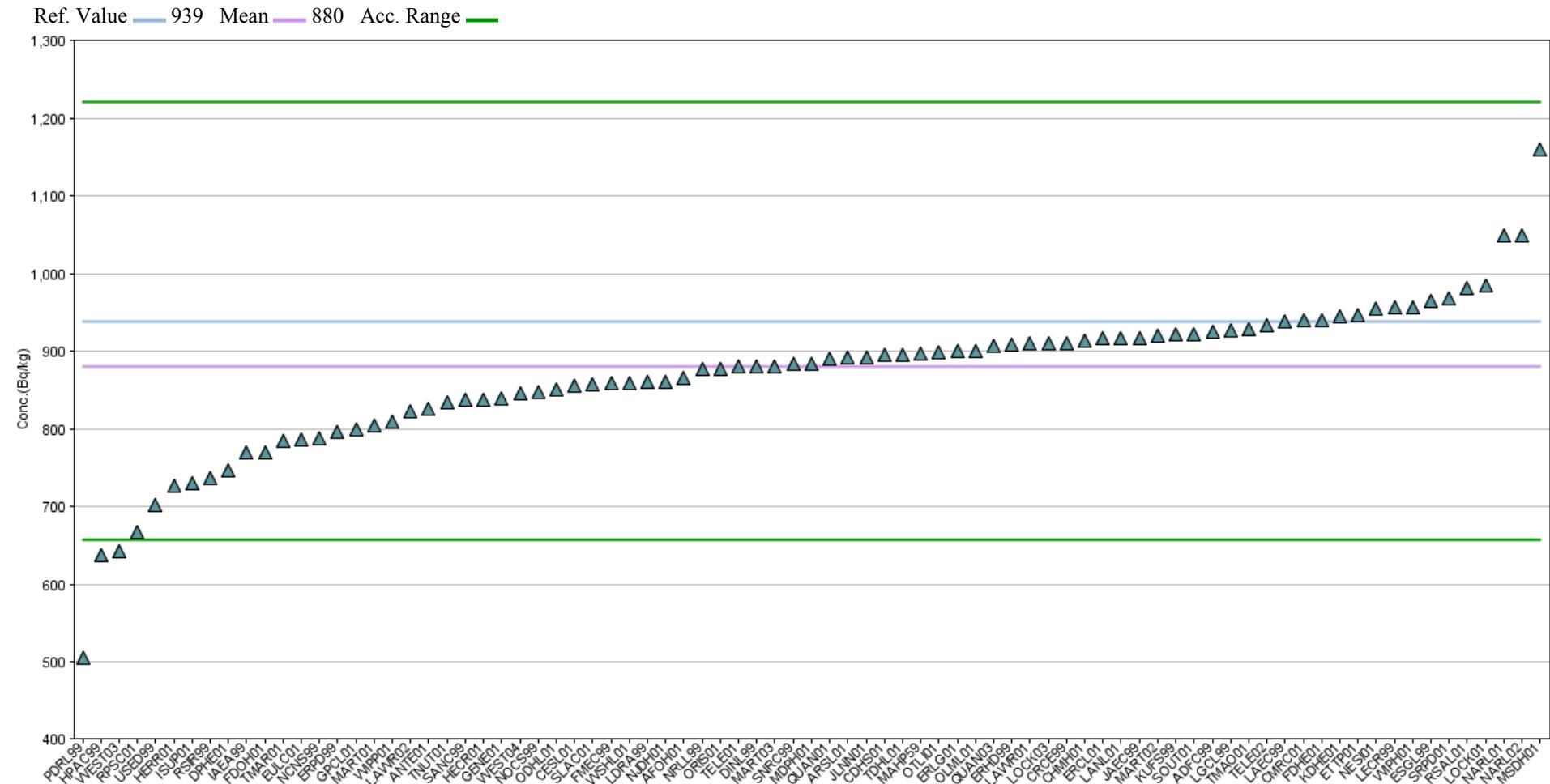
MAPEP-12-MaS27



Note: This chart shows only data points with values between 53.00 and 163.00 (± 5 Standard Deviations)

Cesium-134

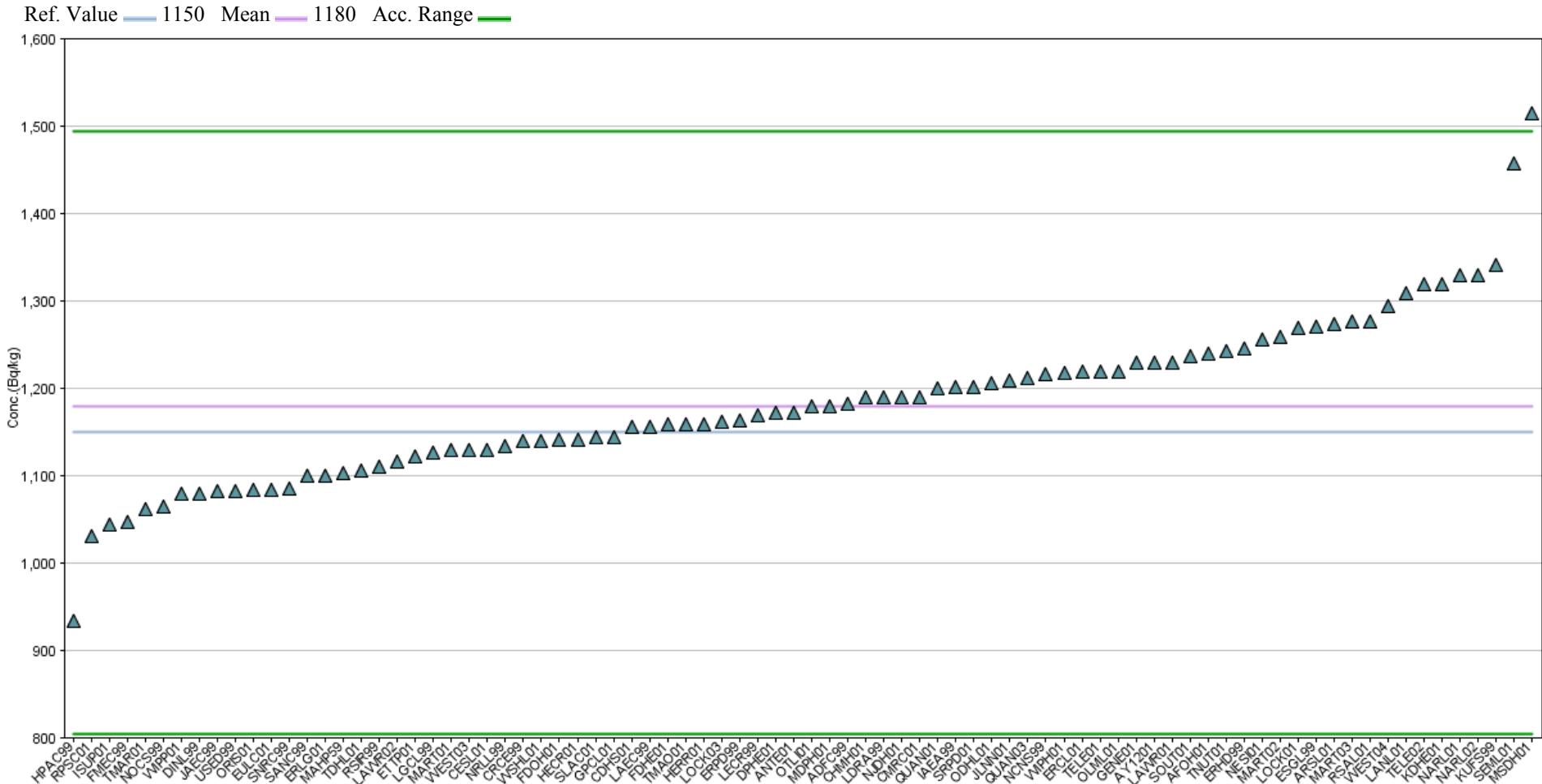
MAPEP-12-MaS27



Note: This chart shows only data points with values between 480.00 and 1,280.00 (± 5 Standard Deviations)

Cesium-137

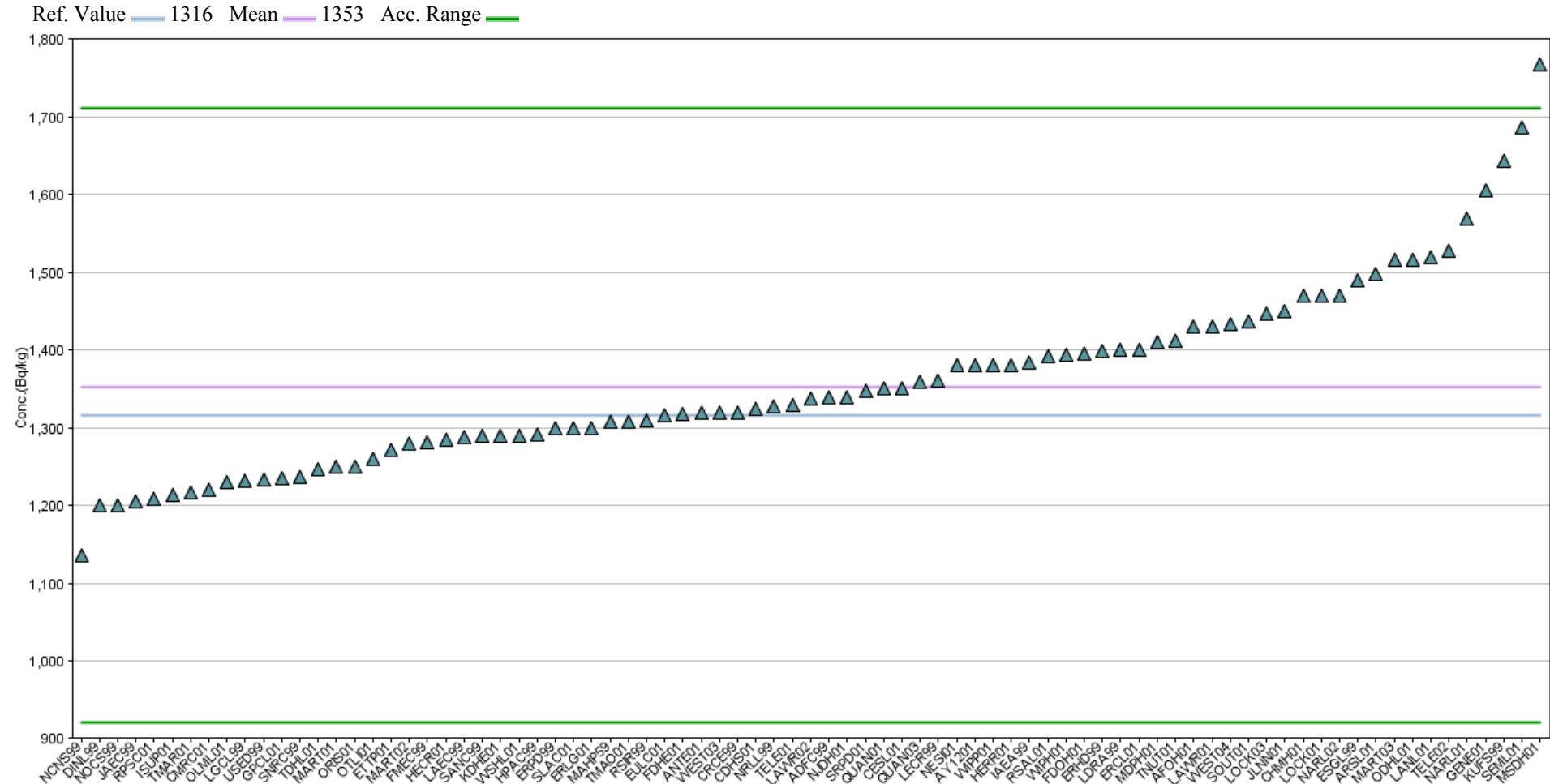
MAPEP-12-MaS27



Note: This chart shows only data points with values between 755.00 and 1,605.00 (± 5 Standard Deviations)

Cobalt-57

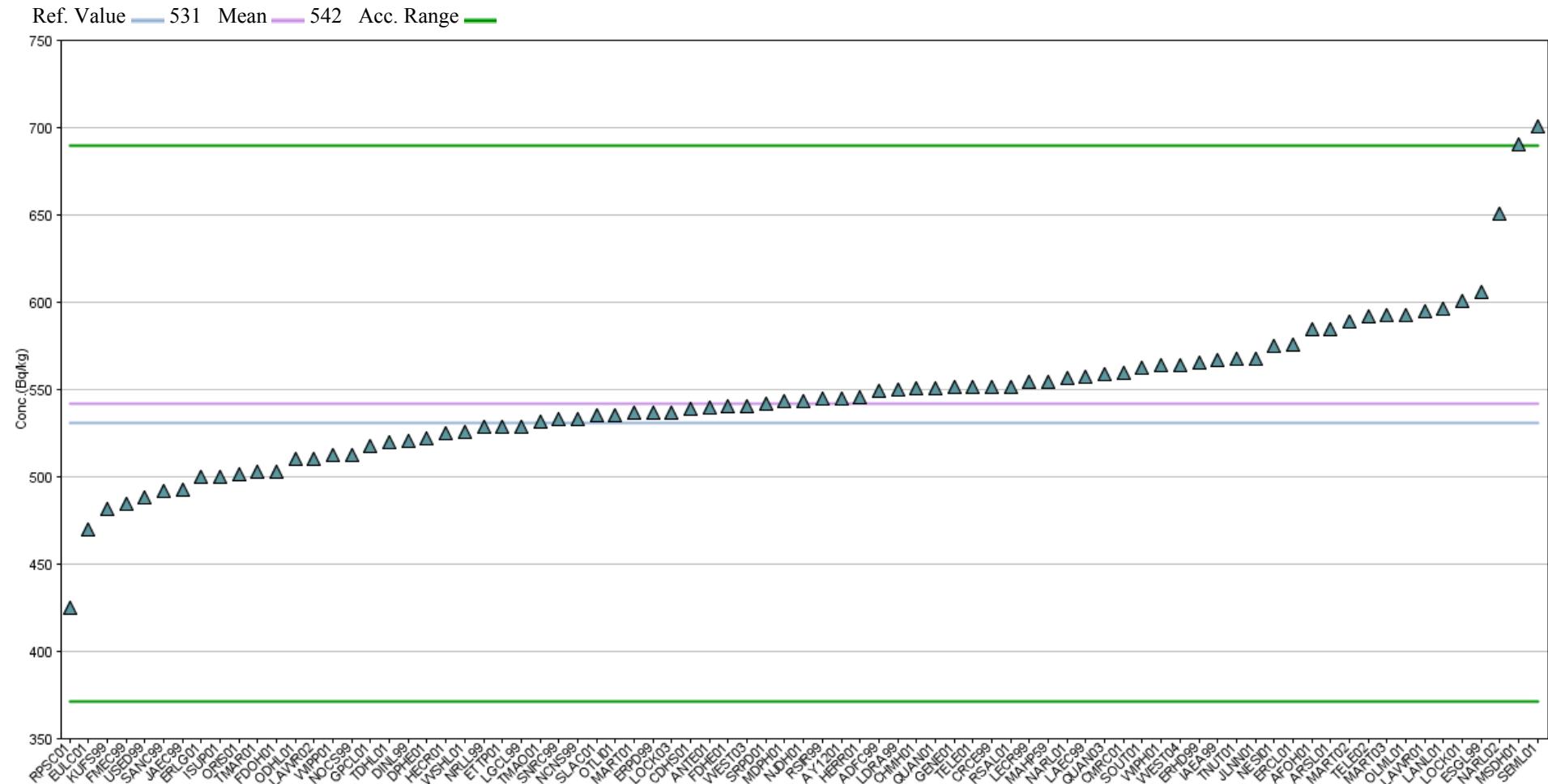
MAPEP-12-MaS27



Note: This chart shows only data points with values between 808.00 and 1,898.00 (± 5 Standard Deviations)

Cobalt-60

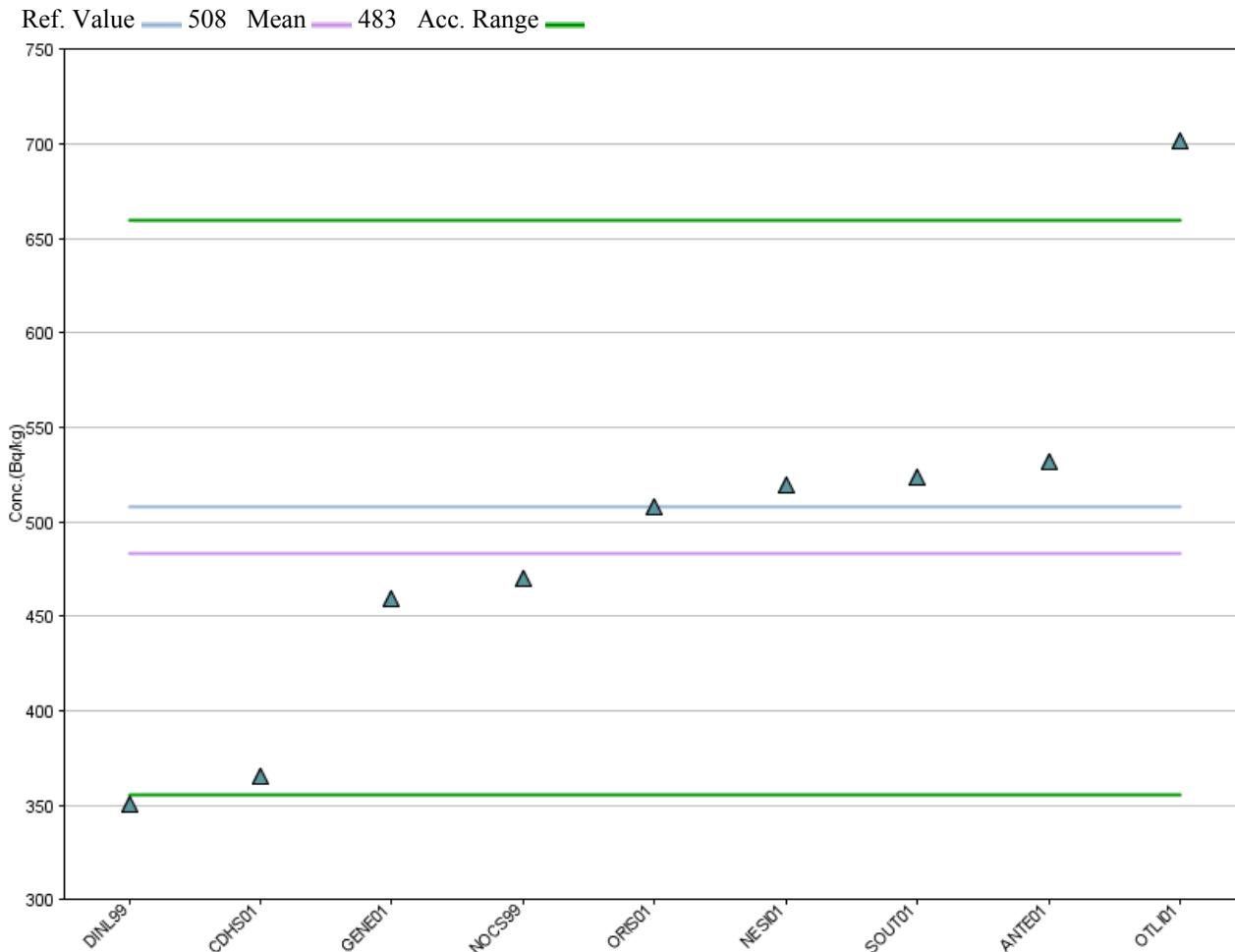
MAPEP-12-MaS27



Note: This chart shows only data points with values between 362.00 and 722.00 (± 5 Standard Deviations)

Iron-55

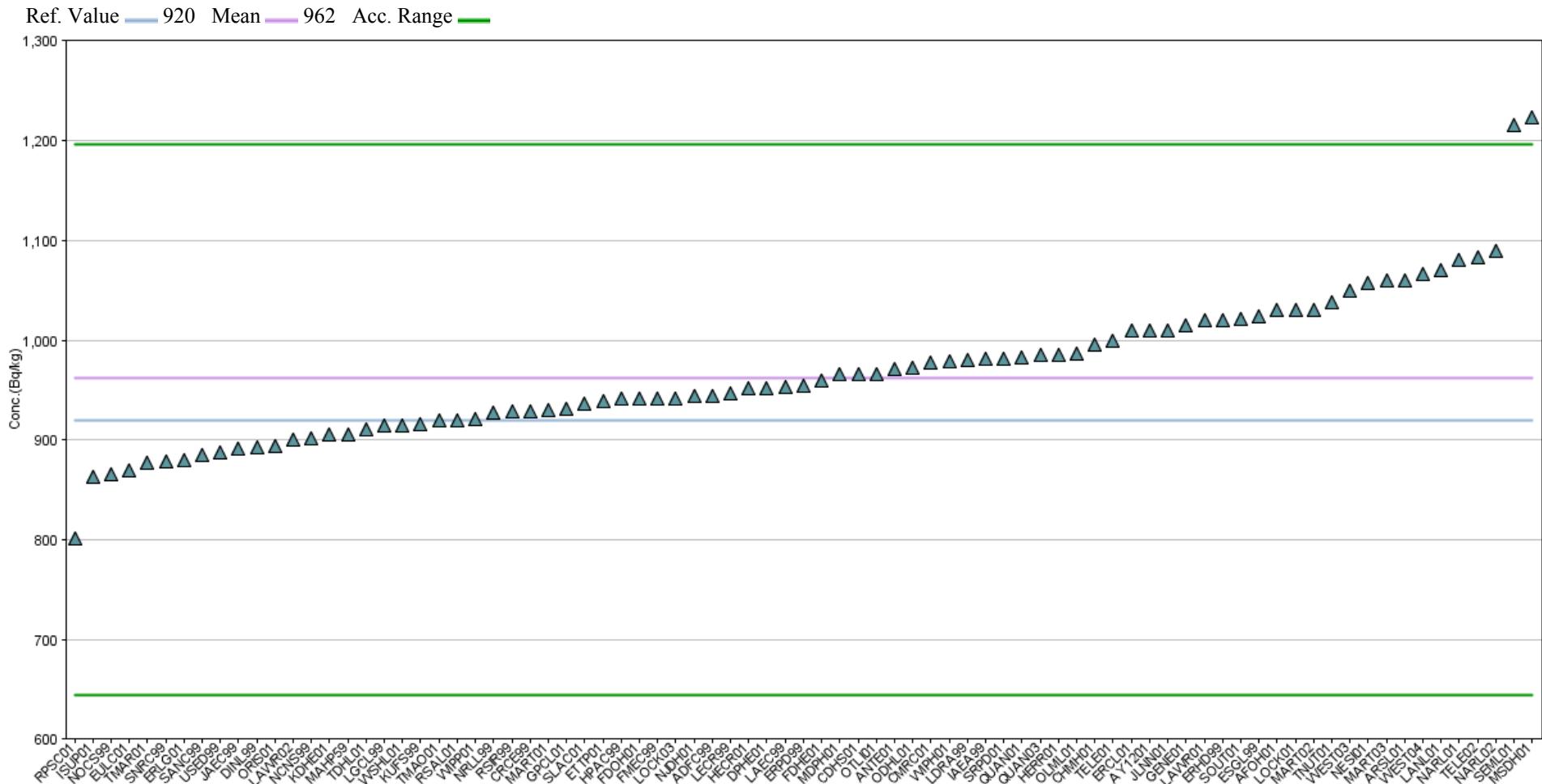
MAPEP-12-MaS27



Note: This chart shows only data points with values between 188.00 and 778.00 (± 5 Standard Deviations)

Manganese-54

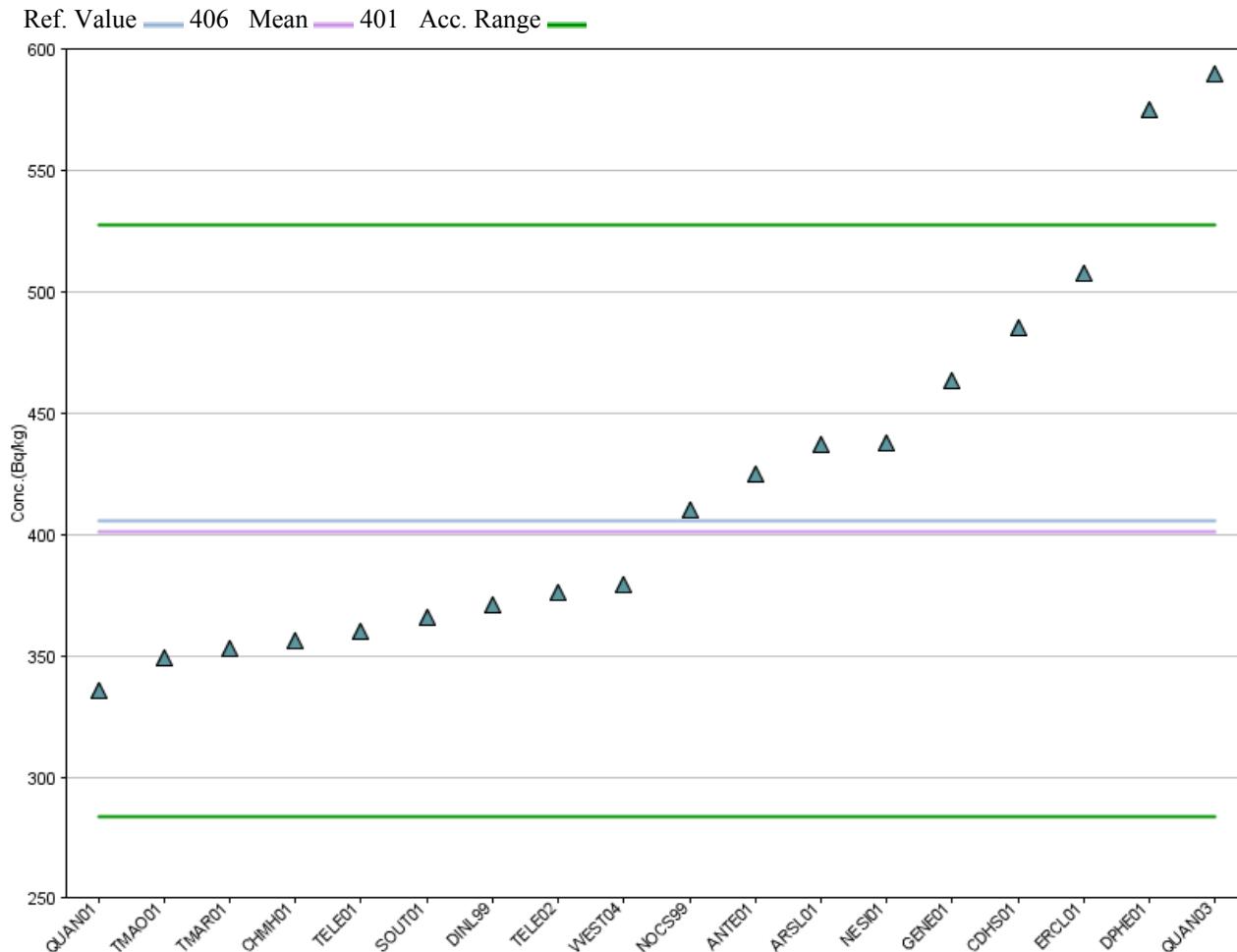
MAPEP-12-MaS27



Note: This chart shows only data points with values between 657.00 and 1,267.00 (± 5 Standard Deviations)

Nickel-63

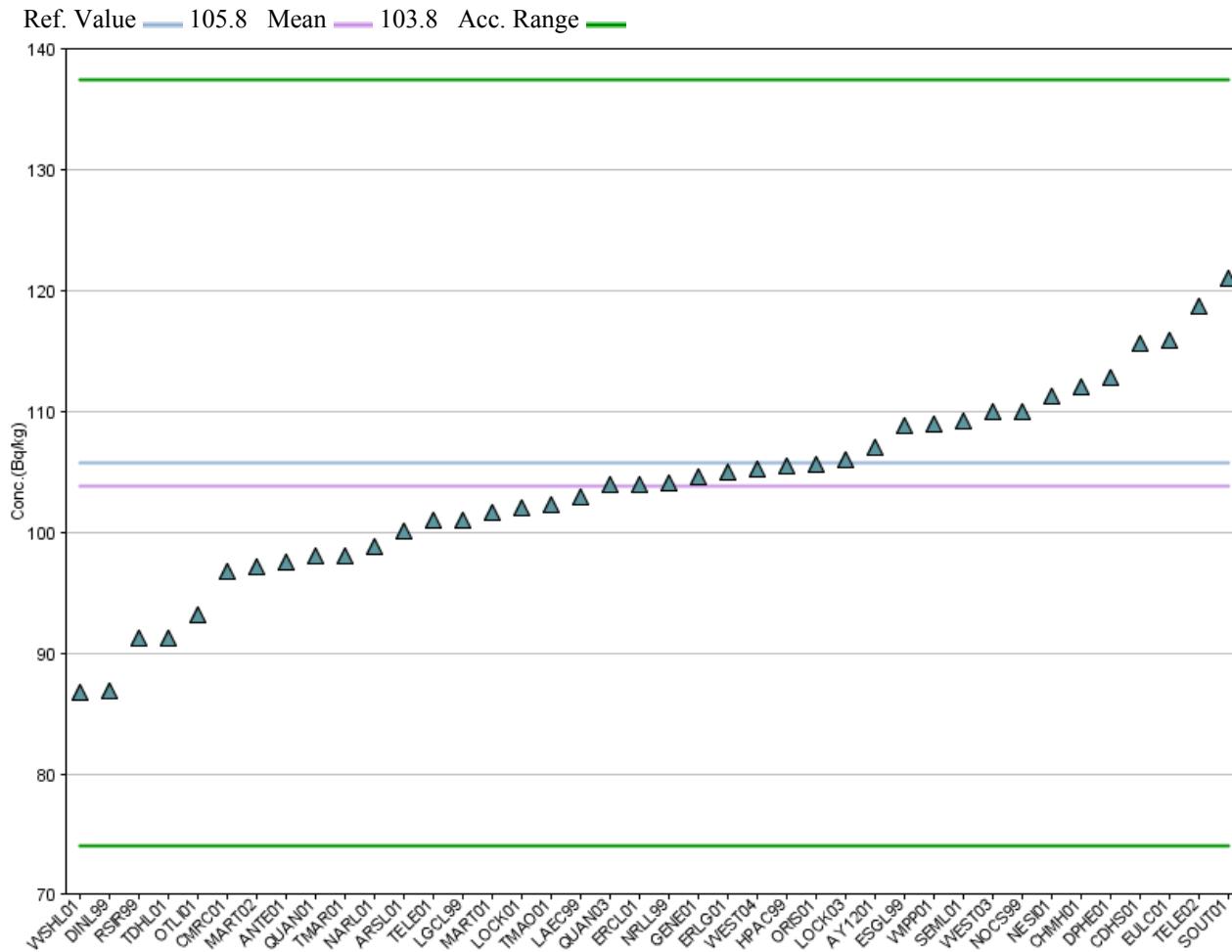
MAPEP-12-MaS27



Note: This chart shows only data points with values between 136.00 and 666.00 (± 5 Standard Deviations)

Plutonium-238

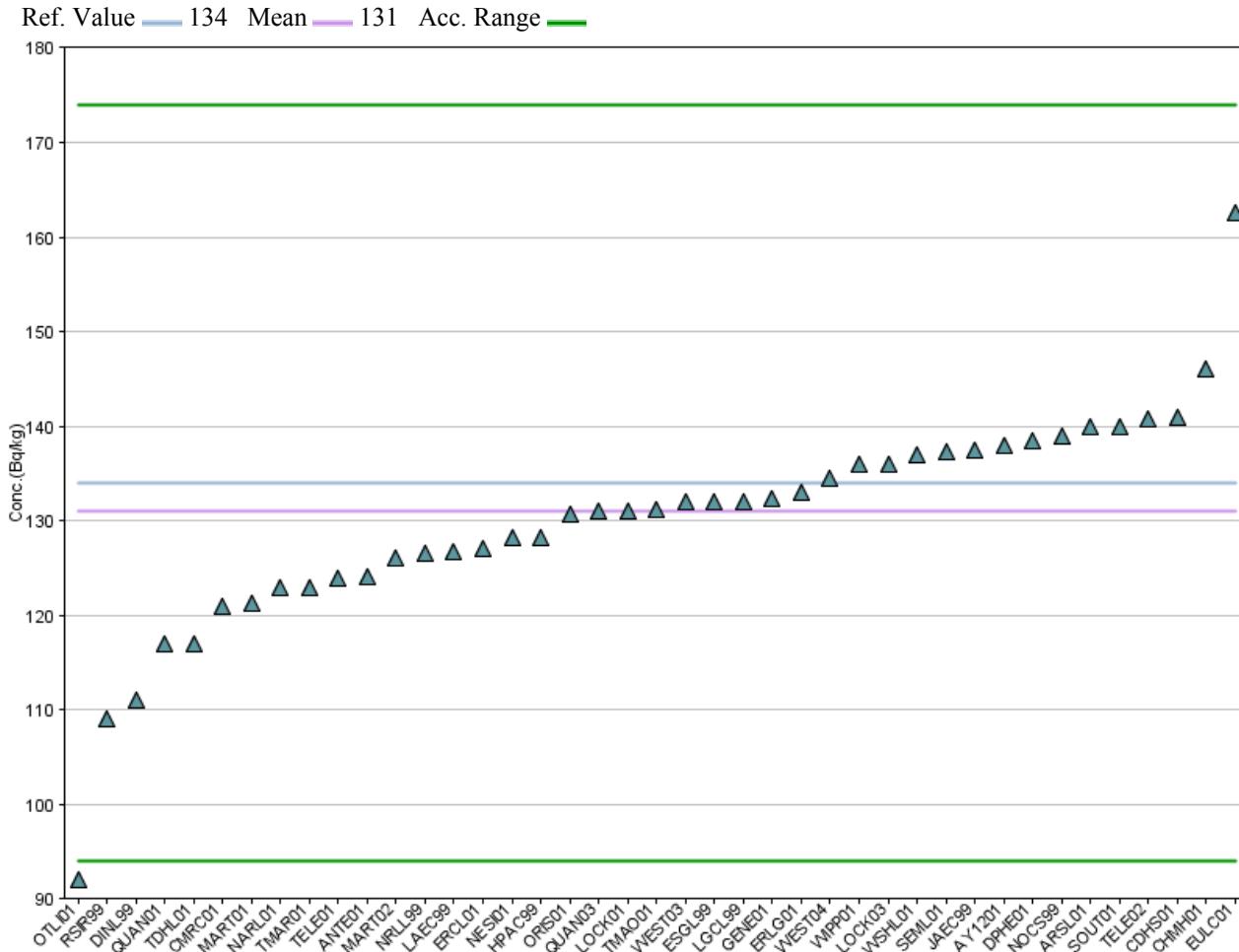
MAPEP-12-MaS27



Note: This chart shows only data points with values between 64.30 and 143.30 (± 5 Standard Deviations)

Plutonium-239/240

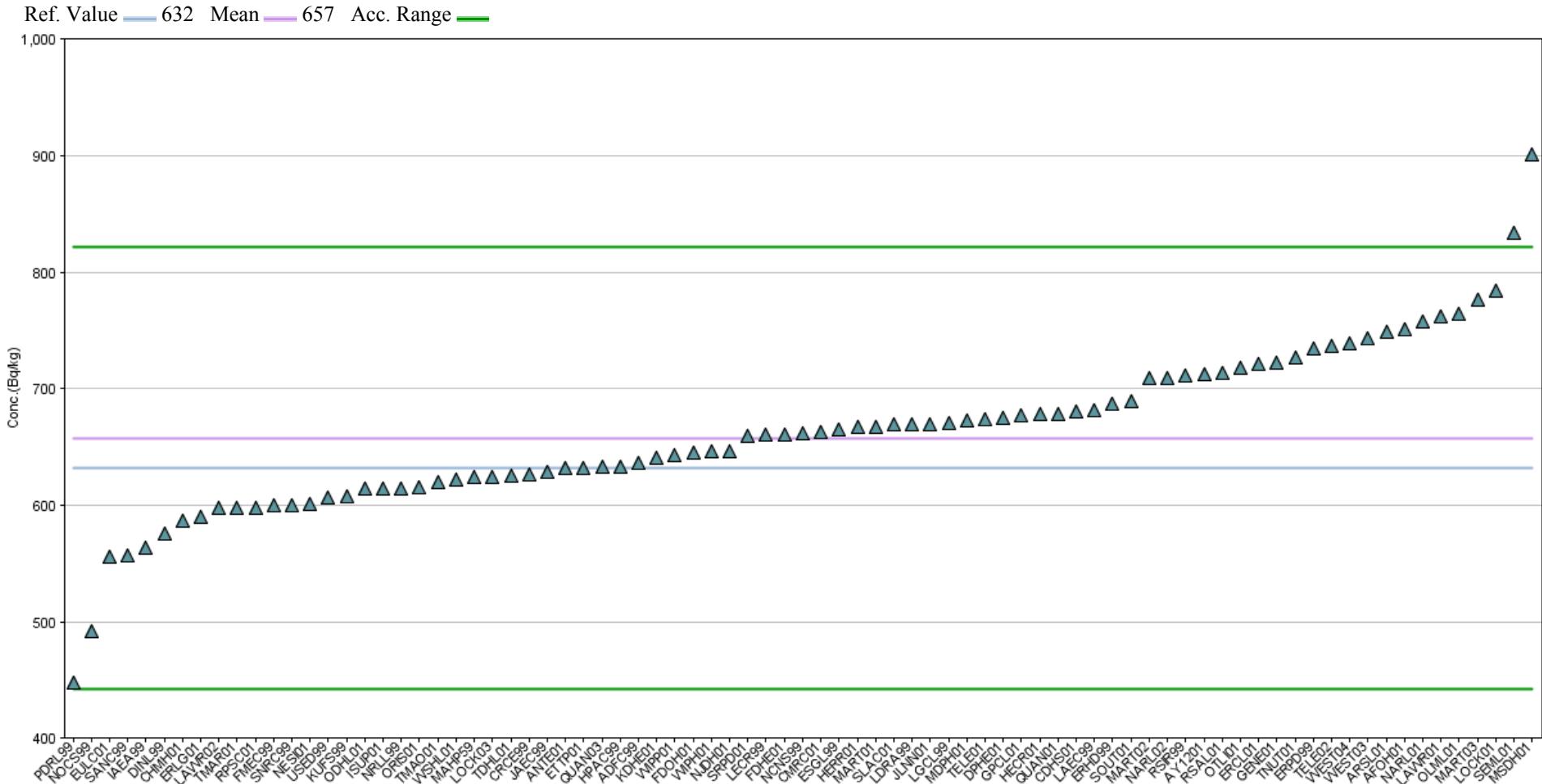
MAPEP-12-MaS27



Note: This chart shows only data points with values between 81.00 and 181.00 (± 5 Standard Deviations)

Potassium-40

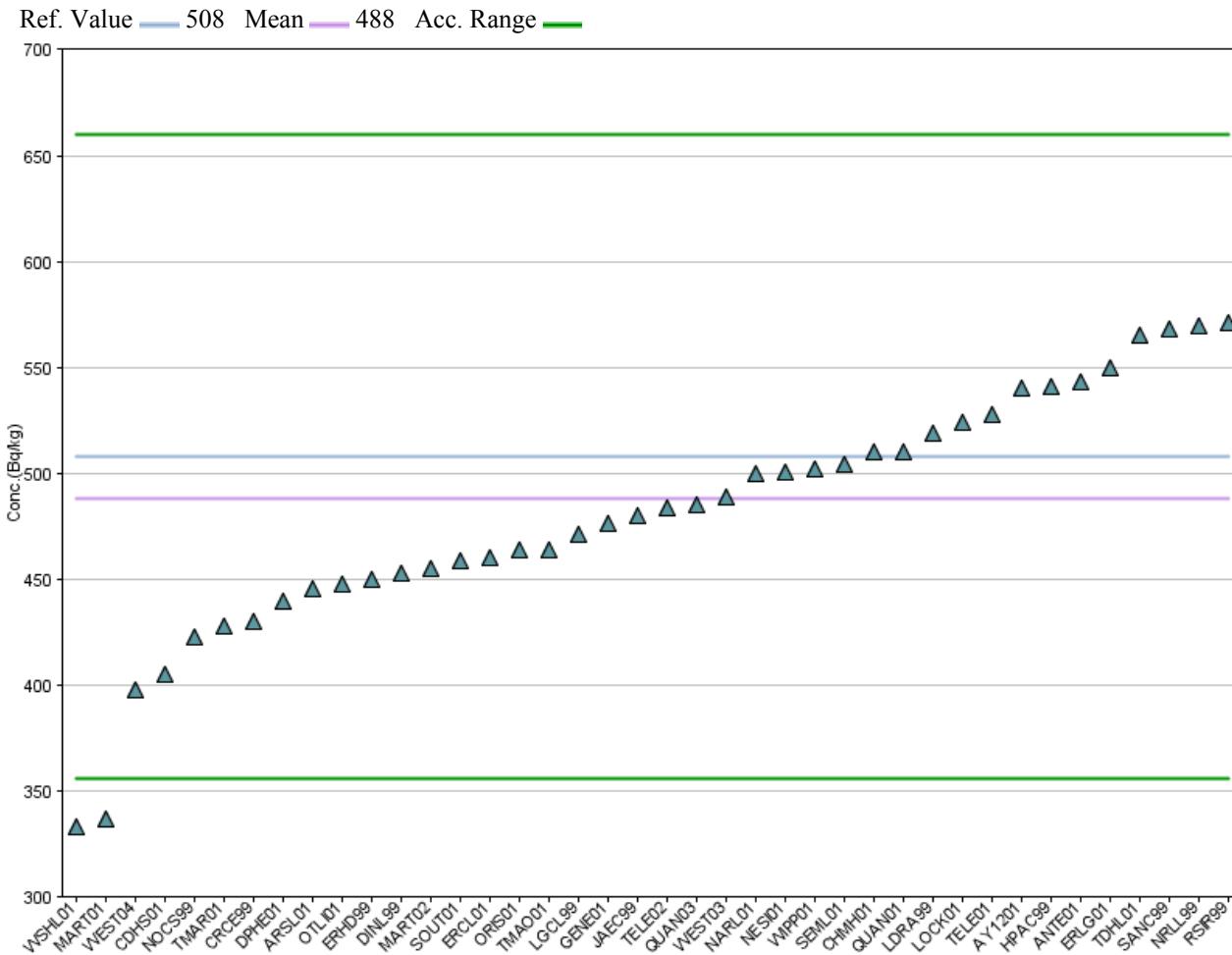
MAPEP-12-MaS27



Note: This chart shows only data points with values between 347.00 and 967.00 (± 5 Standard Deviations)

Strontium-90

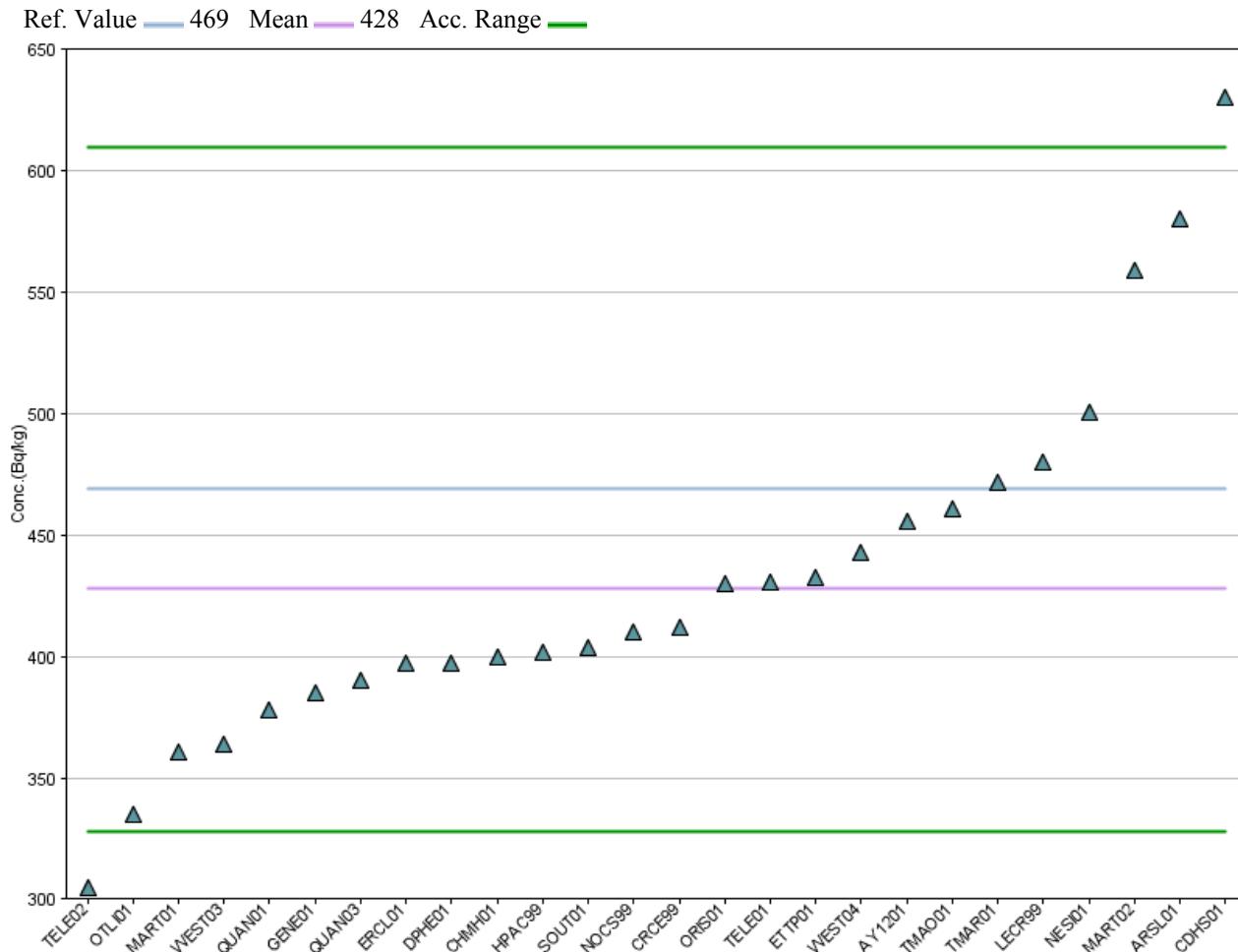
MAPEP-12-MaS27



Note: This chart shows only data points with values between 253.00 and 723.00 (± 5 Standard Deviations)

Technetium-99

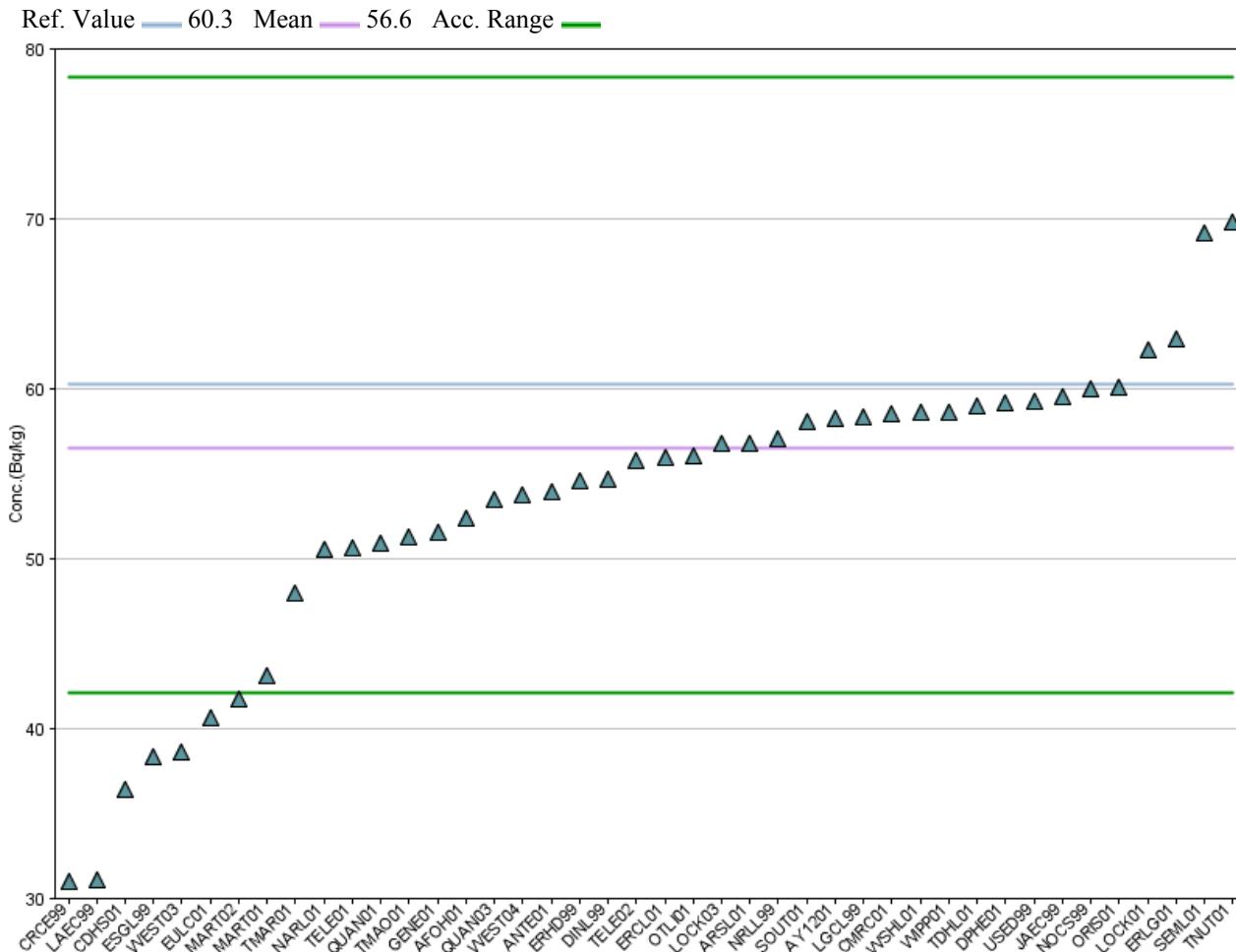
MAPEP-12-MaS27



Note: This chart shows only data points with values between 133.00 and 723.00 (± 5 Standard Deviations)

Uranium-234/233

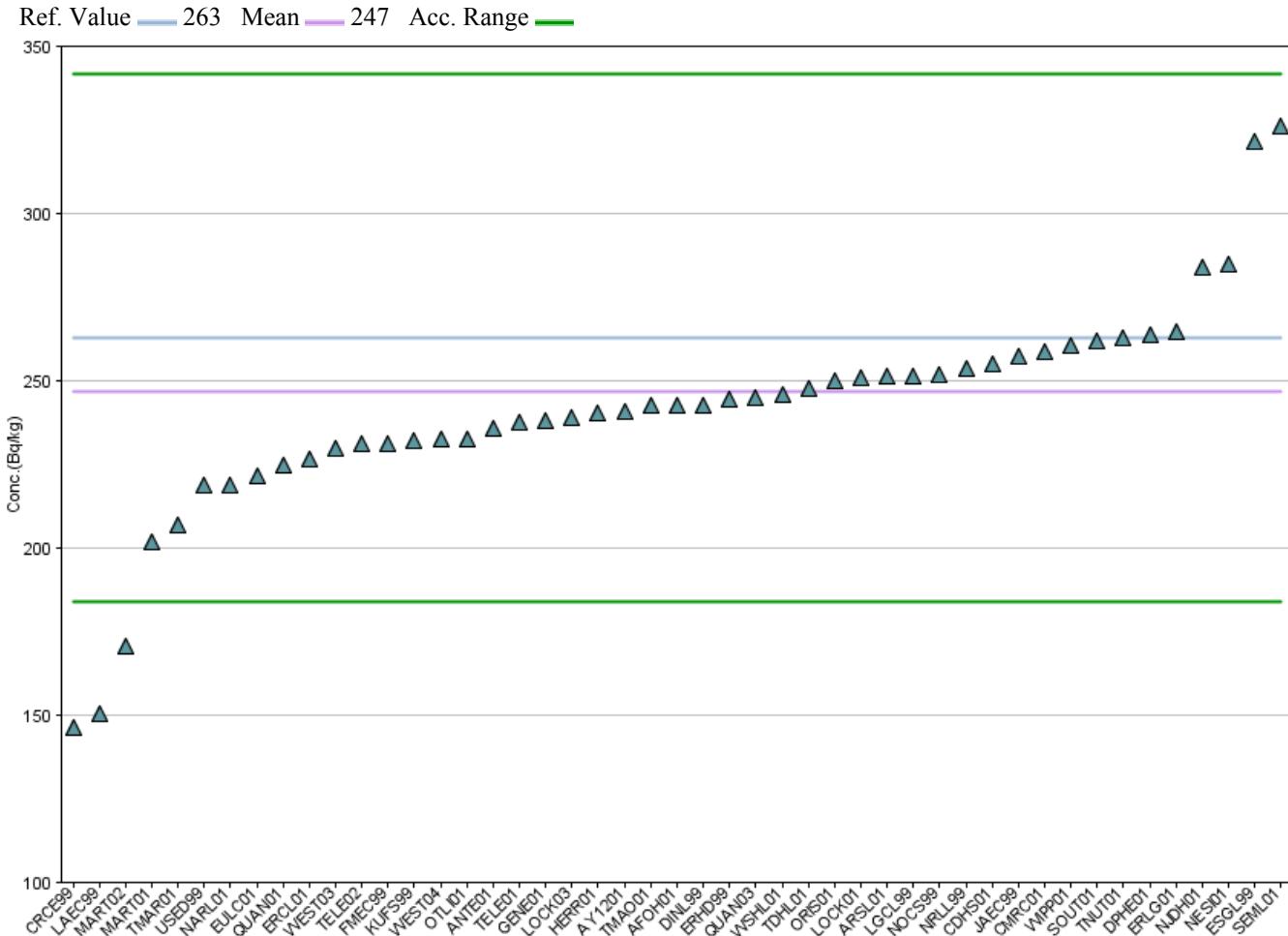
MAPEP-12-MaS27



Note: This chart shows only data points with values between 30.10 and 83.10 (± 5 Standard Deviations)

Uranium-238

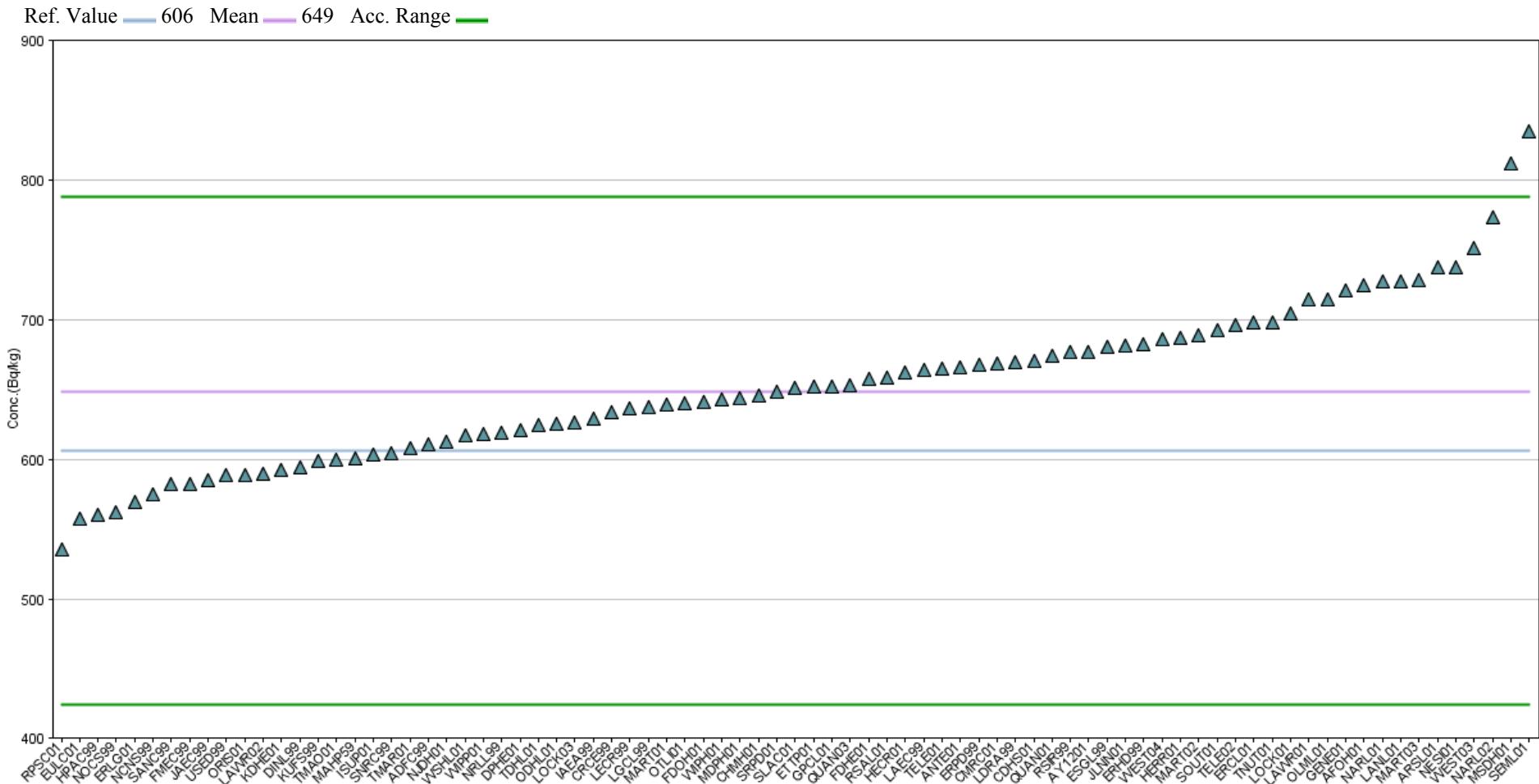
MAPEP-12-MaS27



Note: This chart shows only data points with values between 127.00 and 367.00 (± 5 Standard Deviations)

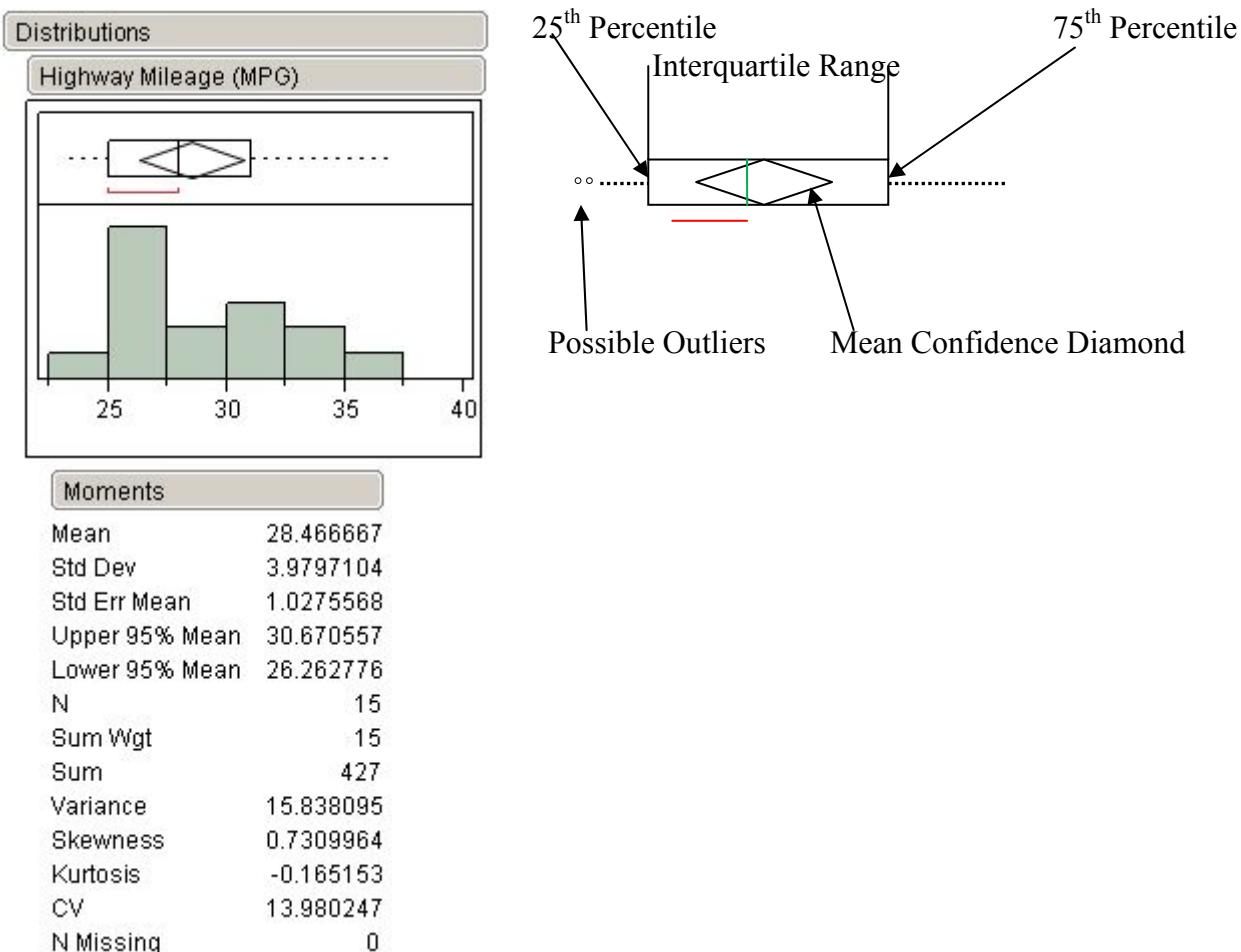
Zinc-65

MAPEP-12-MaS27



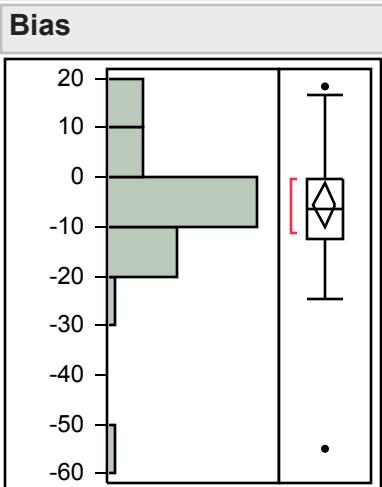
Note: This chart shows only data points with values between 394.00 and 904.00 (± 5 Standard Deviations)

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.



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.

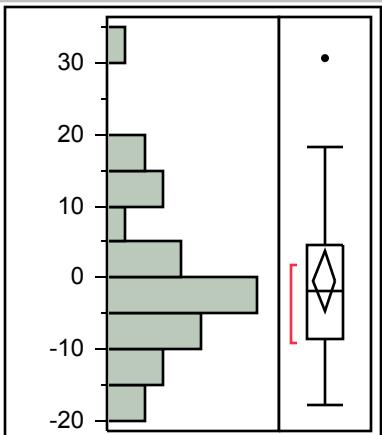
The box plot of the bias data points and the mean visually illustrate the breadth of the distribution and where any potential outliers in the distribution might lie. The moments for the distribution plot are provided below the Bias plot. In some cases, N becomes very small and thus developed statistics may not accurately reflect estimates of the population if N were a significantly larger value.

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

100.0%	maximum	18.4
99.5%		18.4
97.5%		18.4
90.0%		11.16
75.0%	quartile	-0.5
50.0%	median	-6.3
25.0%	quartile	-12.7
10.0%		-17.48
2.5%		-55
0.5%		-55
0.0%	minimum	-55

Summary Statistics

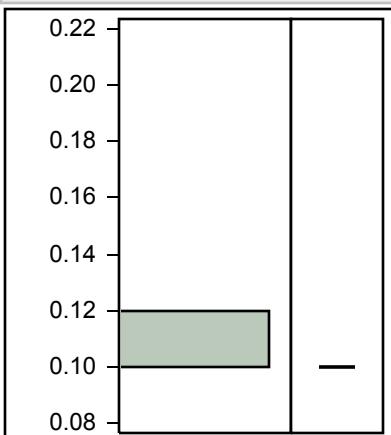
Mean	-5.697143
Std Dev	13.164312
Std Err Mean	2.2251749
Upper 95% Mean	-1.175043
Lower 95% Mean	-10.21924
N	35

MaS Distribution by Detection Method**Distributions Analyte_Detection=Americium-****241 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	30.6
99.5%		30.6
97.5%		30.6
90.0%		16.6
75.0%	quartile	4.6
50.0%	median	-1.8
25.0%	quartile	-8.55
10.0%		-14.4
2.5%		-17.6
0.5%		-17.6
0.0%	minimum	-17.6

Summary Statistics

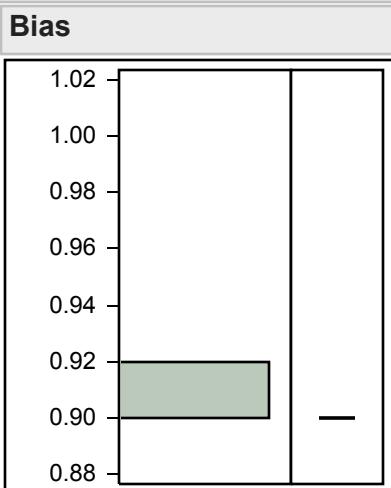
Mean	-0.424138
Std Dev	10.98306
Std Err Mean	2.0395031
Upper 95% Mean	3.7535947
Lower 95% Mean	-4.601871
N	29

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-
134 Alpha 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

Summary Statistics

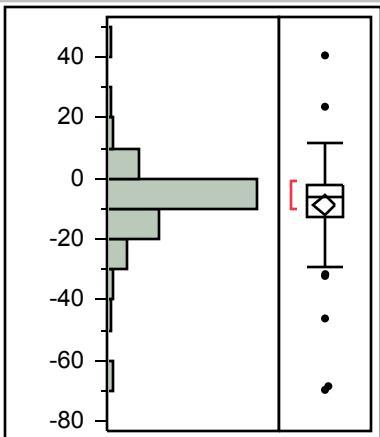
Mean	0.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-134****Beta Counting - liquid scintillation counter****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

Summary Statistics

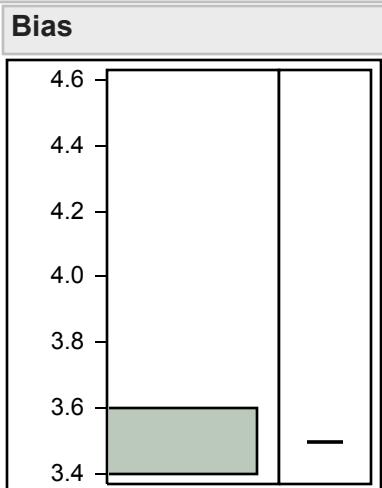
Mean	0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-
134 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	40.5
99.5%		40.5
97.5%		22.715
90.0%		2.53
75.0%	quartile	-1.875
50.0%	median	-6.1
25.0%	quartile	-12.825
10.0%		-22.51
2.5%		-66.728
0.5%		-69.6
0.0%	minimum	-69.6

Summary Statistics

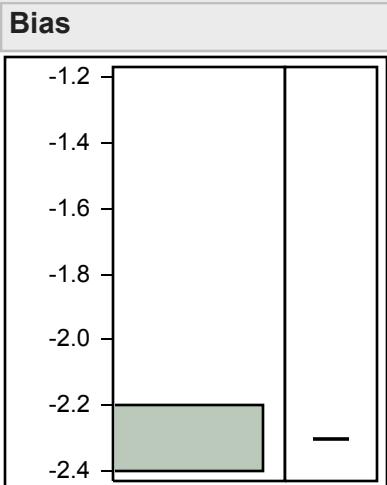
Mean	-8.534146
Std Dev	14.912015
Std Err Mean	1.6467566
Upper 95% Mean	-5.257617
Lower 95% Mean	-11.81068
N	82

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-137 Alpha Spectrometry****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

Summary Statistics

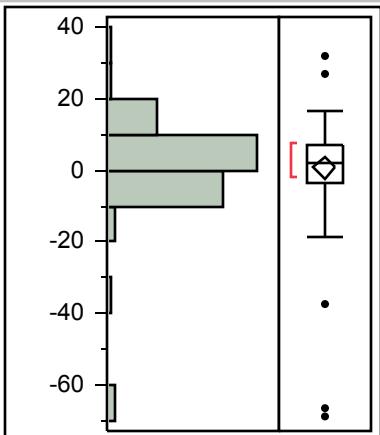
Mean	3.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-137****Beta Counting - liquid scintillation counter****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	-2.3
25.0%	quartile	-2.3
10.0%		-2.3
2.5%		-2.3
0.5%		-2.3
0.0%	minimum	-2.3

Summary Statistics

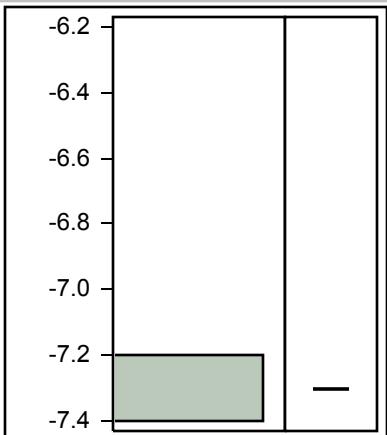
Mean	-2.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cesium-
137 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	31.8
99.5%		31.8
97.5%		25.79
90.0%		13.38
75.0%	quartile	7
50.0%	median	2
25.0%	quartile	-3.4
10.0%		-7.54
2.5%		-63.4
0.5%		-68.6
0.0%	minimum	-68.6

Summary Statistics

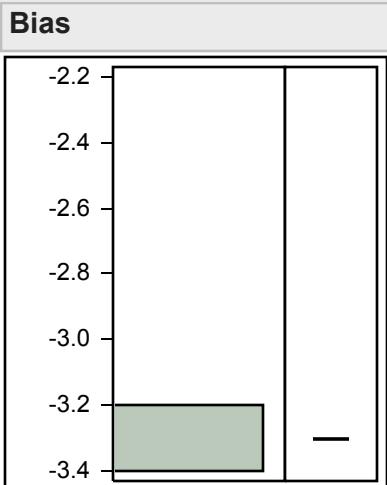
Mean	0.8072289
Std Dev	14.123694
Std Err Mean	1.5502768
Upper 95% Mean	3.8912233
Lower 95% Mean	-2.276765
N	83

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-57 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	-7.3
99.5%		-7.3
97.5%		-7.3
90.0%		-7.3
75.0%	quartile	-7.3
50.0%	median	-7.3
25.0%	quartile	-7.3
10.0%		-7.3
2.5%		-7.3
0.5%		-7.3
0.0%	minimum	-7.3

Summary Statistics

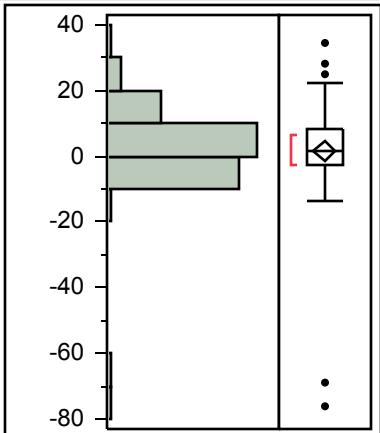
Mean	-7.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-57****Beta Counting - liquid scintillation counter****Quantiles**

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

Summary Statistics

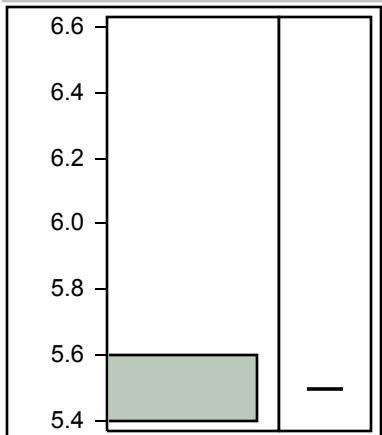
Mean	-3.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

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

100.0%	maximum	34.4
99.5%		34.4
97.5%		27.94
90.0%		15.28
75.0%	quartile	8
50.0%	median	1.7
25.0%	quartile	-2.55
10.0%		-7.74
2.5%		-66.045
0.5%		-76
0.0%	minimum	-76

Summary Statistics

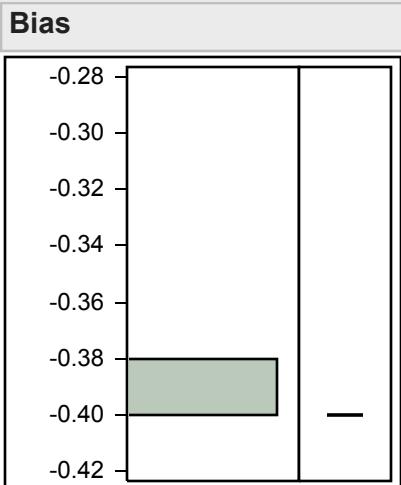
Mean	1.5493827
Std Dev	14.774684
Std Err Mean	1.6416315
Upper 95% Mean	4.8163336
Lower 95% Mean	-1.717568
N	81

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-60 Alpha Spectrometry****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

Summary Statistics

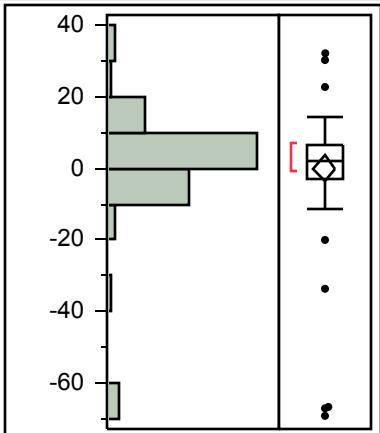
Mean	5.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-60****Beta Counting - liquid scintillation counter****Quantiles**

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

Summary Statistics

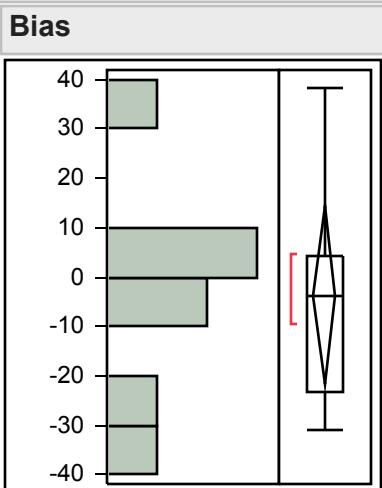
Mean	-0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt-60 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	32
99.5%		32
97.5%		29.725
90.0%		11.7
75.0%	quartile	6.25
50.0%	median	2.1
25.0%	quartile	-2.9
10.0%		-8.56
2.5%		-66.88
0.5%		-69
0.0%	minimum	-69

Summary Statistics

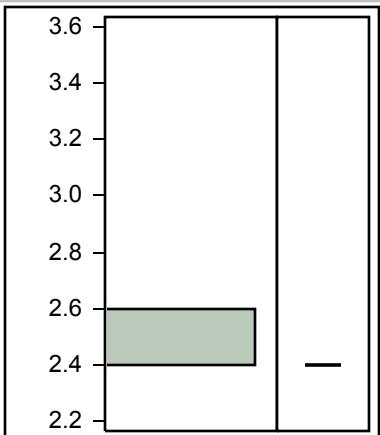
Mean	-0.151852
Std Dev	15.989005
Std Err Mean	1.7765561
Upper 95% Mean	3.3836075
Lower 95% Mean	-3.687311
N	81

MaS Distribution by Detection Method**Distributions Analyte_Detection=Iron-55****Beta Counting - liquid scintillation counter****Quantiles**

100.0%	maximum	38.2
99.5%		38.2
97.5%		38.2
90.0%		38.2
75.0%	quartile	4.325
50.0%	median	-3.75
25.0%	quartile	-23.475
10.0%		-30.9
2.5%		-30.9
0.5%		-30.9
0.0%	minimum	-30.9

Summary Statistics

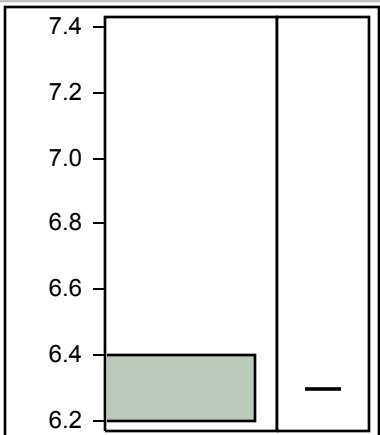
Mean	-3.75
Std Dev	21.619766
Std Err Mean	7.6437416
Upper 95% Mean	14.324577
Lower 95% Mean	-21.82458
N	8

MaS Distribution by Detection Method**Distributions Analyte_Detection=Iron-55 Gamma Spectrometry****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

Summary Statistics

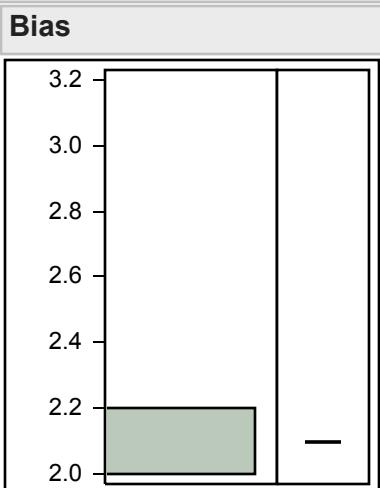
Mean	2.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Manganese-
54 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	6.3
99.5%		6.3
97.5%		6.3
90.0%		6.3
75.0%	quartile	6.3
50.0%	median	6.3
25.0%	quartile	6.3
10.0%		6.3
2.5%		6.3
0.5%		6.3
0.0%	minimum	6.3

Summary Statistics

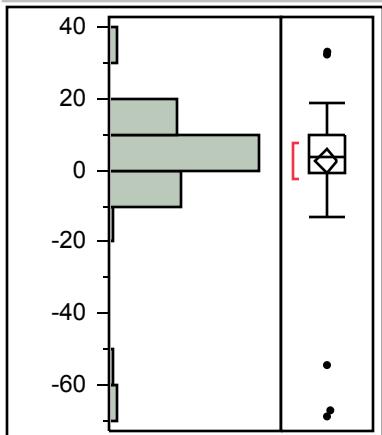
Mean	6.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Manganese-54****Beta Counting - liquid scintillation counter****Quantiles**

100.0%	maximum	2.1
99.5%		2.1
97.5%		2.1
90.0%		2.1
75.0%	quartile	2.1
50.0%	median	2.1
25.0%	quartile	2.1
10.0%		2.1
2.5%		2.1
0.5%		2.1
0.0%	minimum	2.1

Summary Statistics

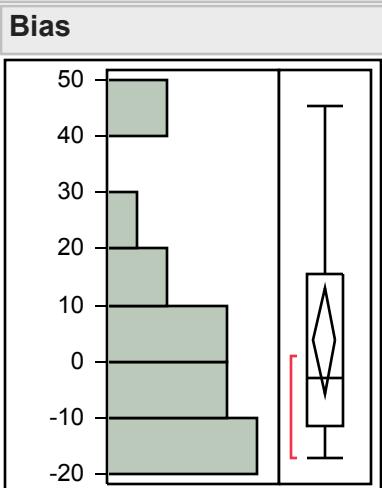
Mean	2.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Manganese-
54 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	33
99.5%		33
97.5%		31.1725
90.0%		15.27
75.0%	quartile	9.925
50.0%	median	3.55
25.0%	quartile	-0.775
10.0%		-4.67
2.5%		-65.955
0.5%		-68.6
0.0%	minimum	-68.6

Summary Statistics

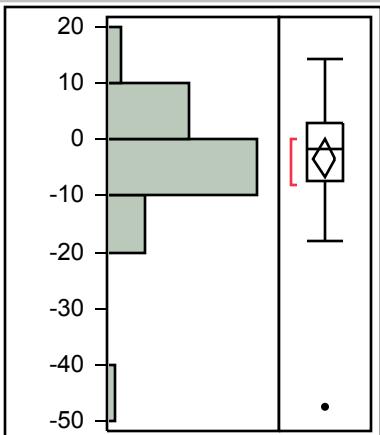
Mean	2.7414634
Std Dev	15.178908
Std Err Mean	1.67623
Upper 95% Mean	6.0766353
Lower 95% Mean	-0.593708
N	82

MaS Distribution by Detection Method**Distributions Analyte_Detection=Nickel-63****Beta Counting - liquid scintillation counter****Quantiles**

100.0%	maximum	45.3
99.5%		45.3
97.5%		45.3
90.0%		42.06
75.0%	quartile	15.55
50.0%	median	-2.75
25.0%	quartile	-11.55
10.0%		-14.32
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Summary Statistics

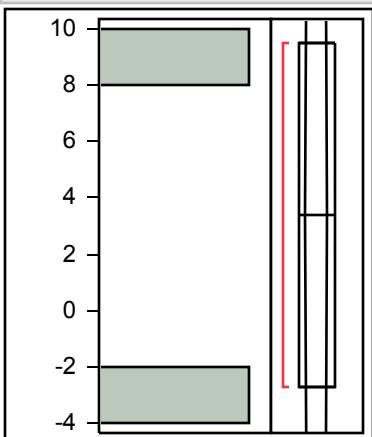
Mean	3.7166667
Std Dev	18.960245
Std Err Mean	4.4689726
Upper 95% Mean	13.145375
Lower 95% Mean	-5.712041
N	18

MaS Distribution by Detection Method**Distributions Analyte_Detection=Plutonium-238 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	14.4
99.5%		14.4
97.5%		14.4
90.0%		6.6
75.0%	quartile	3
50.0%	median	-1.7
25.0%	quartile	-7.4
10.0%		-13.7
2.5%		-47.4
0.5%		-47.4
0.0%	minimum	-47.4

Summary Statistics

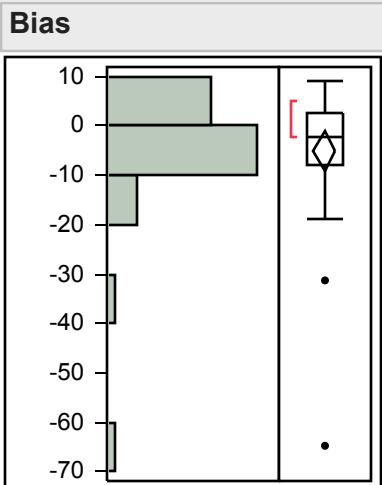
Mean	-3.317949
Std Dev	10.333667
Std Err Mean	1.654711
Upper 95% Mean	0.0318385
Lower 95% Mean	-6.667736
N	39

MaS Distribution by Detection Method**Distributions Analyte_Detection=Plutonium-
238 Gamma Spectrometry****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	3.4
25.0%	quartile	-2.7
10.0%		-2.7
2.5%		-2.7
0.5%		-2.7
0.0%	minimum	-2.7

Summary Statistics

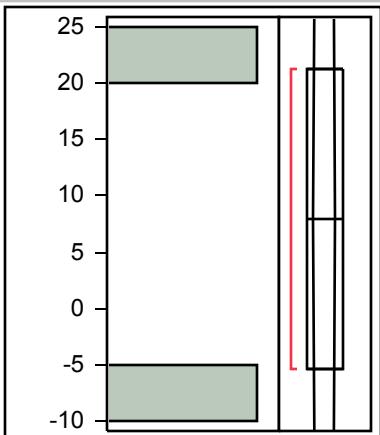
Mean	3.4
Std Dev	8.6267027
Std Err Mean	6.1
Upper 95% Mean	80.907849
Lower 95% Mean	-74.10785
N	2

MaS Distribution by Detection Method**Distributions Analyte_Detection=Plutonium-239/240 Alpha Spectrometry****Quantiles**

100.0%	maximum	9
99.5%		9
97.5%		8.905
90.0%		4.49
75.0%	quartile	2.425
50.0%	median	-2.15
25.0%	quartile	-8.025
10.0%		-16.75
2.5%		-63.963
0.5%		-64.8
0.0%	minimum	-64.8

Summary Statistics

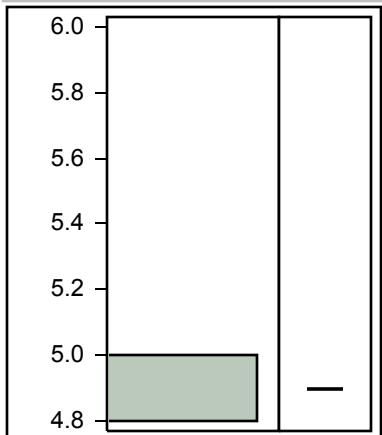
Mean	-4.995
Std Dev	12.369855
Std Err Mean	1.9558458
Upper 95% Mean	-1.038929
Lower 95% Mean	-8.951071
N	40

MaS Distribution by Detection Method**Distributions Analyte_Detection=Plutonium-239/240 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	21.3
99.5%		21.3
97.5%		21.3
90.0%		21.3
75.0%	quartile	21.3
50.0%	median	7.95
25.0%	quartile	-5.4
10.0%		-5.4
2.5%		-5.4
0.5%		-5.4
0.0%	minimum	-5.4

Summary Statistics

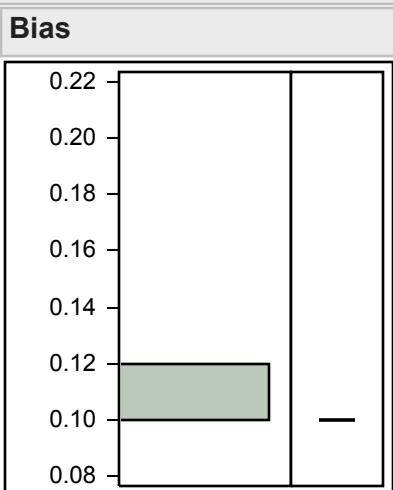
Mean	7.95
Std Dev	18.879751
Std Err Mean	13.35
Upper 95% Mean	177.57783
Lower 95% Mean	-161.6778
N	2

MaS Distribution by Detection Method**Distributions Analyte_Detection=Potassium-
40 Alpha Spectrometry****Bias****Quantiles**

100.0%	maximum	4.9
99.5%		4.9
97.5%		4.9
90.0%		4.9
75.0%	quartile	4.9
50.0%	median	4.9
25.0%	quartile	4.9
10.0%		4.9
2.5%		4.9
0.5%		4.9
0.0%	minimum	4.9

Summary Statistics

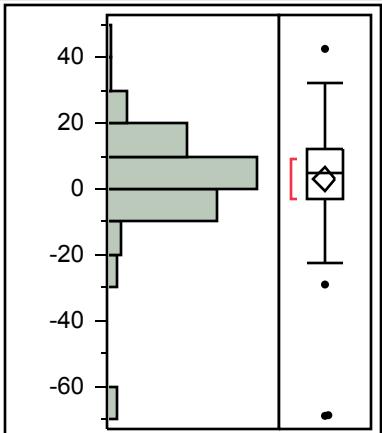
Mean	4.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Potassium-40****Beta Counting - liquid scintillation counter****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

Summary Statistics

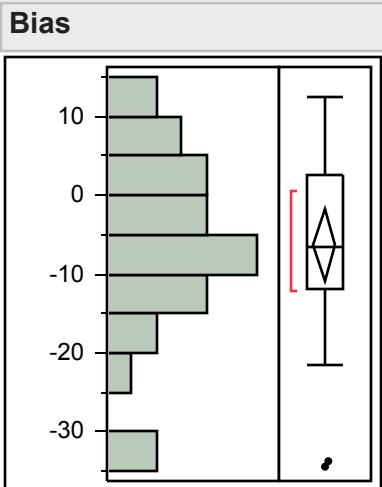
Mean	0.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Potassium-
40 Gamma Spectrometry****Bias****Quantiles**

100.0%	maximum	42.6
99.5%		42.6
97.5%		31.605
90.0%		18.72
75.0%	quartile	12.45
50.0%	median	4.6
25.0%	quartile	-2.75
10.0%		-8.54
2.5%		-66.715
0.5%		-68.9
0.0%	minimum	-68.9

Summary Statistics

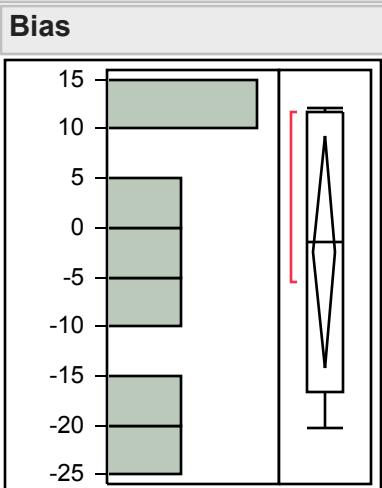
Mean	3.0679012
Std Dev	15.971794
Std Err Mean	1.7746438
Upper 95% Mean	6.5995549
Lower 95% Mean	-0.463752
N	81

MaS Distribution by Detection Method**Distributions Analyte_Detection=Strontium-90****Beta Counting - 2 pi gas flow proportional counter****Quantiles**

100.0%	maximum	12.4
99.5%		12.4
97.5%		12.4
90.0%		7.33
75.0%	quartile	2.5
50.0%	median	-6.7
25.0%	quartile	-11.85
10.0%		-22.81
2.5%		-34.4
0.5%		-34.4
0.0%	minimum	-34.4

Summary Statistics

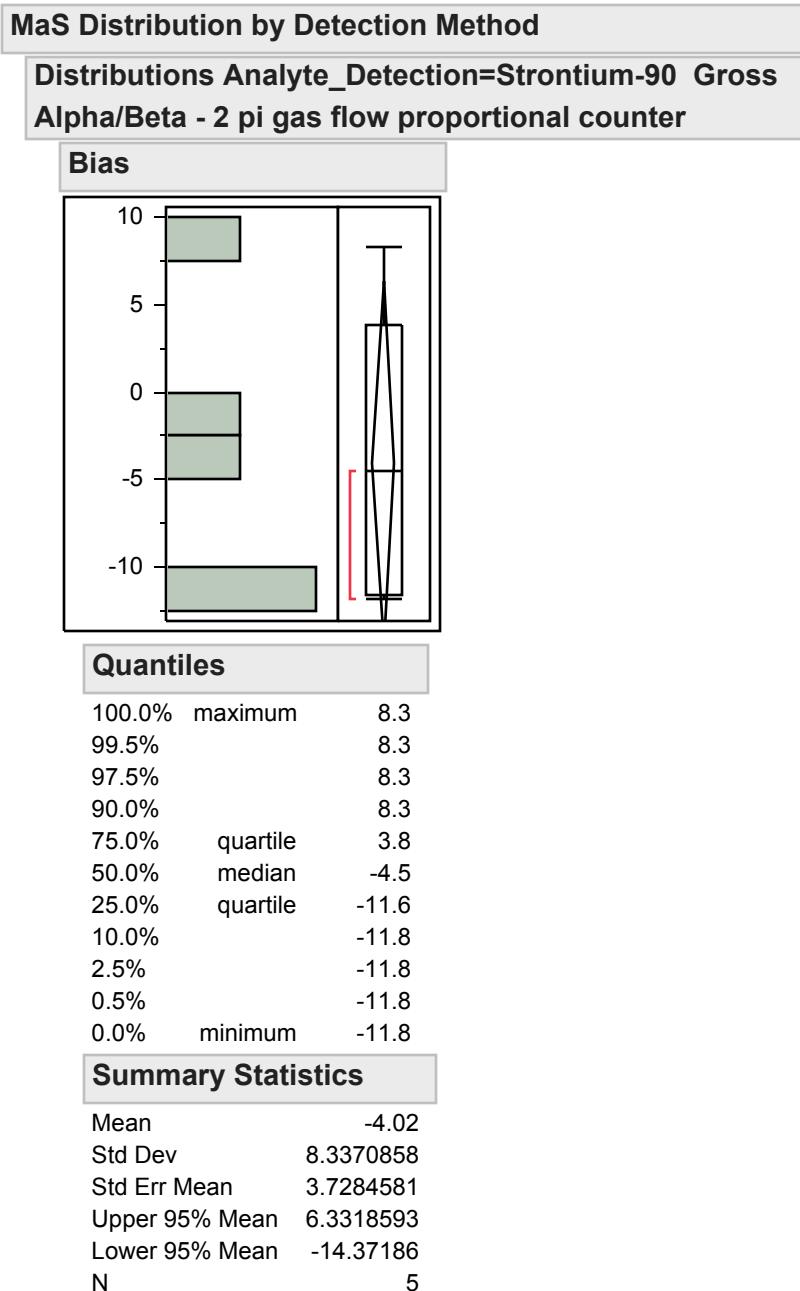
Mean	-6.335714
Std Dev	11.537707
Std Err Mean	2.1804216
Upper 95% Mean	-1.861859
Lower 95% Mean	-10.80957
N	28

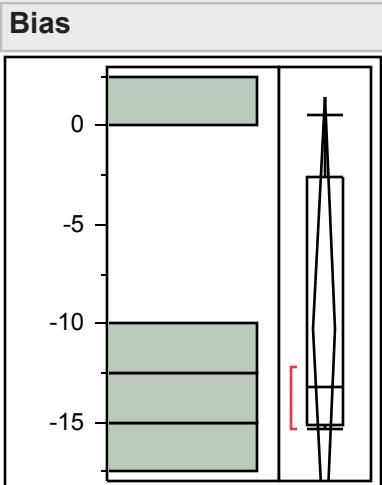
MaS Distribution by Detection Method**Distributions Analyte_Detection=Strontium-90****Beta Counting - liquid scintillation counter****Quantiles**

100.0%	maximum	12.2
99.5%		12.2
97.5%		12.2
90.0%		12.2
75.0%	quartile	11.8
50.0%	median	-1.4
25.0%	quartile	-16.7
10.0%		-20.3
2.5%		-20.3
0.5%		-20.3
0.0%	minimum	-20.3

Summary Statistics

Mean	-2.528571
Std Dev	12.723694
Std Err Mean	4.8091042
Upper 95% Mean	9.2388826
Lower 95% Mean	-14.29603
N	7

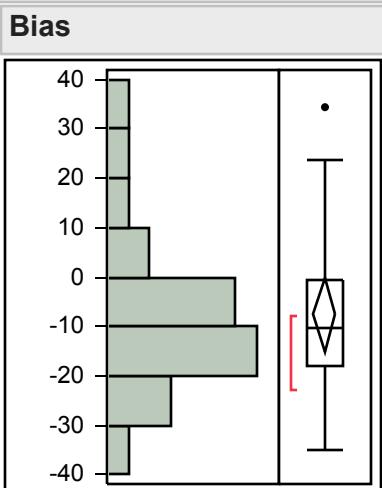


MaS Distribution by Detection Method**Distributions Analyte_Detection=Technetium-99****Beta Counting - 2 pi gas flow proportional counter****Quantiles**

100.0%	maximum	0.6
99.5%		0.6
97.5%		0.6
90.0%		0.6
75.0%	quartile	-2.6
50.0%	median	-13.25
25.0%	quartile	-15.125
10.0%		-15.4
2.5%		-15.4
0.5%		-15.4
0.0%	minimum	-15.4

Summary Statistics

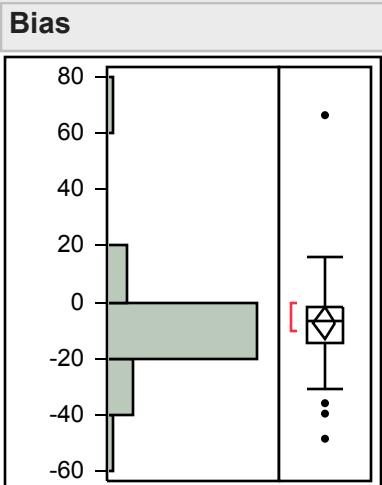
Mean	-10.325
Std Dev	7.4033213
Std Err Mean	3.7016607
Upper 95% Mean	1.4553363
Lower 95% Mean	-22.10534
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Technetium-99****Beta Counting - liquid scintillation counter****Quantiles**

100.0%	maximum	34.4
99.5%		34.4
97.5%		34.4
90.0%		22.35
75.0%	quartile	-0.7
50.0%	median	-10.45
25.0%	quartile	-18.2
10.0%		-26.92
2.5%		-35
0.5%		-35
0.0%	minimum	-35

Summary Statistics

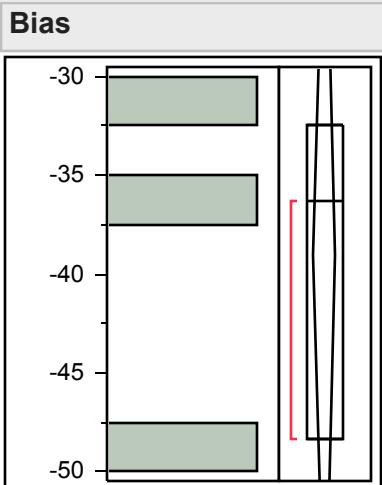
Mean	-7.604545
Std Dev	16.87575
Std Err Mean	3.5979219
Upper 95% Mean	-0.122257
Lower 95% Mean	-15.08683
N	22

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
234/233 Alpha Spectrometry****Quantiles**

100.0%	maximum	66.3
99.5%		66.3
97.5%		65.04
90.0%		4.38
75.0%	quartile	-1.9
50.0%	median	-6.4
25.0%	quartile	-14.775
10.0%		-30.47
2.5%		-48.178
0.5%		-48.4
0.0%	minimum	-48.4

Summary Statistics

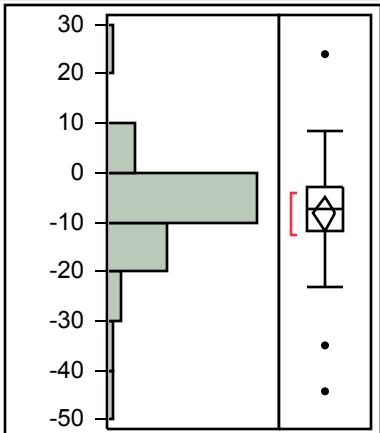
Mean	-7.59
Std Dev	17.641934
Std Err Mean	2.7894347
Upper 95% Mean	-1.947836
Lower 95% Mean	-13.23216
N	40

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
234/233 Gamma Spectrometry****Quantiles**

100.0%	maximum	-32.5
99.5%		-32.5
97.5%		-32.5
90.0%		-32.5
75.0%	quartile	-32.5
50.0%	median	-36.3
25.0%	quartile	-48.4
10.0%		-48.4
2.5%		-48.4
0.5%		-48.4
0.0%	minimum	-48.4

Summary Statistics

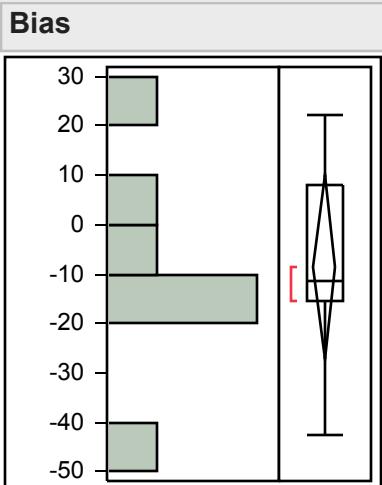
Mean	-39.06667
Std Dev	8.3032122
Std Err Mean	4.7938618
Upper 95% Mean	-18.44034
Lower 95% Mean	-59.69299
N	3

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

100.0%	maximum	24
99.5%		24
97.5%		23.6125
90.0%		0.27
75.0%	quartile	-3.1
50.0%	median	-7.3
25.0%	quartile	-11.95
10.0%		-20.85
2.5%		-44.068
0.5%		-44.3
0.0%	minimum	-44.3

Summary Statistics

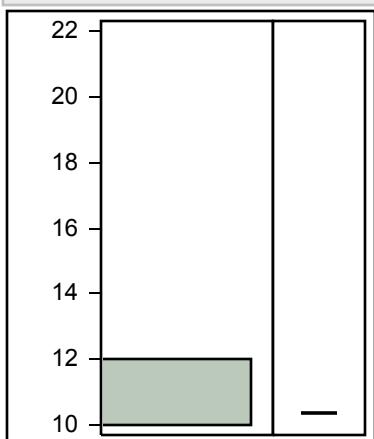
Mean	-8.2075
Std Dev	10.817422
Std Err Mean	1.7103845
Upper 95% Mean	-4.747921
Lower 95% Mean	-11.66708
N	40

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
238 Gamma Spectrometry****Quantiles**

100.0%	maximum	22.4
99.5%		22.4
97.5%		22.4
90.0%		22.4
75.0%	quartile	8
50.0%	median	-11.6
25.0%	quartile	-15.6
10.0%		-42.8
2.5%		-42.8
0.5%		-42.8
0.0%	minimum	-42.8

Summary Statistics

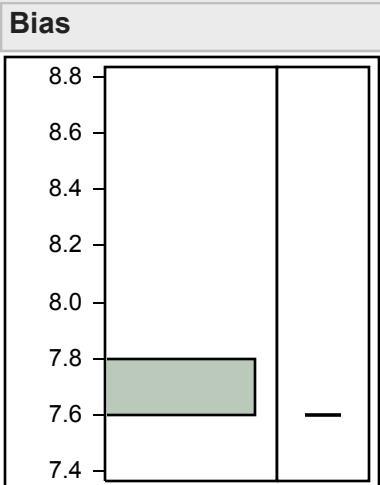
Mean	-8.6
Std Dev	20.313214
Std Err Mean	7.6776733
Upper 95% Mean	10.18659
Lower 95% Mean	-27.38659
N	7

MaS Distribution by Detection Method**Distributions Analyte_Detection=Zinc-
65 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

Summary Statistics

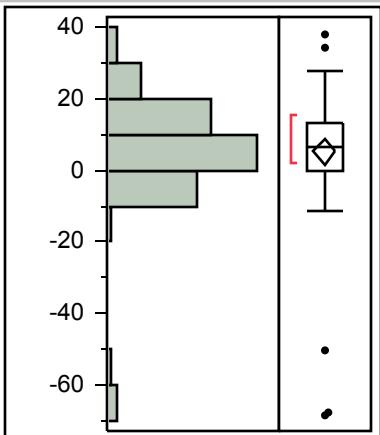
Mean	10.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Zinc-65****Beta Counting - liquid scintillation counter****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

Summary Statistics

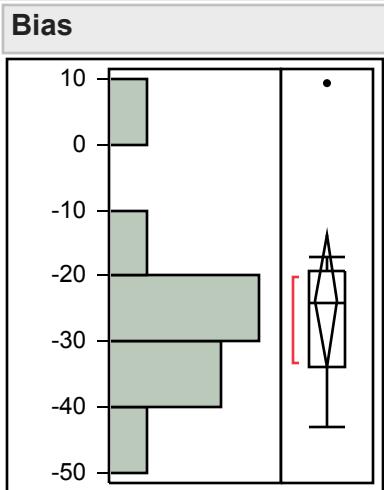
Mean	7.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

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

100.0%	maximum	37.8
99.5%		37.8
97.5%		33.62
90.0%		20.1
75.0%	quartile	13.325
50.0%	median	6.4
25.0%	quartile	-0.425
10.0%		-5.69
2.5%		-66.203
0.5%		-68.3
0.0%	minimum	-68.3

Summary Statistics

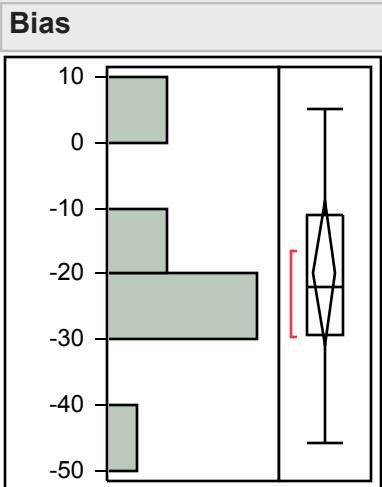
Mean	5.1756098
Std Dev	16.290773
Std Err Mean	1.7990149
Upper 95% Mean	8.7550851
Lower 95% Mean	1.5961344
N	82

MaS Distribution by Detection Method**Distributions Analyte_Detection=Antimony Axial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	9.3
99.5%		9.3
97.5%		9.3
90.0%		6.65
75.0%	quartile	-19.375
50.0%	median	-24.2
25.0%	quartile	-33.7
10.0%		-42.01
2.5%		-42.8
0.5%		-42.8
0.0%	minimum	-42.8

Summary Statistics

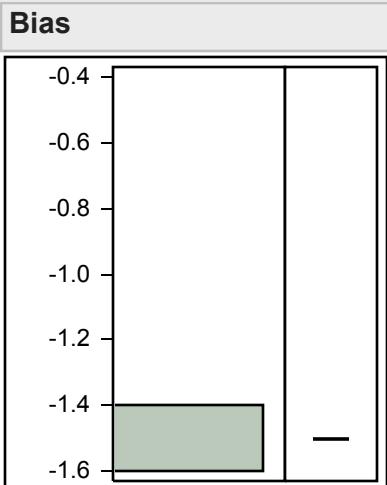
Mean	-23.89
Std Dev	14.097632
Std Err Mean	4.4580626
Upper 95% Mean	-13.80516
Lower 95% Mean	-33.97484
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Antimony
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.02
75.0%	quartile	-10.925
50.0%	median	-22
25.0%	quartile	-29.225
10.0%		-44.18
2.5%		-45.8
0.5%		-45.8
0.0%	minimum	-45.8

Summary Statistics

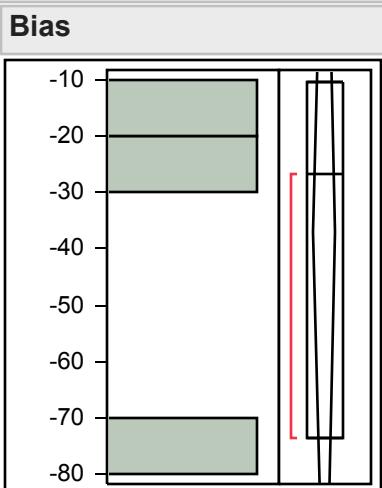
Mean	-19.86
Std Dev	15.305932
Std Err Mean	4.8401607
Upper 95% Mean	-8.910796
Lower 95% Mean	-30.8092
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Antimony****Neutron Activation Analysis****Quantiles**

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

Summary Statistics

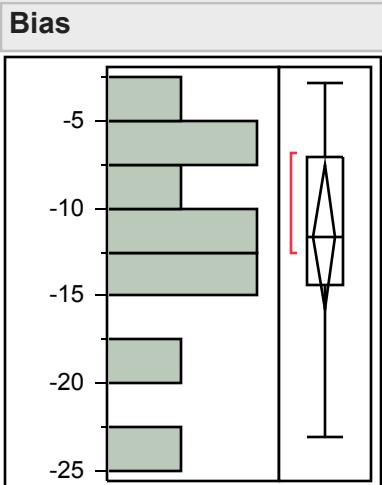
Mean	-1.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Antimony Radial - Inductively Coupled Plasma Emission Spectrometry****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	-26.9
25.0%	quartile	-73.5
10.0%		-73.5
2.5%		-73.5
0.5%		-73.5
0.0%	minimum	-73.5

Summary Statistics

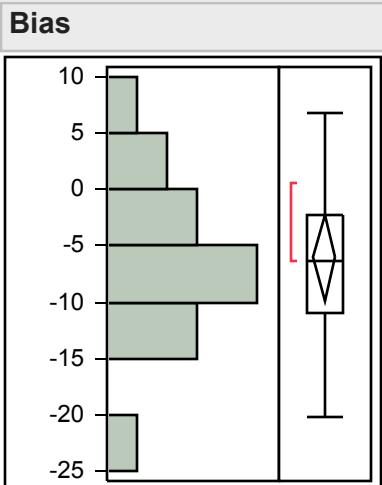
Mean	-36.93333
Std Dev	32.724659
Std Err Mean	18.893591
Upper 95% Mean	44.359227
Lower 95% Mean	-118.2259
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Arsenic Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	-2.9
99.5%		-2.9
97.5%		-2.9
90.0%		-3.3
75.0%	quartile	-7.125
50.0%	median	-11.6
25.0%	quartile	-14.35
10.0%		-22.51
2.5%		-23
0.5%		-23
0.0%	minimum	-23

Summary Statistics

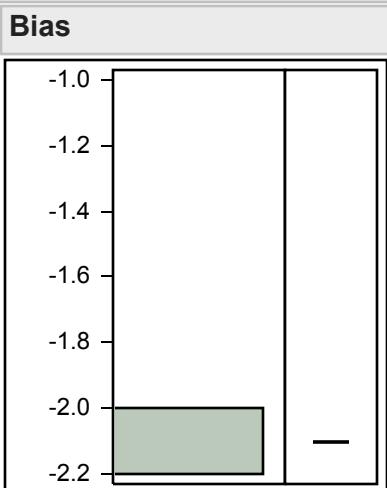
Mean	-11.65
Std Dev	5.7567834
Std Err Mean	1.8204548
Upper 95% Mean	-7.531845
Lower 95% Mean	-15.76815
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Arsenic****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	6.8
99.5%		6.8
97.5%		6.8
90.0%		4.1
75.0%	quartile	-2.2
50.0%	median	-6.3
25.0%	quartile	-11
10.0%		-16.74
2.5%		-20.1
0.5%		-20.1
0.0%	minimum	-20.1

Summary Statistics

Mean	-6.073333
Std Dev	6.919276
Std Err Mean	1.7865494
Upper 95% Mean	-2.241566
Lower 95% Mean	-9.905101
N	15

MaS Distribution by Detection Method**Distributions Analyte_Detection=Arsenic
Neutron Activation Analysis****Quantiles**

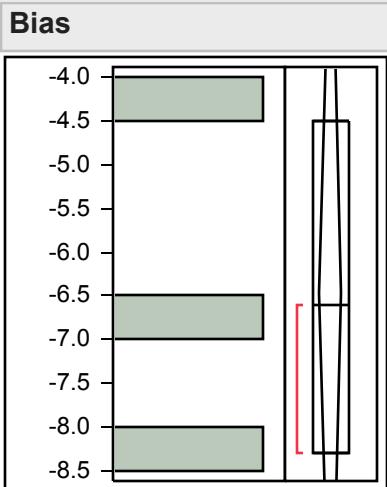
100.0%	maximum	-2.1
99.5%		-2.1
97.5%		-2.1
90.0%		-2.1
75.0%	quartile	-2.1
50.0%	median	-2.1
25.0%	quartile	-2.1
10.0%		-2.1
2.5%		-2.1
0.5%		-2.1
0.0%	minimum	-2.1

Summary Statistics

Mean	-2.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method

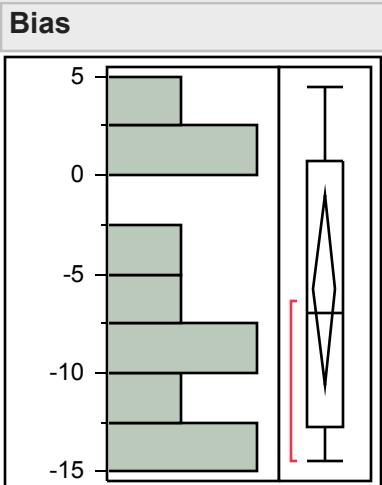
Distributions Analyte_Detection=Arsenic Radial -
Inductively Coupled Plasma Emission Spectrometry

**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	-6.6
25.0%	quartile	-8.3
10.0%		-8.3
2.5%		-8.3
0.5%		-8.3
0.0%	minimum	-8.3

Summary Statistics

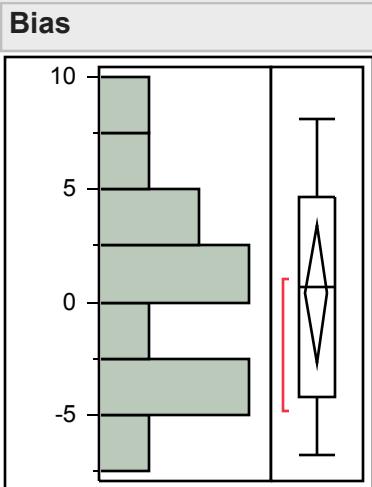
Mean	-6.466667
Std Dev	1.9035055
Std Err Mean	1.0989894
Upper 95% Mean	-1.738097
Lower 95% Mean	-11.19524
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Barium Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	4.5
99.5%		4.5
97.5%		4.5
90.0%		4.26
75.0%	quartile	0.75
50.0%	median	-7
25.0%	quartile	-12.725
10.0%		-14.42
2.5%		-14.5
0.5%		-14.5
0.0%	minimum	-14.5

Summary Statistics

Mean	-5.81
Std Dev	6.7099346
Std Err Mean	2.1218676
Upper 95% Mean	-1.010002
Lower 95% Mean	-10.61
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Barium****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

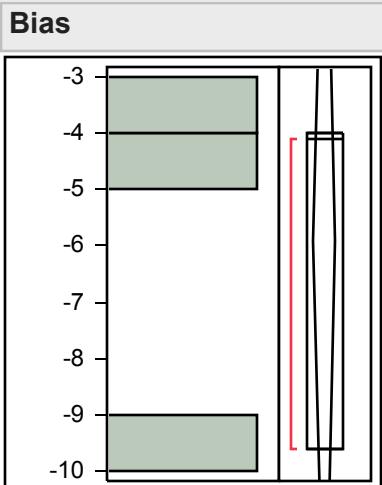
100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		7.59
75.0%	quartile	4.7
50.0%	median	0.65
25.0%	quartile	-4.225
10.0%		-6.2
2.5%		-6.8
0.5%		-6.8
0.0%	minimum	-6.8

Summary Statistics

Mean	0.3833333
Std Dev	4.801862
Std Err Mean	1.3861782
Upper 95% Mean	3.4342909
Lower 95% Mean	-2.667624
N	12

MaS Distribution by Detection Method

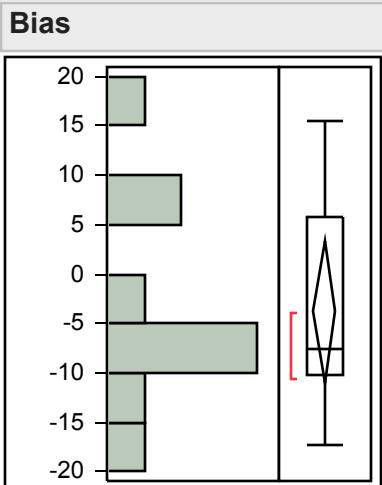
Distributions Analyte_Detection=Barium Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-4
99.5%		-4
97.5%		-4
90.0%		-4
75.0%	quartile	-4
50.0%	median	-4.1
25.0%	quartile	-9.6
10.0%		-9.6
2.5%		-9.6
0.5%		-9.6
0.0%	minimum	-9.6

Summary Statistics

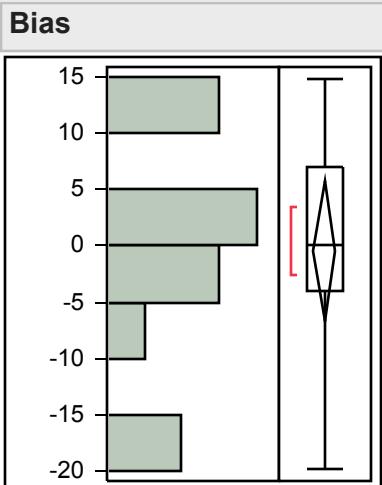
Mean	-5.9
Std Dev	3.2046841
Std Err Mean	1.8502252
Upper 95% Mean	2.0608766
Lower 95% Mean	-13.86088
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Beryllium Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	15.5
99.5%		15.5
97.5%		15.5
90.0%		14.69
75.0%	quartile	5.675
50.0%	median	-7.55
25.0%	quartile	-10.15
10.0%		-16.72
2.5%		-17.4
0.5%		-17.4
0.0%	minimum	-17.4

Summary Statistics

Mean	-3.82
Std Dev	10.017074
Std Err Mean	3.167677
Upper 95% Mean	3.3457833
Lower 95% Mean	-10.98578
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Beryllium
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

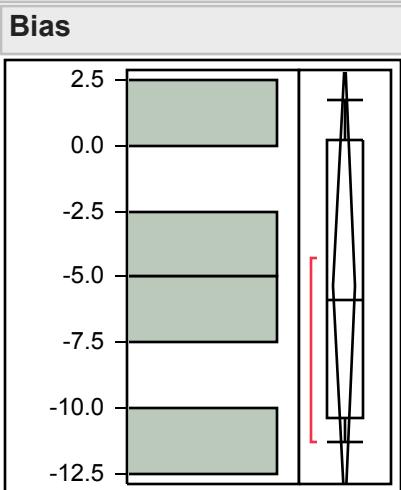
100.0%	maximum	14.8
99.5%		14.8
97.5%		14.8
90.0%		13.48
75.0%	quartile	7
50.0%	median	0
25.0%	quartile	-4.05
10.0%		-19.44
2.5%		-19.8
0.5%		-19.8
0.0%	minimum	-19.8

Summary Statistics

Mean	-0.469231
Std Dev	10.309008
Std Err Mean	2.8592043
Upper 95% Mean	5.7604403
Lower 95% Mean	-6.698902
N	13

MaS Distribution by Detection Method

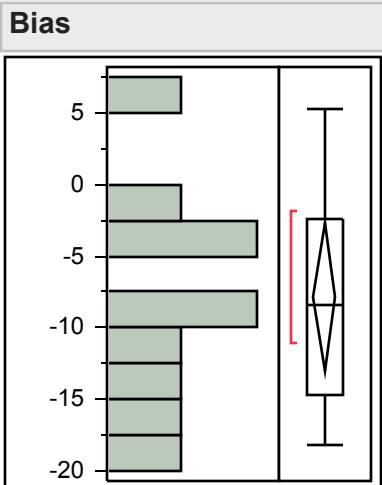
Distributions Analyte_Detection=Beryllium Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	1.7
99.5%		1.7
97.5%		1.7
90.0%		1.7
75.0%	quartile	0.2
50.0%	median	-5.85
25.0%	quartile	-10.325
10.0%		-11.3
2.5%		-11.3
0.5%		-11.3
0.0%	minimum	-11.3

Summary Statistics

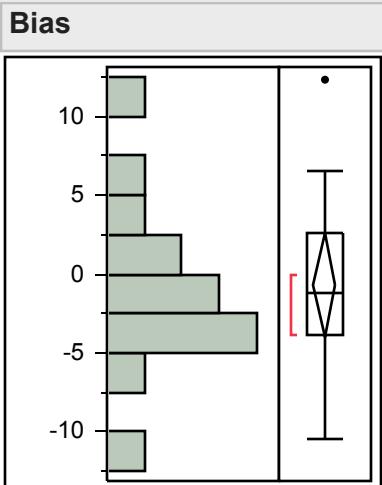
Mean	-5.325
Std Dev	5.4896114
Std Err Mean	2.7448057
Upper 95% Mean	3.4101968
Lower 95% Mean	-14.0602
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cadmium Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		4.49
75.0%	quartile	-2.425
50.0%	median	-8.45
25.0%	quartile	-14.625
10.0%		-17.94
2.5%		-18.2
0.5%		-18.2
0.0%	minimum	-18.2

Summary Statistics

Mean	-7.85
Std Dev	7.2660932
Std Err Mean	2.2977404
Upper 95% Mean	-2.65215
Lower 95% Mean	-13.04785
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cadmium
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

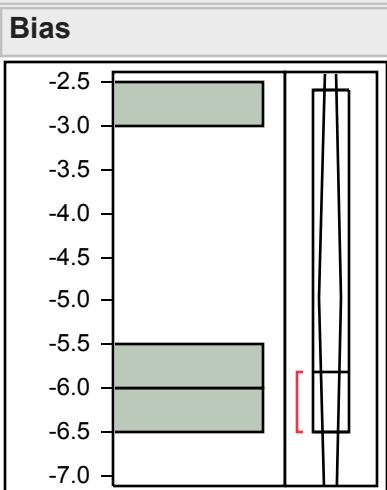
100.0%	maximum	12.3
99.5%		12.3
97.5%		12.3
90.0%		9.4
75.0%	quartile	2.55
50.0%	median	-1.25
25.0%	quartile	-3.9
10.0%		-8.75
2.5%		-10.4
0.5%		-10.4
0.0%	minimum	-10.4

Summary Statistics

Mean	-0.642857
Std Dev	5.6970592
Std Err Mean	1.5226031
Upper 95% Mean	2.6465269
Lower 95% Mean	-3.932241
N	14

MaS Distribution by Detection Method

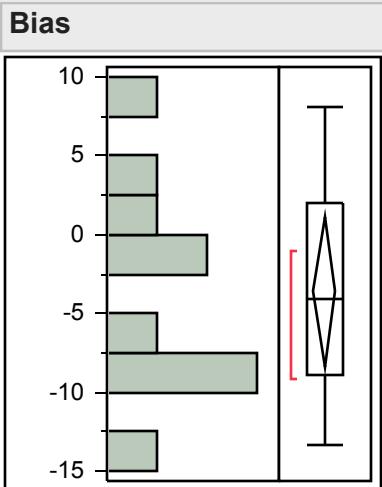
Distributions Analyte_Detection=Cadmium Radial -
Inductively Coupled Plasma Emission Spectrometry

**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	-5.8
25.0%	quartile	-6.5
10.0%		-6.5
2.5%		-6.5
0.5%		-6.5
0.0%	minimum	-6.5

Summary Statistics

Mean	-4.966667
Std Dev	2.0792627
Std Err Mean	1.2004629
Upper 95% Mean	0.1985082
Lower 95% Mean	-10.13184
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Chromium Axial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

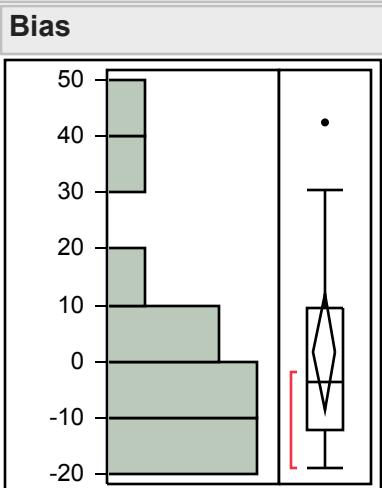
100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		7.59
75.0%	quartile	2.025
50.0%	median	-4.05
25.0%	quartile	-8.95
10.0%		-12.88
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Summary Statistics

Mean	-3.63
Std Dev	6.7050644
Std Err Mean	2.1203275
Upper 95% Mean	1.1665141
Lower 95% Mean	-8.426514
N	10

MaS Distribution by Detection Method

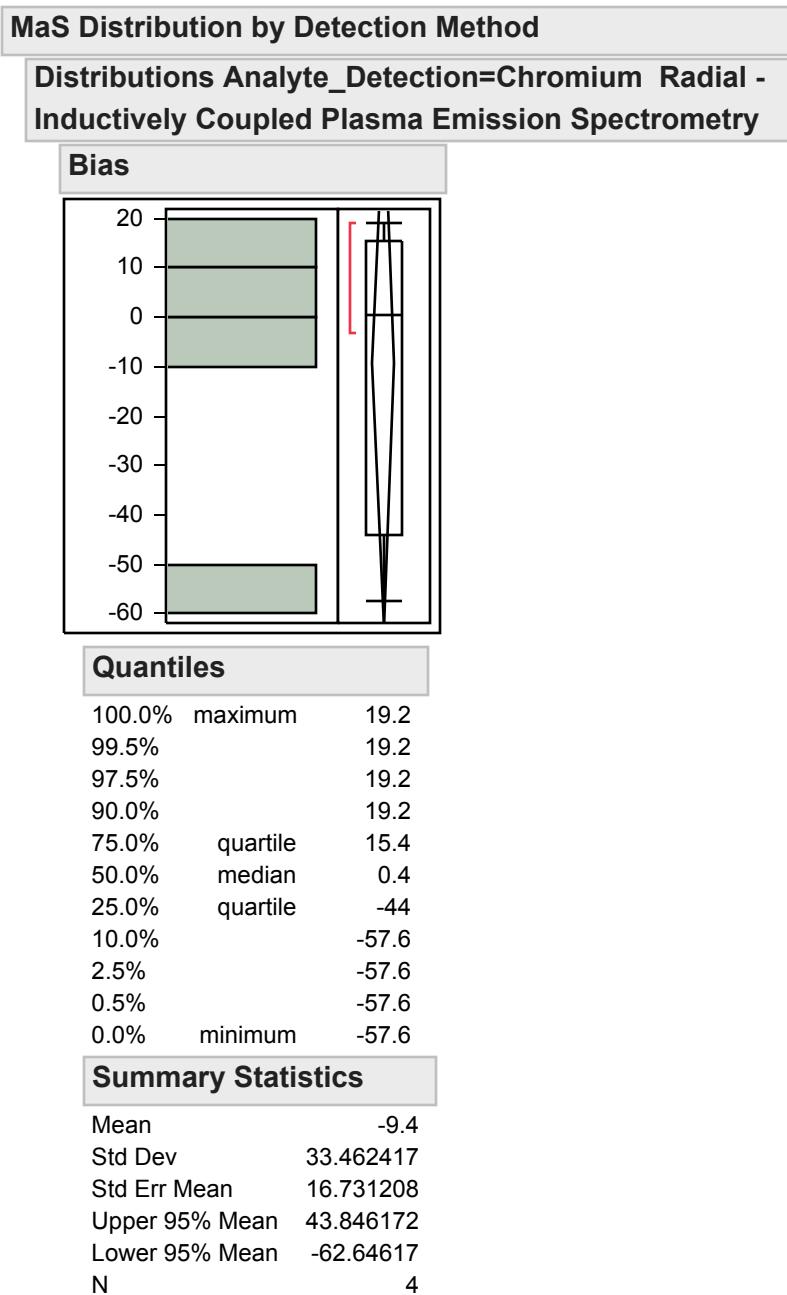
Distributions Analyte_Detection=Chromium
Inductively Coupled Plasma Mass Spectrometry

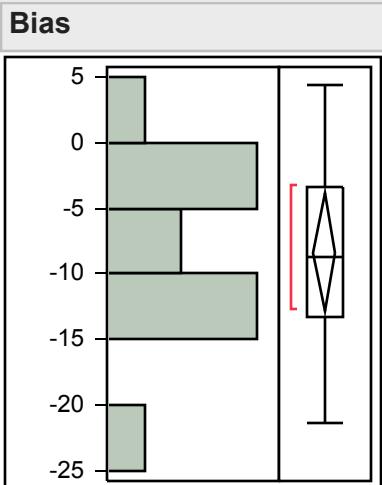
**Quantiles**

100.0%	maximum	42.4
99.5%		42.4
97.5%		42.4
90.0%		36.35
75.0%	quartile	9.625
50.0%	median	-3.7
25.0%	quartile	-12.025
10.0%		-18.05
2.5%		-18.9
0.5%		-18.9
0.0%	minimum	-18.9

Summary Statistics

Mean	1.7785714
Std Dev	17.901576
Std Err Mean	4.7843975
Upper 95% Mean	12.114634
Lower 95% Mean	-8.557491
N	14

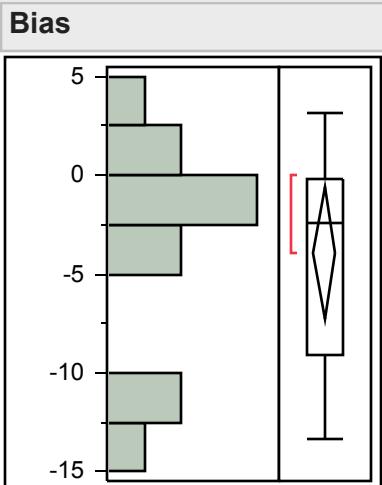


MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		2.6
75.0%	quartile	-3.375
50.0%	median	-8.7
25.0%	quartile	-13.2
10.0%		-19.41
2.5%		-21.3
0.5%		-21.3
0.0%	minimum	-21.3

Summary Statistics

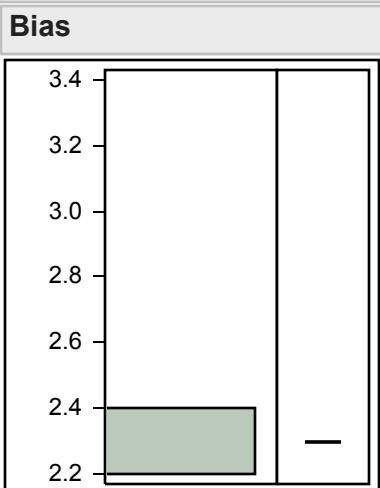
Mean	-8.375
Std Dev	7.0584733
Std Err Mean	2.0376057
Upper 95% Mean	-3.89026
Lower 95% Mean	-12.85974
N	12

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		2.48
75.0%	quartile	-0.2
50.0%	median	-2.4
25.0%	quartile	-9.075
10.0%		-12.92
2.5%		-13.4
0.5%		-13.4
0.0%	minimum	-13.4

Summary Statistics

Mean	-3.925
Std Dev	5.2641368
Std Err Mean	1.5196254
Upper 95% Mean	-0.580327
Lower 95% Mean	-7.269673
N	12

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt
Neutron Activation Analysis****Quantiles**

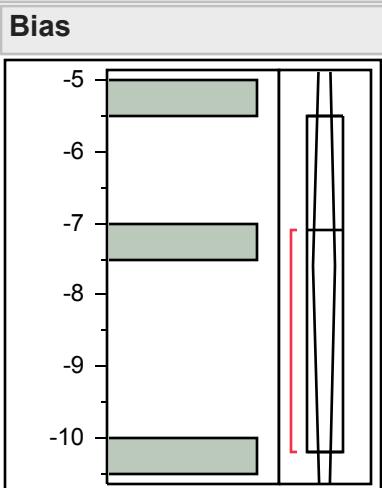
100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	2.3
25.0%	quartile	2.3
10.0%		2.3
2.5%		2.3
0.5%		2.3
0.0%	minimum	2.3

Summary Statistics

Mean	2.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method

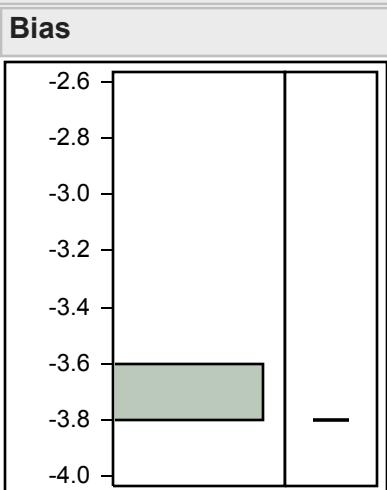
Distributions Analyte_Detection=Cobalt Radial -
Inductively Coupled Plasma Emission Spectrometry

**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	-7.1
25.0%	quartile	-10.2
10.0%		-10.2
2.5%		-10.2
0.5%		-10.2
0.0%	minimum	-10.2

Summary Statistics

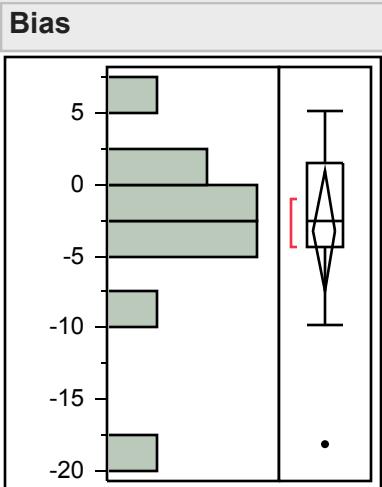
Mean	-7.6
Std Dev	2.3895606
Std Err Mean	1.3796135
Upper 95% Mean	-1.664002
Lower 95% Mean	-13.536
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Cobalt****X-ray Flourescence****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

Summary Statistics

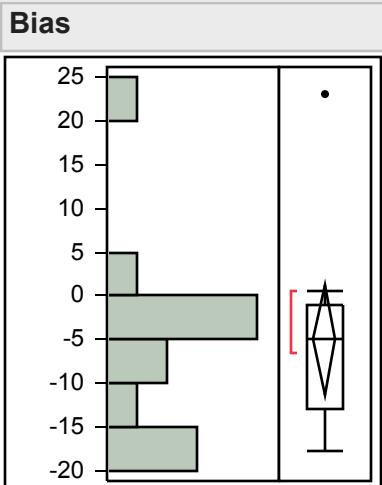
Mean	-3.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Copper Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	5.1
99.5%		5.1
97.5%		5.1
90.0%		4.38
75.0%	quartile	1.5
50.0%	median	-2.5
25.0%	quartile	-4.4
10.0%		-16.44
2.5%		-18.1
0.5%		-18.1
0.0%	minimum	-18.1

Summary Statistics

Mean	-3.272727
Std Dev	6.2507745
Std Err Mean	1.8846794
Upper 95% Mean	0.9266002
Lower 95% Mean	-7.472055
N	11

MaS Distribution by Detection Method**Distributions Analyte_Detection=Copper****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

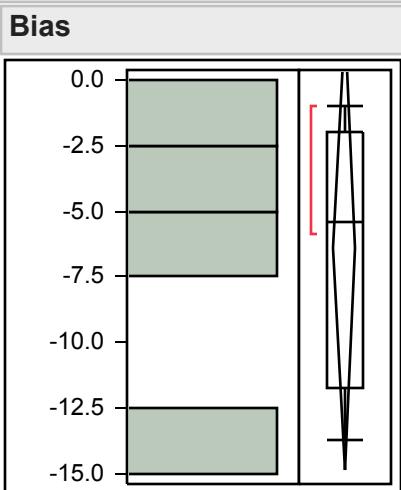
100.0%	maximum	23
99.5%		23
97.5%		23
90.0%		14
75.0%	quartile	-1
50.0%	median	-4.9
25.0%	quartile	-12.85
10.0%		-17.24
2.5%		-17.6
0.5%		-17.6
0.0%	minimum	-17.6

Summary Statistics

Mean	-5
Std Dev	10.455142
Std Err Mean	2.8997347
Upper 95% Mean	1.3179792
Lower 95% Mean	-11.31798
N	13

MaS Distribution by Detection Method

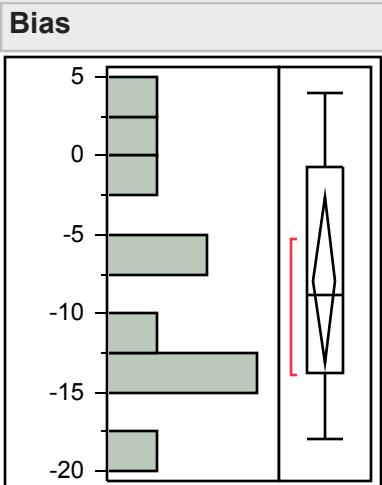
Distributions Analyte_Detection=Copper Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-1
99.5%		-1
97.5%		-1
90.0%		-1
75.0%	quartile	-1.975
50.0%	median	-5.4
25.0%	quartile	-11.75
10.0%		-13.7
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Summary Statistics

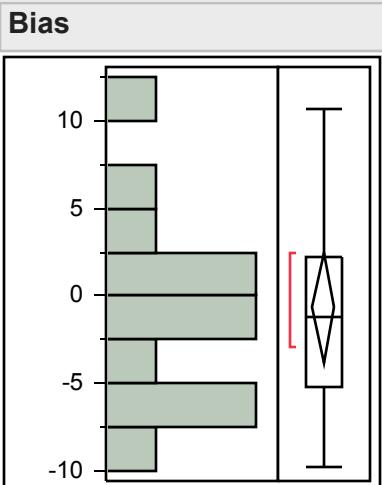
Mean	-6.375
Std Dev	5.3212624
Std Err Mean	2.6606312
Upper 95% Mean	2.0923159
Lower 95% Mean	-14.84232
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Lead Axial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		3.64
75.0%	quartile	-0.725
50.0%	median	-8.85
25.0%	quartile	-13.825
10.0%		-17.5
2.5%		-17.9
0.5%		-17.9
0.0%	minimum	-17.9

Summary Statistics

Mean	-7.88
Std Dev	7.3987687
Std Err Mean	2.3396961
Upper 95% Mean	-2.58724
Lower 95% Mean	-13.17276
N	10

MaS Distribution by Detection Method**Distributions Analyte_Detection=Lead****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

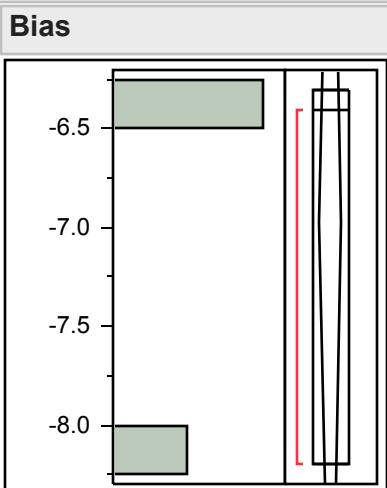
100.0%	maximum	10.7
99.5%		10.7
97.5%		10.7
90.0%		8.65
75.0%	quartile	2.275
50.0%	median	-1.2
25.0%	quartile	-5.175
10.0%		-8.25
2.5%		-9.8
0.5%		-9.8
0.0%	minimum	-9.8

Summary Statistics

Mean	-0.685714
Std Dev	5.3889998
Std Err Mean	1.4402708
Upper 95% Mean	2.4258016
Lower 95% Mean	-3.79723
N	14

MaS Distribution by Detection Method

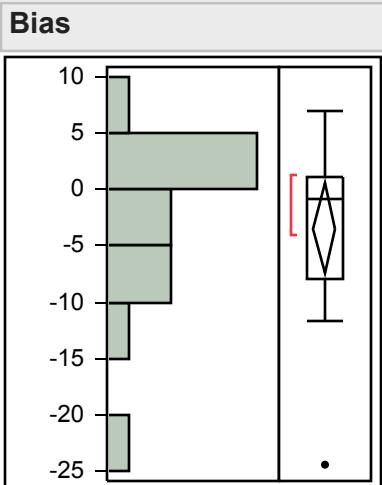
Distributions Analyte_Detection=Lead Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-6.3
99.5%		-6.3
97.5%		-6.3
90.0%		-6.3
75.0%	quartile	-6.3
50.0%	median	-6.4
25.0%	quartile	-8.2
10.0%		-8.2
2.5%		-8.2
0.5%		-8.2
0.0%	minimum	-8.2

Summary Statistics

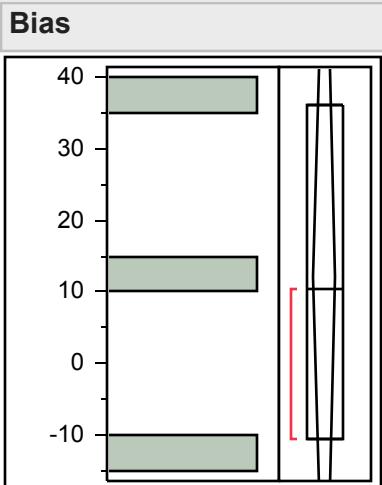
Mean	-6.966667
Std Dev	1.0692677
Std Err Mean	0.617342
Upper 95% Mean	-4.310459
Lower 95% Mean	-9.622875
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Mercury****Cold Vapor Atomic Absorption Spectrometry****Quantiles**

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		4.97
75.0%	quartile	1.05
50.0%	median	-0.85
25.0%	quartile	-7.975
10.0%		-15.44
2.5%		-24.4
0.5%		-24.4
0.0%	minimum	-24.4

Summary Statistics

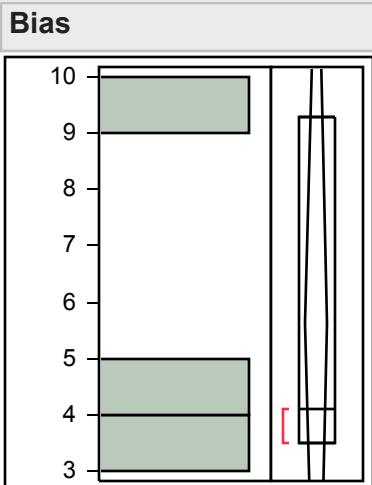
Mean	-3.4375
Std Dev	7.5257668
Std Err Mean	1.8814417
Upper 95% Mean	0.5726981
Lower 95% Mean	-7.447698
N	16

MaS Distribution by Detection Method**Distributions Analyte_Detection=Mercury****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	36
99.5%		36
97.5%		36
90.0%		36
75.0%	quartile	36
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

Summary Statistics

Mean	12
Std Dev	23.286262
Std Err Mean	13.44433
Upper 95% Mean	69.846282
Lower 95% Mean	-45.84628
N	3

MaS Distribution by Detection Method**Distributions****Analyte_Detection=Mercury Other****Quantiles**

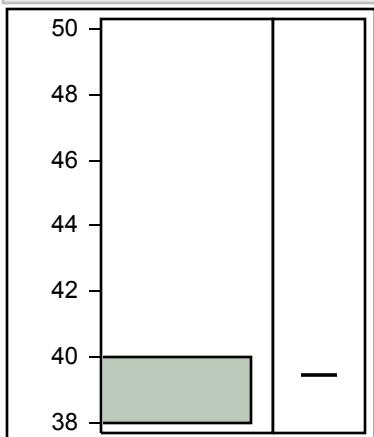
100.0%	maximum	9.3
99.5%		9.3
97.5%		9.3
90.0%		9.3
75.0%	quartile	9.3
50.0%	median	4.1
25.0%	quartile	3.5
10.0%		3.5
2.5%		3.5
0.5%		3.5
0.0%	minimum	3.5

Summary Statistics

Mean	5.6333333
Std Dev	3.1895663
Std Err Mean	1.841497
Upper 95% Mean	13.556655
Lower 95% Mean	-2.289989
N	3

MaS Distribution by Detection Method

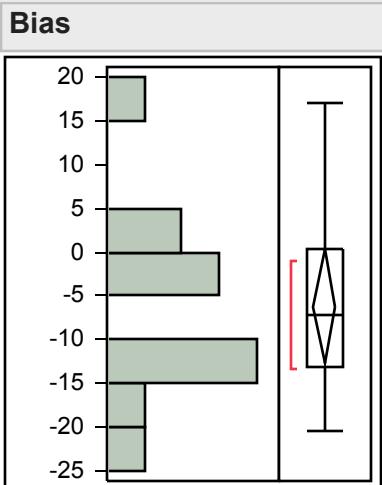
Distributions Analyte_Detection=Mercury Radial -
Inductively Coupled Plasma Emission Spectrometry

Bias**Quantiles**

100.0%	maximum	39.5
99.5%		39.5
97.5%		39.5
90.0%		39.5
75.0%	quartile	39.5
50.0%	median	39.5
25.0%	quartile	39.5
10.0%		39.5
2.5%		39.5
0.5%		39.5
0.0%	minimum	39.5

Summary Statistics

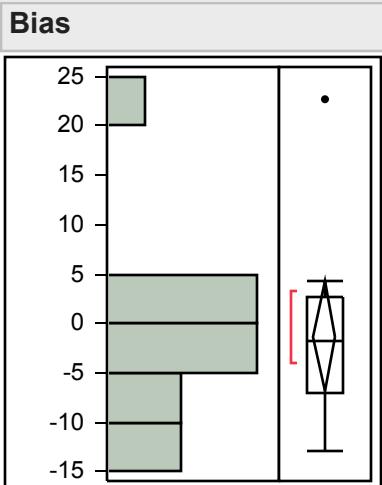
Mean	39.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Nickel Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	17
99.5%		17
97.5%		17
90.0%		12.11
75.0%	quartile	0.275
50.0%	median	-7.2
25.0%	quartile	-13.05
10.0%		-19.22
2.5%		-20.3
0.5%		-20.3
0.0%	minimum	-20.3

Summary Statistics

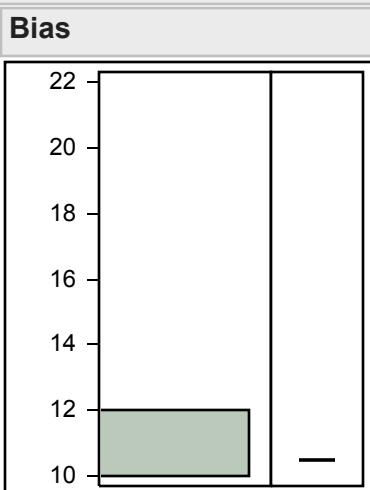
Mean	-6.158333
Std Dev	10.218117
Std Err Mean	2.9497164
Upper 95% Mean	0.3339488
Lower 95% Mean	-12.65062
N	12

MaS Distribution by Detection Method**Distributions Analyte_Detection=Nickel****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	22.7
99.5%		22.7
97.5%		22.7
90.0%		15.34
75.0%	quartile	2.65
50.0%	median	-1.7
25.0%	quartile	-7.15
10.0%		-12.88
2.5%		-13
0.5%		-13
0.0%	minimum	-13

Summary Statistics

Mean	-1.284615
Std Dev	9.1084069
Std Err Mean	2.5262176
Upper 95% Mean	4.2195398
Lower 95% Mean	-6.788771
N	13

MaS Distribution by Detection Method**Distributions Analyte_Detection=Nickel
Neutron Activation Analysis****Quantiles**

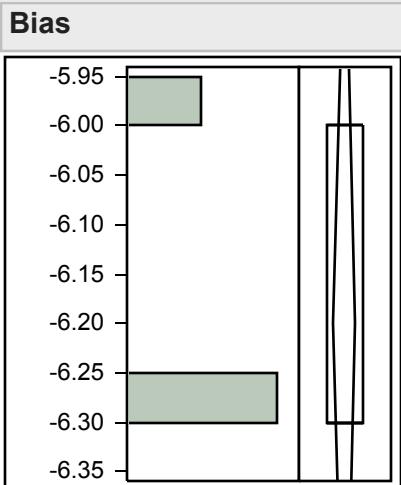
100.0%	maximum	10.5
99.5%		10.5
97.5%		10.5
90.0%		10.5
75.0%	quartile	10.5
50.0%	median	10.5
25.0%	quartile	10.5
10.0%		10.5
2.5%		10.5
0.5%		10.5
0.0%	minimum	10.5

Summary Statistics

Mean	10.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method

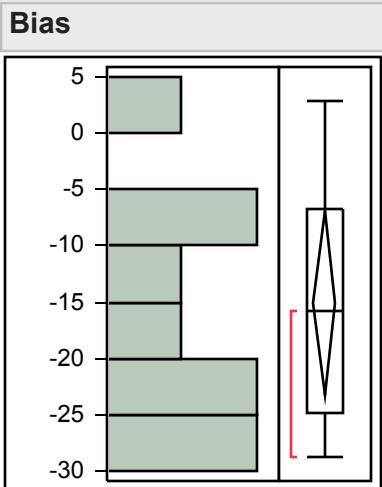
Distributions Analyte_Detection=Nickel Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-6
99.5%		-6
97.5%		-6
90.0%		-6
75.0%	quartile	-6
50.0%	median	-6.3
25.0%	quartile	-6.3
10.0%		-6.3
2.5%		-6.3
0.5%		-6.3
0.0%	minimum	-6.3

Summary Statistics

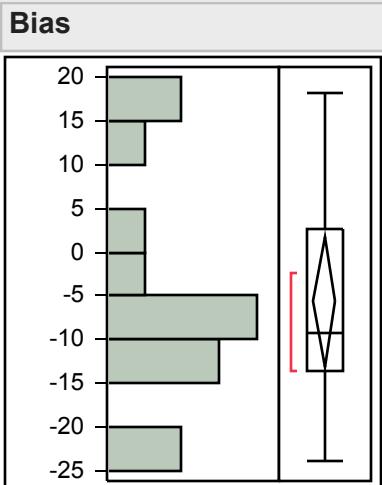
Mean	-6.2
Std Dev	0.1732051
Std Err Mean	0.1
Upper 95% Mean	-5.769735
Lower 95% Mean	-6.630265
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Selenium Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	2.8
99.5%		2.8
97.5%		2.8
90.0%		2.8
75.0%	quartile	-6.75
50.0%	median	-15.8
25.0%	quartile	-24.85
10.0%		-28.8
2.5%		-28.8
0.5%		-28.8
0.0%	minimum	-28.8

Summary Statistics

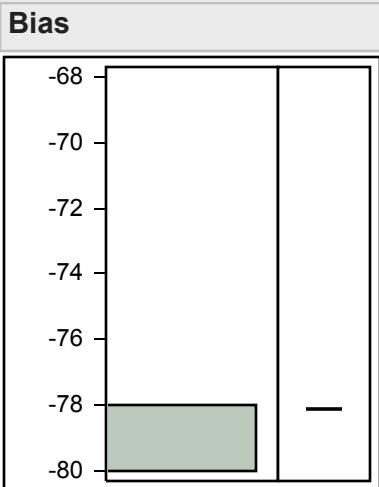
Mean	-15.12222
Std Dev	10.645043
Std Err Mean	3.5483477
Upper 95% Mean	-6.939718
Lower 95% Mean	-23.30473
N	9

MaS Distribution by Detection Method**Distributions Analyte_Detection=Selenium****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	18.1
99.5%		18.1
97.5%		18.1
90.0%		16.9
75.0%	quartile	2.675
50.0%	median	-9.3
25.0%	quartile	-13.6
10.0%		-22.85
2.5%		-23.7
0.5%		-23.7
0.0%	minimum	-23.7

Summary Statistics

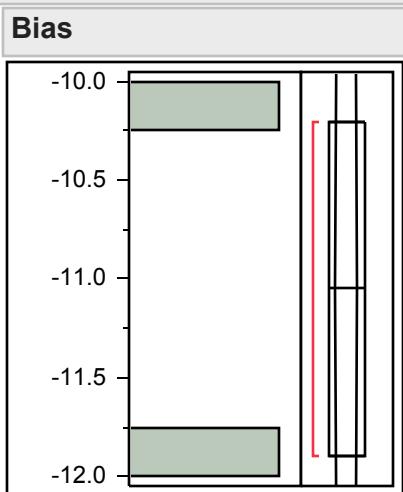
Mean	-5.578571
Std Dev	12.827625
Std Err Mean	3.428327
Upper 95% Mean	1.8278788
Lower 95% Mean	-12.98502
N	14

MaS Distribution by Detection Method**Distributions Analyte_Detection=Selenium****Neutron Activation Analysis****Quantiles**

100.0%	maximum	-78.1
99.5%		-78.1
97.5%		-78.1
90.0%		-78.1
75.0%	quartile	-78.1
50.0%	median	-78.1
25.0%	quartile	-78.1
10.0%		-78.1
2.5%		-78.1
0.5%		-78.1
0.0%	minimum	-78.1

Summary Statistics

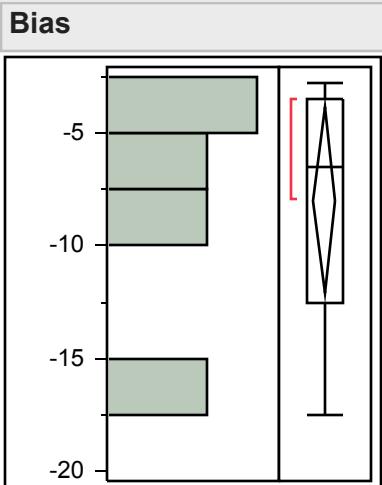
Mean	-78.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Selenium Radial - Inductively Coupled Plasma Emission Spectrometry****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	-11.05
25.0%	quartile	-11.9
10.0%		-11.9
2.5%		-11.9
0.5%		-11.9
0.0%	minimum	-11.9

Summary Statistics

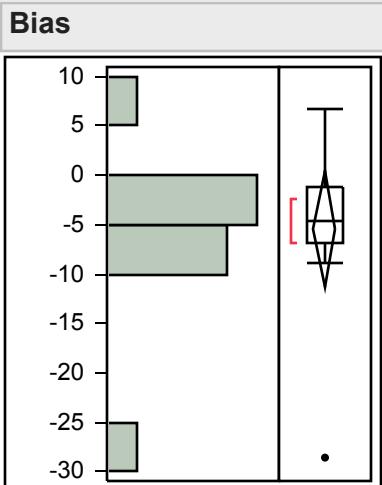
Mean	-11.05
Std Dev	1.2020815
Std Err Mean	0.85
Upper 95% Mean	-0.249726
Lower 95% Mean	-21.85027
N	2

MaS Distribution by Detection Method**Distributions Analyte_Detection=Silver Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	-2.8
99.5%		-2.8
97.5%		-2.8
90.0%		-2.8
75.0%	quartile	-3.5
50.0%	median	-6.5
25.0%	quartile	-12.55
10.0%		-17.5
2.5%		-17.5
0.5%		-17.5
0.0%	minimum	-17.5

Summary Statistics

Mean	-7.988889
Std Dev	5.3440257
Std Err Mean	1.7813419
Upper 95% Mean	-3.881107
Lower 95% Mean	-12.09667
N	9

MaS Distribution by Detection Method**Distributions Analyte_Detection=Silver****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

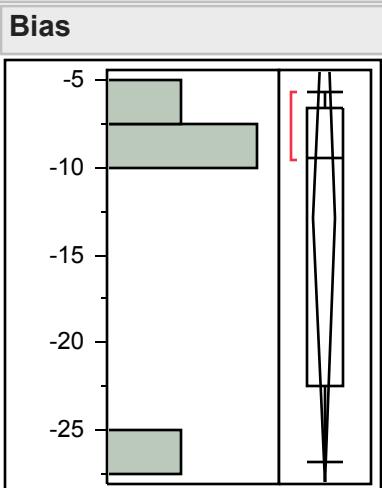
100.0%	maximum	6.8
99.5%		6.8
97.5%		6.8
90.0%		5.4
75.0%	quartile	-1.2
50.0%	median	-4.6
25.0%	quartile	-6.8
10.0%		-24.64
2.5%		-28.6
0.5%		-28.6
0.0%	minimum	-28.6

Summary Statistics

Mean	-5.454545
Std Dev	8.7370892
Std Err Mean	2.6343315
Upper 95% Mean	0.4151109
Lower 95% Mean	-11.3242
N	11

MaS Distribution by Detection Method

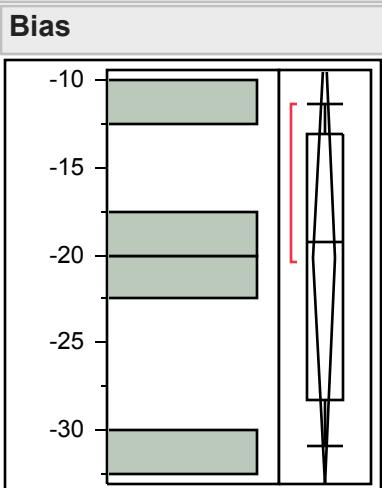
Distributions Analyte_Detection=Silver Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-5.7
99.5%		-5.7
97.5%		-5.7
90.0%		-5.7
75.0%	quartile	-6.6
50.0%	median	-9.45
25.0%	quartile	-22.5
10.0%		-26.8
2.5%		-26.8
0.5%		-26.8
0.0%	minimum	-26.8

Summary Statistics

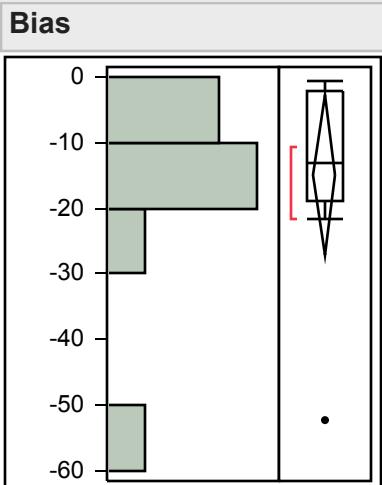
Mean	-12.85
Std Dev	9.4673122
Std Err Mean	4.7336561
Upper 95% Mean	2.2146063
Lower 95% Mean	-27.91461
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Technetium-99****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	-11.4
99.5%		-11.4
97.5%		-11.4
90.0%		-11.4
75.0%	quartile	-13.05
50.0%	median	-19.2
25.0%	quartile	-28.275
10.0%		-30.9
2.5%		-30.9
0.5%		-30.9
0.0%	minimum	-30.9

Summary Statistics

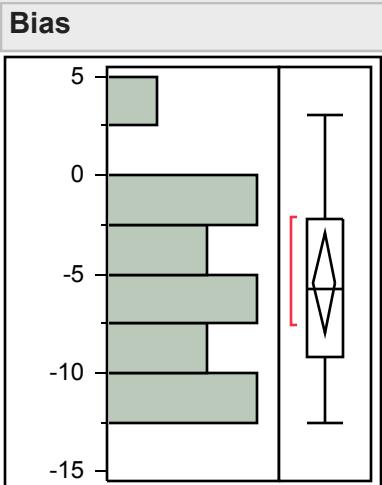
Mean	-20.175
Std Dev	8.099537
Std Err Mean	4.0497685
Upper 95% Mean	-7.286829
Lower 95% Mean	-33.06317
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Thallium Axial -
Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	-0.7
99.5%		-0.7
97.5%		-0.7
90.0%		-0.7
75.0%	quartile	-2.05
50.0%	median	-13.2
25.0%	quartile	-18.9
10.0%		-52.2
2.5%		-52.2
0.5%		-52.2
0.0%	minimum	-52.2

Summary Statistics

Mean	-14.85556
Std Dev	15.772929
Std Err Mean	5.2576429
Upper 95% Mean	-2.731409
Lower 95% Mean	-26.9797
N	9

MaS Distribution by Detection Method**Distributions Analyte_Detection=Thallium****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

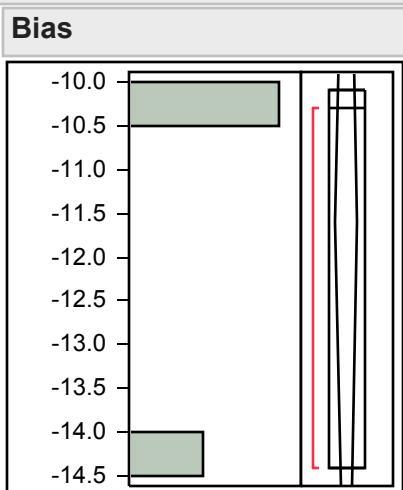
100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		1.3
75.0%	quartile	-2.175
50.0%	median	-5.8
25.0%	quartile	-9.25
10.0%		-11.8
2.5%		-12.5
0.5%		-12.5
0.0%	minimum	-12.5

Summary Statistics

Mean	-5.478571
Std Dev	4.4162599
Std Err Mean	1.1802951
Upper 95% Mean	-2.928699
Lower 95% Mean	-8.028444
N	14

MaS Distribution by Detection Method

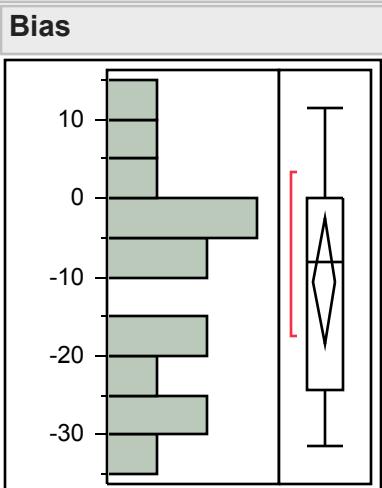
Distributions Analyte_Detection=Thallium Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

100.0%	maximum	-10.1
99.5%		-10.1
97.5%		-10.1
90.0%		-10.1
75.0%	quartile	-10.1
50.0%	median	-10.3
25.0%	quartile	-14.4
10.0%		-14.4
2.5%		-14.4
0.5%		-14.4
0.0%	minimum	-14.4

Summary Statistics

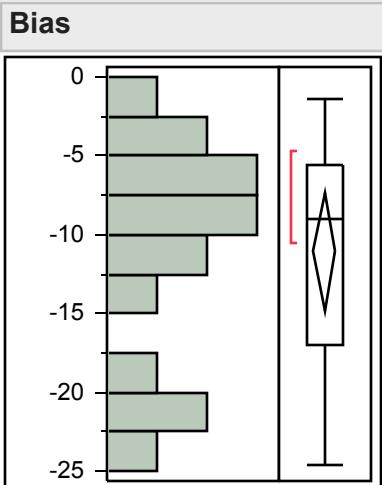
Mean	-11.6
Std Dev	2.4269322
Std Err Mean	1.40119
Upper 95% Mean	-5.571166
Lower 95% Mean	-17.62883
N	3

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-235
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	11.4
99.5%		11.4
97.5%		11.4
90.0%		8.4
75.0%	quartile	0.125
50.0%	median	-8.05
25.0%	quartile	-24.35
10.0%		-30.1
2.5%		-31.5
0.5%		-31.5
0.0%	minimum	-31.5

Summary Statistics

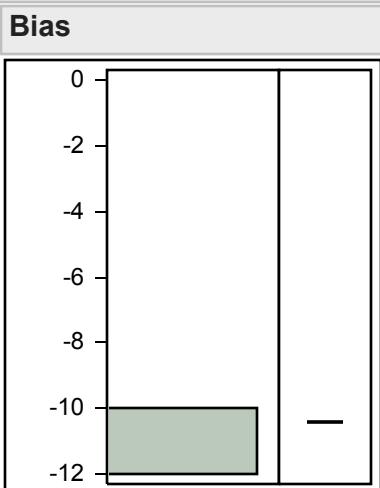
Mean	-10.57857
Std Dev	13.742532
Std Err Mean	3.6728463
Upper 95% Mean	-2.643869
Lower 95% Mean	-18.51327
N	14

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-238
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	-1.4
99.5%		-1.4
97.5%		-1.4
90.0%		-3.08
75.0%	quartile	-5.6
50.0%	median	-9
25.0%	quartile	-17.05
10.0%		-22.64
2.5%		-24.6
0.5%		-24.6
0.0%	minimum	-24.6

Summary Statistics

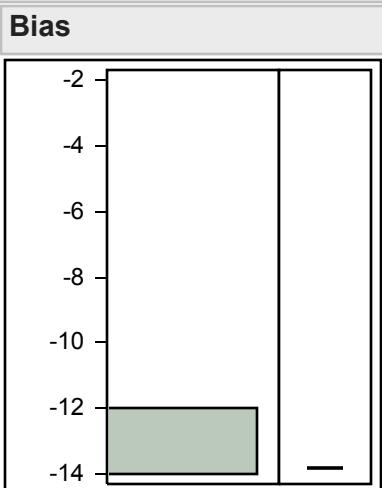
Mean	-11.08125
Std Dev	7.0245492
Std Err Mean	1.7561373
Upper 95% Mean	-7.338132
Lower 95% Mean	-14.82437
N	16

MaS Distribution by Detection Method**Distributions****Analyte_Detection=Uranium-238 Other****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

Summary Statistics

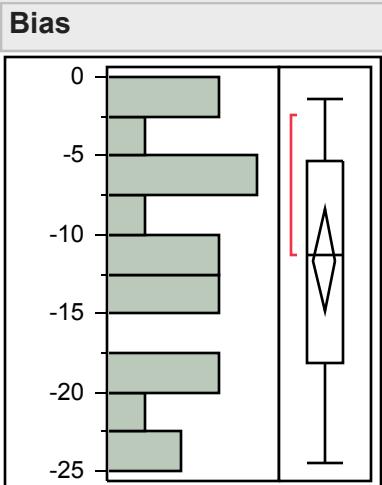
Mean	-10.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
238 Thermal Ionization Mass Spectrometry****Quantiles**

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

Summary Statistics

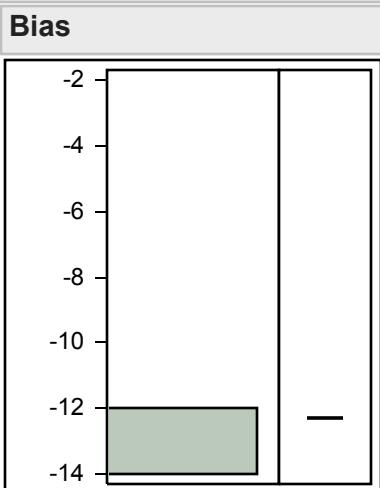
Mean	-13.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-Total
Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	-1.4
99.5%		-1.4
97.5%		-1.4
90.0%		-2.4
75.0%	quartile	-5.3
50.0%	median	-11.3
25.0%	quartile	-18.15
10.0%		-23.32
2.5%		-24.5
0.5%		-24.5
0.0%	minimum	-24.5

Summary Statistics

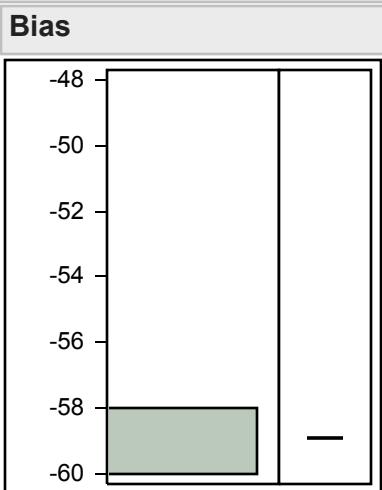
Mean	-11.61905
Std Dev	7.1992791
Std Err Mean	1.5710115
Upper 95% Mean	-8.341975
Lower 95% Mean	-14.89612
N	21

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
Total Kinetic Phosphorescence Analyzer (KPA)****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	-12.3
25.0%	quartile	-12.3
10.0%		-12.3
2.5%		-12.3
0.5%		-12.3
0.0%	minimum	-12.3

Summary Statistics

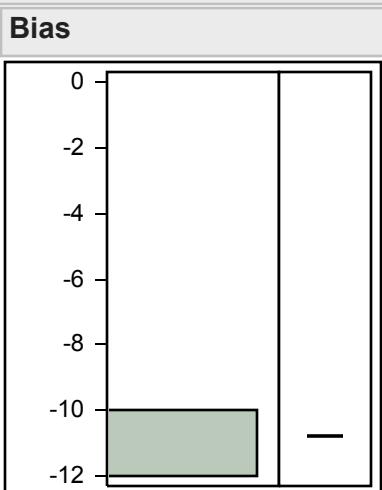
Mean	-12.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
Total Neutron Activation Analysis****Quantiles**

100.0%	maximum	-58.9
99.5%		-58.9
97.5%		-58.9
90.0%		-58.9
75.0%	quartile	-58.9
50.0%	median	-58.9
25.0%	quartile	-58.9
10.0%		-58.9
2.5%		-58.9
0.5%		-58.9
0.0%	minimum	-58.9

Summary Statistics

Mean	-58.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions****Analyte_Detection=Uranium-Total Other****Quantiles**

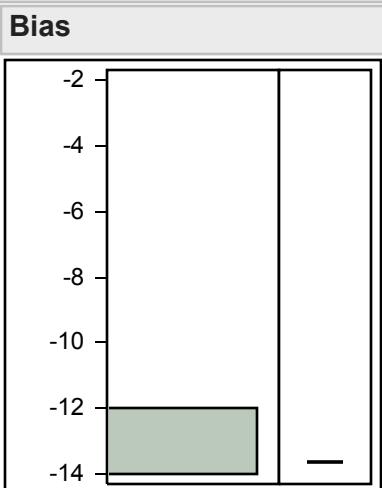
100.0%	maximum	-10.8
99.5%		-10.8
97.5%		-10.8
90.0%		-10.8
75.0%	quartile	-10.8
50.0%	median	-10.8
25.0%	quartile	-10.8
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Summary Statistics

Mean	-10.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method

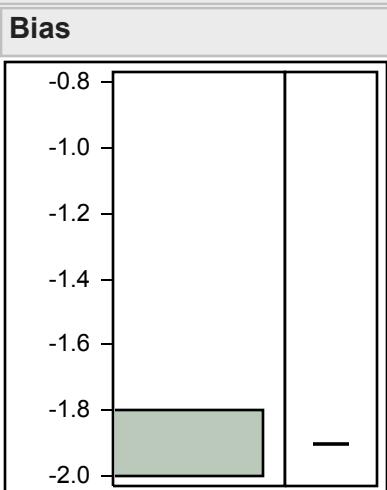
Distributions Analyte_Detection=Uranium-
Total Thermal Ionization Mass Spectrometry

**Quantiles**

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

Summary Statistics

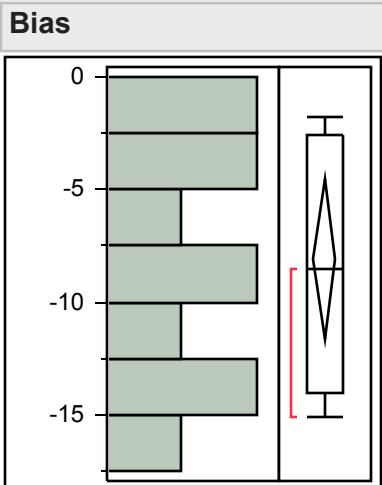
Mean	-13.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Uranium-
Total X-ray Flouresence****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	-1.9
25.0%	quartile	-1.9
10.0%		-1.9
2.5%		-1.9
0.5%		-1.9
0.0%	minimum	-1.9

Summary Statistics

Mean	-1.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method**Distributions Analyte_Detection=Vanadium Axial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

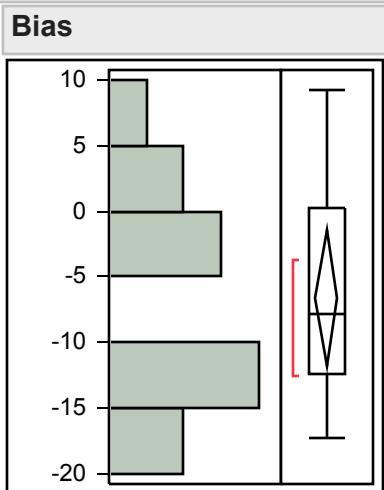
100.0%	maximum	-1.8
99.5%		-1.8
97.5%		-1.8
90.0%		-1.88
75.0%	quartile	-2.6
50.0%	median	-8.5
25.0%	quartile	-14
10.0%		-14.96
2.5%		-15.1
0.5%		-15.1
0.0%	minimum	-15.1

Summary Statistics

Mean	-8.063636
Std Dev	5.2450496
Std Err Mean	1.581442
Upper 95% Mean	-4.539964
Lower 95% Mean	-11.58731
N	11

MaS Distribution by Detection Method

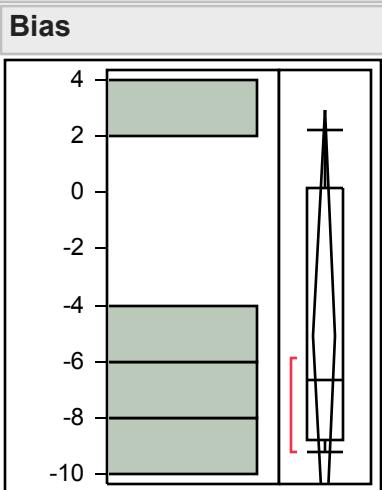
Distributions Analyte_Detection=Vanadium
Inductively Coupled Plasma Mass Spectrometry

**Quantiles**

100.0%	maximum	9.2
99.5%		9.2
97.5%		9.2
90.0%		7.34
75.0%	quartile	0.2
50.0%	median	-7.75
25.0%	quartile	-12.425
10.0%		-16.64
2.5%		-17.3
0.5%		-17.3
0.0%	minimum	-17.3

Summary Statistics

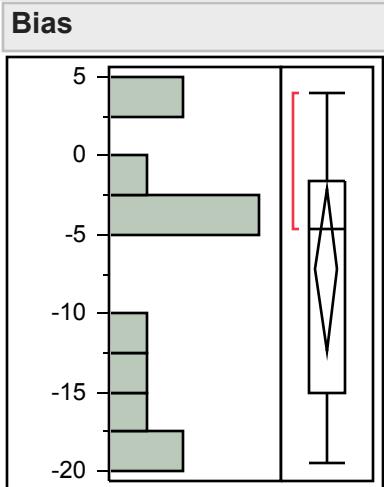
Mean	-6.558333
Std Dev	8.1600421
Std Err Mean	2.3556013
Upper 95% Mean	-1.37369
Lower 95% Mean	-11.74298
N	12

MaS Distribution by Detection Method**Distributions Analyte_Detection=Vanadium Radial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		2.2
75.0%	quartile	0.175
50.0%	median	-6.65
25.0%	quartile	-8.75
10.0%		-9.2
2.5%		-9.2
0.5%		-9.2
0.0%	minimum	-9.2

Summary Statistics

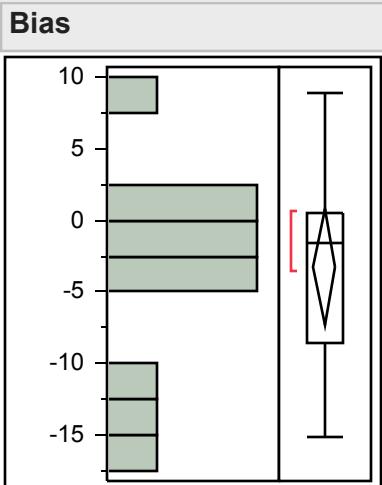
Mean	-5.075
Std Dev	5.0341335
Std Err Mean	2.5170667
Upper 95% Mean	2.9354298
Lower 95% Mean	-13.08543
N	4

MaS Distribution by Detection Method**Distributions Analyte_Detection=Zinc Axial - Inductively Coupled Plasma Emission Spectrometry****Quantiles**

100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		3.85
75.0%	quartile	-1.675
50.0%	median	-4.65
25.0%	quartile	-15.075
10.0%		-18.96
2.5%		-19.5
0.5%		-19.5
0.0%	minimum	-19.5

Summary Statistics

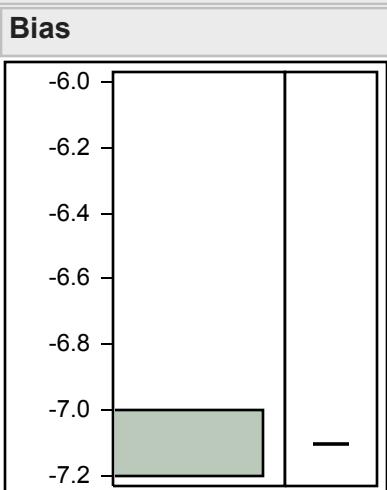
Mean	-7.233333
Std Dev	8.0384681
Std Err Mean	2.3205059
Upper 95% Mean	-2.125934
Lower 95% Mean	-12.34073
N	12

MaS Distribution by Detection Method**Distributions Analyte_Detection=Zinc****Inductively Coupled Plasma Mass Spectrometry****Quantiles**

100.0%	maximum	8.9
99.5%		8.9
97.5%		8.9
90.0%		6.22
75.0%	quartile	0.55
50.0%	median	-1.6
25.0%	quartile	-8.5
10.0%		-14.18
2.5%		-15.1
0.5%		-15.1
0.0%	minimum	-15.1

Summary Statistics

Mean	-3.246154
Std Dev	6.6942283
Std Err Mean	1.8566449
Upper 95% Mean	0.7991278
Lower 95% Mean	-7.291436
N	13

MaS Distribution by Detection Method**Distributions Analyte_Detection=Zinc****Neutron Activation Analysis****Quantiles**

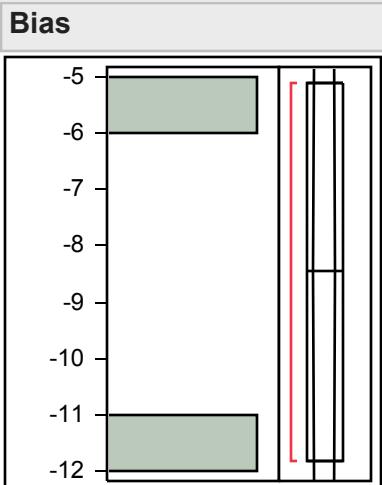
100.0%	maximum	-7.1
99.5%		-7.1
97.5%		-7.1
90.0%		-7.1
75.0%	quartile	-7.1
50.0%	median	-7.1
25.0%	quartile	-7.1
10.0%		-7.1
2.5%		-7.1
0.5%		-7.1
0.0%	minimum	-7.1

Summary Statistics

Mean	-7.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Detection Method

Distributions Analyte_Detection=Zinc Radial -
Inductively Coupled Plasma Emission Spectrometry

**Quantiles**

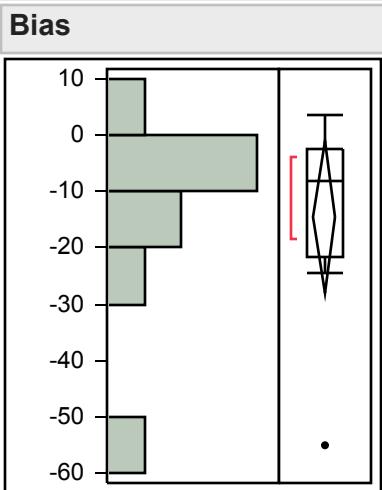
100.0%	maximum	-5.1
99.5%		-5.1
97.5%		-5.1
90.0%		-5.1
75.0%	quartile	-5.1
50.0%	median	-8.45
25.0%	quartile	-11.8
10.0%		-11.8
2.5%		-11.8
0.5%		-11.8
0.0%	minimum	-11.8

Summary Statistics

Mean	-8.45
Std Dev	4.7376154
Std Err Mean	3.35
Upper 95% Mean	34.115786
Lower 95% Mean	-51.01579
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Americium-241 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

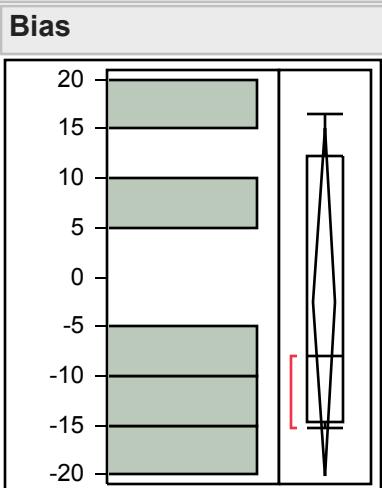
100.0%	maximum	3.6
99.5%		3.6
97.5%		3.6
90.0%		3.6
75.0%	quartile	-2.4
50.0%	median	-8
25.0%	quartile	-21.55
10.0%		-55
2.5%		-55
0.5%		-55
0.0%	minimum	-55

Summary Statistics

Mean	-14.48889
Std Dev	17.670487
Std Err Mean	5.8901623
Upper 95% Mean	-0.90615
Lower 95% Mean	-28.07163
N	9

MaS Distribution by Prep Method

Distributions Analyte_Method=Americium-
241 Acid leaching without hydrofluoric acid

**Quantiles**

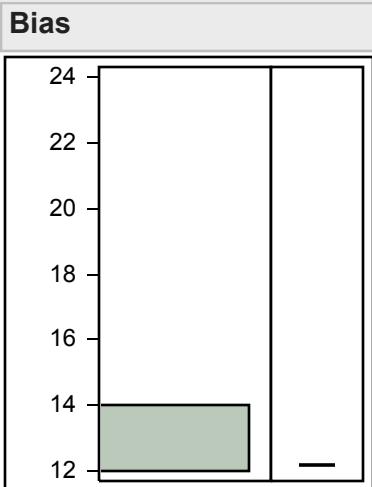
100.0%	maximum	16.5
99.5%		16.5
97.5%		16.5
90.0%		16.5
75.0%	quartile	12.3
50.0%	median	-8.1
25.0%	quartile	-14.6
10.0%		-15.2
2.5%		-15.2
0.5%		-15.2
0.0%	minimum	-15.2

Summary Statistics

Mean	-2.54
Std Dev	14.126677
Std Err Mean	6.317642
Upper 95% Mean	15.000586
Lower 95% Mean	-20.08059
N	5

MaS Distribution by Prep Method

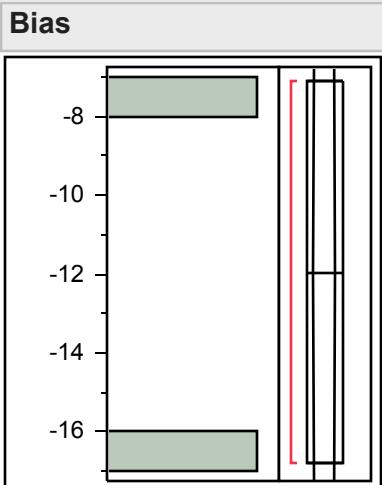
Distributions Analyte_Method=Americium-
241 EPA 901.1, Gamma Emitting, 600/4-80-032

**Quantiles**

100.0%	maximum	12.2
99.5%		12.2
97.5%		12.2
90.0%		12.2
75.0%	quartile	12.2
50.0%	median	12.2
25.0%	quartile	12.2
10.0%		12.2
2.5%		12.2
0.5%		12.2
0.0%	minimum	12.2

Summary Statistics

Mean	12.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

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

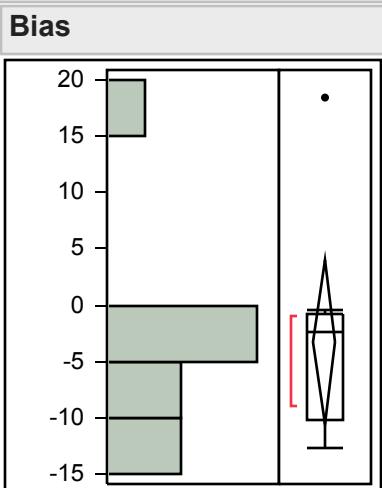
100.0%	maximum	-7.1
99.5%		-7.1
97.5%		-7.1
90.0%		-7.1
75.0%	quartile	-7.1
50.0%	median	-11.95
25.0%	quartile	-16.8
10.0%		-16.8
2.5%		-16.8
0.5%		-16.8
0.0%	minimum	-16.8

Summary Statistics

Mean	-11.95
Std Dev	6.8589358
Std Err Mean	4.85
Upper 95% Mean	49.675093
Lower 95% Mean	-73.57509
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Americium-241 Ion
Exchange Chromatography / Ion Chromatography

**Quantiles**

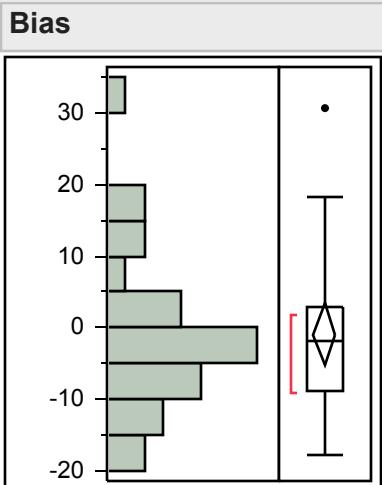
100.0%	maximum	18.4
99.5%		18.4
97.5%		18.4
90.0%		18.4
75.0%	quartile	-0.7
50.0%	median	-2.3
25.0%	quartile	-10.2
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

Mean	-3.3
Std Dev	9.3904207
Std Err Mean	3.1301402
Upper 95% Mean	3.9181163
Lower 95% Mean	-10.51812
N	9

MaS Distribution by Prep Method

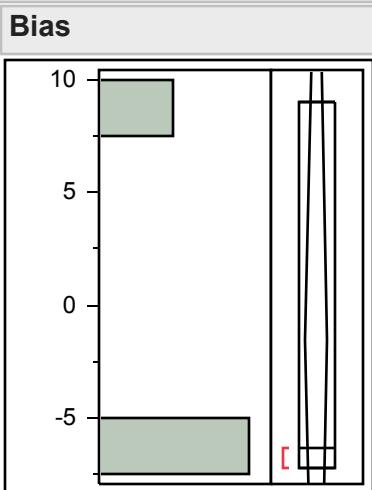
Distributions Analyte_Method=Americium-
241 No preparation - analyzed as received

**Quantiles**

100.0%	maximum	30.6
99.5%		30.6
97.5%		30.6
90.0%		16.75
75.0%	quartile	2.85
50.0%	median	-1.95
25.0%	quartile	-8.775
10.0%		-14.58
2.5%		-17.6
0.5%		-17.6
0.0%	minimum	-17.6

Summary Statistics

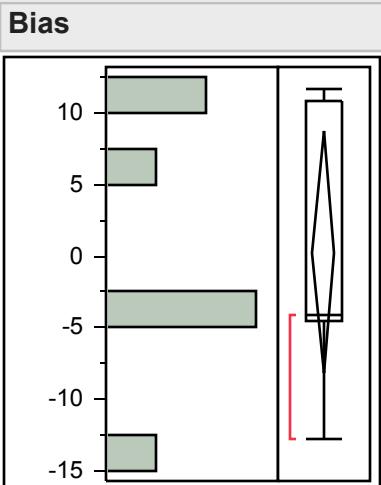
Mean	-0.875
Std Dev	10.907885
Std Err Mean	2.0613964
Upper 95% Mean	3.3546361
Lower 95% Mean	-5.104636
N	28

MaS Distribution by Prep Method**Distributions****Analyte_Method=Americium-241 Other****Quantiles**

100.0%	maximum	9
99.5%		9
97.5%		9
90.0%		9
75.0%	quartile	9
50.0%	median	-6.3
25.0%	quartile	-7.2
10.0%		-7.2
2.5%		-7.2
0.5%		-7.2
0.0%	minimum	-7.2

Summary Statistics

Mean	-1.5
Std Dev	9.1043945
Std Err Mean	5.2564246
Upper 95% Mean	21.11657
Lower 95% Mean	-24.11657
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Americium-****241 Total dissolution by fusion****Quantiles**

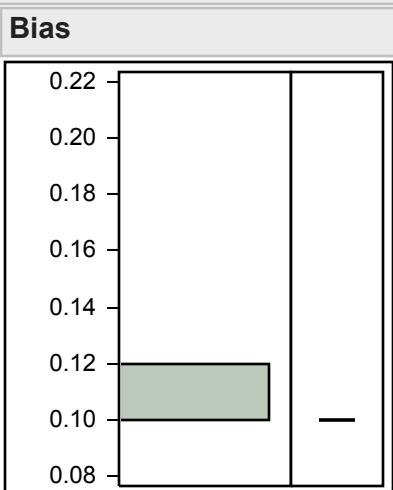
100.0%	maximum	11.7
99.5%		11.7
97.5%		11.7
90.0%		11.7
75.0%	quartile	10.8
50.0%	median	-4.1
25.0%	quartile	-4.5
10.0%		-12.8
2.5%		-12.8
0.5%		-12.8
0.0%	minimum	-12.8

Summary Statistics

Mean	0.2571429
Std Dev	9.1401782
Std Err Mean	3.4546626
Upper 95% Mean	8.7103978
Lower 95% Mean	-8.196112
N	7

MaS Distribution by Prep Method

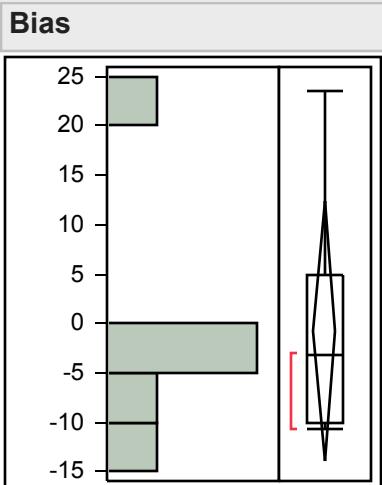
Distributions Analyte_Method=Cesium-134 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**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

Summary Statistics

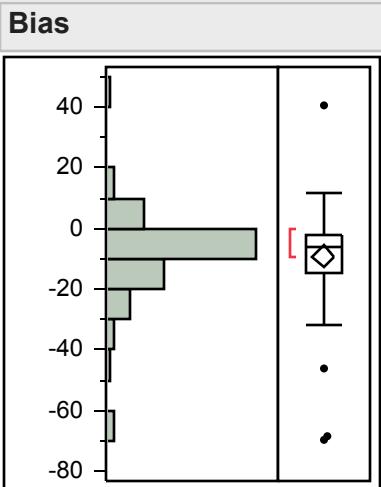
Mean	0.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Cesium-134****EPA 901.1, Gamma Emitting, 600/4-80-032****Quantiles**

100.0%	maximum	23.6
99.5%		23.6
97.5%		23.6
90.0%		23.6
75.0%	quartile	5
50.0%	median	-3.25
25.0%	quartile	-10.125
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Summary Statistics

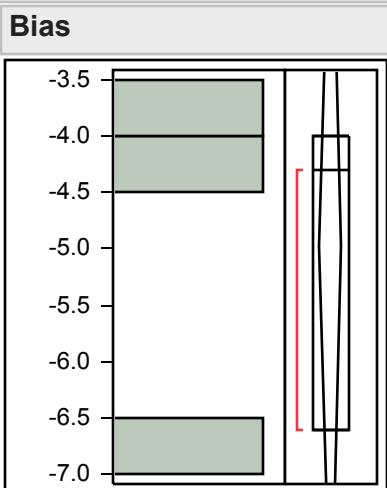
Mean	-0.8
Std Dev	12.572828
Std Err Mean	5.1328355
Upper 95% Mean	12.394374
Lower 95% Mean	-13.99437
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Cesium-134****No preparation - analyzed as received****Quantiles**

100.0%	maximum	40.5
99.5%		40.5
97.5%		16.105
90.0%		2.44
75.0%	quartile	-1.85
50.0%	median	-6.2
25.0%	quartile	-14.65
10.0%		-24.22
2.5%		-68.58
0.5%		-69.6
0.0%	minimum	-69.6

Summary Statistics

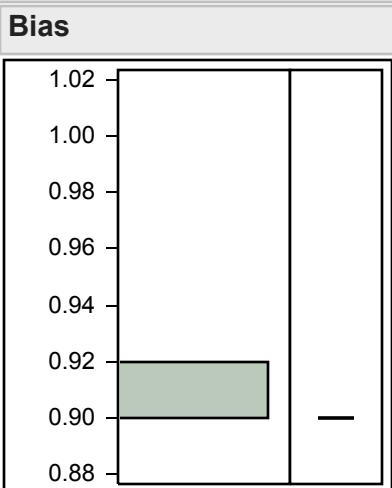
Mean	-9.316438
Std Dev	15.264174
Std Err Mean	1.7865364
Upper 95% Mean	-5.755043
Lower 95% Mean	-12.87783
N	73

MaS Distribution by Prep Method**Distributions****Analyte_Method=Cesium-134 Other****Quantiles**

100.0%	maximum	-4
99.5%		-4
97.5%		-4
90.0%		-4
75.0%	quartile	-4
50.0%	median	-4.3
25.0%	quartile	-6.6
10.0%		-6.6
2.5%		-6.6
0.5%		-6.6
0.0%	minimum	-6.6

Summary Statistics

Mean	-4.966667
Std Dev	1.4224392
Std Err Mean	0.8212457
Upper 95% Mean	-1.433132
Lower 95% Mean	-8.500202
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Cesium-134 Wet ash - Acid digestion - the use of oxidizers to destroy organics****Quantiles**

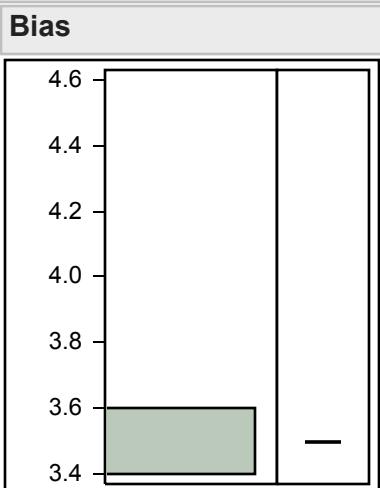
100.0%	maximum	0.9
99.5%		0.9
97.5%		0.9
90.0%		0.9
75.0%	quartile	0.9
50.0%	median	0.9
25.0%	quartile	0.9
10.0%		0.9
2.5%		0.9
0.5%		0.9
0.0%	minimum	0.9

Summary Statistics

Mean	0.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

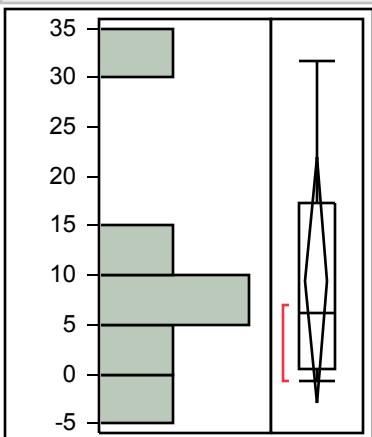
Distributions Analyte_Method=Cesium-137 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**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

Summary Statistics

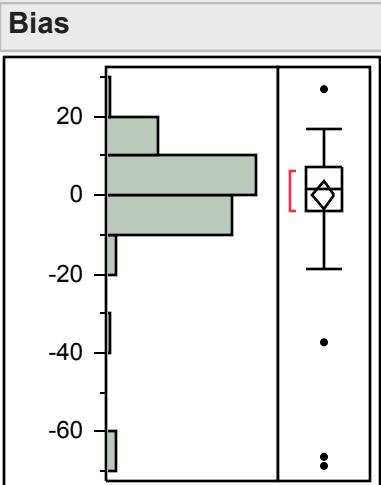
Mean	3.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

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

100.0%	maximum	31.8
99.5%		31.8
97.5%		31.8
90.0%		31.8
75.0%	quartile	17.4
50.0%	median	6.2
25.0%	quartile	0.425
10.0%		-0.7
2.5%		-0.7
0.5%		-0.7
0.0%	minimum	-0.7

Summary Statistics

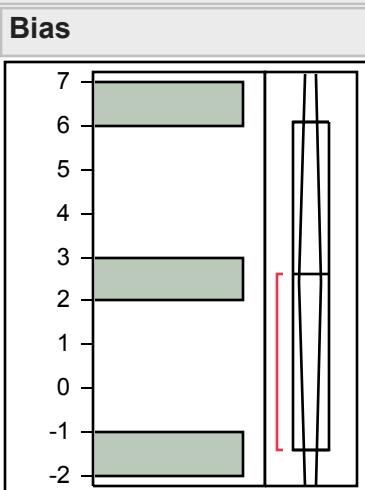
Mean	9.4833333
Std Dev	11.91376
Std Err Mean	4.863772
Upper 95% Mean	21.986057
Lower 95% Mean	-3.019391
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Cesium-137****No preparation - analyzed as received****Quantiles**

100.0%	maximum	26.8
99.5%		26.8
97.5%		17.9625
90.0%		12.5
75.0%	quartile	7.15
50.0%	median	1.45
25.0%	quartile	-4.075
10.0%		-8.3
2.5%		-66.588
0.5%		-68.6
0.0%	minimum	-68.6

Summary Statistics

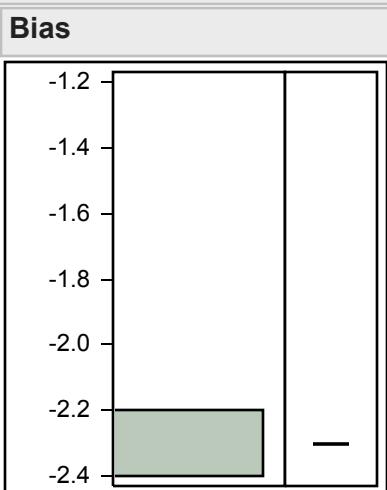
Mean	0.0378378
Std Dev	14.389881
Std Err Mean	1.6727897
Upper 95% Mean	3.371703
Lower 95% Mean	-3.296027
N	74

MaS Distribution by Prep Method**Distributions****Analyte_Method=Cesium-137 Other****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	2.6
25.0%	quartile	-1.4
10.0%		-1.4
2.5%		-1.4
0.5%		-1.4
0.0%	minimum	-1.4

Summary Statistics

Mean	2.4333333
Std Dev	3.7527767
Std Err Mean	2.1666667
Upper 95% Mean	11.755748
Lower 95% Mean	-6.889081
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Cesium-137 Wet ash - Acid digestion - the use of oxidizers to destroy organics****Quantiles**

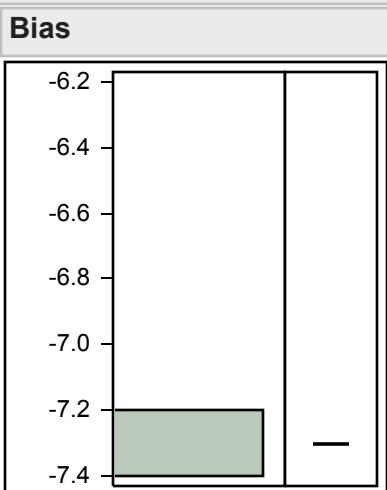
100.0%	maximum	-2.3
99.5%		-2.3
97.5%		-2.3
90.0%		-2.3
75.0%	quartile	-2.3
50.0%	median	-2.3
25.0%	quartile	-2.3
10.0%		-2.3
2.5%		-2.3
0.5%		-2.3
0.0%	minimum	-2.3

Summary Statistics

Mean	-2.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

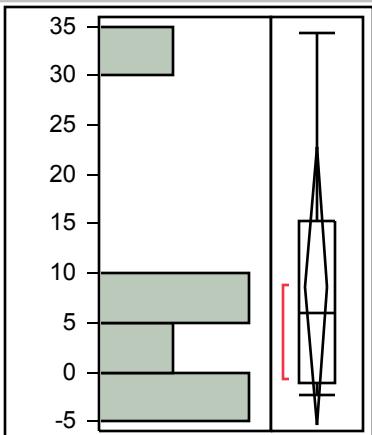
Distributions Analyte_Method=Cobalt-57 Acid dissolution
by strong Aqua Requia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	-7.3
99.5%		-7.3
97.5%		-7.3
90.0%		-7.3
75.0%	quartile	-7.3
50.0%	median	-7.3
25.0%	quartile	-7.3
10.0%		-7.3
2.5%		-7.3
0.5%		-7.3
0.0%	minimum	-7.3

Summary Statistics

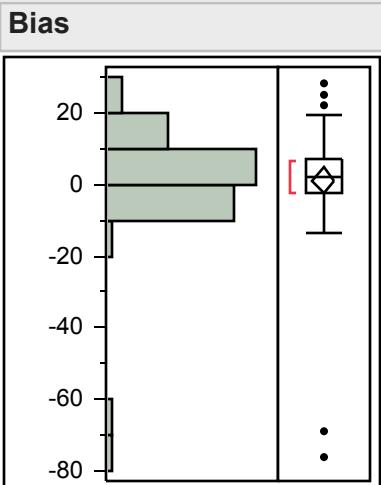
Mean	-7.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Cobalt-57****EPA 901.1, Gamma Emitting, 600/4-80-032****Bias****Quantiles**

100.0%	maximum	34.4
99.5%		34.4
97.5%		34.4
90.0%		34.4
75.0%	quartile	15.275
50.0%	median	6
25.0%	quartile	-1.05
10.0%		-2.4
2.5%		-2.4
0.5%		-2.4
0.0%	minimum	-2.4

Summary Statistics

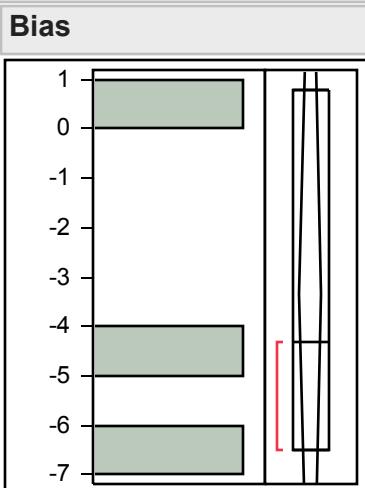
Mean	8.7166667
Std Dev	13.411848
Std Err Mean	5.475364
Upper 95% Mean	22.791538
Lower 95% Mean	-5.358205
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Cobalt-57****No preparation - analyzed as received****Quantiles**

100.0%	maximum	28.1
99.5%		28.1
97.5%		25.46
90.0%		15.27
75.0%	quartile	7.25
50.0%	median	1.75
25.0%	quartile	-2.55
10.0%		-8.01
2.5%		-70.06
0.5%		-76
0.0%	minimum	-76

Summary Statistics

Mean	1.1555556
Std Dev	15.079581
Std Err Mean	1.7771457
Upper 95% Mean	4.6990834
Lower 95% Mean	-2.387972
N	72

MaS Distribution by Prep Method**Distributions****Analyte_Method=Cobalt-57 Other****Quantiles**

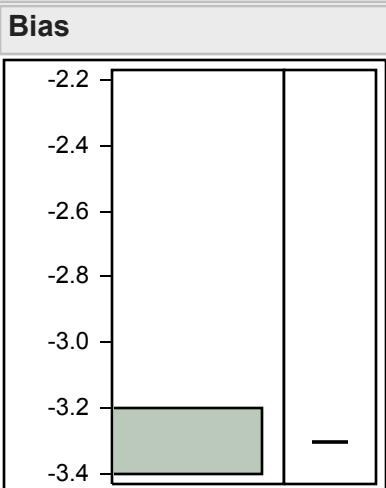
100.0%	maximum	0.8
99.5%		0.8
97.5%		0.8
90.0%		0.8
75.0%	quartile	0.8
50.0%	median	-4.3
25.0%	quartile	-6.5
10.0%		-6.5
2.5%		-6.5
0.5%		-6.5
0.0%	minimum	-6.5

Summary Statistics

Mean	-3.333333
Std Dev	3.7447741
Std Err Mean	2.1620464
Upper 95% Mean	5.9692013
Lower 95% Mean	-12.63587
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Cobalt-57 Wet ash - Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

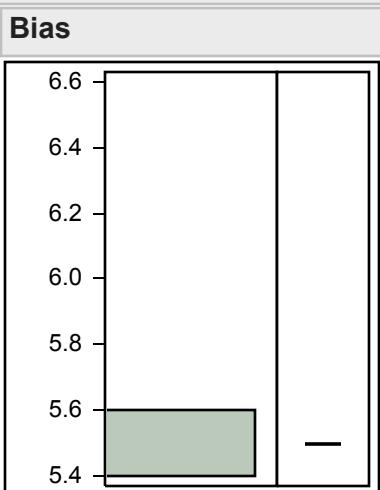
100.0%	maximum	-3.3
99.5%		-3.3
97.5%		-3.3
90.0%		-3.3
75.0%	quartile	-3.3
50.0%	median	-3.3
25.0%	quartile	-3.3
10.0%		-3.3
2.5%		-3.3
0.5%		-3.3
0.0%	minimum	-3.3

Summary Statistics

Mean	-3.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

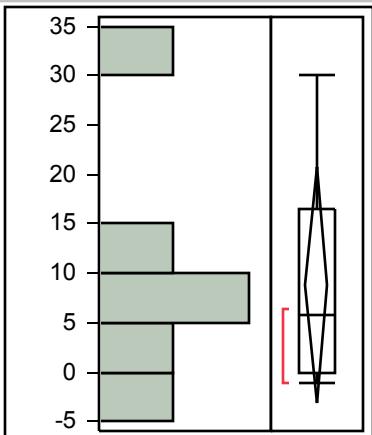
Distributions Analyte_Method=Cobalt-60 Acid dissolution
by strong Aqua Requia, hydrofluoric acid, etc.

**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

Summary Statistics

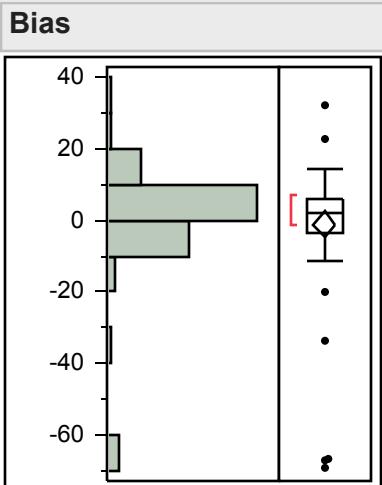
Mean	5.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Cobalt-60****EPA 901.1, Gamma Emitting, 600/4-80-032****Bias****Quantiles**

100.0%	maximum	30.1
99.5%		30.1
97.5%		30.1
90.0%		30.1
75.0%	quartile	16.6
50.0%	median	5.8
25.0%	quartile	-0.125
10.0%		-1.1
2.5%		-1.1
0.5%		-1.1
0.0%	minimum	-1.1

Summary Statistics

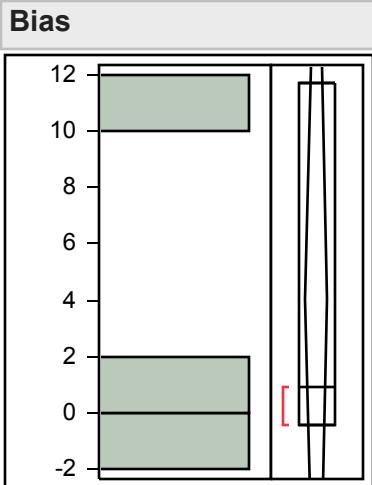
Mean	8.8166667
Std Dev	11.445945
Std Err Mean	4.6727877
Upper 95% Mean	20.82845
Lower 95% Mean	-3.195116
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Cobalt-60****No preparation - analyzed as received****Quantiles**

100.0%	maximum	32
99.5%		32
97.5%		24.245
90.0%		11.32
75.0%	quartile	5.775
50.0%	median	2
25.0%	quartile	-3.7
10.0%		-9.05
2.5%		-67.268
0.5%		-69
0.0%	minimum	-69

Summary Statistics

Mean	-1.075
Std Dev	16.406463
Std Err Mean	1.9335203
Upper 95% Mean	2.7803299
Lower 95% Mean	-4.93033
N	72

MaS Distribution by Prep Method**Distributions****Analyte_Method=Cobalt-60 Other****Quantiles**

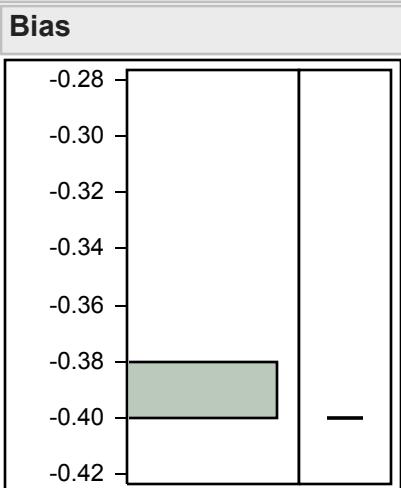
100.0%	maximum	11.7
99.5%		11.7
97.5%		11.7
90.0%		11.7
75.0%	quartile	11.7
50.0%	median	0.9
25.0%	quartile	-0.4
10.0%		-0.4
2.5%		-0.4
0.5%		-0.4
0.0%	minimum	-0.4

Summary Statistics

Mean	4.0666667
Std Dev	6.6425397
Std Err Mean	3.8350721
Upper 95% Mean	20.56765
Lower 95% Mean	-12.43432
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Cobalt-60 Wet ash - Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

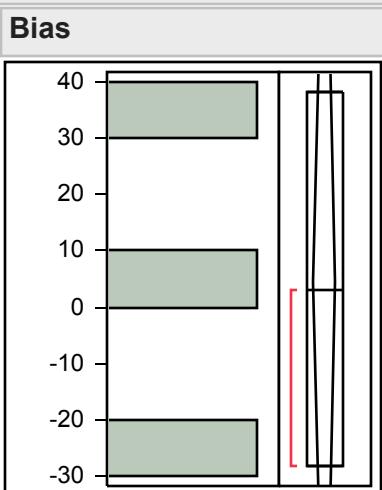
100.0%	maximum	-0.4
99.5%		-0.4
97.5%		-0.4
90.0%		-0.4
75.0%	quartile	-0.4
50.0%	median	-0.4
25.0%	quartile	-0.4
10.0%		-0.4
2.5%		-0.4
0.5%		-0.4
0.0%	minimum	-0.4

Summary Statistics

Mean	-0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Iron-55 Acid dissolution
by strong Aqua Requia, hydrofluoric acid, etc.

**Quantiles**

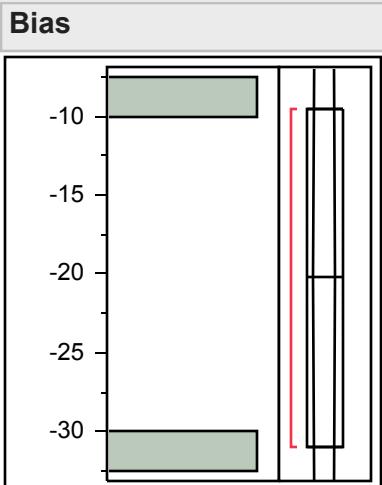
100.0%	maximum	38.2
99.5%		38.2
97.5%		38.2
90.0%		38.2
75.0%	quartile	38.2
50.0%	median	3.2
25.0%	quartile	-28.1
10.0%		-28.1
2.5%		-28.1
0.5%		-28.1
0.0%	minimum	-28.1

Summary Statistics

Mean	4.4333333
Std Dev	33.167203
Std Err Mean	19.149093
Upper 95% Mean	86.825232
Lower 95% Mean	-77.95857
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Iron-55
Acid leaching without hydrofluoric acid

**Quantiles**

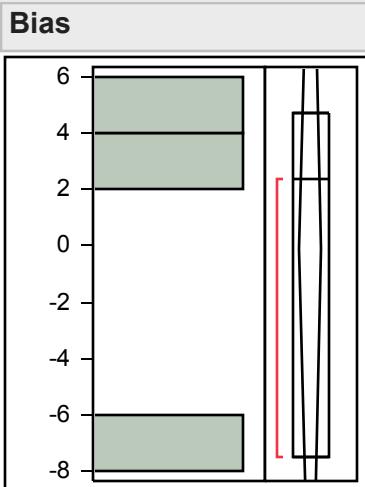
100.0%	maximum	-9.6
99.5%		-9.6
97.5%		-9.6
90.0%		-9.6
75.0%	quartile	-9.6
50.0%	median	-20.25
25.0%	quartile	-30.9
10.0%		-30.9
2.5%		-30.9
0.5%		-30.9
0.0%	minimum	-30.9

Summary Statistics

Mean	-20.25
Std Dev	15.061374
Std Err Mean	10.65
Upper 95% Mean	115.07108
Lower 95% Mean	-155.5711
N	2

MaS Distribution by Prep Method

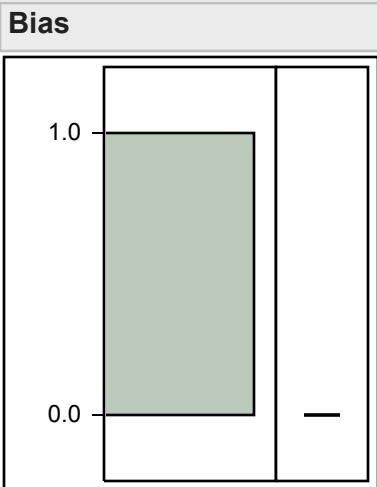
Distributions Analyte_Method=Iron-55 Ion
Exchange Chromatography / Ion Chromatography

**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	2.4
25.0%	quartile	-7.5
10.0%		-7.5
2.5%		-7.5
0.5%		-7.5
0.0%	minimum	-7.5

Summary Statistics

Mean	-0.133333
Std Dev	6.4825407
Std Err Mean	3.7426966
Upper 95% Mean	15.97019
Lower 95% Mean	-16.23686
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Iron-
55 Total dissolution by fusion****Quantiles**

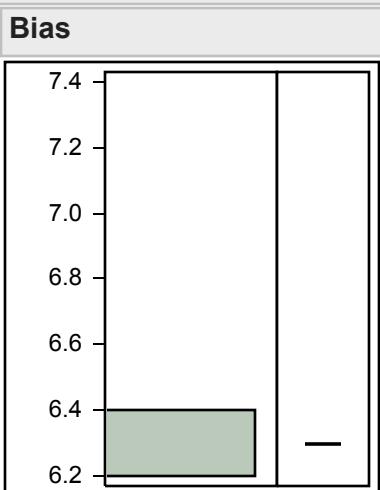
100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	0
25.0%	quartile	0
10.0%		0
2.5%		0
0.5%		0
0.0%	minimum	0

Summary Statistics

Mean	0
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Manganese-54 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

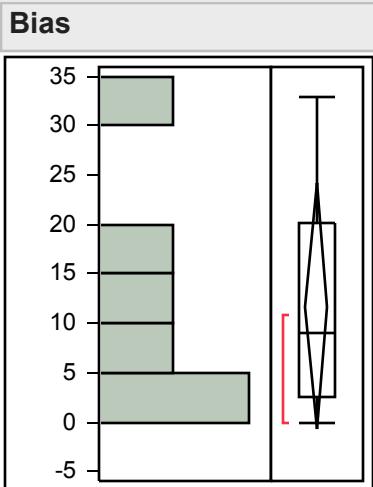
100.0%	maximum	6.3
99.5%		6.3
97.5%		6.3
90.0%		6.3
75.0%	quartile	6.3
50.0%	median	6.3
25.0%	quartile	6.3
10.0%		6.3
2.5%		6.3
0.5%		6.3
0.0%	minimum	6.3

Summary Statistics

Mean	6.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

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

**Quantiles**

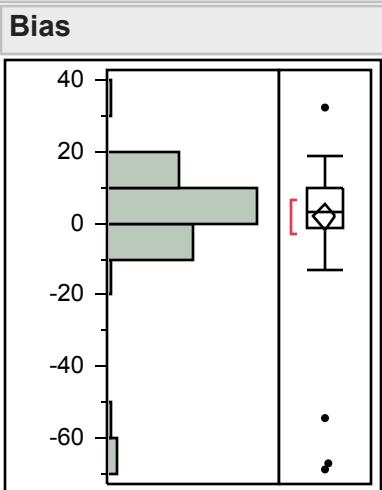
100.0%	maximum	33
99.5%		33
97.5%		33
90.0%		33
75.0%	quartile	20.175
50.0%	median	9.05
25.0%	quartile	2.55
10.0%		0
2.5%		0
0.5%		0
0.0%	minimum	0

Summary Statistics

Mean	11.733333
Std Dev	11.815188
Std Err Mean	4.8235303
Upper 95% Mean	24.132613
Lower 95% Mean	-0.665946
N	6

MaS Distribution by Prep Method

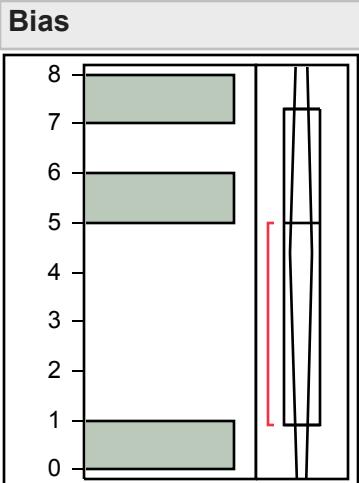
Distributions Analyte_Method=Manganese-
54 No preparation - analyzed as received

**Quantiles**

100.0%	maximum	32.2
99.5%		32.2
97.5%		20.555
90.0%		15.12
75.0%	quartile	9.8
50.0%	median	2.9
25.0%	quartile	-1.55
10.0%		-5.18
2.5%		-67.155
0.5%		-68.6
0.0%	minimum	-68.6

Summary Statistics

Mean	1.9342466
Std Dev	15.546697
Std Err Mean	1.8196032
Upper 95% Mean	5.5615593
Lower 95% Mean	-1.693066
N	73

MaS Distribution by Prep Method**Distributions****Analyte_Method=Manganese-54 Other****Quantiles**

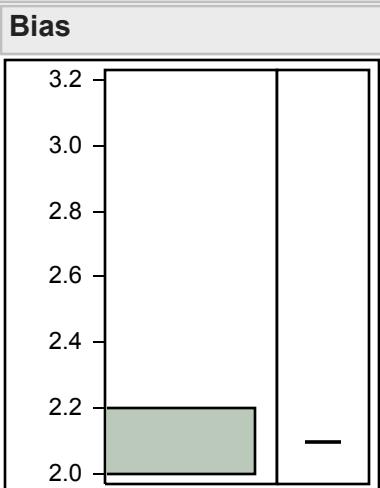
100.0%	maximum	7.3
99.5%		7.3
97.5%		7.3
90.0%		7.3
75.0%	quartile	7.3
50.0%	median	5
25.0%	quartile	0.9
10.0%		0.9
2.5%		0.9
0.5%		0.9
0.0%	minimum	0.9

Summary Statistics

Mean	4.4
Std Dev	3.241913
Std Err Mean	1.8717194
Upper 95% Mean	12.453358
Lower 95% Mean	-3.653358
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Manganese-54 Wet ash -
Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

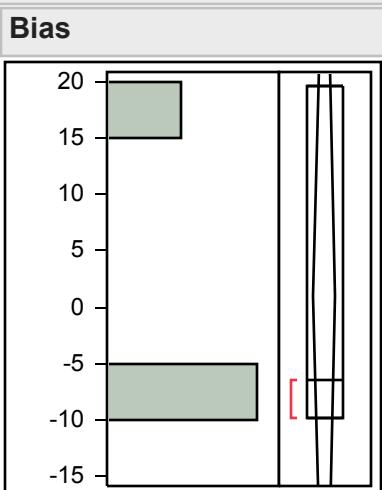
100.0%	maximum	2.1
99.5%		2.1
97.5%		2.1
90.0%		2.1
75.0%	quartile	2.1
50.0%	median	2.1
25.0%	quartile	2.1
10.0%		2.1
2.5%		2.1
0.5%		2.1
0.0%	minimum	2.1

Summary Statistics

Mean	2.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

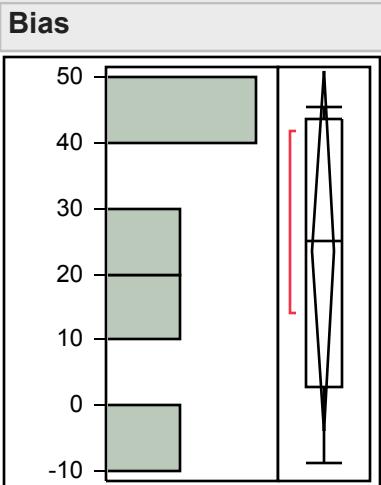
Distributions Analyte_Method=Nickel-63 Acid dissolution
by strong Aqua Requia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	19.6
99.5%		19.6
97.5%		19.6
90.0%		19.6
75.0%	quartile	19.6
50.0%	median	-6.5
25.0%	quartile	-9.9
10.0%		-9.9
2.5%		-9.9
0.5%		-9.9
0.0%	minimum	-9.9

Summary Statistics

Mean	1.0666667
Std Dev	16.140116
Std Err Mean	9.3185001
Upper 95% Mean	41.160937
Lower 95% Mean	-39.0276
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Nickel-63****Acid leaching without hydrofluoric acid****Quantiles**

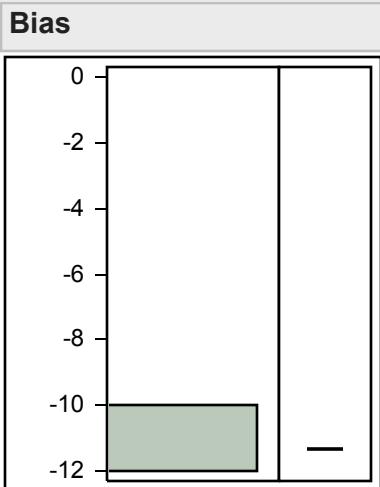
100.0%	maximum	45.3
99.5%		45.3
97.5%		45.3
90.0%		45.3
75.0%	quartile	43.5
50.0%	median	25.1
25.0%	quartile	2.8
10.0%		-8.6
2.5%		-8.6
0.5%		-8.6
0.0%	minimum	-8.6

Summary Statistics

Mean	23.54
Std Dev	21.942721
Std Err Mean	9.8130831
Upper 95% Mean	50.785487
Lower 95% Mean	-3.705487
N	5

MaS Distribution by Prep Method

Distributions Analyte_Method=Nickel-
63 Coprecipitation, straight

**Quantiles**

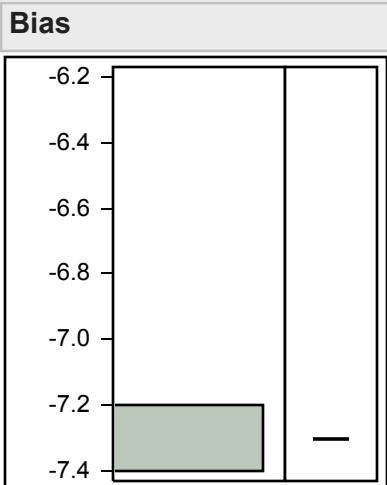
100.0%	maximum	-11.3
99.5%		-11.3
97.5%		-11.3
90.0%		-11.3
75.0%	quartile	-11.3
50.0%	median	-11.3
25.0%	quartile	-11.3
10.0%		-11.3
2.5%		-11.3
0.5%		-11.3
0.0%	minimum	-11.3

Summary Statistics

Mean	-11.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Nickel-
63 Evaporation, acidified

**Quantiles**

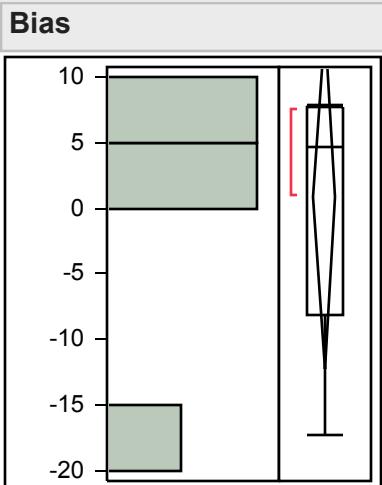
100.0%	maximum	-7.3
99.5%		-7.3
97.5%		-7.3
90.0%		-7.3
75.0%	quartile	-7.3
50.0%	median	-7.3
25.0%	quartile	-7.3
10.0%		-7.3
2.5%		-7.3
0.5%		-7.3
0.0%	minimum	-7.3

Summary Statistics

Mean	-7.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

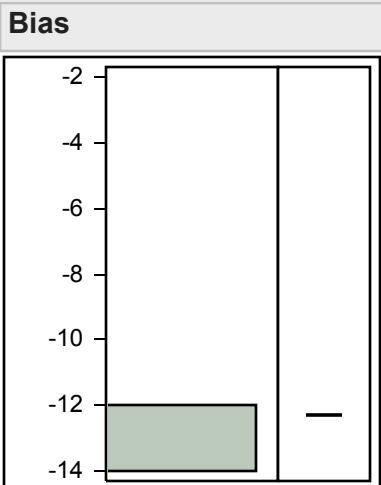
Distributions Analyte_Method=Nickel-63 Ion
Exchange Chromatography / Ion Chromatography

**Quantiles**

100.0%	maximum	7.9
99.5%		7.9
97.5%		7.9
90.0%		7.9
75.0%	quartile	7.75
50.0%	median	4.7
25.0%	quartile	-8.1
10.0%		-17.2
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Summary Statistics

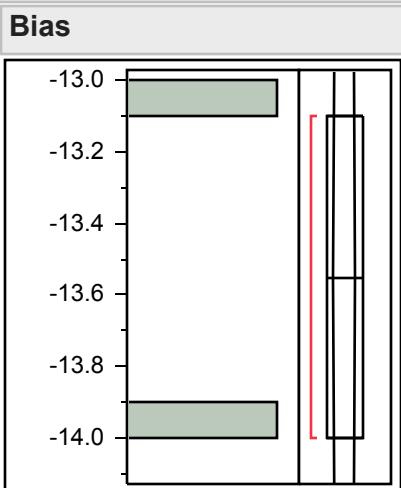
Mean	0.8
Std Dev	10.439109
Std Err Mean	4.6685115
Upper 95% Mean	13.761866
Lower 95% Mean	-12.16187
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Nickel-63****No preparation - analyzed as received****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	-12.3
25.0%	quartile	-12.3
10.0%		-12.3
2.5%		-12.3
0.5%		-12.3
0.0%	minimum	-12.3

Summary Statistics

Mean	-12.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Nickel-63 Other****Quantiles**

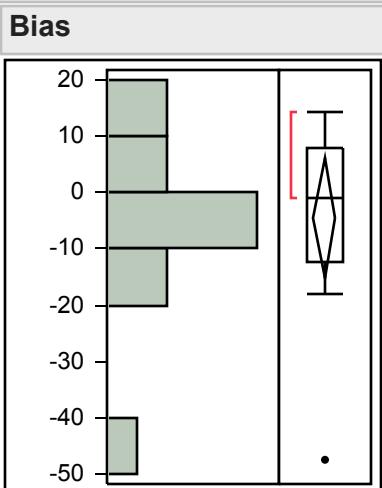
100.0%	maximum	-13.1
99.5%		-13.1
97.5%		-13.1
90.0%		-13.1
75.0%	quartile	-13.1
50.0%	median	-13.55
25.0%	quartile	-14
10.0%		-14
2.5%		-14
0.5%		-14
0.0%	minimum	-14

Summary Statistics

Mean	-13.55
Std Dev	0.6363961
Std Err Mean	0.45
Upper 95% Mean	-7.832208
Lower 95% Mean	-19.26779
N	2

MaS Distribution by Prep Method

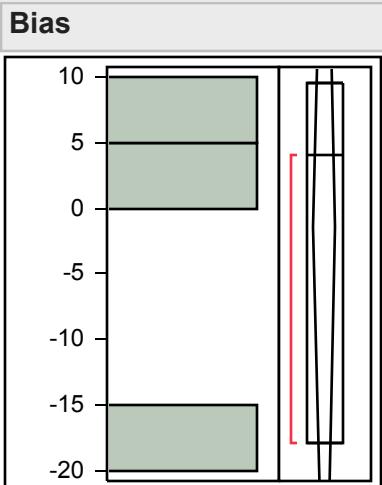
Distributions Analyte_Method=Plutonium-238 Acid dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	14.4
99.5%		14.4
97.5%		14.4
90.0%		13.74
75.0%	quartile	7.725
50.0%	median	-0.95
25.0%	quartile	-12.4
10.0%		-38.58
2.5%		-47.4
0.5%		-47.4
0.0%	minimum	-47.4

Summary Statistics

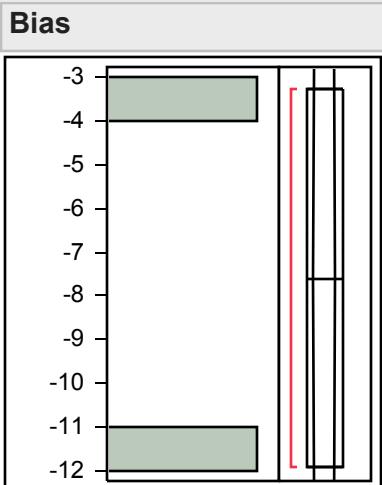
Mean	-4.566667
Std Dev	16.649561
Std Err Mean	4.8063142
Upper 95% Mean	6.0119596
Lower 95% Mean	-15.14529
N	12

MaS Distribution by Prep Method**Distributions Analyte_Method=Plutonium-
238 Acid leaching without hydrofluoric acid****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	4
25.0%	quartile	-17.9
10.0%		-17.9
2.5%		-17.9
0.5%		-17.9
0.0%	minimum	-17.9

Summary Statistics

Mean	-1.466667
Std Dev	14.494942
Std Err Mean	8.3686585
Upper 95% Mean	34.540765
Lower 95% Mean	-37.4741
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Plutonium-238****EPA 907, Actinide Elements, 600/4/80-032****Quantiles**

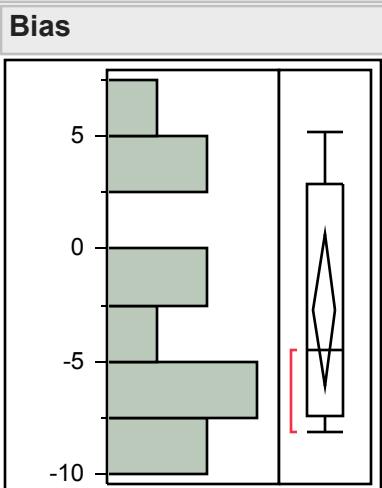
100.0%	maximum	-3.3
99.5%		-3.3
97.5%		-3.3
90.0%		-3.3
75.0%	quartile	-3.3
50.0%	median	-7.6
25.0%	quartile	-11.9
10.0%		-11.9
2.5%		-11.9
0.5%		-11.9
0.0%	minimum	-11.9

Summary Statistics

Mean	-7.6
Std Dev	6.0811183
Std Err Mean	4.3
Upper 95% Mean	47.03668
Lower 95% Mean	-62.23668
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Plutonium-238 Ion
Exchange Chromatography / Ion Chromatography

**Quantiles**

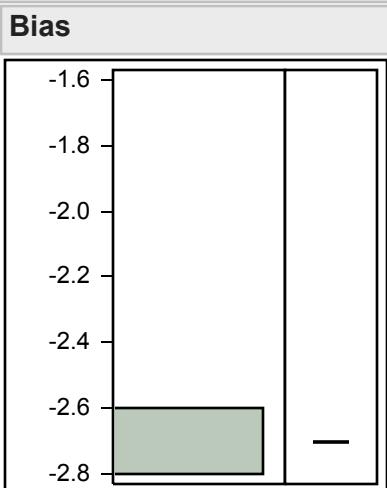
100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		4.96
75.0%	quartile	2.9
50.0%	median	-4.5
25.0%	quartile	-7.4
10.0%		-8.04
2.5%		-8.1
0.5%		-8.1
0.0%	minimum	-8.1

Summary Statistics

Mean	-2.7
Std Dev	4.97172
Std Err Mean	1.49903
Upper 95% Mean	0.640047
Lower 95% Mean	-6.040047
N	11

MaS Distribution by Prep Method

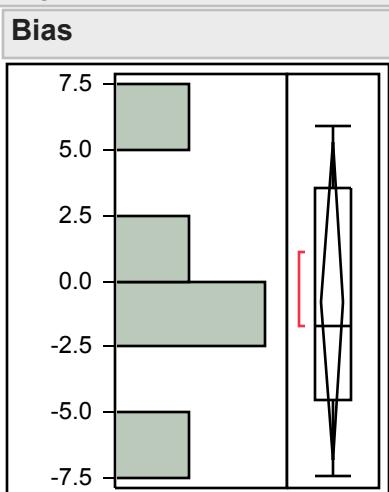
Distributions Analyte_Method=Plutonium-
238 No preparation - analyzed as received

**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

Summary Statistics

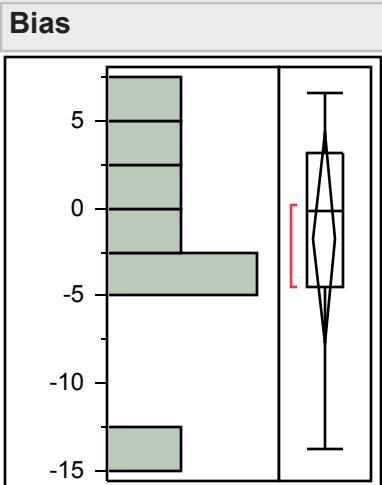
Mean	-2.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Plutonium-238 Other****Quantiles**

100.0%	maximum	5.9
99.5%		5.9
97.5%		5.9
90.0%		5.9
75.0%	quartile	3.5
50.0%	median	-1.7
25.0%	quartile	-4.55
10.0%		-7.4
2.5%		-7.4
0.5%		-7.4
0.0%	minimum	-7.4

Summary Statistics

Mean	-0.76
Std Dev	4.8392148
Std Err Mean	2.1641627
Upper 95% Mean	5.2486788
Lower 95% Mean	-6.768679
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Plutonium-
238 Total dissolution by fusion****Quantiles**

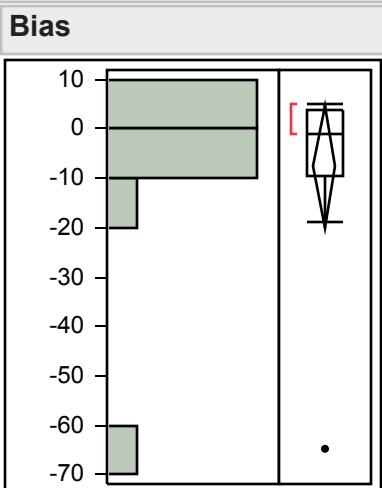
100.0%	maximum	6.6
99.5%		6.6
97.5%		6.6
90.0%		6.6
75.0%	quartile	3.2
50.0%	median	-0.2
25.0%	quartile	-4.5
10.0%		-13.7
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Summary Statistics

Mean	-1.714286
Std Dev	6.5090779
Std Err Mean	2.4602002
Upper 95% Mean	4.3056073
Lower 95% Mean	-7.734179
N	7

MaS Distribution by Prep Method

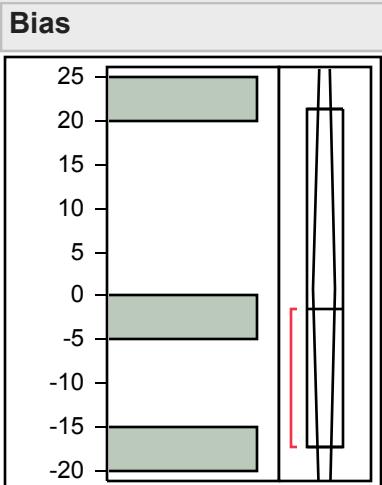
Distributions Analyte_Method=Plutonium-239/240 Acid dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.14
75.0%	quartile	3.925
50.0%	median	-0.95
25.0%	quartile	-9.65
10.0%		-50.97
2.5%		-64.8
0.5%		-64.8
0.0%	minimum	-64.8

Summary Statistics

Mean	-7.541667
Std Dev	19.424327
Std Err Mean	5.6073201
Upper 95% Mean	4.7999617
Lower 95% Mean	-19.8833
N	12

MaS Distribution by Prep Method**Distributions Analyte_Method=Plutonium-239/****240 Acid leaching without hydrofluoric acid****Quantiles**

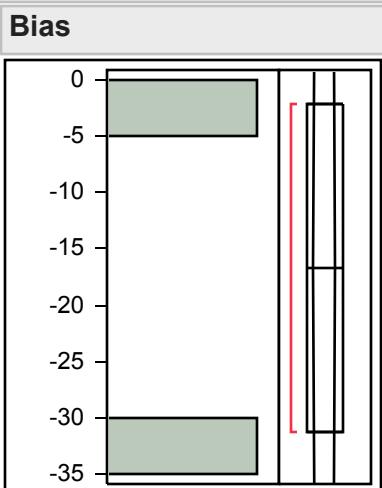
100.0%	maximum	21.3
99.5%		21.3
97.5%		21.3
90.0%		21.3
75.0%	quartile	21.3
50.0%	median	-1.5
25.0%	quartile	-17.2
10.0%		-17.2
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Summary Statistics

Mean	0.86666667
Std Dev	19.358805
Std Err Mean	11.176811
Upper 95% Mean	48.956604
Lower 95% Mean	-47.22327
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Plutonium-239/
240 EPA 907, Actinide Elements, 600/4/80-032

**Quantiles**

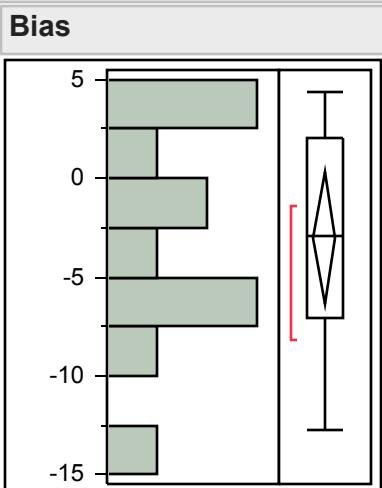
100.0%	maximum	-2.1
99.5%		-2.1
97.5%		-2.1
90.0%		-2.1
75.0%	quartile	-2.1
50.0%	median	-16.7
25.0%	quartile	-31.3
10.0%		-31.3
2.5%		-31.3
0.5%		-31.3
0.0%	minimum	-31.3

Summary Statistics

Mean	-16.7
Std Dev	20.647518
Std Err Mean	14.6
Upper 95% Mean	168.81059
Lower 95% Mean	-202.2106
N	2

MaS Distribution by Prep Method

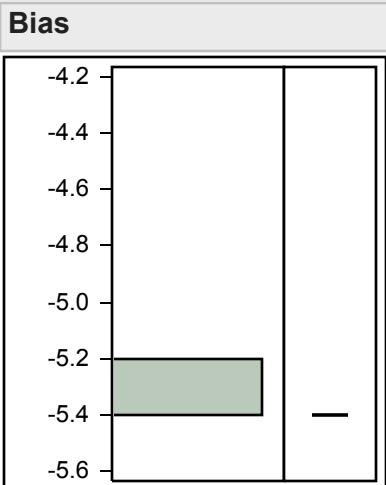
Distributions Analyte_Method=Plutonium-239/240
Ion Exchange Chromatography / Ion Chromatography

**Quantiles**

100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		4.19
75.0%	quartile	2.05
50.0%	median	-2.9
25.0%	quartile	-7.05
10.0%		-11.35
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

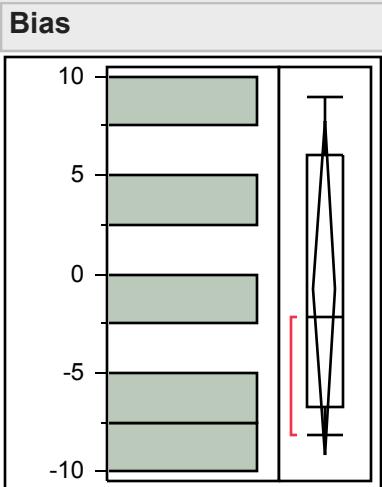
Mean	-3
Std Dev	5.2684309
Std Err Mean	1.520865
Upper 95% Mean	0.3474013
Lower 95% Mean	-6.347401
N	12

MaS Distribution by Prep Method**Distributions Analyte_Method=Plutonium-239/****240 No preparation - analyzed as received****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

Summary Statistics

Mean	-5.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Plutonium-239/240 Other****Quantiles**

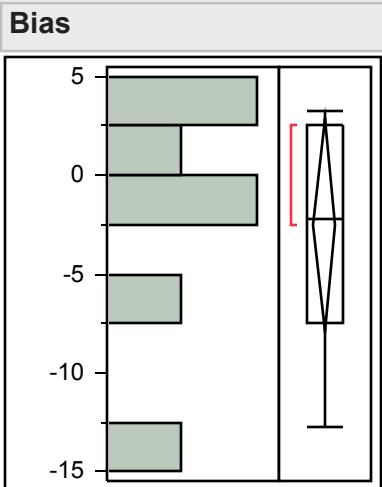
100.0%	maximum	9
99.5%		9
97.5%		9
90.0%		9
75.0%	quartile	6
50.0%	median	-2.2
25.0%	quartile	-6.7
10.0%		-8.2
2.5%		-8.2
0.5%		-8.2
0.0%	minimum	-8.2

Summary Statistics

Mean	-0.72
Std Dev	6.8287627
Std Err Mean	3.0539155
Upper 95% Mean	7.7590288
Lower 95% Mean	-9.199029
N	5

MaS Distribution by Prep Method

Distributions Analyte_Method=Plutonium-
239/240 Total dissolution by fusion

**Quantiles**

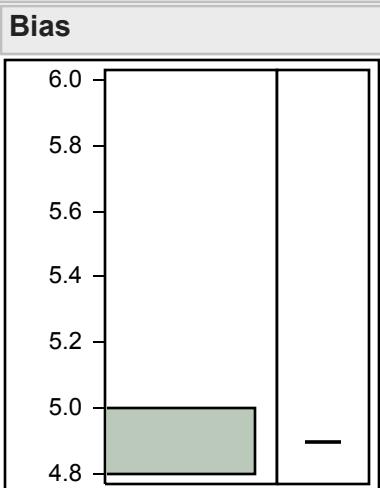
100.0%	maximum	3.3
99.5%		3.3
97.5%		3.3
90.0%		3.3
75.0%	quartile	2.5
50.0%	median	-2.2
25.0%	quartile	-7.5
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

Mean	-2.514286
Std Dev	5.8276435
Std Err Mean	2.2026422
Upper 95% Mean	2.8753856
Lower 95% Mean	-7.903957
N	7

MaS Distribution by Prep Method

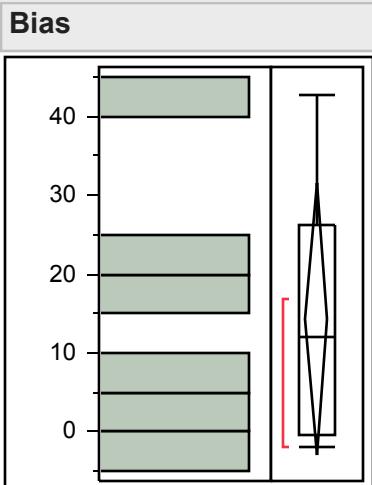
Distributions Analyte_Method=Potassium-40 Acid dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	4.9
99.5%		4.9
97.5%		4.9
90.0%		4.9
75.0%	quartile	4.9
50.0%	median	4.9
25.0%	quartile	4.9
10.0%		4.9
2.5%		4.9
0.5%		4.9
0.0%	minimum	4.9

Summary Statistics

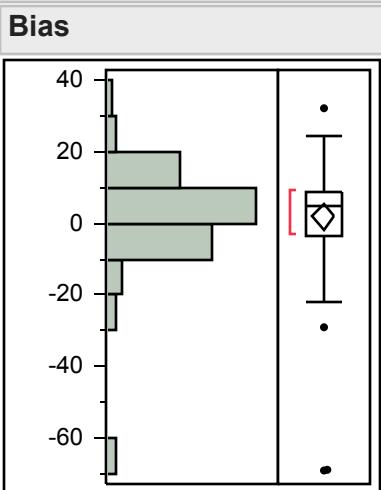
Mean	4.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Potassium-40****EPA 901.1, Gamma Emitting, 600/4-80-032****Quantiles**

100.0%	maximum	42.6
99.5%		42.6
97.5%		42.6
90.0%		42.6
75.0%	quartile	26.1
50.0%	median	12.1
25.0%	quartile	-0.325
10.0%		-1.9
2.5%		-1.9
0.5%		-1.9
0.0%	minimum	-1.9

Summary Statistics

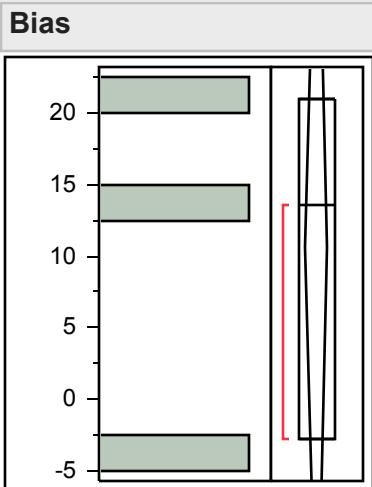
Mean	14.283333
Std Dev	16.477793
Std Err Mean	6.7270309
Upper 95% Mean	31.575717
Lower 95% Mean	-3.00905
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Potassium-****40 No preparation - analyzed as received****Quantiles**

100.0%	maximum	32
99.5%		32
97.5%		25.4825
90.0%		17.4
75.0%	quartile	8.925
50.0%	median	4.5
25.0%	quartile	-3.55
10.0%		-10.23
2.5%		-68.735
0.5%		-68.9
0.0%	minimum	-68.9

Summary Statistics

Mean	1.8194444
Std Dev	15.798535
Std Err Mean	1.8618752
Upper 95% Mean	5.5319181
Lower 95% Mean	-1.893029
N	72

MaS Distribution by Prep Method**Distributions****Analyte_Method=Potassium-40 Other****Quantiles**

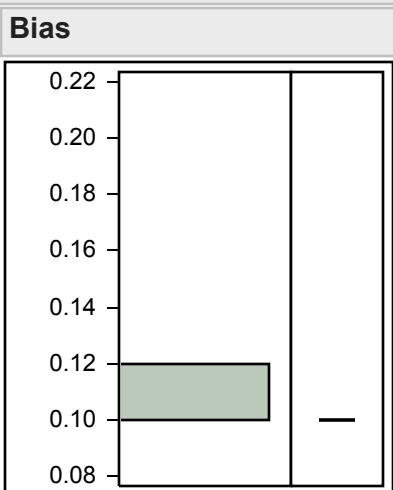
100.0%	maximum	20.9
99.5%		20.9
97.5%		20.9
90.0%		20.9
75.0%	quartile	20.9
50.0%	median	13.6
25.0%	quartile	-2.7
10.0%		-2.7
2.5%		-2.7
0.5%		-2.7
0.0%	minimum	-2.7

Summary Statistics

Mean	10.6
Std Dev	12.082632
Std Err Mean	6.9759109
Upper 95% Mean	40.614922
Lower 95% Mean	-19.41492
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Potassium-40 Wet ash -
Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

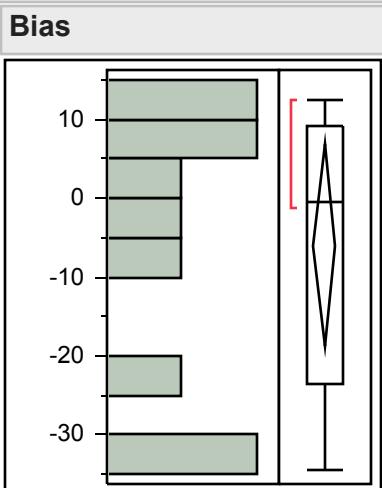
100.0%	maximum	0.1
99.5%		0.1
97.5%		0.1
90.0%		0.1
75.0%	quartile	0.1
50.0%	median	0.1
25.0%	quartile	0.1
10.0%		0.1
2.5%		0.1
0.5%		0.1
0.0%	minimum	0.1

Summary Statistics

Mean	0.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

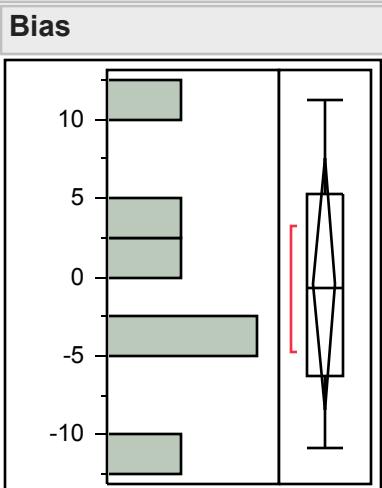
Distributions Analyte_Method=Strontium-90 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	12.4
99.5%		12.4
97.5%		12.4
90.0%		12.34
75.0%	quartile	9.175
50.0%	median	-0.4
25.0%	quartile	-23.65
10.0%		-34.33
2.5%		-34.4
0.5%		-34.4
0.0%	minimum	-34.4

Summary Statistics

Mean	-5.98
Std Dev	17.861927
Std Err Mean	5.6484373
Upper 95% Mean	6.797653
Lower 95% Mean	-18.75765
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Strontium-90****Acid leaching without hydrofluoric acid****Quantiles**

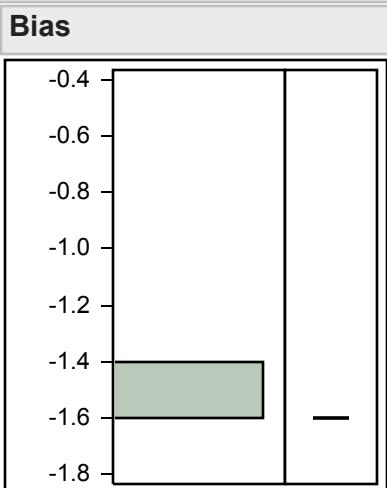
100.0%	maximum	11.2
99.5%		11.2
97.5%		11.2
90.0%		11.2
75.0%	quartile	5.2
50.0%	median	-0.75
25.0%	quartile	-6.3
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Summary Statistics

Mean	-0.45
Std Dev	7.6508169
Std Err Mean	3.1234329
Upper 95% Mean	7.57904
Lower 95% Mean	-8.47904
N	6

MaS Distribution by Prep Method

Distributions Analyte_Method=Strontium-
90 Coprecipitation, straight

**Quantiles**

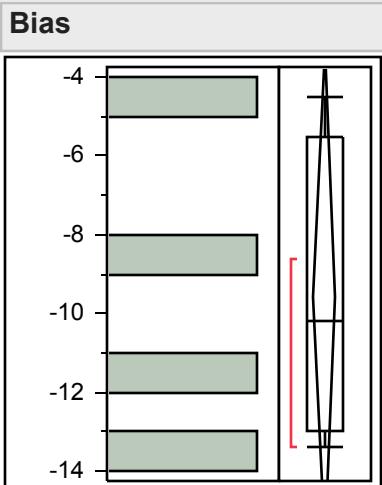
100.0%	maximum	-1.6
99.5%		-1.6
97.5%		-1.6
90.0%		-1.6
75.0%	quartile	-1.6
50.0%	median	-1.6
25.0%	quartile	-1.6
10.0%		-1.6
2.5%		-1.6
0.5%		-1.6
0.0%	minimum	-1.6

Summary Statistics

Mean	-1.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Strontium-90
EPA 905, Radioactive Strontium, 600/4-80-032

**Quantiles**

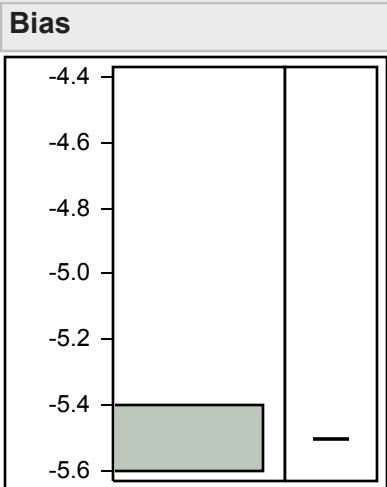
100.0%	maximum	-4.5
99.5%		-4.5
97.5%		-4.5
90.0%		-4.5
75.0%	quartile	-5.525
50.0%	median	-10.2
25.0%	quartile	-13
10.0%		-13.4
2.5%		-13.4
0.5%		-13.4
0.0%	minimum	-13.4

Summary Statistics

Mean	-9.575
Std Dev	3.9279978
Std Err Mean	1.9639989
Upper 95% Mean	-3.324679
Lower 95% Mean	-15.82532
N	4

MaS Distribution by Prep Method

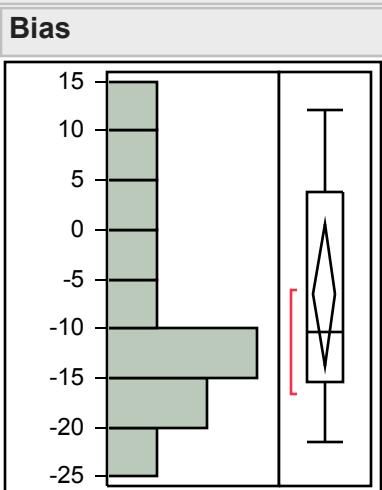
Distributions Analyte_Method=Strontium-
90 Evaporation, acidified

**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

Summary Statistics

Mean	-5.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Strontium-90 Ion
Exchange Chromatography / Ion Chromatography****Quantiles**

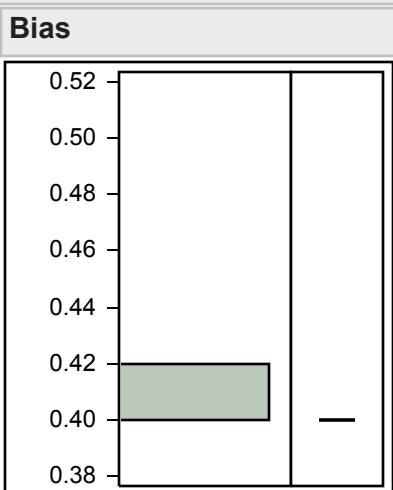
100.0%	maximum	12.2
99.5%		12.2
97.5%		12.2
90.0%		11.14
75.0%	quartile	3.9
50.0%	median	-10.4
25.0%	quartile	-15.4
10.0%		-20.62
2.5%		-21.6
0.5%		-21.6
0.0%	minimum	-21.6

Summary Statistics

Mean	-6.572727
Std Dev	10.707109
Std Err Mean	3.2283148
Upper 95% Mean	0.6204064
Lower 95% Mean	-13.76586
N	11

MaS Distribution by Prep Method

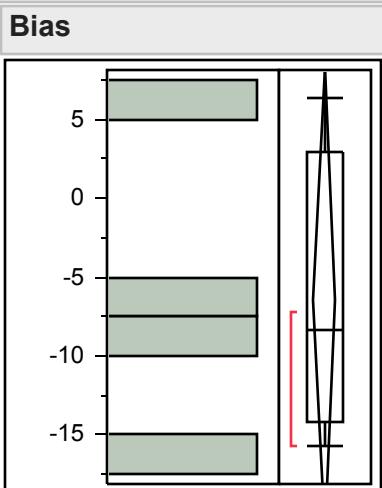
Distributions Analyte_Method=Strontium-
90 No preparation - analyzed as received

**Quantiles**

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

Summary Statistics

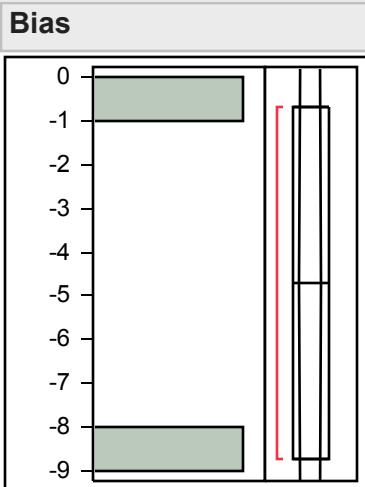
Mean	0.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Strontium-90 Other****Quantiles**

100.0%	maximum	6.3
99.5%		6.3
97.5%		6.3
90.0%		6.3
75.0%	quartile	2.925
50.0%	median	-8.3
25.0%	quartile	-14.125
10.0%		-15.7
2.5%		-15.7
0.5%		-15.7
0.0%	minimum	-15.7

Summary Statistics

Mean	-6.5
Std Dev	9.2624691
Std Err Mean	4.6312345
Upper 95% Mean	8.2386552
Lower 95% Mean	-21.23866
N	4

MaS Distribution by Prep Method**Distributions Analyte_Method=Strontium-****90 Total dissolution by fusion****Quantiles**

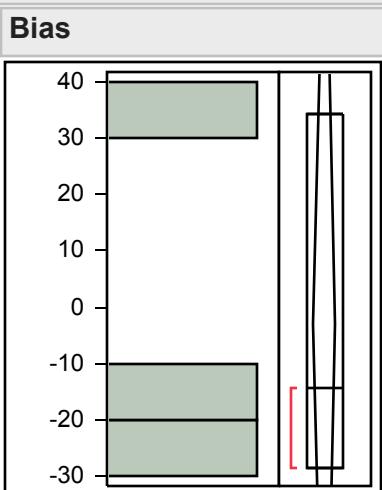
100.0%	maximum	-0.7
99.5%		-0.7
97.5%		-0.7
90.0%		-0.7
75.0%	quartile	-0.7
50.0%	median	-4.7
25.0%	quartile	-8.7
10.0%		-8.7
2.5%		-8.7
0.5%		-8.7
0.0%	minimum	-8.7

Summary Statistics

Mean	-4.7
Std Dev	5.6568542
Std Err Mean	4
Upper 95% Mean	46.124819
Lower 95% Mean	-55.52482
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Technetium-99 Acid
dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

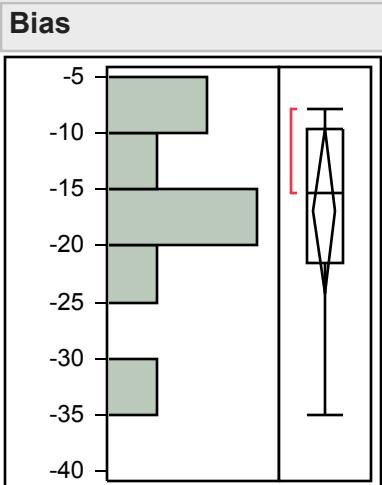
100.0%	maximum	34.4
99.5%		34.4
97.5%		34.4
90.0%		34.4
75.0%	quartile	34.4
50.0%	median	-14.3
25.0%	quartile	-28.6
10.0%		-28.6
2.5%		-28.6
0.5%		-28.6
0.0%	minimum	-28.6

Summary Statistics

Mean	-2.833333
Std Dev	33.02822
Std Err Mean	19.068852
Upper 95% Mean	79.213314
Lower 95% Mean	-84.87998
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Technetium-
99 Acid leaching without hydrofluoric acid

**Quantiles**

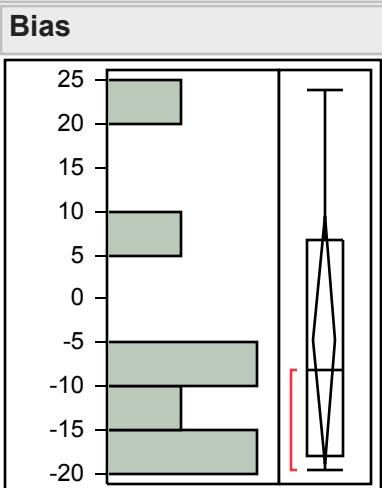
100.0%	maximum	-7.8
99.5%		-7.8
97.5%		-7.8
90.0%		-7.8
75.0%	quartile	-9.7
50.0%	median	-15.35
25.0%	quartile	-21.45
10.0%		-35
2.5%		-35
0.5%		-35
0.0%	minimum	-35

Summary Statistics

Mean	-16.9375
Std Dev	8.7456009
Std Err Mean	3.0920369
Upper 95% Mean	-9.625995
Lower 95% Mean	-24.24901
N	8

MaS Distribution by Prep Method

Distributions Analyte_Method=Technetium-99 Ion
Exchange Chromatography / Ion Chromatography

**Quantiles**

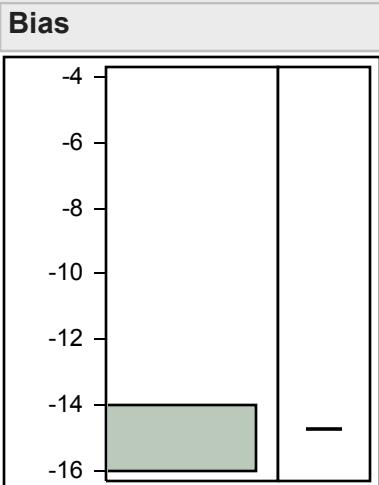
100.0%	maximum	23.7
99.5%		23.7
97.5%		23.7
90.0%		23.7
75.0%	quartile	6.8
50.0%	median	-8.1
25.0%	quartile	-17.8
10.0%		-19.4
2.5%		-19.4
0.5%		-19.4
0.0%	minimum	-19.4

Summary Statistics

Mean	-4.7
Std Dev	15.281361
Std Err Mean	5.7758116
Upper 95% Mean	9.4329019
Lower 95% Mean	-18.8329
N	7

MaS Distribution by Prep Method

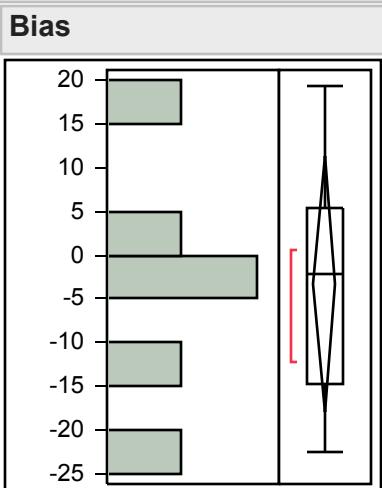
Distributions Analyte_Method=Technetium-
99 No preparation - analyzed as received

**Quantiles**

100.0%	maximum	-14.7
99.5%		-14.7
97.5%		-14.7
90.0%		-14.7
75.0%	quartile	-14.7
50.0%	median	-14.7
25.0%	quartile	-14.7
10.0%		-14.7
2.5%		-14.7
0.5%		-14.7
0.0%	minimum	-14.7

Summary Statistics

Mean	-14.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Technetium-99 Other****Quantiles**

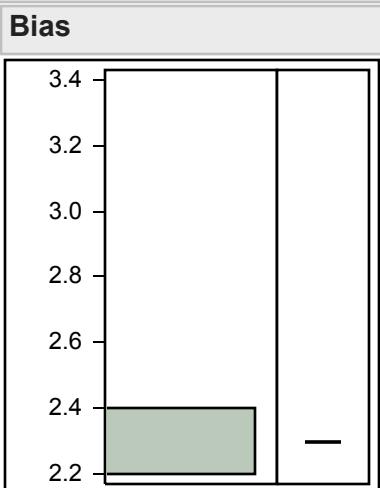
100.0%	maximum	19.2
99.5%		19.2
97.5%		19.2
90.0%		19.2
75.0%	quartile	5.25
50.0%	median	-2.25
25.0%	quartile	-14.75
10.0%		-22.4
2.5%		-22.4
0.5%		-22.4
0.0%	minimum	-22.4

Summary Statistics

Mean	-3.216667
Std Dev	13.915806
Std Err Mean	5.6811042
Upper 95% Mean	11.387076
Lower 95% Mean	-17.82041
N	6

MaS Distribution by Prep Method

Distributions Analyte_Method=Technetium-99 Wet ash -
Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

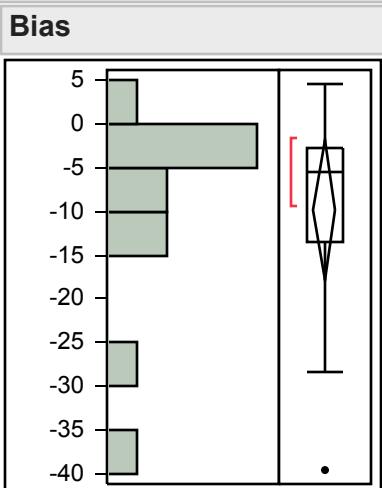
100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	2.3
25.0%	quartile	2.3
10.0%		2.3
2.5%		2.3
0.5%		2.3
0.0%	minimum	2.3

Summary Statistics

Mean	2.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Uranium-234/233 Acid dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

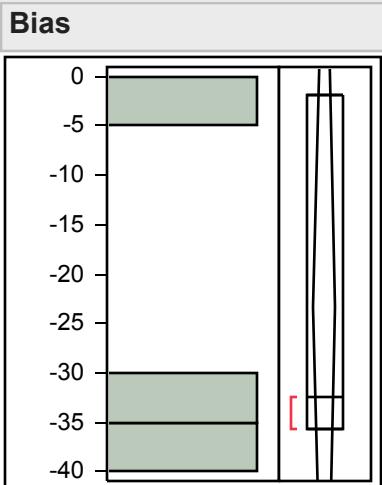
100.0%	maximum	4.5
99.5%		4.5
97.5%		4.5
90.0%		2.64
75.0%	quartile	-2.7
50.0%	median	-5.55
25.0%	quartile	-13.475
10.0%		-36.17
2.5%		-39.5
0.5%		-39.5
0.0%	minimum	-39.5

Summary Statistics

Mean	-9.9
Std Dev	12.481987
Std Err Mean	3.6032393
Upper 95% Mean	-1.969324
Lower 95% Mean	-17.83068
N	12

MaS Distribution by Prep Method

Distributions Analyte_Method=Uranium-234/
233 Acid leaching without hydrofluoric acid

**Quantiles**

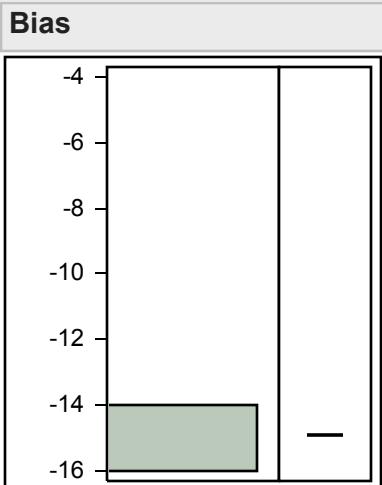
100.0%	maximum	-1.8
99.5%		-1.8
97.5%		-1.8
90.0%		-1.8
75.0%	quartile	-1.8
50.0%	median	-32.5
25.0%	quartile	-35.8
10.0%		-35.8
2.5%		-35.8
0.5%		-35.8
0.0%	minimum	-35.8

Summary Statistics

Mean	-23.36667
Std Dev	18.750022
Std Err Mean	10.82533
Upper 95% Mean	23.210971
Lower 95% Mean	-69.9443
N	3

MaS Distribution by Prep Method

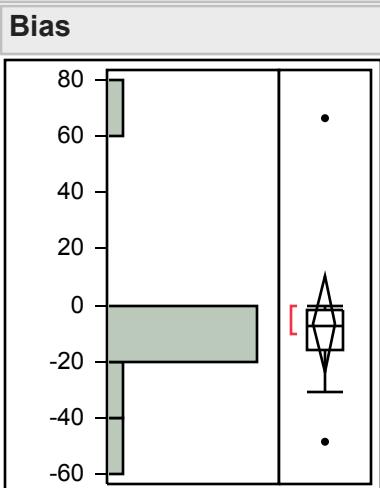
Distributions Analyte_Method=Uranium-234/233 EPA
908, Uranium-Radiochemical Method, 600/4/80-032

**Quantiles**

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

Summary Statistics

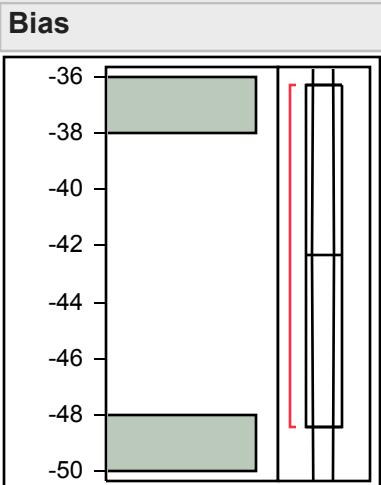
Mean	-14.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-234/233****Ion Exchange Chromatography / Ion Chromatography****Quantiles**

100.0%	maximum	66.3
99.5%		66.3
97.5%		66.3
90.0%		46.26
75.0%	quartile	-1.625
50.0%	median	-7.55
25.0%	quartile	-15.925
10.0%		-43.09
2.5%		-48.4
0.5%		-48.4
0.0%	minimum	-48.4

Summary Statistics

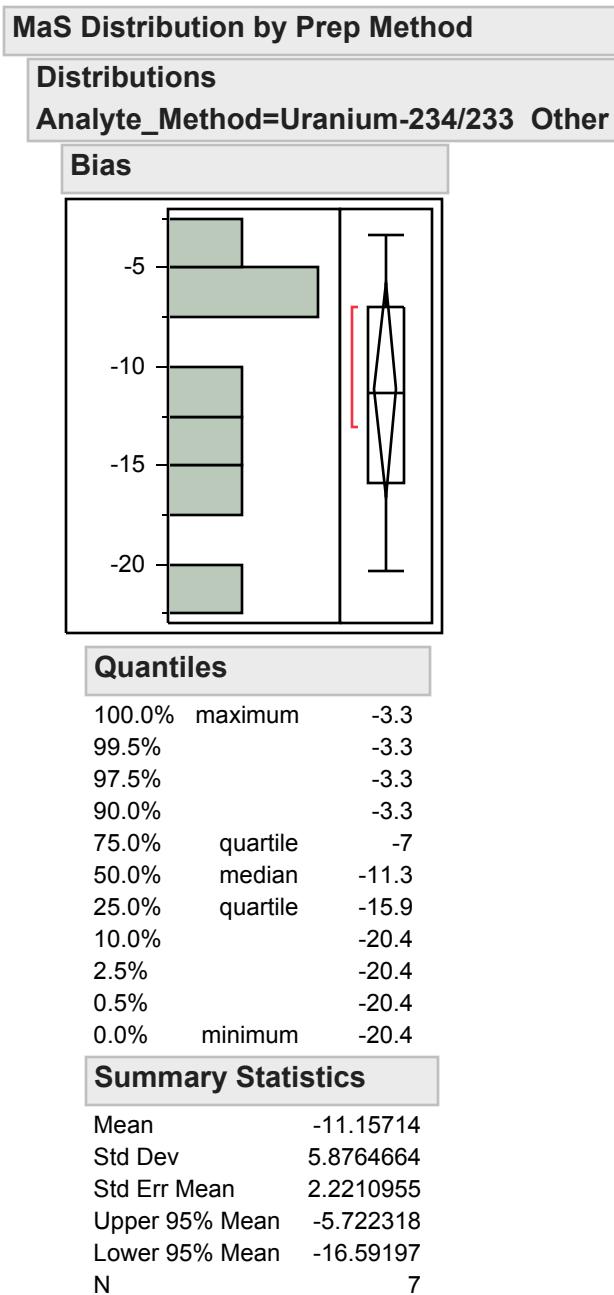
Mean	-6.658333
Std Dev	26.822496
Std Err Mean	7.7429876
Upper 95% Mean	10.383868
Lower 95% Mean	-23.70053
N	12

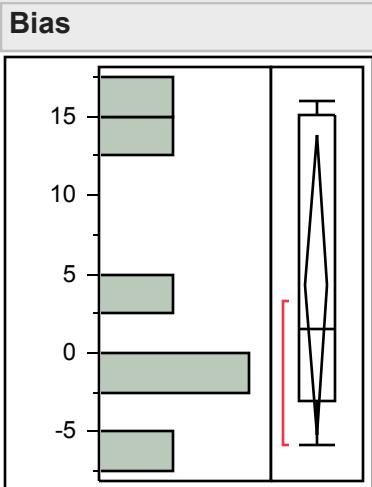
MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-234/****233 No preparation - analyzed as received****Quantiles**

100.0%	maximum	-36.3
99.5%		-36.3
97.5%		-36.3
90.0%		-36.3
75.0%	quartile	-36.3
50.0%	median	-42.35
25.0%	quartile	-48.4
10.0%		-48.4
2.5%		-48.4
0.5%		-48.4
0.0%	minimum	-48.4

Summary Statistics

Mean	-42.35
Std Dev	8.5559921
Std Err Mean	6.05
Upper 95% Mean	34.522539
Lower 95% Mean	-119.2225
N	2



MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-
234/233 Total dissolution by fusion****Quantiles**

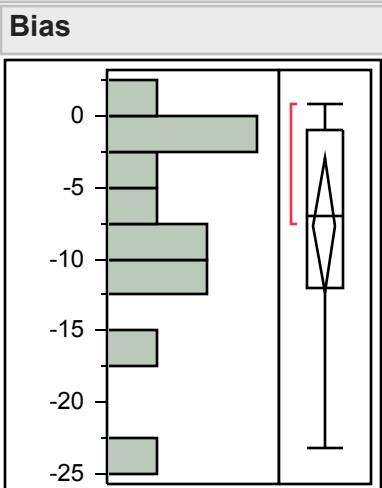
100.0%	maximum	15.9
99.5%		15.9
97.5%		15.9
90.0%		15.9
75.0%	quartile	15.075
50.0%	median	1.5
25.0%	quartile	-3.1
10.0%		-5.8
2.5%		-5.8
0.5%		-5.8
0.0%	minimum	-5.8

Summary Statistics

Mean	4.2833333
Std Dev	9.0689397
Std Err Mean	3.7023791
Upper 95% Mean	13.800602
Lower 95% Mean	-5.233935
N	6

MaS Distribution by Prep Method

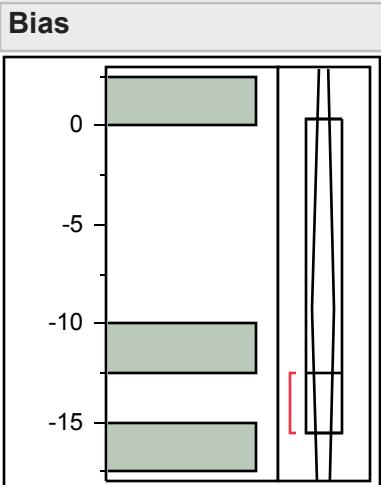
Distributions Analyte_Method=Uranium-238 Acid dissolution by strong Aqua Regia, hydrofluoric acid, etc.

**Quantiles**

100.0%	maximum	0.8
99.5%		0.8
97.5%		0.8
90.0%		0.44
75.0%	quartile	-0.975
50.0%	median	-7
25.0%	quartile	-11.95
10.0%		-21.28
2.5%		-23.2
0.5%		-23.2
0.0%	minimum	-23.2

Summary Statistics

Mean	-7.658333
Std Dev	7.3553269
Std Err Mean	2.1233
Upper 95% Mean	-2.984982
Lower 95% Mean	-12.33169
N	12

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-238****Acid leaching without hydrofluoric acid****Quantiles**

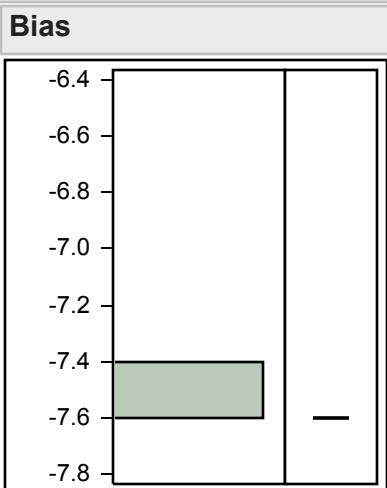
100.0%	maximum	0.3
99.5%		0.3
97.5%		0.3
90.0%		0.3
75.0%	quartile	0.3
50.0%	median	-12.5
25.0%	quartile	-15.6
10.0%		-15.6
2.5%		-15.6
0.5%		-15.6
0.0%	minimum	-15.6

Summary Statistics

Mean	-9.266667
Std Dev	8.4287207
Std Err Mean	4.8663242
Upper 95% Mean	11.671436
Lower 95% Mean	-30.20477
N	3

MaS Distribution by Prep Method

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

**Quantiles**

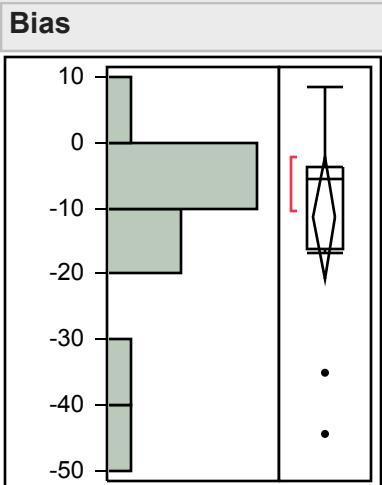
100.0%	maximum	-7.6
99.5%		-7.6
97.5%		-7.6
90.0%		-7.6
75.0%	quartile	-7.6
50.0%	median	-7.6
25.0%	quartile	-7.6
10.0%		-7.6
2.5%		-7.6
0.5%		-7.6
0.0%	minimum	-7.6

Summary Statistics

Mean	-7.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Uranium-238 Ion
Exchange Chromatography / Ion Chromatography

**Quantiles**

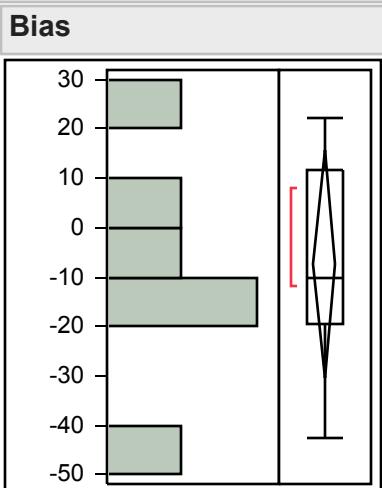
100.0%	maximum	8.5
99.5%		8.5
97.5%		8.5
90.0%		5.32
75.0%	quartile	-3.6
50.0%	median	-5.7
25.0%	quartile	-16.125
10.0%		-41.51
2.5%		-44.3
0.5%		-44.3
0.0%	minimum	-44.3

Summary Statistics

Mean	-11.46667
Std Dev	14.754742
Std Err Mean	4.2593273
Upper 95% Mean	-2.091951
Lower 95% Mean	-20.84138
N	12

MaS Distribution by Prep Method

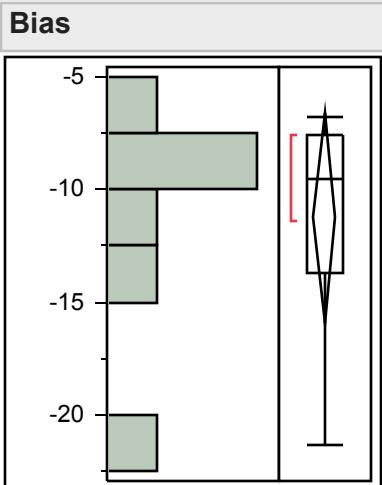
Distributions Analyte_Method=Uranium-
238 No preparation - analyzed as received

**Quantiles**

100.0%	maximum	22.4
99.5%		22.4
97.5%		22.4
90.0%		22.4
75.0%	quartile	11.6
50.0%	median	-10.1
25.0%	quartile	-19.7
10.0%		-42.8
2.5%		-42.8
0.5%		-42.8
0.0%	minimum	-42.8

Summary Statistics

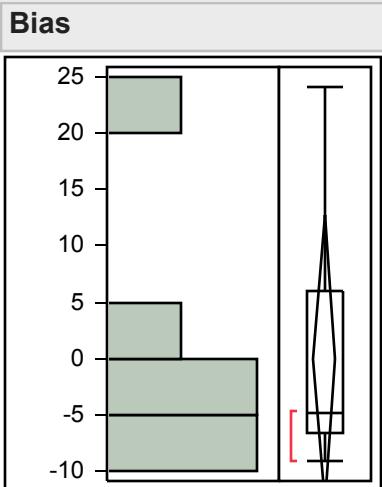
Mean	-7.433333
Std Dev	21.993605
Std Err Mean	8.9788517
Upper 95% Mean	15.64754
Lower 95% Mean	-30.51421
N	6

MaS Distribution by Prep Method**Distributions****Analyte_Method=Uranium-238 Other****Quantiles**

100.0%	maximum	-6.8
99.5%		-6.8
97.5%		-6.8
90.0%		-6.8
75.0%	quartile	-7.6
50.0%	median	-9.5
25.0%	quartile	-13.7
10.0%		-21.3
2.5%		-21.3
0.5%		-21.3
0.0%	minimum	-21.3

Summary Statistics

Mean	-11.24286
Std Dev	5.0222363
Std Err Mean	1.8982269
Upper 95% Mean	-6.598063
Lower 95% Mean	-15.88765
N	7

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-
238 Total dissolution by fusion****Quantiles**

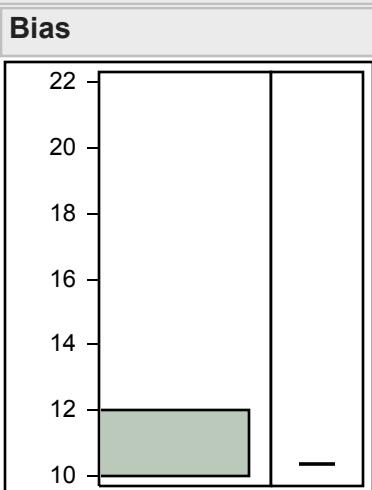
100.0%	maximum	24
99.5%		24
97.5%		24
90.0%		24
75.0%	quartile	6
50.0%	median	-4.75
25.0%	quartile	-6.55
10.0%		-9.1
2.5%		-9.1
0.5%		-9.1
0.0%	minimum	-9.1

Summary Statistics

Mean	-0.05
Std Dev	12.13635
Std Err Mean	4.9546443
Upper 95% Mean	12.686319
Lower 95% Mean	-12.78632
N	6

MaS Distribution by Prep Method

Distributions Analyte_Method=Zinc-65 Acid dissolution
by strong Aqua Requia, hydrofluoric acid, etc.

**Quantiles**

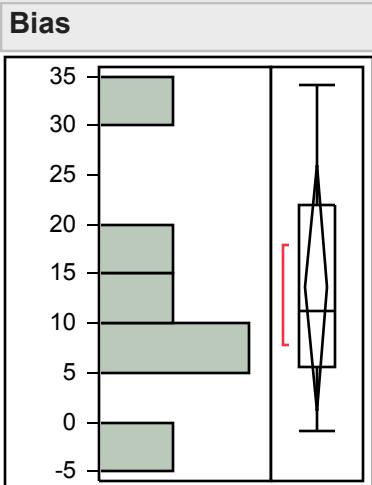
100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		10.4
75.0%	quartile	10.4
50.0%	median	10.4
25.0%	quartile	10.4
10.0%		10.4
2.5%		10.4
0.5%		10.4
0.0%	minimum	10.4

Summary Statistics

Mean	10.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

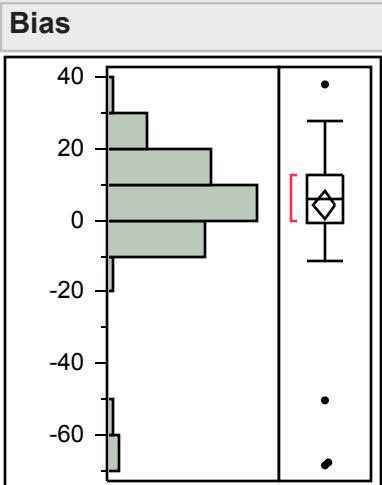
Distributions Analyte_Method=Zinc-65
EPA 901.1, Gamma Emitting, 600/4-80-032

**Quantiles**

100.0%	maximum	34.1
99.5%		34.1
97.5%		34.1
90.0%		34.1
75.0%	quartile	22.025
50.0%	median	11.3
25.0%	quartile	5.6
10.0%		-1
2.5%		-1
0.5%		-1
0.0%	minimum	-1

Summary Statistics

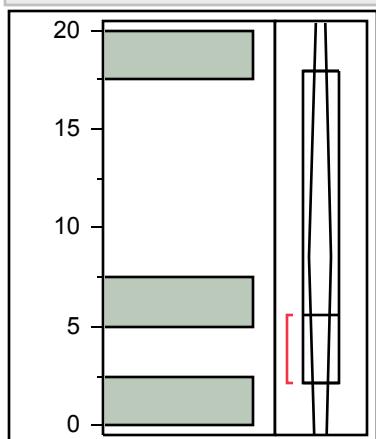
Mean	13.583333
Std Dev	11.874244
Std Err Mean	4.8476397
Upper 95% Mean	26.044588
Lower 95% Mean	1.1220787
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Zinc-65****No preparation - analyzed as received****Quantiles**

100.0%	maximum	37.8
99.5%		37.8
97.5%		29.215
90.0%		20.1
75.0%	quartile	12.55
50.0%	median	6.1
25.0%	quartile	-0.95
10.0%		-6.74
2.5%		-67.62
0.5%		-68.3
0.0%	minimum	-68.3

Summary Statistics

Mean	4.3452055
Std Dev	16.726128
Std Err Mean	1.9576452
Upper 95% Mean	8.2476998
Lower 95% Mean	0.4427112
N	73

MaS Distribution by Prep Method**Distributions****Analyte_Method=Zinc-65 Other****Bias****Quantiles**

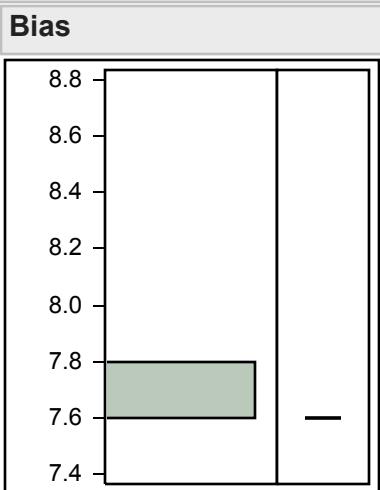
100.0%	maximum	18
99.5%		18
97.5%		18
90.0%		18
75.0%	quartile	18
50.0%	median	5.6
25.0%	quartile	2.1
10.0%		2.1
2.5%		2.1
0.5%		2.1
0.0%	minimum	2.1

Summary Statistics

Mean	8.5666667
Std Dev	8.3548389
Std Err Mean	4.8236685
Upper 95% Mean	29.321237
Lower 95% Mean	-12.1879
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Zinc-65 Wet ash - Acid digestion - the use of oxidizers to destroy organics

**Quantiles**

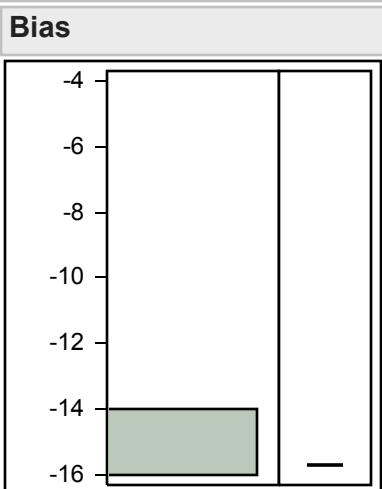
100.0%	maximum	7.6
99.5%		7.6
97.5%		7.6
90.0%		7.6
75.0%	quartile	7.6
50.0%	median	7.6
25.0%	quartile	7.6
10.0%		7.6
2.5%		7.6
0.5%		7.6
0.0%	minimum	7.6

Summary Statistics

Mean	7.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

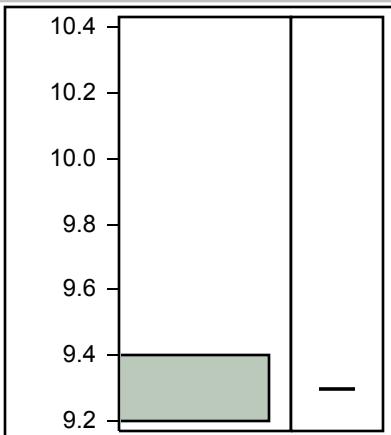
Distributions Analyte_Method=Antimony EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	-15.7
99.5%		-15.7
97.5%		-15.7
90.0%		-15.7
75.0%	quartile	-15.7
50.0%	median	-15.7
25.0%	quartile	-15.7
10.0%		-15.7
2.5%		-15.7
0.5%		-15.7
0.0%	minimum	-15.7

Summary Statistics

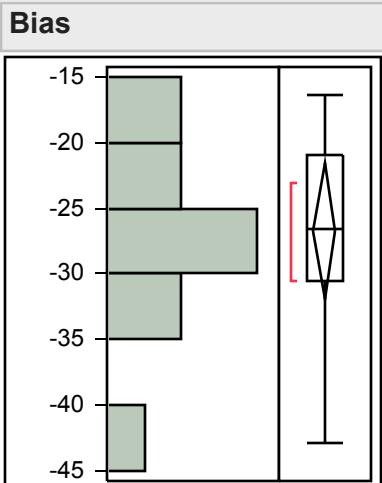
Mean	-15.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Antimony Other****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	9.3
25.0%	quartile	9.3
10.0%		9.3
2.5%		9.3
0.5%		9.3
0.0%	minimum	9.3

Summary Statistics

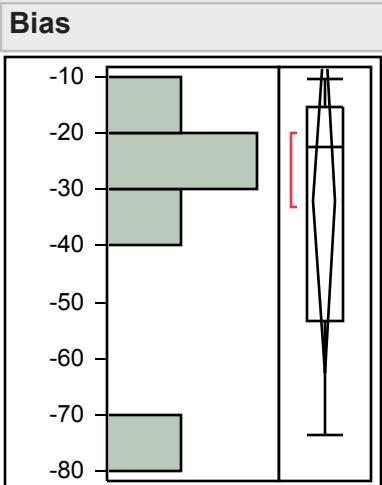
Mean	9.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Antimony SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	-16.4
99.5%		-16.4
97.5%		-16.4
90.0%		-16.56
75.0%	quartile	-20.9
50.0%	median	-26.6
25.0%	quartile	-30.6
10.0%		-41.22
2.5%		-42.8
0.5%		-42.8
0.0%	minimum	-42.8

Summary Statistics

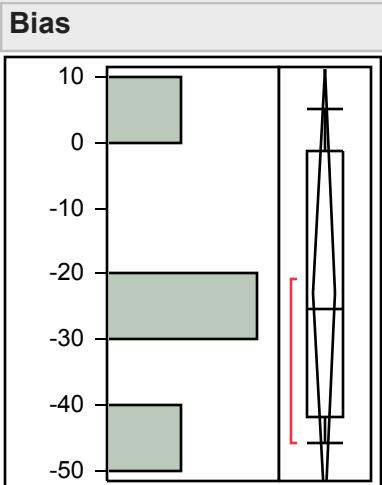
Mean	-26.77273
Std Dev	7.6866236
Std Err Mean	2.3176042
Upper 95% Mean	-21.60878
Lower 95% Mean	-31.93667
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Antimony SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	-10.4
99.5%		-10.4
97.5%		-10.4
90.0%		-10.4
75.0%	quartile	-15.25
50.0%	median	-22.4
25.0%	quartile	-53.4
10.0%		-73.5
2.5%		-73.5
0.5%		-73.5
0.0%	minimum	-73.5

Summary Statistics

Mean	-31.94
Std Dev	24.618347
Std Err Mean	11.009659
Upper 95% Mean	-1.372285
Lower 95% Mean	-62.50771
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Antimony SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

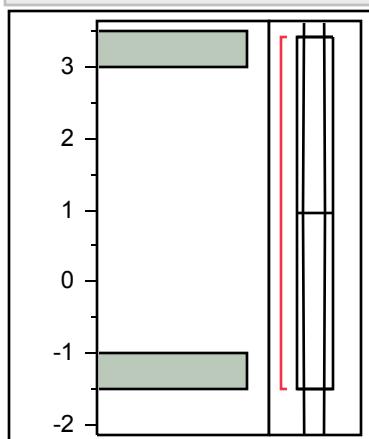
100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.2
75.0%	quartile	-1.325
50.0%	median	-25.25
25.0%	quartile	-41.75
10.0%		-45.8
2.5%		-45.8
0.5%		-45.8
0.0%	minimum	-45.8

Summary Statistics

Mean	-22.775
Std Dev	21.313904
Std Err Mean	10.656952
Upper 95% Mean	11.140177
Lower 95% Mean	-56.69018
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Antimony Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

Bias**Quantiles**

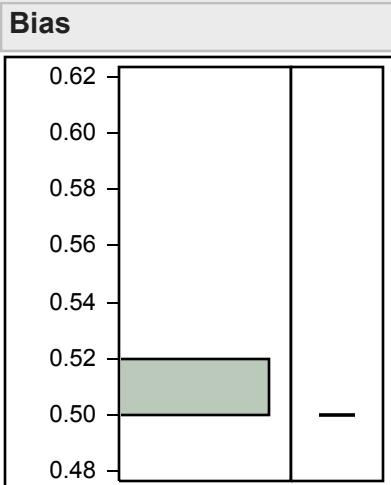
100.0%	maximum	3.4
99.5%		3.4
97.5%		3.4
90.0%		3.4
75.0%	quartile	3.4
50.0%	median	0.95
25.0%	quartile	-1.5
10.0%		-1.5
2.5%		-1.5
0.5%		-1.5
0.0%	minimum	-1.5

Summary Statistics

Mean	0.95
Std Dev	3.4648232
Std Err Mean	2.45
Upper 95% Mean	32.080202
Lower 95% Mean	-30.1802
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Arsenic EPA
Method 200.2 Sample Preparation Methods

**Quantiles**

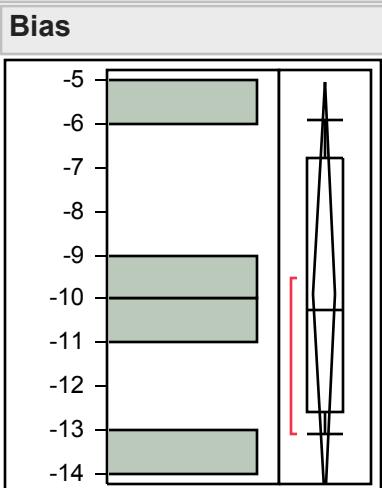
100.0%	maximum	0.5
99.5%		0.5
97.5%		0.5
90.0%		0.5
75.0%	quartile	0.5
50.0%	median	0.5
25.0%	quartile	0.5
10.0%		0.5
2.5%		0.5
0.5%		0.5
0.0%	minimum	0.5

Summary Statistics

Mean	0.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

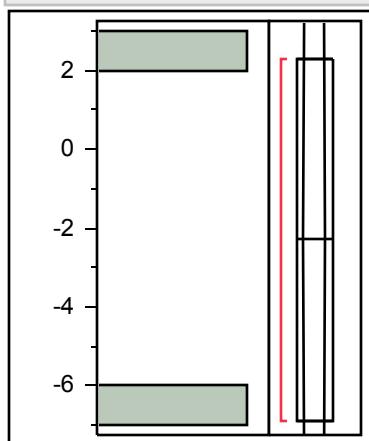
Distributions Analyte_Method=Arsenic EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	-5.9
99.5%		-5.9
97.5%		-5.9
90.0%		-5.9
75.0%	quartile	-6.8
50.0%	median	-10.25
25.0%	quartile	-12.575
10.0%		-13.1
2.5%		-13.1
0.5%		-13.1
0.0%	minimum	-13.1

Summary Statistics

Mean	-9.875
Std Dev	3.0335623
Std Err Mean	1.5167811
Upper 95% Mean	-5.047925
Lower 95% Mean	-14.70207
N	4

MaS Distribution by Prep Method**Distributions****Analyte_Method=Arsenic Other****Bias****Quantiles**

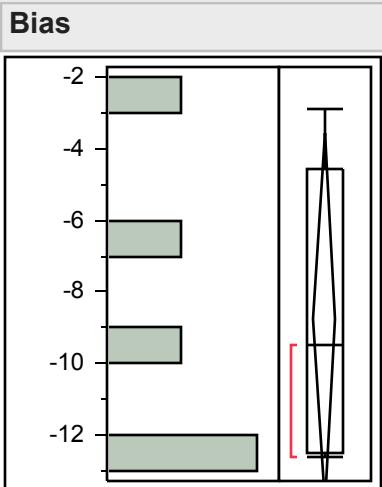
100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	-2.3
25.0%	quartile	-6.9
10.0%		-6.9
2.5%		-6.9
0.5%		-6.9
0.0%	minimum	-6.9

Summary Statistics

Mean	-2.3
Std Dev	6.5053824
Std Err Mean	4.6
Upper 95% Mean	56.148542
Lower 95% Mean	-60.74854
N	2

MaS Distribution by Prep Method

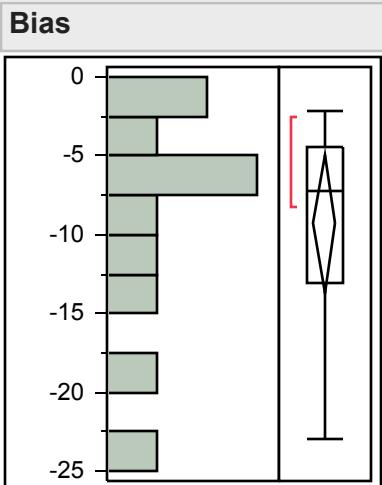
Distributions Analyte_Method=Arsenic SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

100.0%	maximum	-2.9
99.5%		-2.9
97.5%		-2.9
90.0%		-2.9
75.0%	quartile	-4.6
50.0%	median	-9.5
25.0%	quartile	-12.5
10.0%		-12.6
2.5%		-12.6
0.5%		-12.6
0.0%	minimum	-12.6

Summary Statistics

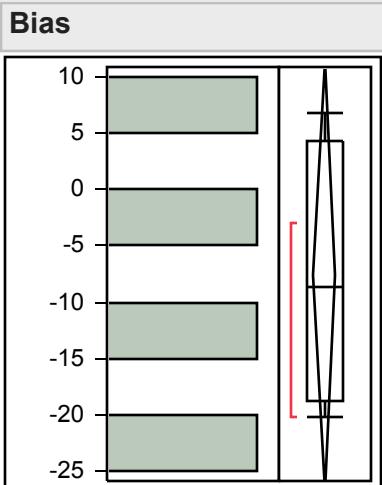
Mean	-8.74
Std Dev	4.1512649
Std Err Mean	1.8565021
Upper 95% Mean	-3.585524
Lower 95% Mean	-13.89448
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Arsenic SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	-2.2
99.5%		-2.2
97.5%		-2.2
90.0%		-2.26
75.0%	quartile	-4.5
50.0%	median	-7.2
25.0%	quartile	-13.1
10.0%		-22.02
2.5%		-23
0.5%		-23
0.0%	minimum	-23

Summary Statistics

Mean	-9.327273
Std Dev	6.5053964
Std Err Mean	1.9614508
Upper 95% Mean	-4.956888
Lower 95% Mean	-13.69766
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Arsenic SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

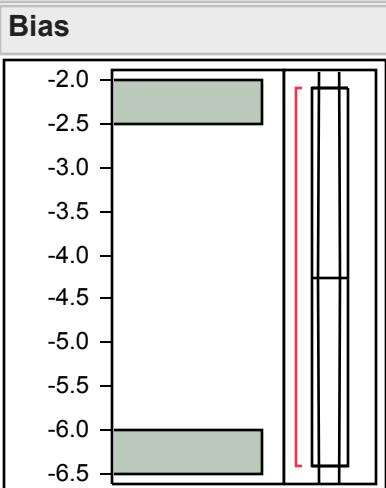
100.0%	maximum	6.8
99.5%		6.8
97.5%		6.8
90.0%		6.8
75.0%	quartile	4.375
50.0%	median	-8.7
25.0%	quartile	-18.7
10.0%		-20.1
2.5%		-20.1
0.5%		-20.1
0.0%	minimum	-20.1

Summary Statistics

Mean	-7.675
Std Dev	12.017869
Std Err Mean	6.0089343
Upper 95% Mean	11.448111
Lower 95% Mean	-26.79811
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Arsenic Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

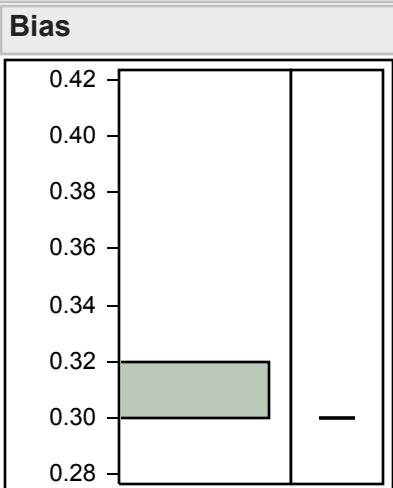
100.0%	maximum	-2.1
99.5%		-2.1
97.5%		-2.1
90.0%		-2.1
75.0%	quartile	-2.1
50.0%	median	-4.25
25.0%	quartile	-6.4
10.0%		-6.4
2.5%		-6.4
0.5%		-6.4
0.0%	minimum	-6.4

Summary Statistics

Mean	-4.25
Std Dev	3.0405592
Std Err Mean	2.15
Upper 95% Mean	23.06834
Lower 95% Mean	-31.56834
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Barium EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

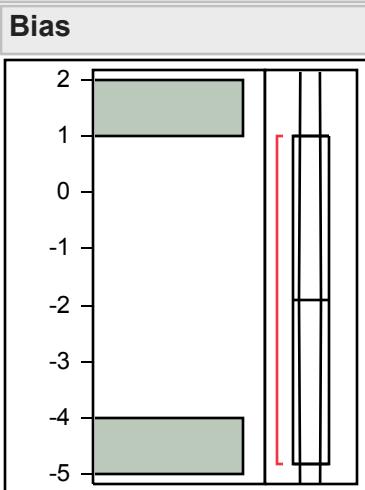
100.0%	maximum	0.3
99.5%		0.3
97.5%		0.3
90.0%		0.3
75.0%	quartile	0.3
50.0%	median	0.3
25.0%	quartile	0.3
10.0%		0.3
2.5%		0.3
0.5%		0.3
0.0%	minimum	0.3

Summary Statistics

Mean	0.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

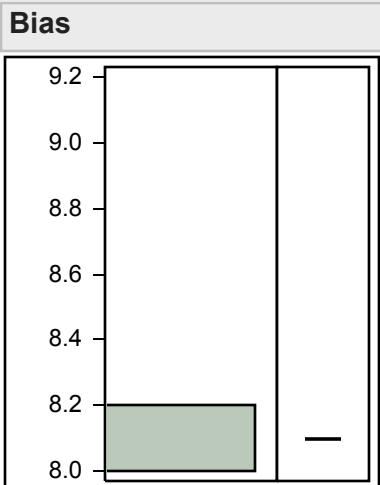
Distributions Analyte_Method=Barium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	1
99.5%		1
97.5%		1
90.0%		1
75.0%	quartile	1
50.0%	median	-1.9
25.0%	quartile	-4.8
10.0%		-4.8
2.5%		-4.8
0.5%		-4.8
0.0%	minimum	-4.8

Summary Statistics

Mean	-1.9
Std Dev	4.1012193
Std Err Mean	2.9
Upper 95% Mean	34.947994
Lower 95% Mean	-38.74799
N	2

MaS Distribution by Prep Method**Distributions****Analyte_Method=Barium Other****Quantiles**

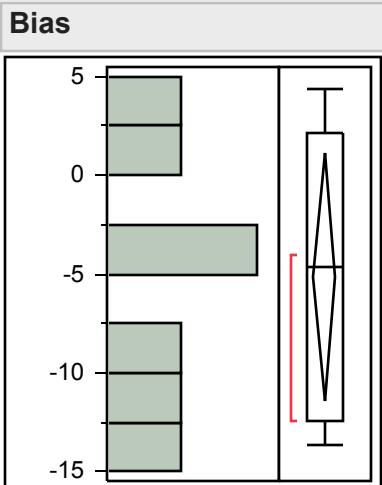
100.0%	maximum	8.1
99.5%		8.1
97.5%		8.1
90.0%		8.1
75.0%	quartile	8.1
50.0%	median	8.1
25.0%	quartile	8.1
10.0%		8.1
2.5%		8.1
0.5%		8.1
0.0%	minimum	8.1

Summary Statistics

Mean	8.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Barium SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

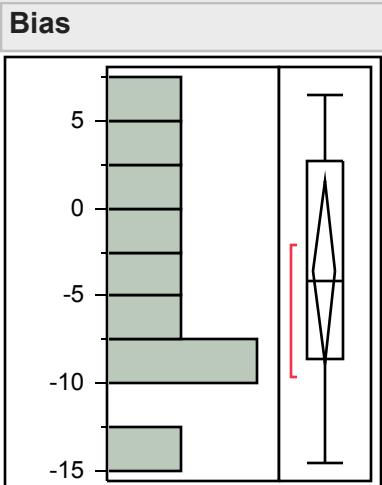
100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		4.4
75.0%	quartile	2.1
50.0%	median	-4.6
25.0%	quartile	-12.4
10.0%		-13.7
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Summary Statistics

Mean	-5.142857
Std Dev	6.8078036
Std Err Mean	2.5731079
Upper 95% Mean	1.1533111
Lower 95% Mean	-11.43903
N	7

MaS Distribution by Prep Method

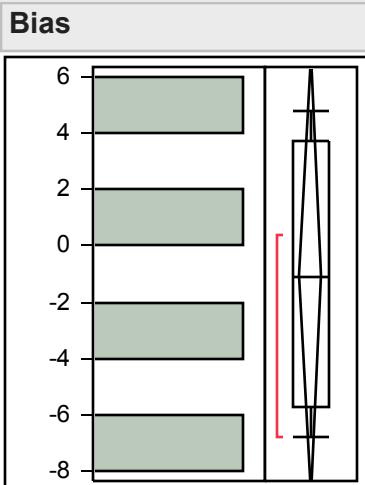
Distributions Analyte_Method=Barium SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	6.4
99.5%		6.4
97.5%		6.4
90.0%		6.4
75.0%	quartile	2.7
50.0%	median	-4.1
25.0%	quartile	-8.6
10.0%		-14.5
2.5%		-14.5
0.5%		-14.5
0.0%	minimum	-14.5

Summary Statistics

Mean	-3.611111
Std Dev	6.7731906
Std Err Mean	2.2577302
Upper 95% Mean	1.5952241
Lower 95% Mean	-8.817446
N	9

MaS Distribution by Prep Method**Distributions Analyte_Method=Barium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

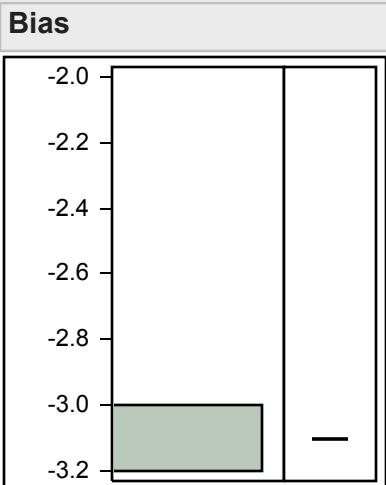
100.0%	maximum	4.8
99.5%		4.8
97.5%		4.8
90.0%		4.8
75.0%	quartile	3.7
50.0%	median	-1.1
25.0%	quartile	-5.75
10.0%		-6.8
2.5%		-6.8
0.5%		-6.8
0.0%	minimum	-6.8

Summary Statistics

Mean	-1.05
Std Dev	4.8918299
Std Err Mean	2.445915
Upper 95% Mean	6.733993
Lower 95% Mean	-8.833993
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Barium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

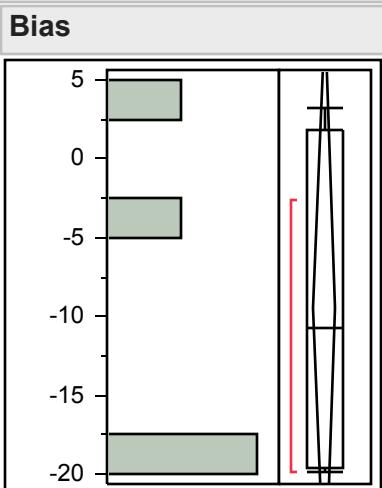
100.0%	maximum	-3.1
99.5%		-3.1
97.5%		-3.1
90.0%		-3.1
75.0%	quartile	-3.1
50.0%	median	-3.1
25.0%	quartile	-3.1
10.0%		-3.1
2.5%		-3.1
0.5%		-3.1
0.0%	minimum	-3.1

Summary Statistics

Mean	-3.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Beryllium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

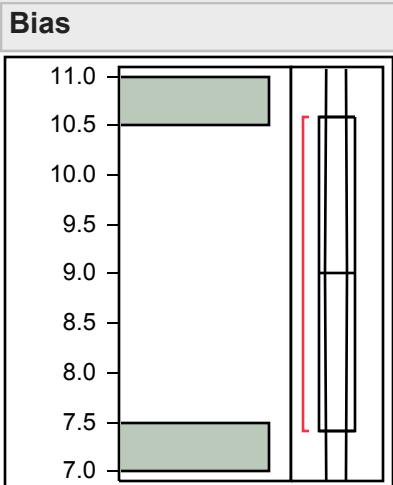
100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		3.2
75.0%	quartile	1.75
50.0%	median	-10.75
25.0%	quartile	-19.575
10.0%		-19.8
2.5%		-19.8
0.5%		-19.8
0.0%	minimum	-19.8

Summary Statistics

Mean	-9.525
Std Dev	11.595222
Std Err Mean	5.7976109
Upper 95% Mean	8.9255853
Lower 95% Mean	-27.97559
N	4

MaS Distribution by Prep Method**Distributions**

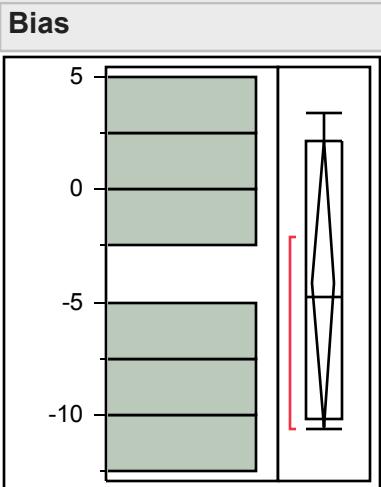
Analyte_Method=Beryllium Other

**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	9
25.0%	quartile	7.4
10.0%		7.4
2.5%		7.4
0.5%		7.4
0.0%	minimum	7.4

Summary Statistics

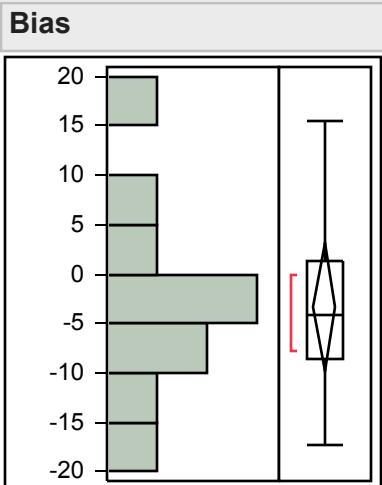
Mean	9
Std Dev	2.2627417
Std Err Mean	1.6
Upper 95% Mean	29.329928
Lower 95% Mean	-11.32993
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Beryllium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	3.4
99.5%		3.4
97.5%		3.4
90.0%		3.4
75.0%	quartile	2.125
50.0%	median	-4.75
25.0%	quartile	-10.15
10.0%		-10.6
2.5%		-10.6
0.5%		-10.6
0.0%	minimum	-10.6

Summary Statistics

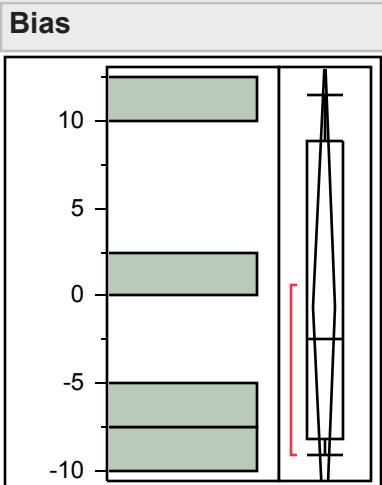
Mean	-4.166667
Std Dev	6.0301465
Std Err Mean	2.461797
Upper 95% Mean	2.161584
Lower 95% Mean	-10.49492
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Beryllium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	15.5
99.5%		15.5
97.5%		15.5
90.0%		14.46
75.0%	quartile	1.275
50.0%	median	-4.15
25.0%	quartile	-8.6
10.0%		-16.79
2.5%		-17.4
0.5%		-17.4
0.0%	minimum	-17.4

Summary Statistics

Mean	-3.28
Std Dev	9.0637005
Std Err Mean	2.8661938
Upper 95% Mean	3.2037807
Lower 95% Mean	-9.763781
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Beryllium****SW846 Methods 3015, 3051 (Microwave assisted)****Quantiles**

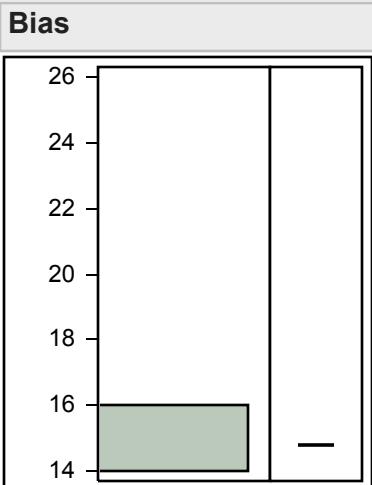
100.0%	maximum	11.5
99.5%		11.5
97.5%		11.5
90.0%		11.5
75.0%	quartile	8.775
50.0%	median	-2.45
25.0%	quartile	-8.2
10.0%		-9.1
2.5%		-9.1
0.5%		-9.1
0.0%	minimum	-9.1

Summary Statistics

Mean	-0.625
Std Dev	9.0204859
Std Err Mean	4.510243
Upper 95% Mean	13.728606
Lower 95% Mean	-14.97861
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Beryllium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

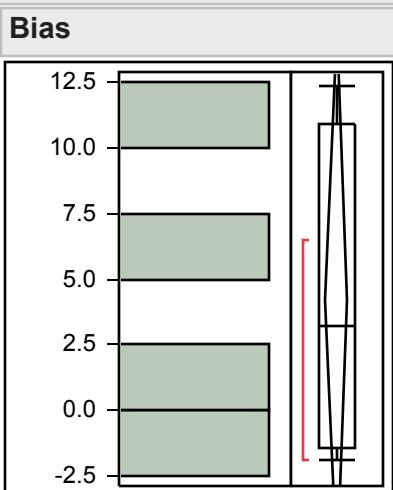
100.0%	maximum	14.8
99.5%		14.8
97.5%		14.8
90.0%		14.8
75.0%	quartile	14.8
50.0%	median	14.8
25.0%	quartile	14.8
10.0%		14.8
2.5%		14.8
0.5%		14.8
0.0%	minimum	14.8

Summary Statistics

Mean	14.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Cadmium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

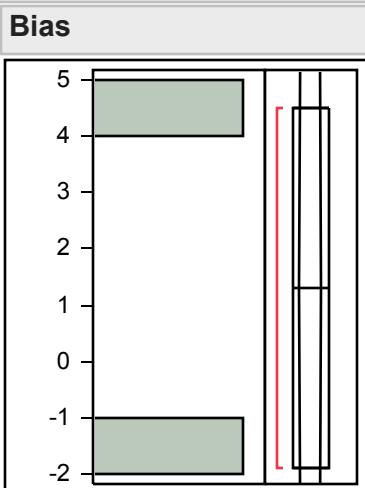
100.0%	maximum	12.3
99.5%		12.3
97.5%		12.3
90.0%		12.3
75.0%	quartile	10.85
50.0%	median	3.25
25.0%	quartile	-1.425
10.0%		-1.9
2.5%		-1.9
0.5%		-1.9
0.0%	minimum	-1.9

Summary Statistics

Mean	4.225
Std Dev	6.4742438
Std Err Mean	3.2371219
Upper 95% Mean	14.526967
Lower 95% Mean	-6.076967
N	4

MaS Distribution by Prep Method**Distributions**

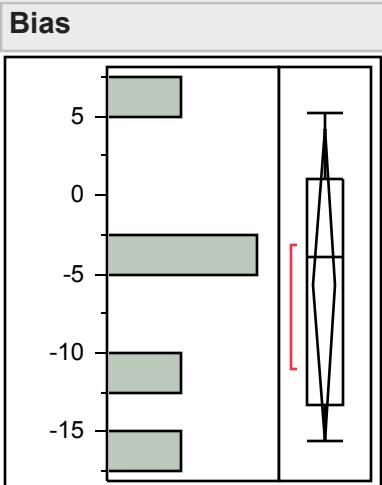
Analyte_Method=Cadmium Other

**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	1.3
25.0%	quartile	-1.9
10.0%		-1.9
2.5%		-1.9
0.5%		-1.9
0.0%	minimum	-1.9

Summary Statistics

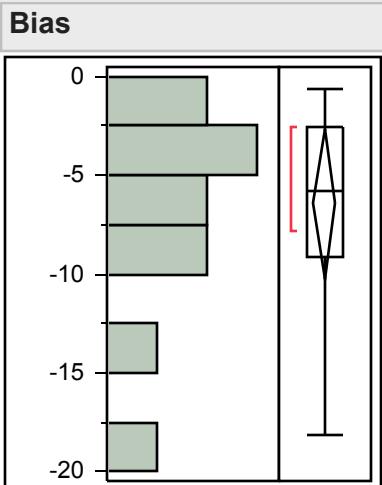
Mean	1.3
Std Dev	4.5254834
Std Err Mean	3.2
Upper 95% Mean	41.959855
Lower 95% Mean	-39.35986
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Cadmium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.2
75.0%	quartile	1
50.0%	median	-3.9
25.0%	quartile	-13.3
10.0%		-15.6
2.5%		-15.6
0.5%		-15.6
0.0%	minimum	-15.6

Summary Statistics

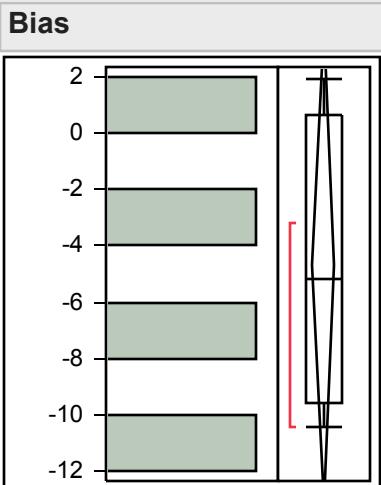
Mean	-5.7
Std Dev	7.9749608
Std Err Mean	3.5665109
Upper 95% Mean	4.2022217
Lower 95% Mean	-15.60222
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Cadmium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	-0.6
99.5%		-0.6
97.5%		-0.6
90.0%		-0.6
75.0%	quartile	-2.6
50.0%	median	-5.8
25.0%	quartile	-9.1
10.0%		-17.42
2.5%		-18.2
0.5%		-18.2
0.0%	minimum	-18.2

Summary Statistics

Mean	-6.427273
Std Dev	5.6732867
Std Err Mean	1.7105603
Upper 95% Mean	-2.615907
Lower 95% Mean	-10.23864
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Cadmium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

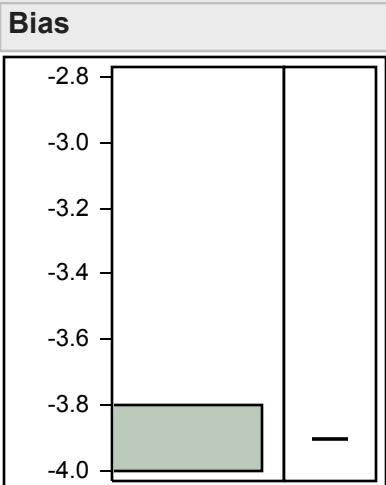
100.0%	maximum	1.9
99.5%		1.9
97.5%		1.9
90.0%		1.9
75.0%	quartile	0.625
50.0%	median	-5.15
25.0%	quartile	-9.575
10.0%		-10.4
2.5%		-10.4
0.5%		-10.4
0.0%	minimum	-10.4

Summary Statistics

Mean	-4.7
Std Dev	5.2933921
Std Err Mean	2.6466961
Upper 95% Mean	3.7229681
Lower 95% Mean	-13.12297
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Cadmium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

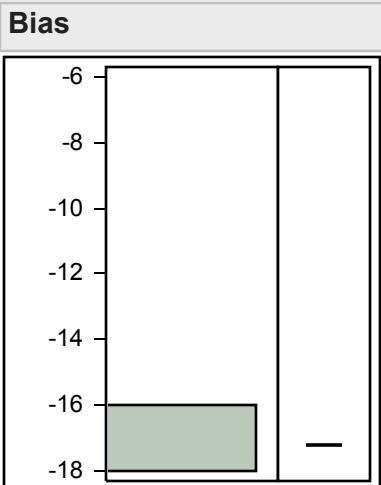
100.0%	maximum	-3.9
99.5%		-3.9
97.5%		-3.9
90.0%		-3.9
75.0%	quartile	-3.9
50.0%	median	-3.9
25.0%	quartile	-3.9
10.0%		-3.9
2.5%		-3.9
0.5%		-3.9
0.0%	minimum	-3.9

Summary Statistics

Mean	-3.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Chromium EPA
Method 200.2 Sample Preparation Methods

**Quantiles**

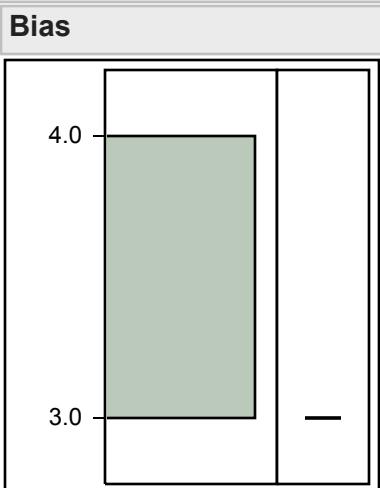
100.0%	maximum	-17.2
99.5%		-17.2
97.5%		-17.2
90.0%		-17.2
75.0%	quartile	-17.2
50.0%	median	-17.2
25.0%	quartile	-17.2
10.0%		-17.2
2.5%		-17.2
0.5%		-17.2
0.0%	minimum	-17.2

Summary Statistics

Mean	-17.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Chromium EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

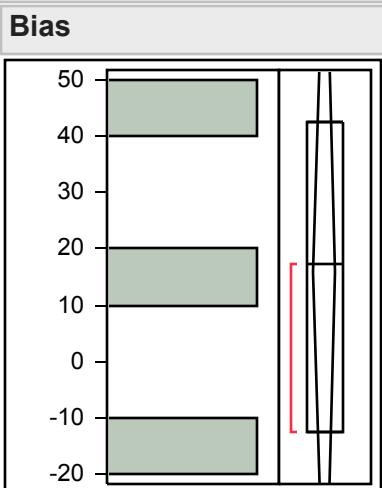
100.0%	maximum	3
99.5%		3
97.5%		3
90.0%		3
75.0%	quartile	3
50.0%	median	3
25.0%	quartile	3
10.0%		3
2.5%		3
0.5%		3
0.0%	minimum	3

Summary Statistics

Mean	3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

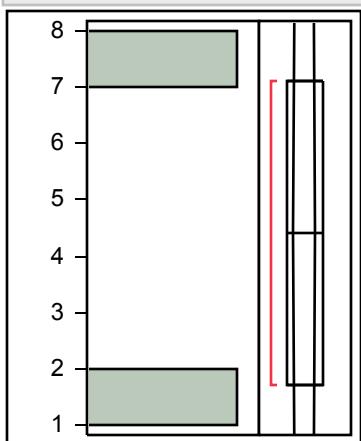
Distributions Analyte_Method=Chromium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	42.4
99.5%		42.4
97.5%		42.4
90.0%		42.4
75.0%	quartile	42.4
50.0%	median	17.2
25.0%	quartile	-12.4
10.0%		-12.4
2.5%		-12.4
0.5%		-12.4
0.0%	minimum	-12.4

Summary Statistics

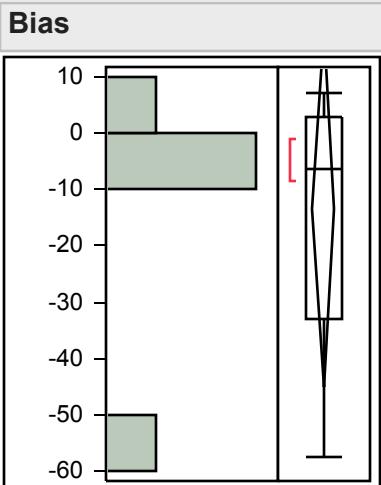
Mean	15.733333
Std Dev	27.429425
Std Err Mean	15.836386
Upper 95% Mean	83.871801
Lower 95% Mean	-52.40513
N	3

MaS Distribution by Prep Method**Distributions****Analyte_Method=Chromium Other****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	4.4
25.0%	quartile	1.7
10.0%		1.7
2.5%		1.7
0.5%		1.7
0.0%	minimum	1.7

Summary Statistics

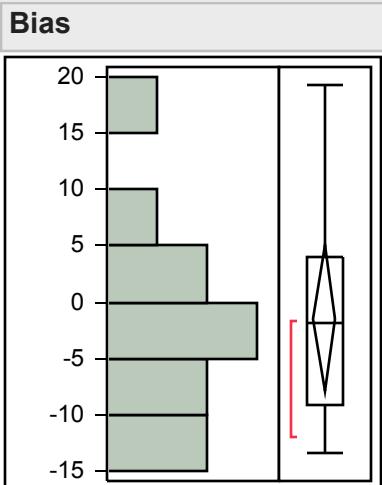
Mean	4.4
Std Dev	3.8183766
Std Err Mean	2.7
Upper 95% Mean	38.706753
Lower 95% Mean	-29.90675
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Chromium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	7.1
99.5%		7.1
97.5%		7.1
90.0%		7.1
75.0%	quartile	3
50.0%	median	-6.5
25.0%	quartile	-33.1
10.0%		-57.6
2.5%		-57.6
0.5%		-57.6
0.0%	minimum	-57.6

Summary Statistics

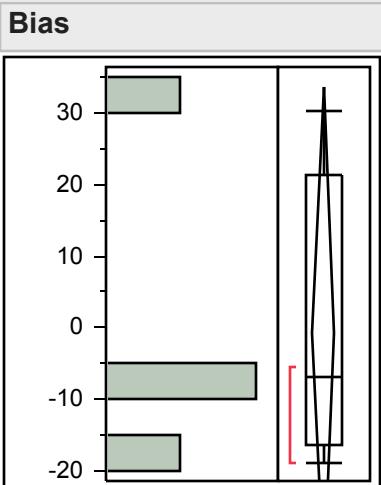
Mean	-13.34
Std Dev	25.474556
Std Err Mean	11.392568
Upper 95% Mean	18.290839
Lower 95% Mean	-44.97084
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Chromium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	19.2
99.5%		19.2
97.5%		19.2
90.0%		16.98
75.0%	quartile	4
50.0%	median	-1.9
25.0%	quartile	-9.1
10.0%		-13.02
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Summary Statistics

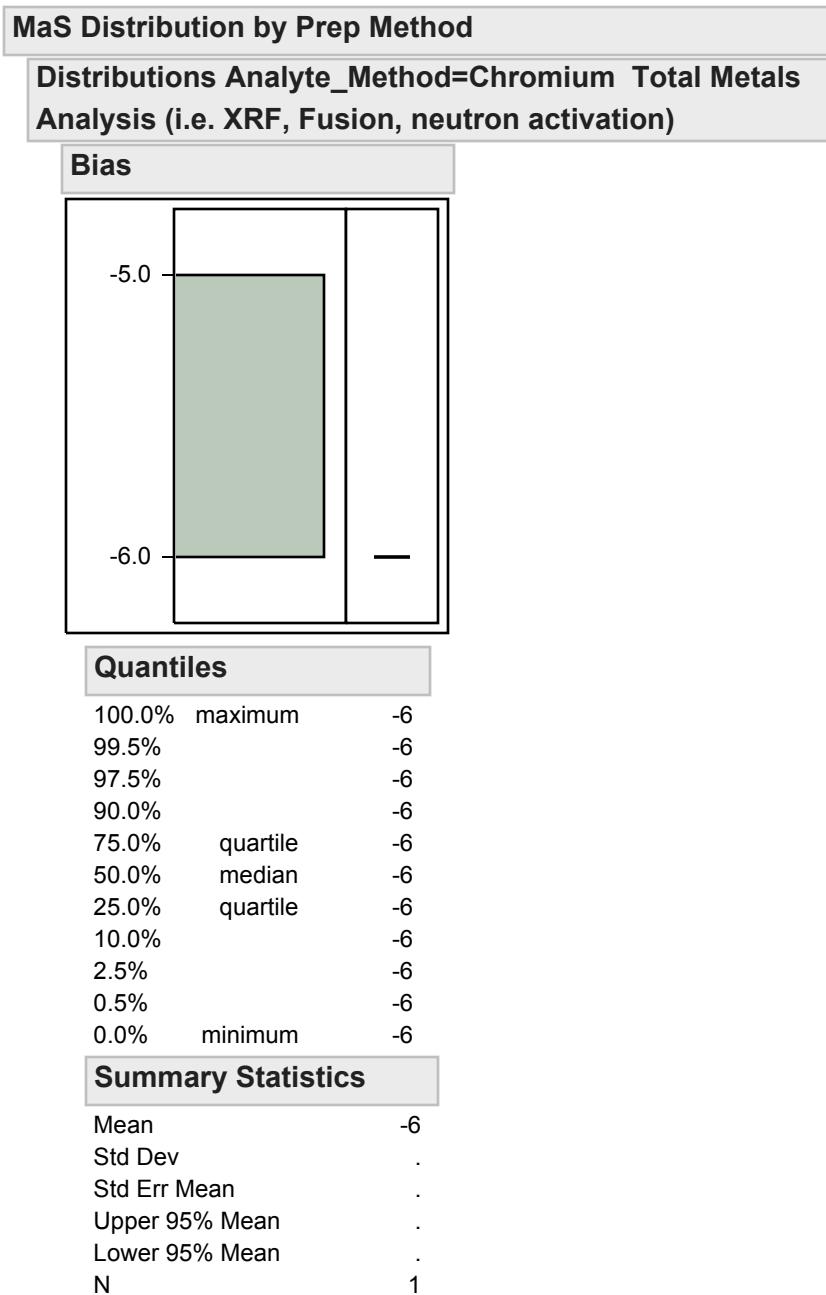
Mean	-1.418182
Std Dev	9.6646591
Std Err Mean	2.9140044
Upper 95% Mean	5.0746245
Lower 95% Mean	-7.910988
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Chromium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

100.0%	maximum	30.3
99.5%		30.3
97.5%		30.3
90.0%		30.3
75.0%	quartile	21.35
50.0%	median	-6.95
25.0%	quartile	-16.275
10.0%		-18.9
2.5%		-18.9
0.5%		-18.9
0.0%	minimum	-18.9

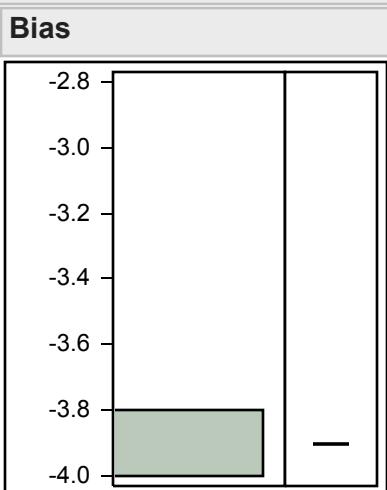
Summary Statistics

Mean	-0.625
Std Dev	21.405198
Std Err Mean	10.702599
Upper 95% Mean	33.435447
Lower 95% Mean	-34.68545
N	4



MaS Distribution by Prep Method

Distributions Analyte_Method=Cobalt EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

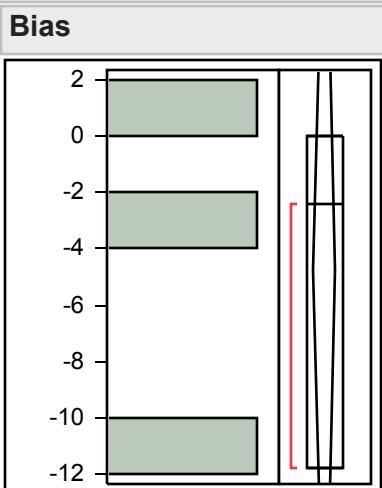
100.0%	maximum	-3.9
99.5%		-3.9
97.5%		-3.9
90.0%		-3.9
75.0%	quartile	-3.9
50.0%	median	-3.9
25.0%	quartile	-3.9
10.0%		-3.9
2.5%		-3.9
0.5%		-3.9
0.0%	minimum	-3.9

Summary Statistics

Mean	-3.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

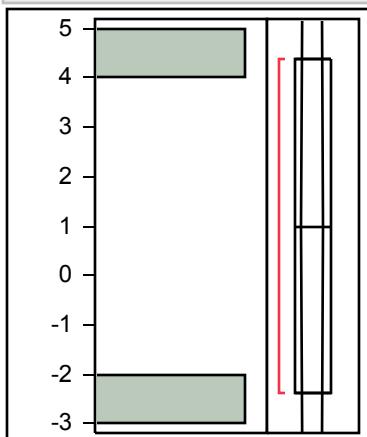
Distributions Analyte_Method=Cobalt EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	0
50.0%	median	-2.4
25.0%	quartile	-11.8
10.0%		-11.8
2.5%		-11.8
0.5%		-11.8
0.0%	minimum	-11.8

Summary Statistics

Mean	-4.733333
Std Dev	6.236452
Std Err Mean	3.6006172
Upper 95% Mean	10.758872
Lower 95% Mean	-20.22554
N	3

MaS Distribution by Prep Method**Distributions****Analyte_Method=Cobalt Other****Bias****Quantiles**

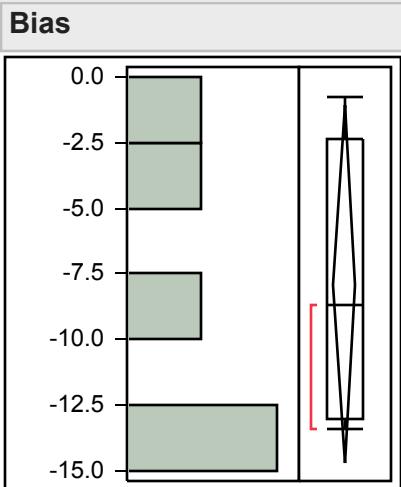
100.0%	maximum	4.4
99.5%		4.4
97.5%		4.4
90.0%		4.4
75.0%	quartile	4.4
50.0%	median	1
25.0%	quartile	-2.4
10.0%		-2.4
2.5%		-2.4
0.5%		-2.4
0.0%	minimum	-2.4

Summary Statistics

Mean	1
Std Dev	4.8083261
Std Err Mean	3.4
Upper 95% Mean	44.201096
Lower 95% Mean	-42.2011
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Cobalt SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

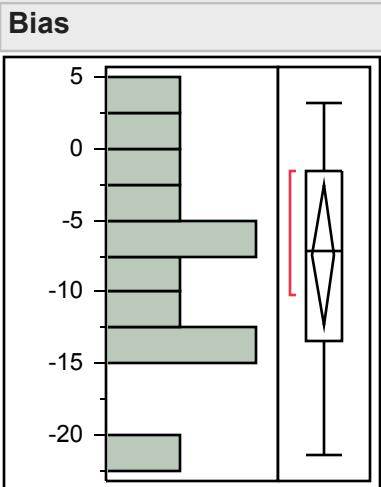
100.0%	maximum	-0.8
99.5%		-0.8
97.5%		-0.8
90.0%		-0.8
75.0%	quartile	-2.35
50.0%	median	-8.7
25.0%	quartile	-13
10.0%		-13.4
2.5%		-13.4
0.5%		-13.4
0.0%	minimum	-13.4

Summary Statistics

Mean	-7.88
Std Dev	5.4632408
Std Err Mean	2.4432356
Upper 95% Mean	-1.096491
Lower 95% Mean	-14.66351
N	5

MaS Distribution by Prep Method

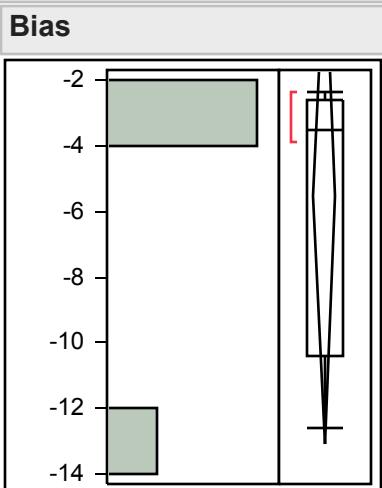
Distributions Analyte_Method=Cobalt SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		2.72
75.0%	quartile	-1.6
50.0%	median	-7.1
25.0%	quartile	-13.4
10.0%		-20.04
2.5%		-21.3
0.5%		-21.3
0.0%	minimum	-21.3

Summary Statistics

Mean	-7.454545
Std Dev	7.287299
Std Err Mean	2.1972033
Upper 95% Mean	-2.558871
Lower 95% Mean	-12.35022
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Cobalt SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

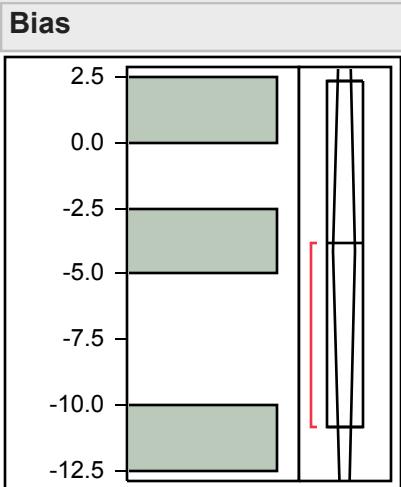
100.0%	maximum	-2.4
99.5%		-2.4
97.5%		-2.4
90.0%		-2.4
75.0%	quartile	-2.6
50.0%	median	-3.55
25.0%	quartile	-10.425
10.0%		-12.6
2.5%		-12.6
0.5%		-12.6
0.0%	minimum	-12.6

Summary Statistics

Mean	-5.525
Std Dev	4.7563116
Std Err Mean	2.3781558
Upper 95% Mean	2.0433531
Lower 95% Mean	-13.09335
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Cobalt Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

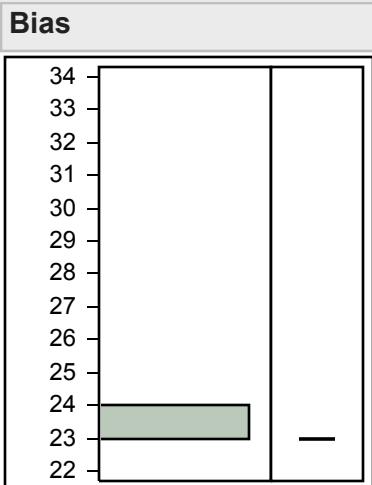
100.0%	maximum	2.3
99.5%		2.3
97.5%		2.3
90.0%		2.3
75.0%	quartile	2.3
50.0%	median	-3.8
25.0%	quartile	-10.8
10.0%		-10.8
2.5%		-10.8
0.5%		-10.8
0.0%	minimum	-10.8

Summary Statistics

Mean	-4.1
Std Dev	6.5551506
Std Err Mean	3.784618
Upper 95% Mean	12.183897
Lower 95% Mean	-20.3839
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper EPA
Method 200.2 Sample Preparation Methods

**Quantiles**

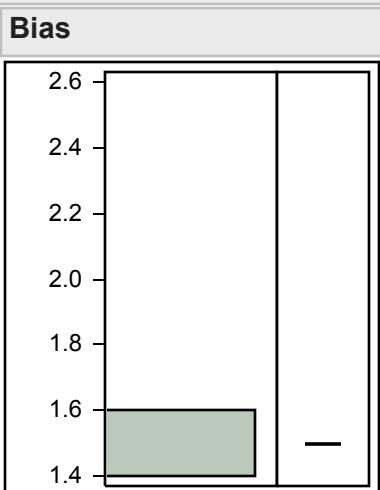
100.0%	maximum	23
99.5%		23
97.5%		23
90.0%		23
75.0%	quartile	23
50.0%	median	23
25.0%	quartile	23
10.0%		23
2.5%		23
0.5%		23
0.0%	minimum	23

Summary Statistics

Mean	23
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

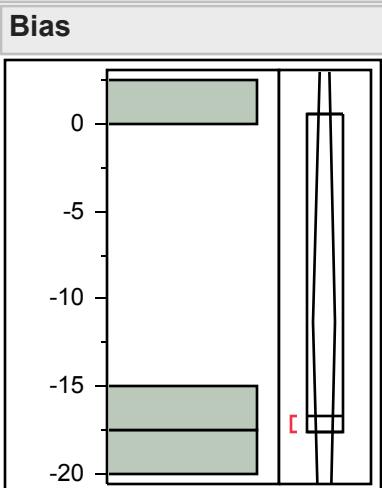
100.0%	maximum	1.5
99.5%		1.5
97.5%		1.5
90.0%		1.5
75.0%	quartile	1.5
50.0%	median	1.5
25.0%	quartile	1.5
10.0%		1.5
2.5%		1.5
0.5%		1.5
0.0%	minimum	1.5

Summary Statistics

Mean	1.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

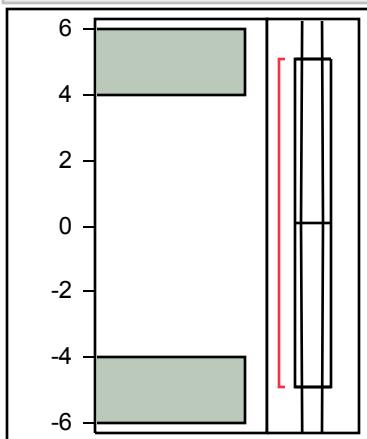
Distributions Analyte_Method=Copper EPA
Method 200.8 Trace Metals in Waters & Wastes

**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	-16.7
25.0%	quartile	-17.6
10.0%		-17.6
2.5%		-17.6
0.5%		-17.6
0.0%	minimum	-17.6

Summary Statistics

Mean	-11.26667
Std Dev	10.200163
Std Err Mean	5.8890671
Upper 95% Mean	14.071944
Lower 95% Mean	-36.60528
N	3

MaS Distribution by Prep Method**Distributions****Analyte_Method=Copper Other****Bias****Quantiles**

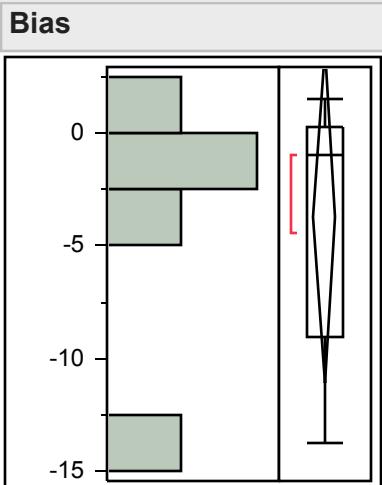
100.0%	maximum	5.1
99.5%		5.1
97.5%		5.1
90.0%		5.1
75.0%	quartile	5.1
50.0%	median	0.1
25.0%	quartile	-4.9
10.0%		-4.9
2.5%		-4.9
0.5%		-4.9
0.0%	minimum	-4.9

Summary Statistics

Mean	0.1
Std Dev	7.0710678
Std Err Mean	5
Upper 95% Mean	63.631024
Lower 95% Mean	-63.43102
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

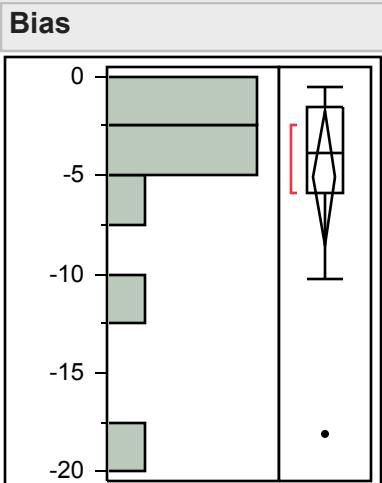
100.0%	maximum	1.5
99.5%		1.5
97.5%		1.5
90.0%		1.5
75.0%	quartile	0.25
50.0%	median	-1
25.0%	quartile	-9.05
10.0%		-13.7
2.5%		-13.7
0.5%		-13.7
0.0%	minimum	-13.7

Summary Statistics

Mean	-3.72
Std Dev	5.960453
Std Err Mean	2.6655956
Upper 95% Mean	3.6808799
Lower 95% Mean	-11.12088
N	5

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

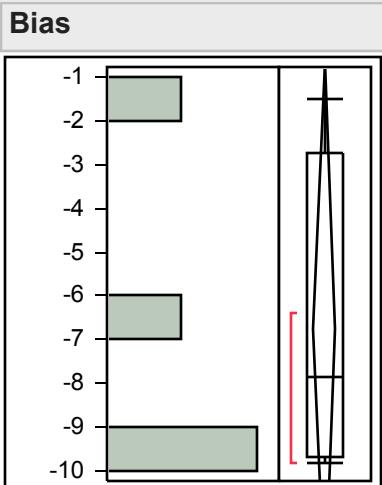
100.0%	maximum	-0.5
99.5%		-0.5
97.5%		-0.5
90.0%		-0.6
75.0%	quartile	-1.5
50.0%	median	-3.9
25.0%	quartile	-5.9
10.0%		-16.54
2.5%		-18.1
0.5%		-18.1
0.0%	minimum	-18.1

Summary Statistics

Mean	-5.127273
Std Dev	5.0913831
Std Err Mean	1.5351098
Upper 95% Mean	-1.706835
Lower 95% Mean	-8.54771
N	11

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper SW846
Methods 3015, 3051 (Microwave assisted)

**Quantiles**

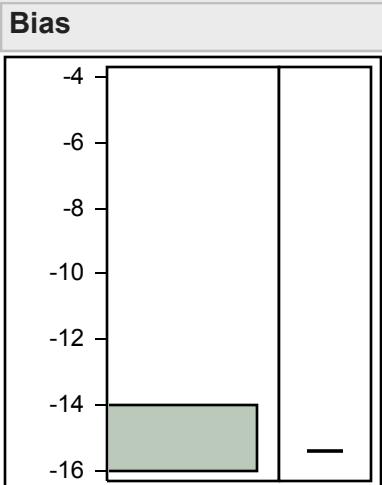
100.0%	maximum	-1.5
99.5%		-1.5
97.5%		-1.5
90.0%		-1.5
75.0%	quartile	-2.725
50.0%	median	-7.85
25.0%	quartile	-9.675
10.0%		-9.8
2.5%		-9.8
0.5%		-9.8
0.0%	minimum	-9.8

Summary Statistics

Mean	-6.75
Std Dev	3.8074488
Std Err Mean	1.9037244
Upper 95% Mean	-0.691499
Lower 95% Mean	-12.8085
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Copper Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

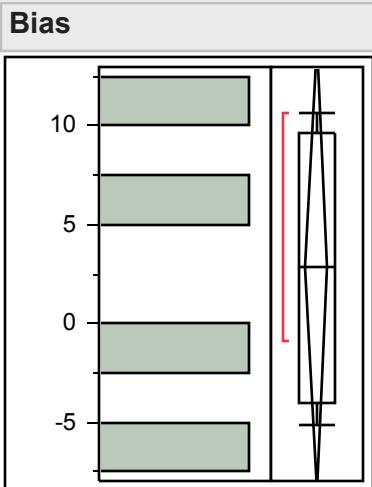
100.0%	maximum	-15.4
99.5%		-15.4
97.5%		-15.4
90.0%		-15.4
75.0%	quartile	-15.4
50.0%	median	-15.4
25.0%	quartile	-15.4
10.0%		-15.4
2.5%		-15.4
0.5%		-15.4
0.0%	minimum	-15.4

Summary Statistics

Mean	-15.4
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

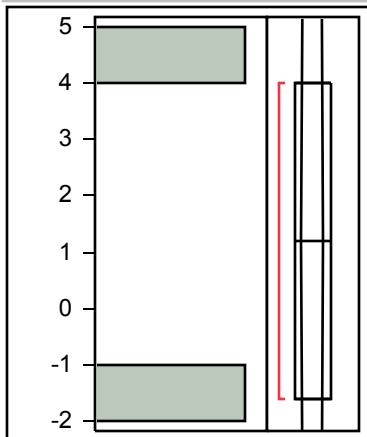
Distributions Analyte_Method=Lead EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	10.7
99.5%		10.7
97.5%		10.7
90.0%		10.7
75.0%	quartile	9.675
50.0%	median	2.85
25.0%	quartile	-4.05
10.0%		-5.1
2.5%		-5.1
0.5%		-5.1
0.0%	minimum	-5.1

Summary Statistics

Mean	2.825
Std Dev	7.1402031
Std Err Mean	3.5701015
Upper 95% Mean	14.186656
Lower 95% Mean	-8.536656
N	4

MaS Distribution by Prep Method**Distributions****Analyte_Method=Lead Other****Bias****Quantiles**

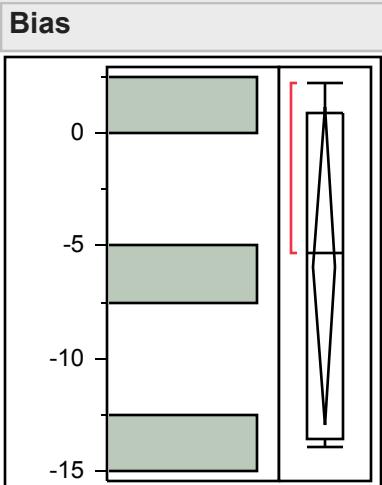
100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		4
75.0%	quartile	4
50.0%	median	1.2
25.0%	quartile	-1.6
10.0%		-1.6
2.5%		-1.6
0.5%		-1.6
0.0%	minimum	-1.6

Summary Statistics

Mean	1.2
Std Dev	3.959798
Std Err Mean	2.8
Upper 95% Mean	36.777373
Lower 95% Mean	-34.37737
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Lead SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

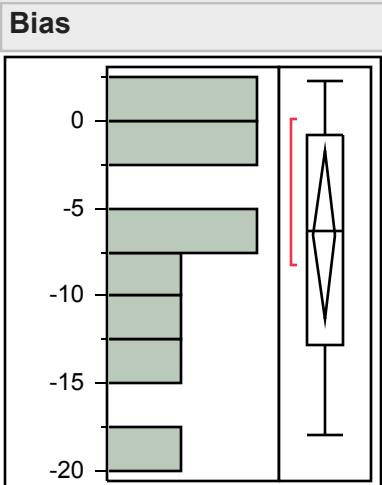
100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		2.2
75.0%	quartile	0.85
50.0%	median	-5.3
25.0%	quartile	-13.6
10.0%		-13.9
2.5%		-13.9
0.5%		-13.9
0.0%	minimum	-13.9

Summary Statistics

Mean	-5.9
Std Dev	6.7495185
Std Err Mean	2.7554794
Upper 95% Mean	1.1831853
Lower 95% Mean	-12.98319
N	6

MaS Distribution by Prep Method

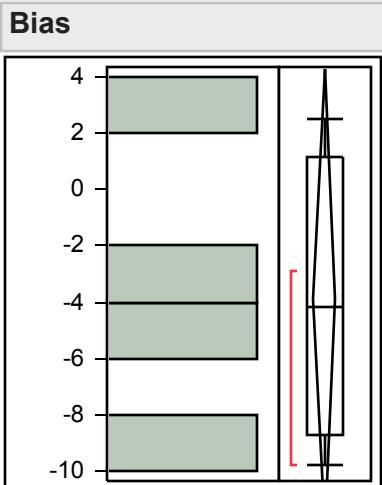
Distributions Analyte_Method=Lead SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		1.99
75.0%	quartile	-0.8
50.0%	median	-6.35
25.0%	quartile	-12.75
10.0%		-17.49
2.5%		-17.9
0.5%		-17.9
0.0%	minimum	-17.9

Summary Statistics

Mean	-6.53
Std Dev	6.6198439
Std Err Mean	2.0933784
Upper 95% Mean	-1.794449
Lower 95% Mean	-11.26555
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Lead SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

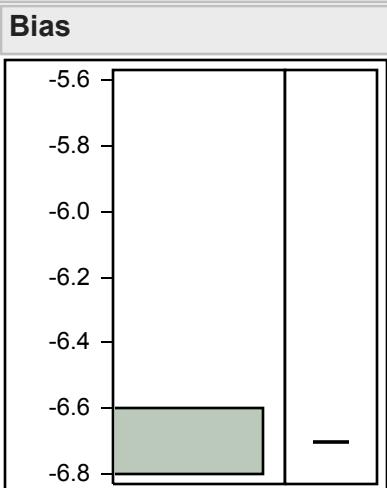
100.0%	maximum	2.5
99.5%		2.5
97.5%		2.5
90.0%		2.5
75.0%	quartile	1.15
50.0%	median	-4.15
25.0%	quartile	-8.7
10.0%		-9.8
2.5%		-9.8
0.5%		-9.8
0.0%	minimum	-9.8

Summary Statistics

Mean	-3.9
Std Dev	5.132251
Std Err Mean	2.5661255
Upper 95% Mean	4.2665566
Lower 95% Mean	-12.06656
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Lead Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

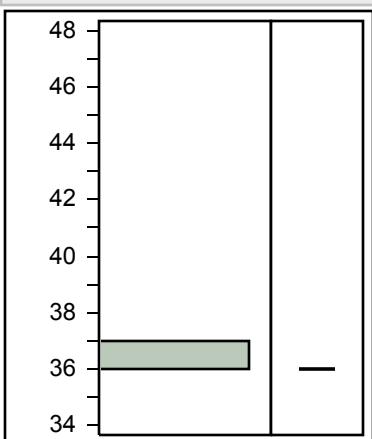
100.0%	maximum	-6.7
99.5%		-6.7
97.5%		-6.7
90.0%		-6.7
75.0%	quartile	-6.7
50.0%	median	-6.7
25.0%	quartile	-6.7
10.0%		-6.7
2.5%		-6.7
0.5%		-6.7
0.0%	minimum	-6.7

Summary Statistics

Mean	-6.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Mercury EPA
Method 200.8 Trace Metals in Waters & Wastes

Bias**Quantiles**

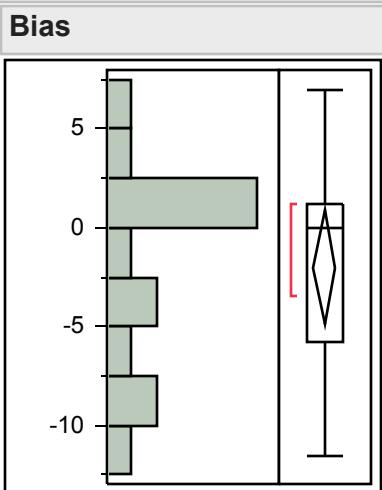
100.0%	maximum	36
99.5%		36
97.5%		36
90.0%		36
75.0%	quartile	36
50.0%	median	36
25.0%	quartile	36
10.0%		36
2.5%		36
0.5%		36
0.0%	minimum	36

Summary Statistics

Mean	36
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

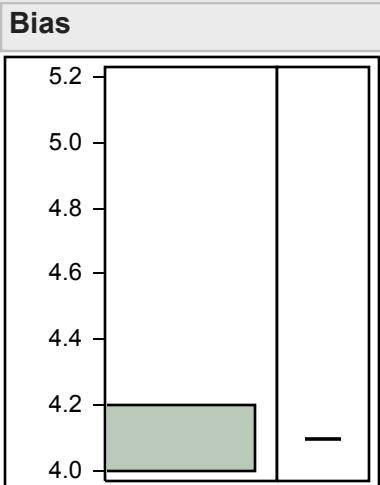
Distributions Analyte_Method=Mercury
Mercury per SW846 Method 7470 or 7471

**Quantiles**

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		5.26
75.0%	quartile	1.2
50.0%	median	0
25.0%	quartile	-5.8
10.0%		-10.58
2.5%		-11.6
0.5%		-11.6
0.0%	minimum	-11.6

Summary Statistics

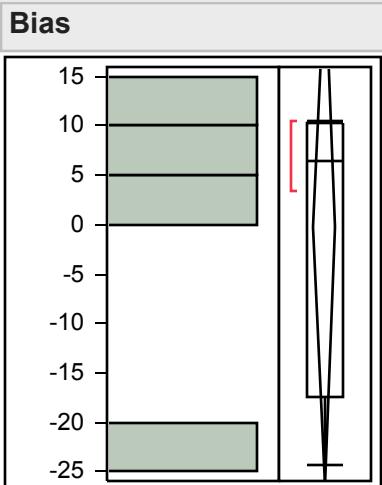
Mean	-2.04
Std Dev	5.2156084
Std Err Mean	1.3466643
Upper 95% Mean	0.8483077
Lower 95% Mean	-4.928308
N	15

MaS Distribution by Prep Method**Distributions Analyte_Method=Mercury****No preparation - analyzed as received****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

Summary Statistics

Mean	4.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Mercury Other****Quantiles**

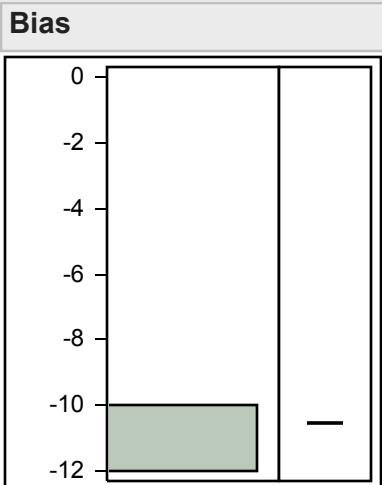
100.0%	maximum	10.5
99.5%		10.5
97.5%		10.5
90.0%		10.5
75.0%	quartile	10.2
50.0%	median	6.4
25.0%	quartile	-17.425
10.0%		-24.4
2.5%		-24.4
0.5%		-24.4
0.0%	minimum	-24.4

Summary Statistics

Mean	-0.275
Std Dev	16.371189
Std Err Mean	8.1855946
Upper 95% Mean	25.775215
Lower 95% Mean	-26.32522
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Mercury SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

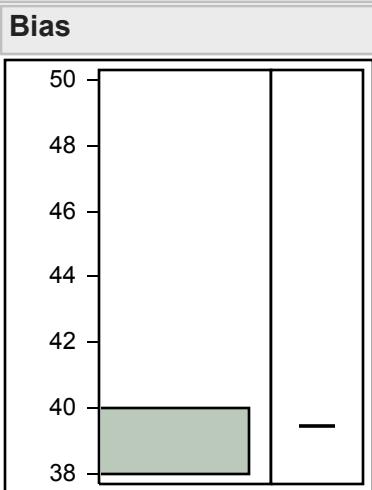
100.0%	maximum	-10.5
99.5%		-10.5
97.5%		-10.5
90.0%		-10.5
75.0%	quartile	-10.5
50.0%	median	-10.5
25.0%	quartile	-10.5
10.0%		-10.5
2.5%		-10.5
0.5%		-10.5
0.0%	minimum	-10.5

Summary Statistics

Mean	-10.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Mercury SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

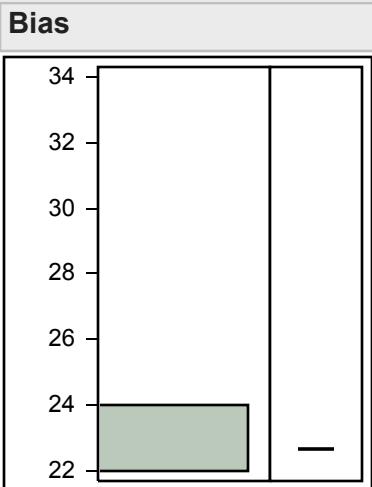
100.0%	maximum	39.5
99.5%		39.5
97.5%		39.5
90.0%		39.5
75.0%	quartile	39.5
50.0%	median	39.5
25.0%	quartile	39.5
10.0%		39.5
2.5%		39.5
0.5%		39.5
0.0%	minimum	39.5

Summary Statistics

Mean	39.5
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Nickel EPA
Method 200.2 Sample Preparation Methods

**Quantiles**

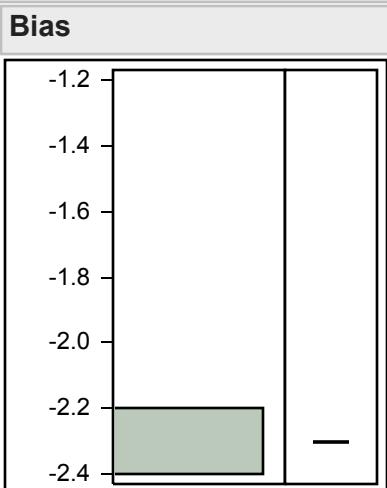
100.0%	maximum	22.7
99.5%		22.7
97.5%		22.7
90.0%		22.7
75.0%	quartile	22.7
50.0%	median	22.7
25.0%	quartile	22.7
10.0%		22.7
2.5%		22.7
0.5%		22.7
0.0%	minimum	22.7

Summary Statistics

Mean	22.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

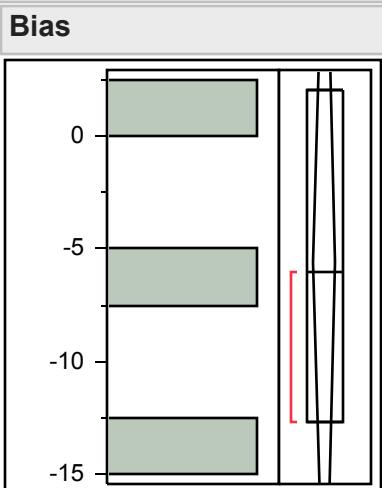
Distributions Analyte_Method=Nickel EPA
Method 200.7 Trace Metals in Waters & Wastes

**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	-2.3
25.0%	quartile	-2.3
10.0%		-2.3
2.5%		-2.3
0.5%		-2.3
0.0%	minimum	-2.3

Summary Statistics

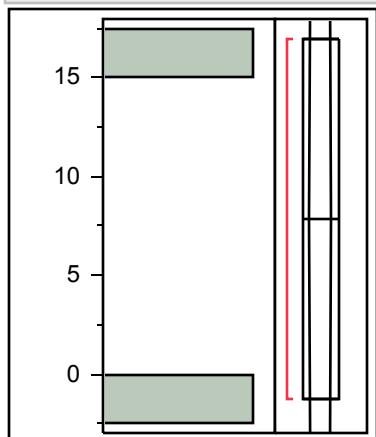
Mean	-2.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Nickel EPA
Method 200.8 Trace Metals in Waters & Wastes****Quantiles**

100.0%	maximum	2
99.5%		2
97.5%		2
90.0%		2
75.0%	quartile	2
50.0%	median	-6
25.0%	quartile	-12.7
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

Summary Statistics

Mean	-5.566667
Std Dev	7.3595743
Std Err Mean	4.2490522
Upper 95% Mean	12.715529
Lower 95% Mean	-23.84886
N	3

MaS Distribution by Prep Method**Distributions****Analyte_Method=Nickel Other****Bias****Quantiles**

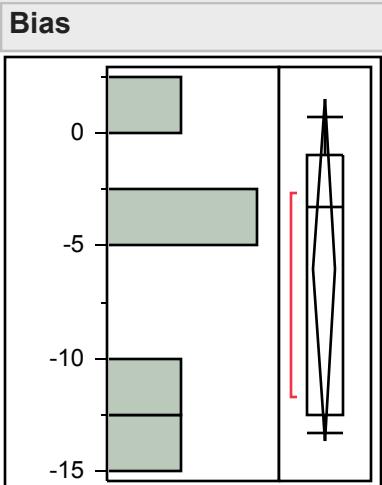
100.0%	maximum	17
99.5%		17
97.5%		17
90.0%		17
75.0%	quartile	17
50.0%	median	7.85
25.0%	quartile	-1.3
10.0%		-1.3
2.5%		-1.3
0.5%		-1.3
0.0%	minimum	-1.3

Summary Statistics

Mean	7.85
Std Dev	12.940054
Std Err Mean	9.15
Upper 95% Mean	124.11177
Lower 95% Mean	-108.4118
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Nickel SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

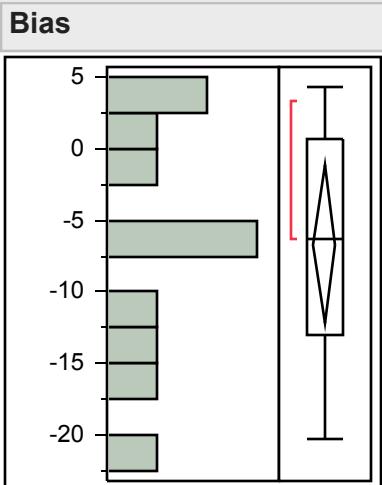
100.0%	maximum	0.7
99.5%		0.7
97.5%		0.7
90.0%		0.7
75.0%	quartile	-1
50.0%	median	-3.3
25.0%	quartile	-12.5
10.0%		-13.3
2.5%		-13.3
0.5%		-13.3
0.0%	minimum	-13.3

Summary Statistics

Mean	-6.06
Std Dev	6.0998361
Std Err Mean	2.7279296
Upper 95% Mean	1.5139468
Lower 95% Mean	-13.63395
N	5

MaS Distribution by Prep Method

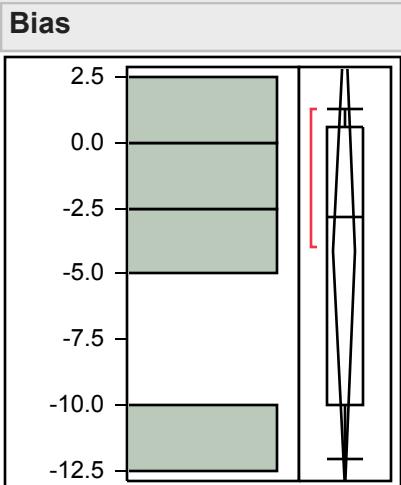
Distributions Analyte_Method=Nickel SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	4.3
99.5%		4.3
97.5%		4.3
90.0%		4.1
75.0%	quartile	0.7
50.0%	median	-6.3
25.0%	quartile	-13
10.0%		-19.58
2.5%		-20.3
0.5%		-20.3
0.0%	minimum	-20.3

Summary Statistics

Mean	-6.690909
Std Dev	8.1551768
Std Err Mean	2.4588783
Upper 95% Mean	-1.212187
Lower 95% Mean	-12.16963
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Nickel SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

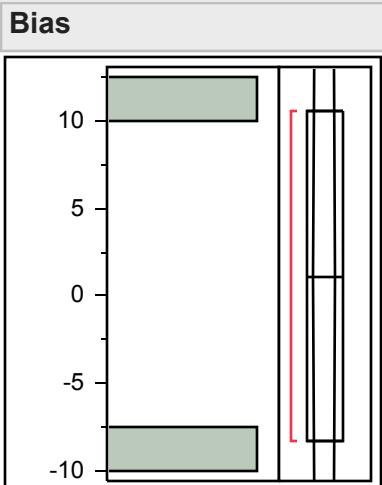
100.0%	maximum	1.3
99.5%		1.3
97.5%		1.3
90.0%		1.3
75.0%	quartile	0.55
50.0%	median	-2.85
25.0%	quartile	-10
10.0%		-12
2.5%		-12
0.5%		-12
0.0%	minimum	-12

Summary Statistics

Mean	-4.1
Std Dev	5.6961976
Std Err Mean	2.8480988
Upper 95% Mean	4.9639214
Lower 95% Mean	-13.16392
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Nickel Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

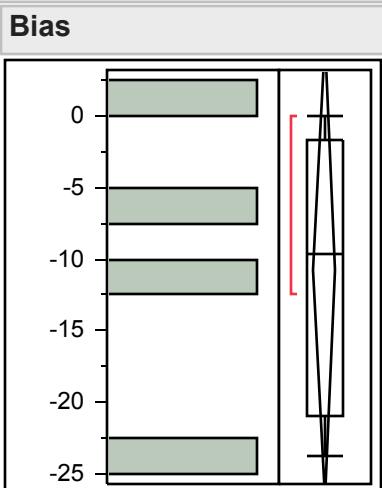
100.0%	maximum	10.5
99.5%		10.5
97.5%		10.5
90.0%		10.5
75.0%	quartile	10.5
50.0%	median	1.1
25.0%	quartile	-8.3
10.0%		-8.3
2.5%		-8.3
0.5%		-8.3
0.0%	minimum	-8.3

Summary Statistics

Mean	1.1
Std Dev	13.293607
Std Err Mean	9.4
Upper 95% Mean	120.53832
Lower 95% Mean	-118.3383
N	2

MaS Distribution by Prep Method

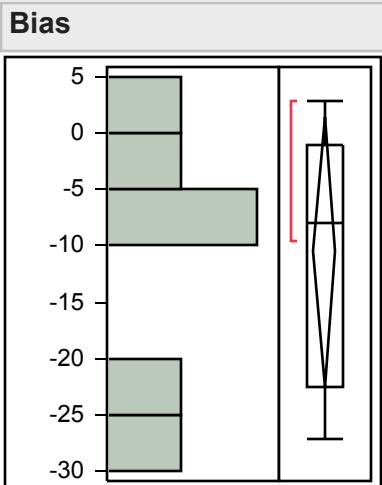
Distributions Analyte_Method=Selenium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	0
99.5%		0
97.5%		0
90.0%		0
75.0%	quartile	-1.7
50.0%	median	-9.6
25.0%	quartile	-20.875
10.0%		-23.7
2.5%		-23.7
0.5%		-23.7
0.0%	minimum	-23.7

Summary Statistics

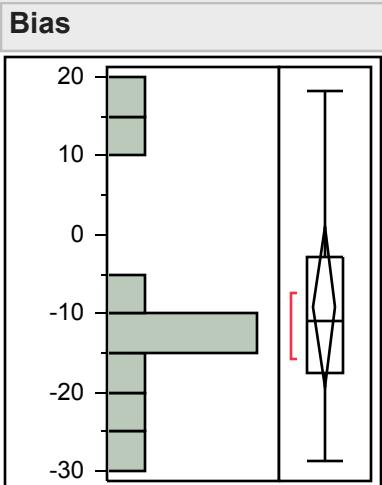
Mean	-10.725
Std Dev	10.026423
Std Err Mean	5.0132117
Upper 95% Mean	5.2292771
Lower 95% Mean	-26.67928
N	4

MaS Distribution by Prep Method**Distributions Analyte_Method=Selenium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	2.8
99.5%		2.8
97.5%		2.8
90.0%		2.8
75.0%	quartile	-1.025
50.0%	median	-7.9
25.0%	quartile	-22.45
10.0%		-27.1
2.5%		-27.1
0.5%		-27.1
0.0%	minimum	-27.1

Summary Statistics

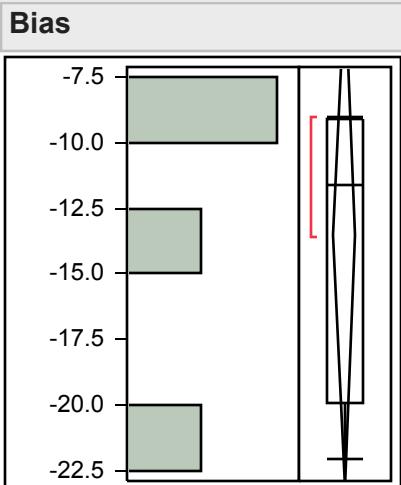
Mean	-10.55
Std Dev	11.376599
Std Err Mean	4.644477
Upper 95% Mean	1.3890082
Lower 95% Mean	-22.48901
N	6

MaS Distribution by Prep Method**Distributions Analyte_Method=Selenium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	18.1
99.5%		18.1
97.5%		18.1
90.0%		17.36
75.0%	quartile	-2.8
50.0%	median	-11.05
25.0%	quartile	-17.5
10.0%		-28.18
2.5%		-28.8
0.5%		-28.8
0.0%	minimum	-28.8

Summary Statistics

Mean	-9.16
Std Dev	14.066603
Std Err Mean	4.4482506
Upper 95% Mean	0.9026419
Lower 95% Mean	-19.22264
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Selenium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

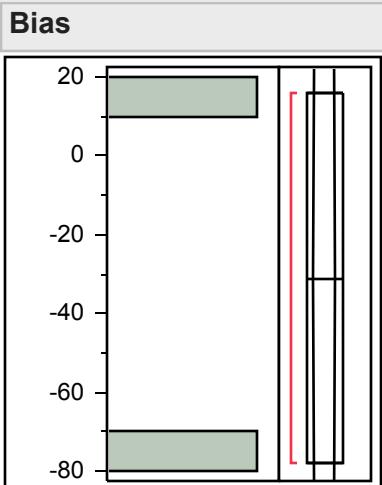
100.0%	maximum	-9
99.5%		-9
97.5%		-9
90.0%		-9
75.0%	quartile	-9.15
50.0%	median	-11.6
25.0%	quartile	-19.9
10.0%		-22
2.5%		-22
0.5%		-22
0.0%	minimum	-22

Summary Statistics

Mean	-13.55
Std Dev	5.991939
Std Err Mean	2.9959695
Upper 95% Mean	-4.015488
Lower 95% Mean	-23.08451
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Selenium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

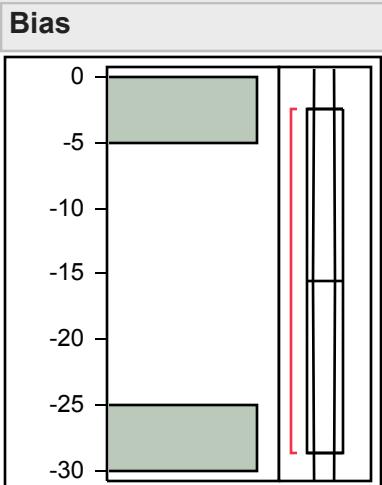
100.0%	maximum	15.7
99.5%		15.7
97.5%		15.7
90.0%		15.7
75.0%	quartile	15.7
50.0%	median	-31.2
25.0%	quartile	-78.1
10.0%		-78.1
2.5%		-78.1
0.5%		-78.1
0.0%	minimum	-78.1

Summary Statistics

Mean	-31.2
Std Dev	66.326616
Std Err Mean	46.9
Upper 95% Mean	564.721
Lower 95% Mean	-627.121
N	2

MaS Distribution by Prep Method

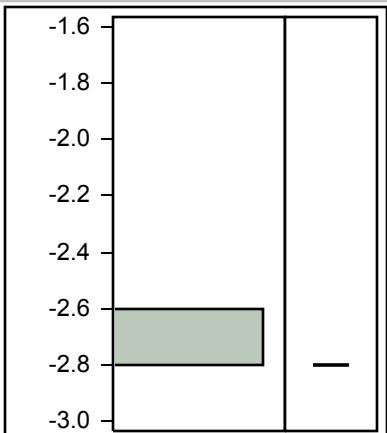
Distributions Analyte_Method=Silver EPA
Method 200.8 Trace Metals in Waters & Wastes

**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	-15.5
25.0%	quartile	-28.6
10.0%		-28.6
2.5%		-28.6
0.5%		-28.6
0.0%	minimum	-28.6

Summary Statistics

Mean	-15.5
Std Dev	18.526198
Std Err Mean	13.1
Upper 95% Mean	150.95128
Lower 95% Mean	-181.9513
N	2

MaS Distribution by Prep Method**Distributions****Analyte_Method=Silver Other****Bias****Quantiles**

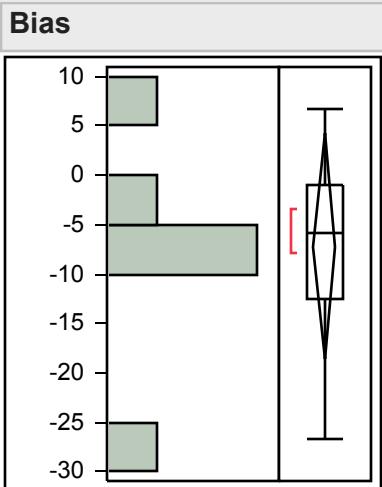
100.0%	maximum	-2.8
99.5%		-2.8
97.5%		-2.8
90.0%		-2.8
75.0%	quartile	-2.8
50.0%	median	-2.8
25.0%	quartile	-2.8
10.0%		-2.8
2.5%		-2.8
0.5%		-2.8
0.0%	minimum	-2.8

Summary Statistics

Mean	-2.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Silver SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

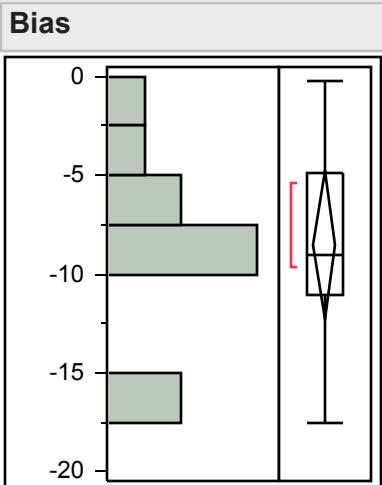
100.0%	maximum	6.8
99.5%		6.8
97.5%		6.8
90.0%		6.8
75.0%	quartile	-0.925
50.0%	median	-5.8
25.0%	quartile	-12.625
10.0%		-26.8
2.5%		-26.8
0.5%		-26.8
0.0%	minimum	-26.8

Summary Statistics

Mean	-7.166667
Std Dev	10.94745
Std Err Mean	4.4692778
Upper 95% Mean	4.3219778
Lower 95% Mean	-18.65531
N	6

MaS Distribution by Prep Method

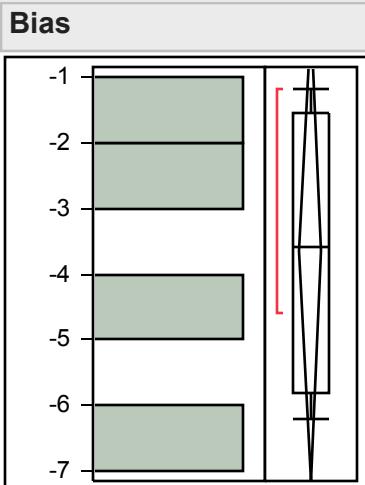
Distributions Analyte_Method=Silver SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	-0.2
99.5%		-0.2
97.5%		-0.2
90.0%		-0.53
75.0%	quartile	-4.925
50.0%	median	-9.05
25.0%	quartile	-11.1
10.0%		-17.31
2.5%		-17.5
0.5%		-17.5
0.0%	minimum	-17.5

Summary Statistics

Mean	-8.51
Std Dev	5.2248232
Std Err Mean	1.6522342
Upper 95% Mean	-4.772387
Lower 95% Mean	-12.24761
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Silver SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

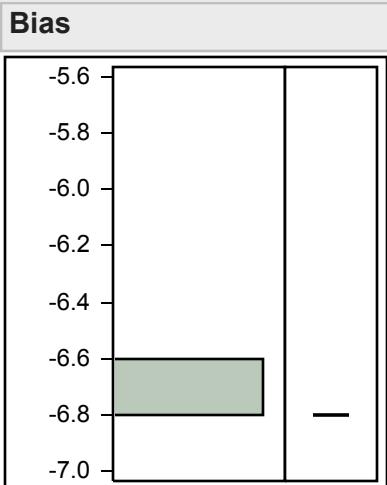
100.0%	maximum	-1.2
99.5%		-1.2
97.5%		-1.2
90.0%		-1.2
75.0%	quartile	-1.55
50.0%	median	-3.6
25.0%	quartile	-5.8
10.0%		-6.2
2.5%		-6.2
0.5%		-6.2
0.0%	minimum	-6.2

Summary Statistics

Mean	-3.65
Std Dev	2.1992423
Std Err Mean	1.0996211
Upper 95% Mean	-0.150515
Lower 95% Mean	-7.149485
N	4

MaS Distribution by Prep Method

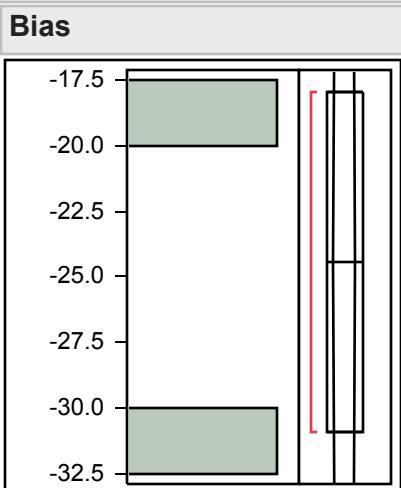
Distributions Analyte_Method=Silver Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

100.0%	maximum	-6.8
99.5%		-6.8
97.5%		-6.8
90.0%		-6.8
75.0%	quartile	-6.8
50.0%	median	-6.8
25.0%	quartile	-6.8
10.0%		-6.8
2.5%		-6.8
0.5%		-6.8
0.0%	minimum	-6.8

Summary Statistics

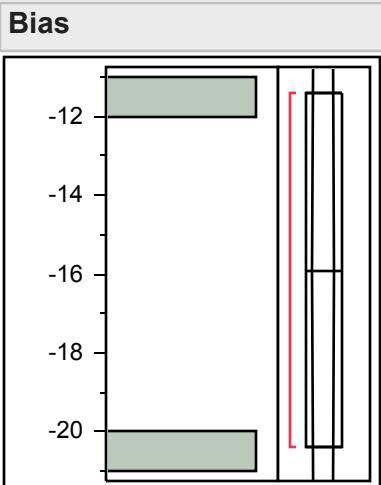
Mean	-6.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Technetium-99 Other****Quantiles**

100.0%	maximum	-18
99.5%		-18
97.5%		-18
90.0%		-18
75.0%	quartile	-18
50.0%	median	-24.45
25.0%	quartile	-30.9
10.0%		-30.9
2.5%		-30.9
0.5%		-30.9
0.0%	minimum	-30.9

Summary Statistics

Mean	-24.45
Std Dev	9.1216775
Std Err Mean	6.45
Upper 95% Mean	57.505021
Lower 95% Mean	-106.405
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Technetium-99 SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

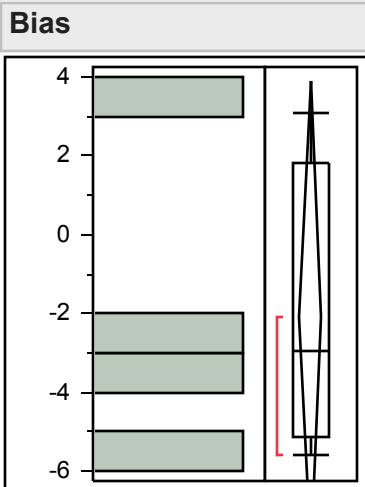
100.0%	maximum	-11.4
99.5%		-11.4
97.5%		-11.4
90.0%		-11.4
75.0%	quartile	-11.4
50.0%	median	-15.9
25.0%	quartile	-20.4
10.0%		-20.4
2.5%		-20.4
0.5%		-20.4
0.0%	minimum	-20.4

Summary Statistics

Mean	-15.9
Std Dev	6.363961
Std Err Mean	4.5
Upper 95% Mean	41.277921
Lower 95% Mean	-73.07792
N	2

MaS Distribution by Prep Method

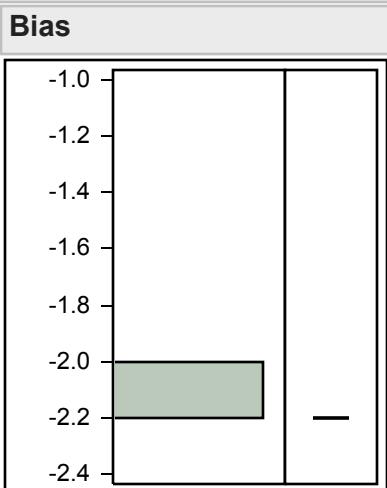
Distributions Analyte_Method=Thallium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	3.1
99.5%		3.1
97.5%		3.1
90.0%		3.1
75.0%	quartile	1.8
50.0%	median	-2.95
25.0%	quartile	-5.15
10.0%		-5.6
2.5%		-5.6
0.5%		-5.6
0.0%	minimum	-5.6

Summary Statistics

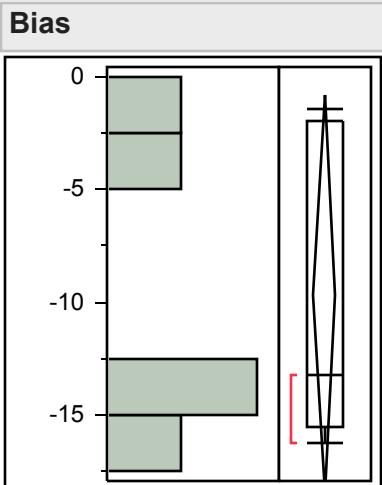
Mean	-2.1
Std Dev	3.7496667
Std Err Mean	1.8748333
Upper 95% Mean	3.8665564
Lower 95% Mean	-8.066556
N	4

MaS Distribution by Prep Method**Distributions****Analyte_Method=Thallium Other****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	-2.2
25.0%	quartile	-2.2
10.0%		-2.2
2.5%		-2.2
0.5%		-2.2
0.0%	minimum	-2.2

Summary Statistics

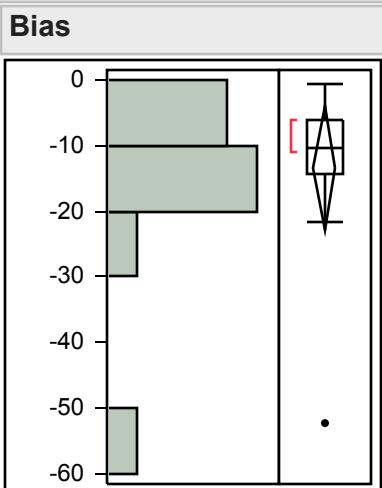
Mean	-2.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Thallium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	-1.4
99.5%		-1.4
97.5%		-1.4
90.0%		-1.4
75.0%	quartile	-2
50.0%	median	-13.2
25.0%	quartile	-15.55
10.0%		-16.2
2.5%		-16.2
0.5%		-16.2
0.0%	minimum	-16.2

Summary Statistics

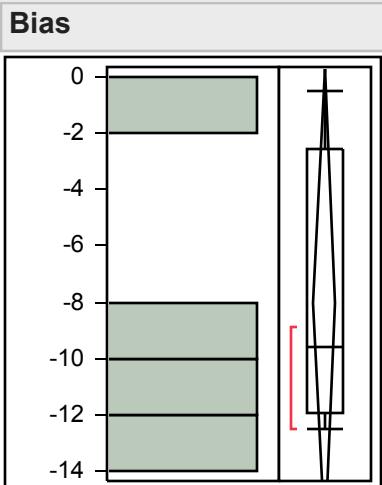
Mean	-9.66
Std Dev	7.0857604
Std Err Mean	3.1688484
Upper 95% Mean	-0.861866
Lower 95% Mean	-18.45813
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Thallium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	-0.7
99.5%		-0.7
97.5%		-0.7
90.0%		-1.1
75.0%	quartile	-6
50.0%	median	-10.3
25.0%	quartile	-14.4
10.0%		-46.08
2.5%		-52.2
0.5%		-52.2
0.0%	minimum	-52.2

Summary Statistics

Mean	-13.40909
Std Dev	14.037126
Std Err Mean	4.2323528
Upper 95% Mean	-3.978821
Lower 95% Mean	-22.83936
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Thallium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

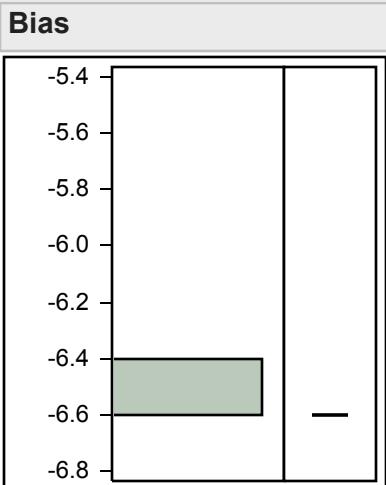
100.0%	maximum	-0.5
99.5%		-0.5
97.5%		-0.5
90.0%		-0.5
75.0%	quartile	-2.6
50.0%	median	-9.6
25.0%	quartile	-11.95
10.0%		-12.5
2.5%		-12.5
0.5%		-12.5
0.0%	minimum	-12.5

Summary Statistics

Mean	-8.05
Std Dev	5.2469038
Std Err Mean	2.6234519
Upper 95% Mean	0.2989949
Lower 95% Mean	-16.39899
N	4

MaS Distribution by Prep Method

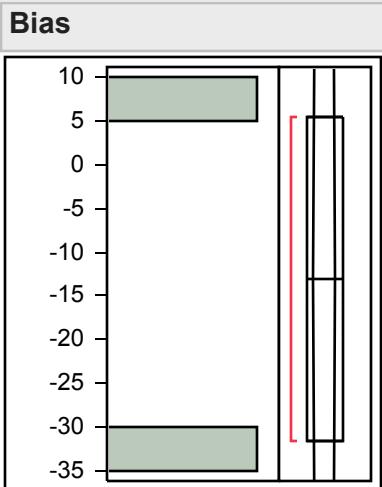
Distributions Analyte_Method=Thallium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**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	-6.6
25.0%	quartile	-6.6
10.0%		-6.6
2.5%		-6.6
0.5%		-6.6
0.0%	minimum	-6.6

Summary Statistics

Mean	-6.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-235 EPA****Method 200.8 Trace Metals in Waters & Wastes****Quantiles**

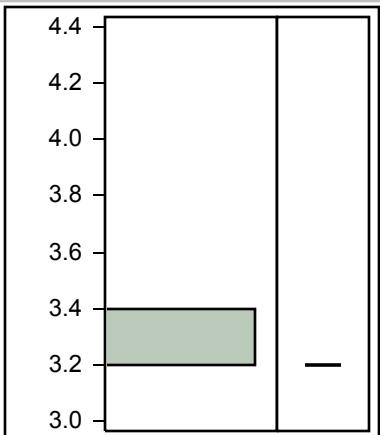
100.0%	maximum	5.4
99.5%		5.4
97.5%		5.4
90.0%		5.4
75.0%	quartile	5.4
50.0%	median	-13.05
25.0%	quartile	-31.5
10.0%		-31.5
2.5%		-31.5
0.5%		-31.5
0.0%	minimum	-31.5

Summary Statistics

Mean	-13.05
Std Dev	26.09224
Std Err Mean	18.45
Upper 95% Mean	221.37948
Lower 95% Mean	-247.4795
N	2

MaS Distribution by Prep Method

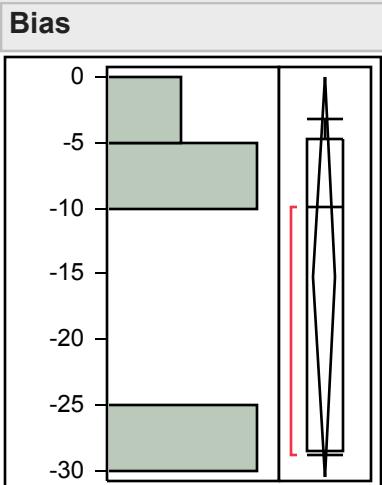
Distributions Analyte_Method=Uranium-
235 No preparation - analyzed as received

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

Summary Statistics

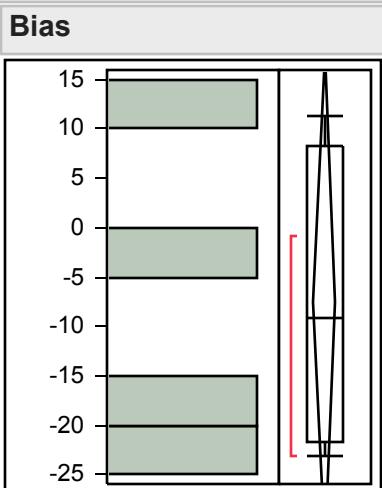
Mean	3.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions****Analyte_Method=Uranium-235 Other****Quantiles**

100.0%	maximum	-3.2
99.5%		-3.2
97.5%		-3.2
90.0%		-3.2
75.0%	quartile	-4.7
50.0%	median	-9.9
25.0%	quartile	-28.4
10.0%		-28.7
2.5%		-28.7
0.5%		-28.7
0.0%	minimum	-28.7

Summary Statistics

Mean	-15.22
Std Dev	12.265276
Std Err Mean	5.4851983
Upper 95% Mean	0.0093519
Lower 95% Mean	-30.44935
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-235 SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

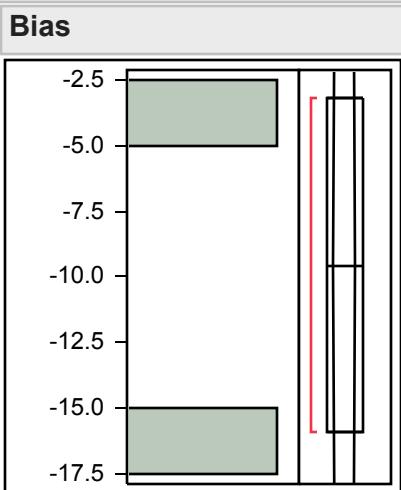
100.0%	maximum	11.4
99.5%		11.4
97.5%		11.4
90.0%		11.4
75.0%	quartile	8.325
50.0%	median	-9.15
25.0%	quartile	-21.675
10.0%		-23.1
2.5%		-23.1
0.5%		-23.1
0.0%	minimum	-23.1

Summary Statistics

Mean	-7.5
Std Dev	15.728318
Std Err Mean	7.8641592
Upper 95% Mean	17.527264
Lower 95% Mean	-32.52726
N	4

MaS Distribution by Prep Method

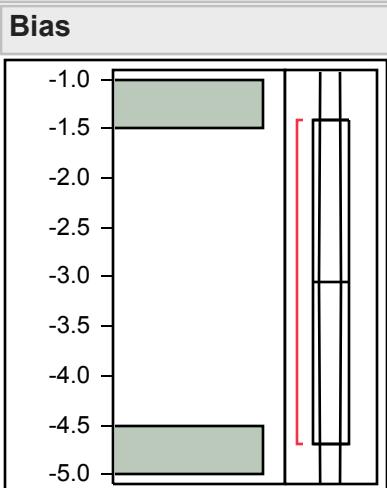
Distributions Analyte_Method=Uranium-235 Total
Metals Analysis (i.e. XRF, Fusion, neutron activation)

**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	-9.55
25.0%	quartile	-15.9
10.0%		-15.9
2.5%		-15.9
0.5%		-15.9
0.0%	minimum	-15.9

Summary Statistics

Mean	-9.55
Std Dev	8.9802561
Std Err Mean	6.35
Upper 95% Mean	71.1344
Lower 95% Mean	-90.2344
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-238 EPA****Method 200.8 Trace Metals in Waters & Wastes****Quantiles**

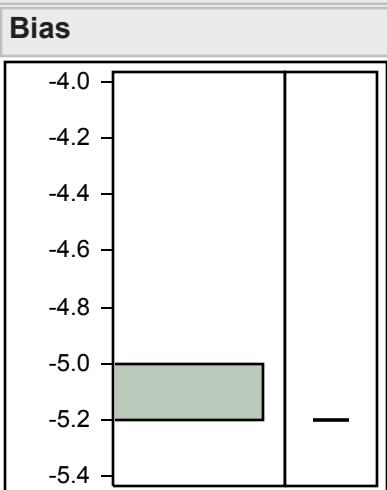
100.0%	maximum	-1.4
99.5%		-1.4
97.5%		-1.4
90.0%		-1.4
75.0%	quartile	-1.4
50.0%	median	-3.05
25.0%	quartile	-4.7
10.0%		-4.7
2.5%		-4.7
0.5%		-4.7
0.0%	minimum	-4.7

Summary Statistics

Mean	-3.05
Std Dev	2.3334524
Std Err Mean	1.65
Upper 95% Mean	17.915238
Lower 95% Mean	-24.01524
N	2

MaS Distribution by Prep Method

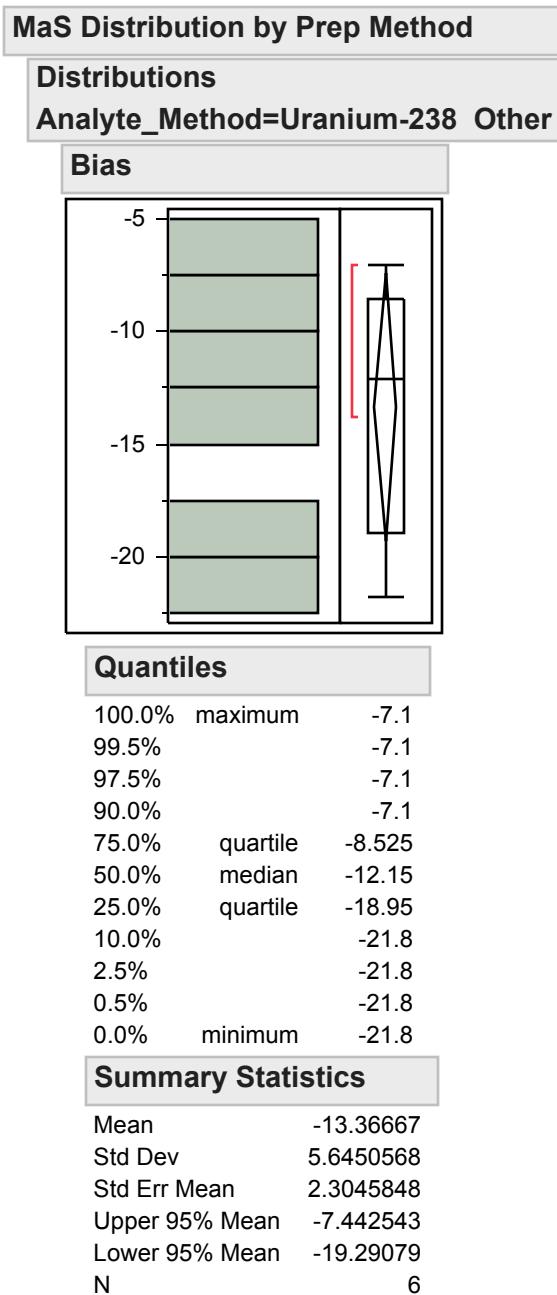
Distributions Analyte_Method=Uranium-
238 No preparation - analyzed as received

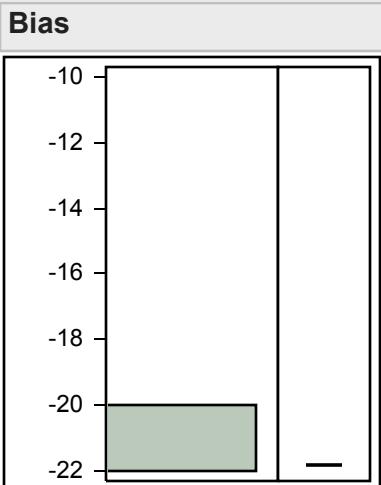
**Quantiles**

100.0%	maximum	-5.2
99.5%		-5.2
97.5%		-5.2
90.0%		-5.2
75.0%	quartile	-5.2
50.0%	median	-5.2
25.0%	quartile	-5.2
10.0%		-5.2
2.5%		-5.2
0.5%		-5.2
0.0%	minimum	-5.2

Summary Statistics

Mean	-5.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

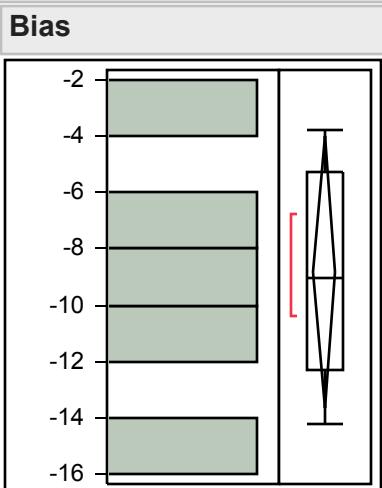


MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-238 SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	-21.8
99.5%		-21.8
97.5%		-21.8
90.0%		-21.8
75.0%	quartile	-21.8
50.0%	median	-21.8
25.0%	quartile	-21.8
10.0%		-21.8
2.5%		-21.8
0.5%		-21.8
0.0%	minimum	-21.8

Summary Statistics

Mean	-21.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-238 SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

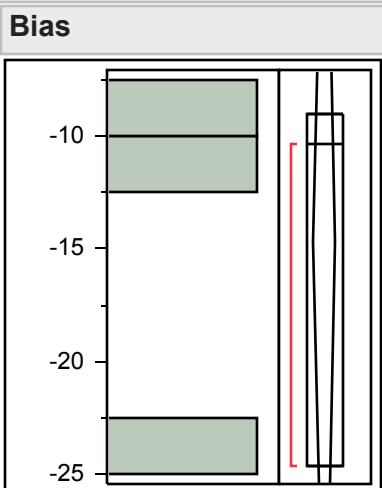
100.0%	maximum	-3.8
99.5%		-3.8
97.5%		-3.8
90.0%		-3.8
75.0%	quartile	-5.3
50.0%	median	-9
25.0%	quartile	-12.3
10.0%		-14.2
2.5%		-14.2
0.5%		-14.2
0.0%	minimum	-14.2

Summary Statistics

Mean	-8.84
Std Dev	3.8971785
Std Err Mean	1.7428712
Upper 95% Mean	-4.001014
Lower 95% Mean	-13.67899
N	5

MaS Distribution by Prep Method

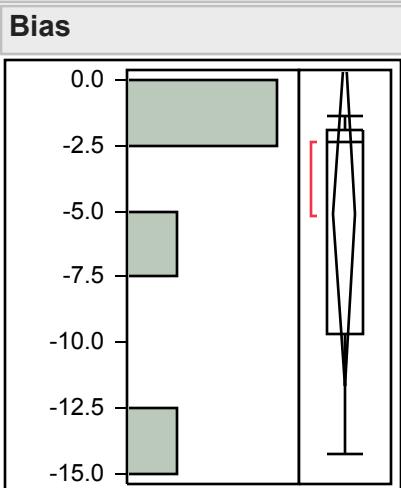
Distributions Analyte_Method=Uranium-238 Total
Metals Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

100.0%	maximum	-9
99.5%		-9
97.5%		-9
90.0%		-9
75.0%	quartile	-9
50.0%	median	-10.4
25.0%	quartile	-24.6
10.0%		-24.6
2.5%		-24.6
0.5%		-24.6
0.0%	minimum	-24.6

Summary Statistics

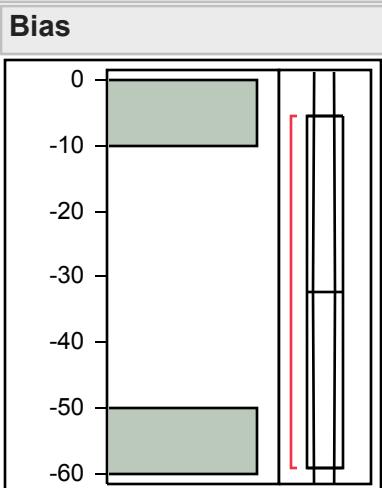
Mean	-14.66667
Std Dev	8.6309521
Std Err Mean	4.9830825
Upper 95% Mean	6.7738068
Lower 95% Mean	-36.10714
N	3

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-Total EPA****Method 200.8 Trace Metals in Waters & Wastes****Quantiles**

100.0%	maximum	-1.4
99.5%		-1.4
97.5%		-1.4
90.0%		-1.4
75.0%	quartile	-1.9
50.0%	median	-2.4
25.0%	quartile	-9.7
10.0%		-14.2
2.5%		-14.2
0.5%		-14.2
0.0%	minimum	-14.2

Summary Statistics

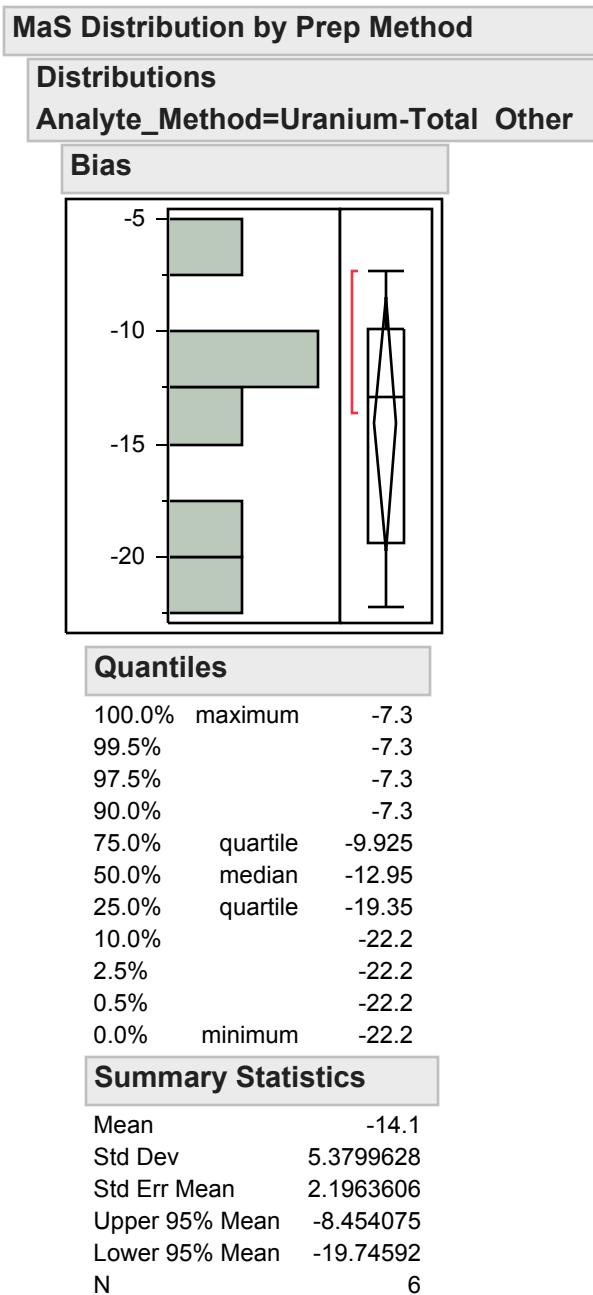
Mean	-5.12
Std Dev	5.2699146
Std Err Mean	2.3567775
Upper 95% Mean	1.4234632
Lower 95% Mean	-11.66346
N	5

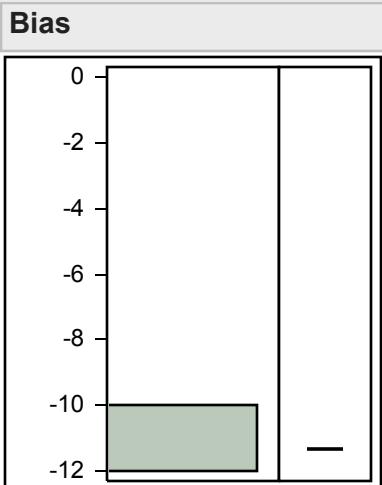
MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-****Total No preparation - analyzed as received****Quantiles**

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	-32.15
25.0%	quartile	-58.9
10.0%		-58.9
2.5%		-58.9
0.5%		-58.9
0.0%	minimum	-58.9

Summary Statistics

Mean	-32.15
Std Dev	37.830213
Std Err Mean	26.75
Upper 95% Mean	307.74098
Lower 95% Mean	-372.041
N	2

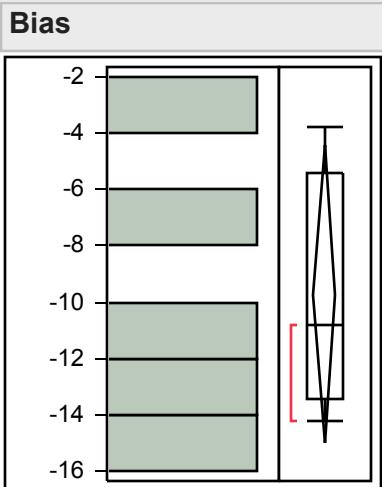


MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-Total SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

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

Summary Statistics

Mean	-11.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method**Distributions Analyte_Method=Uranium-Total SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

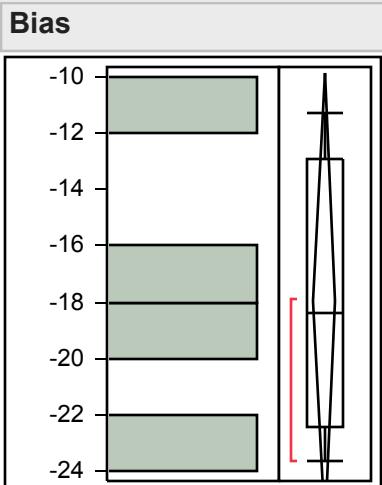
100.0%	maximum	-3.8
99.5%		-3.8
97.5%		-3.8
90.0%		-3.8
75.0%	quartile	-5.45
50.0%	median	-10.8
25.0%	quartile	-13.45
10.0%		-14.2
2.5%		-14.2
0.5%		-14.2
0.0%	minimum	-14.2

Summary Statistics

Mean	-9.72
Std Dev	4.2434656
Std Err Mean	1.8977355
Upper 95% Mean	-4.451042
Lower 95% Mean	-14.98896
N	5

MaS Distribution by Prep Method

Distributions Analyte_Method=Uranium-Total
SW846 Methods 3015, 3051 (Microwave assisted)

**Quantiles**

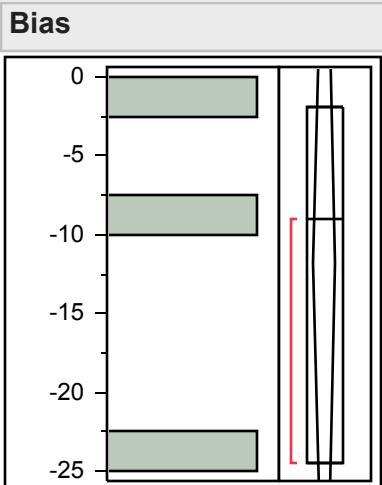
100.0%	maximum	-11.3
99.5%		-11.3
97.5%		-11.3
90.0%		-11.3
75.0%	quartile	-12.95
50.0%	median	-18.4
25.0%	quartile	-22.425
10.0%		-23.6
2.5%		-23.6
0.5%		-23.6
0.0%	minimum	-23.6

Summary Statistics

Mean	-17.925
Std Dev	5.0677904
Std Err Mean	2.5338952
Upper 95% Mean	-9.861015
Lower 95% Mean	-25.98899
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Uranium-Total Total
Metals Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

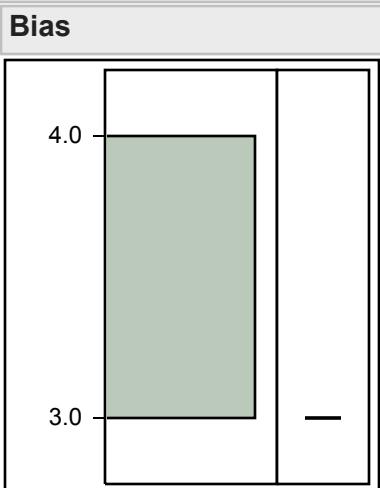
100.0%	maximum	-1.9
99.5%		-1.9
97.5%		-1.9
90.0%		-1.9
75.0%	quartile	-1.9
50.0%	median	-9
25.0%	quartile	-24.5
10.0%		-24.5
2.5%		-24.5
0.5%		-24.5
0.0%	minimum	-24.5

Summary Statistics

Mean	-11.8
Std Dev	11.557249
Std Err Mean	6.6725807
Upper 95% Mean	16.909798
Lower 95% Mean	-40.5098
N	3

MaS Distribution by Prep Method

Distributions Analyte_Method=Vanadium EPA
Method 200.2 Sample Preparation Methods

**Quantiles**

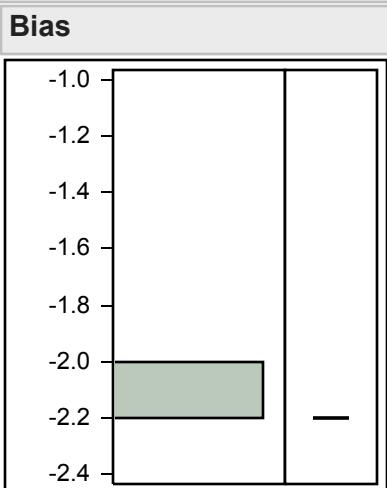
100.0%	maximum	3
99.5%		3
97.5%		3
90.0%		3
75.0%	quartile	3
50.0%	median	3
25.0%	quartile	3
10.0%		3
2.5%		3
0.5%		3
0.0%	minimum	3

Summary Statistics

Mean	3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Vanadium EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

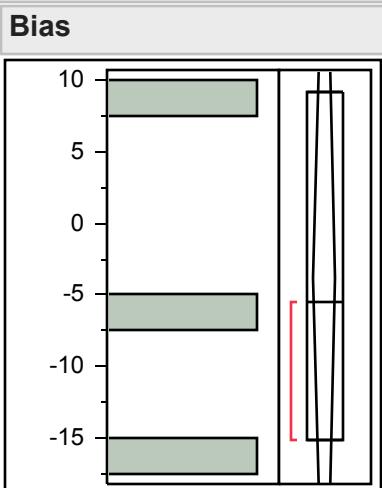
100.0%	maximum	-2.2
99.5%		-2.2
97.5%		-2.2
90.0%		-2.2
75.0%	quartile	-2.2
50.0%	median	-2.2
25.0%	quartile	-2.2
10.0%		-2.2
2.5%		-2.2
0.5%		-2.2
0.0%	minimum	-2.2

Summary Statistics

Mean	-2.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Vanadium EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

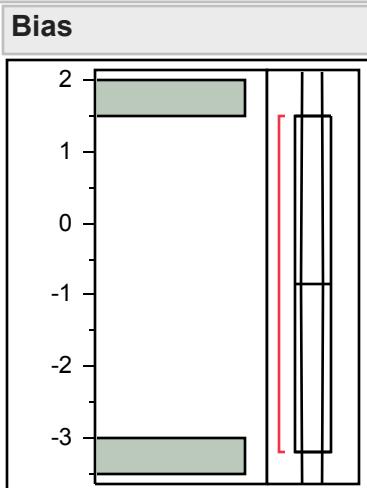
100.0%	maximum	9.2
99.5%		9.2
97.5%		9.2
90.0%		9.2
75.0%	quartile	9.2
50.0%	median	-5.5
25.0%	quartile	-15.1
10.0%		-15.1
2.5%		-15.1
0.5%		-15.1
0.0%	minimum	-15.1

Summary Statistics

Mean	-3.8
Std Dev	12.238872
Std Err Mean	7.0661163
Upper 95% Mean	26.603045
Lower 95% Mean	-34.20304
N	3

MaS Distribution by Prep Method**Distributions**

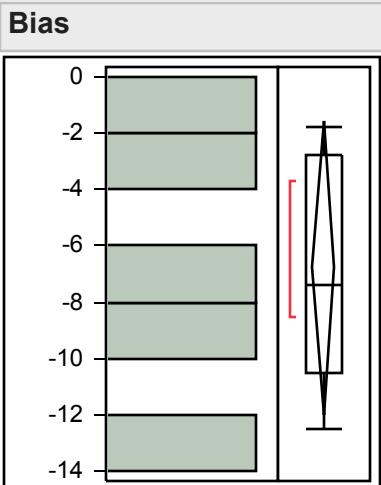
Analyte_Method=Vanadium Other

**Quantiles**

100.0%	maximum	1.5
99.5%		1.5
97.5%		1.5
90.0%		1.5
75.0%	quartile	1.5
50.0%	median	-0.85
25.0%	quartile	-3.2
10.0%		-3.2
2.5%		-3.2
0.5%		-3.2
0.0%	minimum	-3.2

Summary Statistics

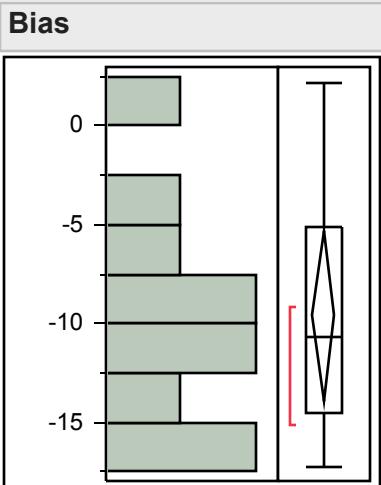
Mean	-0.85
Std Dev	3.3234019
Std Err Mean	2.35
Upper 95% Mean	29.009581
Lower 95% Mean	-30.70958
N	2

MaS Distribution by Prep Method**Distributions Analyte_Method=Vanadium SW846****Method 3050B, Section 7.5, Increased Solubility****Quantiles**

100.0%	maximum	-1.8
99.5%		-1.8
97.5%		-1.8
90.0%		-1.8
75.0%	quartile	-2.75
50.0%	median	-7.4
25.0%	quartile	-10.5
10.0%		-12.5
2.5%		-12.5
0.5%		-12.5
0.0%	minimum	-12.5

Summary Statistics

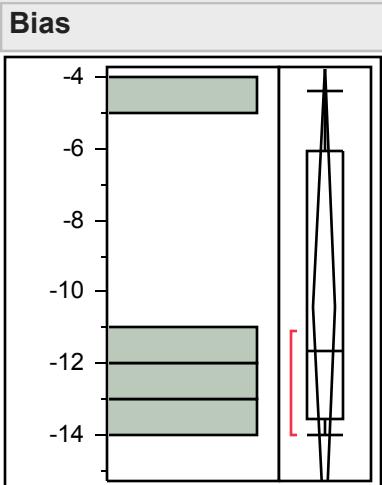
Mean	-6.78
Std Dev	4.1936857
Std Err Mean	1.8754733
Upper 95% Mean	-1.572851
Lower 95% Mean	-11.98715
N	5

MaS Distribution by Prep Method**Distributions Analyte_Method=Vanadium SW846****Methods 3005, 3010, 3020, 3050 or CLP ILM03.0****Quantiles**

100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		1.72
75.0%	quartile	-5.075
50.0%	median	-10.7
25.0%	quartile	-14.575
10.0%		-17.08
2.5%		-17.3
0.5%		-17.3
0.0%	minimum	-17.3

Summary Statistics

Mean	-9.59
Std Dev	6.0209726
Std Err Mean	1.9039987
Upper 95% Mean	-5.282856
Lower 95% Mean	-13.89714
N	10

MaS Distribution by Prep Method**Distributions Analyte_Method=Vanadium SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

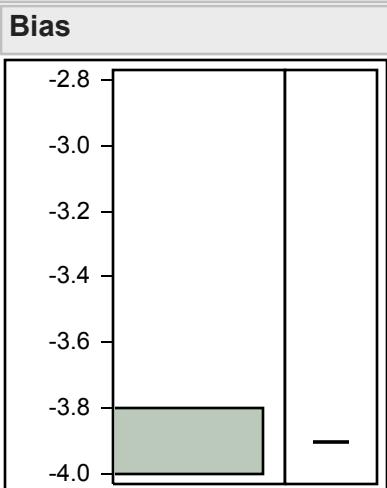
100.0%	maximum	-4.4
99.5%		-4.4
97.5%		-4.4
90.0%		-4.4
75.0%	quartile	-6.075
50.0%	median	-11.65
25.0%	quartile	-13.55
10.0%		-14
2.5%		-14
0.5%		-14
0.0%	minimum	-14

Summary Statistics

Mean	-10.425
Std Dev	4.1907637
Std Err Mean	2.0953818
Upper 95% Mean	-3.75656
Lower 95% Mean	-17.09344
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Vanadium Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**Quantiles**

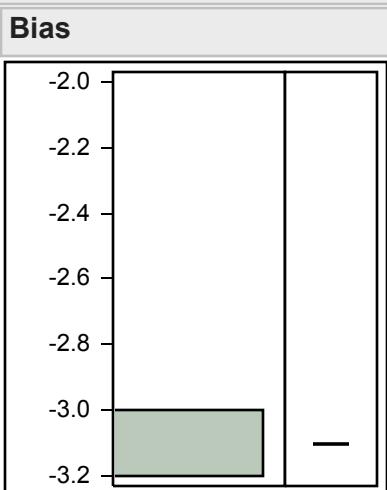
100.0%	maximum	-3.9
99.5%		-3.9
97.5%		-3.9
90.0%		-3.9
75.0%	quartile	-3.9
50.0%	median	-3.9
25.0%	quartile	-3.9
10.0%		-3.9
2.5%		-3.9
0.5%		-3.9
0.0%	minimum	-3.9

Summary Statistics

Mean	-3.9
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

Distributions Analyte_Method=Zinc EPA
Method 200.7 Trace Metals in Waters & Wastes

**Quantiles**

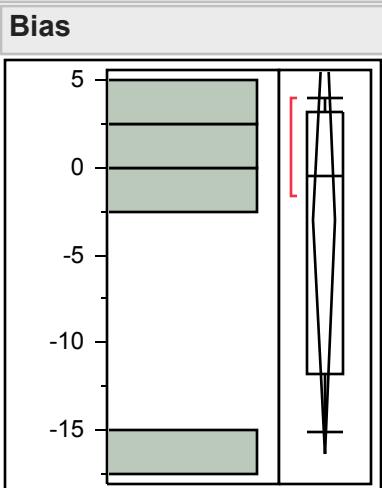
100.0%	maximum	-3.1
99.5%		-3.1
97.5%		-3.1
90.0%		-3.1
75.0%	quartile	-3.1
50.0%	median	-3.1
25.0%	quartile	-3.1
10.0%		-3.1
2.5%		-3.1
0.5%		-3.1
0.0%	minimum	-3.1

Summary Statistics

Mean	-3.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

MaS Distribution by Prep Method

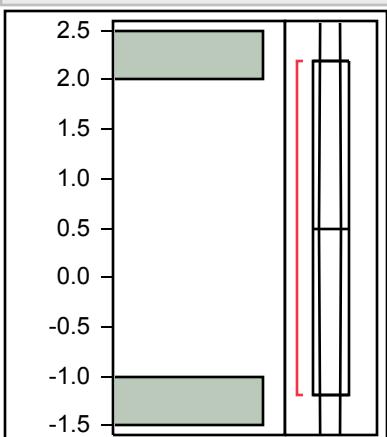
Distributions Analyte_Method=Zinc EPA
Method 200.8 Trace Metals in Waters & Wastes

**Quantiles**

100.0%	maximum	4
99.5%		4
97.5%		4
90.0%		4
75.0%	quartile	3.175
50.0%	median	-0.45
25.0%	quartile	-11.725
10.0%		-15.1
2.5%		-15.1
0.5%		-15.1
0.0%	minimum	-15.1

Summary Statistics

Mean	-3
Std Dev	8.3876894
Std Err Mean	4.1938447
Upper 95% Mean	10.346686
Lower 95% Mean	-16.34669
N	4

MaS Distribution by Prep Method**Distributions Analyte_Method=Zinc Other****Bias****Quantiles**

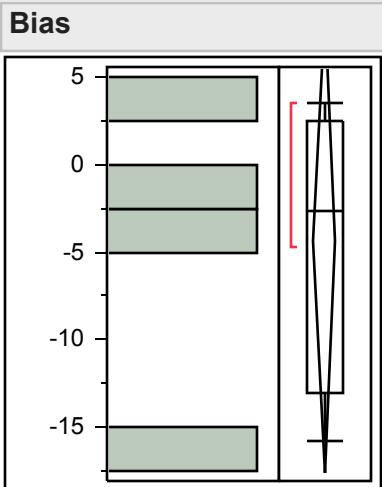
100.0%	maximum	2.2
99.5%		2.2
97.5%		2.2
90.0%		2.2
75.0%	quartile	2.2
50.0%	median	0.5
25.0%	quartile	-1.2
10.0%		-1.2
2.5%		-1.2
0.5%		-1.2
0.0%	minimum	-1.2

Summary Statistics

Mean	0.5
Std Dev	2.4041631
Std Err Mean	1.7
Upper 95% Mean	22.100548
Lower 95% Mean	-21.10055
N	2

MaS Distribution by Prep Method

Distributions Analyte_Method=Zinc SW846
Method 3050B, Section 7.5, Increased Solubility

**Quantiles**

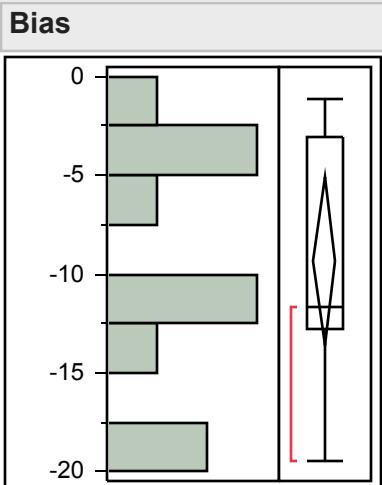
100.0%	maximum	3.5
99.5%		3.5
97.5%		3.5
90.0%		3.5
75.0%	quartile	2.45
50.0%	median	-2.7
25.0%	quartile	-13.025
10.0%		-15.8
2.5%		-15.8
0.5%		-15.8
0.0%	minimum	-15.8

Summary Statistics

Mean	-4.425
Std Dev	8.2895014
Std Err Mean	4.1447507
Upper 95% Mean	8.7654465
Lower 95% Mean	-17.61545
N	4

MaS Distribution by Prep Method

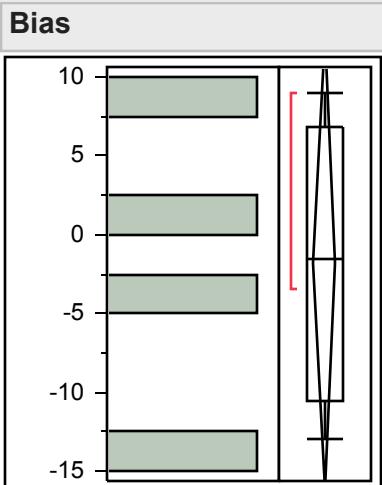
Distributions Analyte_Method=Zinc SW846
Methods 3005, 3010, 3020, 3050 or CLP ILM03.0

**Quantiles**

100.0%	maximum	-1.1
99.5%		-1.1
97.5%		-1.1
90.0%		-1.4
75.0%	quartile	-3.1
50.0%	median	-11.7
25.0%	quartile	-12.8
10.0%		-19.14
2.5%		-19.5
0.5%		-19.5
0.0%	minimum	-19.5

Summary Statistics

Mean	-9.309091
Std Dev	6.3148166
Std Err Mean	1.9039889
Upper 95% Mean	-5.066739
Lower 95% Mean	-13.55144
N	11

MaS Distribution by Prep Method**Distributions Analyte_Method=Zinc SW846****Methods 3015, 3051 (Microwave assisted)****Quantiles**

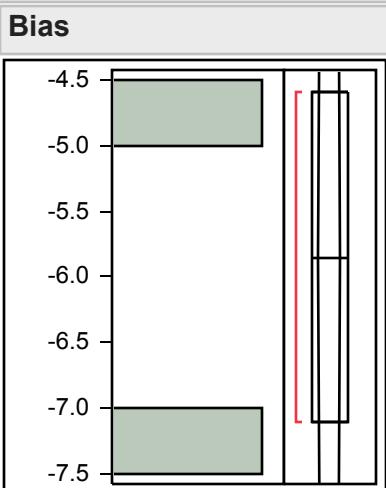
100.0%	maximum	8.9
99.5%		8.9
97.5%		8.9
90.0%		8.9
75.0%	quartile	6.775
50.0%	median	-1.55
25.0%	quartile	-10.55
10.0%		-12.9
2.5%		-12.9
0.5%		-12.9
0.0%	minimum	-12.9

Summary Statistics

Mean	-1.775
Std Dev	9.044842
Std Err Mean	4.522421
Upper 95% Mean	12.617362
Lower 95% Mean	-16.16736
N	4

MaS Distribution by Prep Method

Distributions Analyte_Method=Zinc Total Metals
Analysis (i.e. XRF, Fusion, neutron activation)

**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	-5.85
25.0%	quartile	-7.1
10.0%		-7.1
2.5%		-7.1
0.5%		-7.1
0.0%	minimum	-7.1

Summary Statistics

Mean	-5.85
Std Dev	1.767767
Std Err Mean	1.25
Upper 95% Mean	10.032756
Lower 95% Mean	-21.73276
N	2