

MAPEP-08-GrF19 Laboratories Receiving Samples

Lab Code	Lab Name
1	ADEM01 Alabama Department of Environmental Management
2	AFOH01 USAFSAM/SDRR
3	ANLA01 Argonne National Laboratory/Analytical Chemistry Lab.
4	ANTE01 Paragon Analytics a Division of DataChem Laboratories, Inc.
5	ARPL01 Analytical Support Operations - Radiochemical Processing Lab
6	ARSL01 American Radiation Services Inc.
7	AY1201 B&W Y-12, Analytical Chemistry Organization Laboratory
8	CDHS01 California Department of Public Health
9	CESL01 Lawrence Livermore National Laboratory - EMRL
10	CHMH01 222-S Laboratory
11	CMRC01 Carlsbad Environmental Monitoring and Research Center
12	DEHS01 Department of Environmental Health & Safety
13	DRMG01 BWXT Pantex - D&RMG
14	ENES01 Energy Northwest Environmental Services
15	EPAL01 U. S. EPA Office of Radiation and Indoor Air
16	ERCL01 Washington State Public Health Laboratories
17	ERLG01 Environmental Radiation Laboratory
18	ERPD99 Ministry Of Health,Radiation Protection Department Lab
19	FDHE01 Florida Dept of Health Environmental Laboratory
20	FDOH01 Florida Dept. of Health, Mobile Environmental Radiological Lab
21	FMEC99 Foods and Water Laboratories Center
22	FNAL01 Fermi National Accelerator Laboratory (FermiLab)
23	GENE01 GEL Laboratories, LLC
24	HCAL01 Hazards Control Analytical Lab
25	HECR01 SC Dept. Health and Environmental Control Radiological Laboratory
26	HERR01 Washington Closure Hanford
27	ISUP01 ISU - Department of Physics/Health Physics/EAL
28	JAEC99 Radiation Measurements Laboratory
29	KDHE01 Kansas Dept. of Health & Environment
30	KSCF01 Kennedy Space Center, HP Laboratory
31	LOCK01 ICP Analytical Services Laboratories
32	LOCK03 Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
33	MART02 United States Enrichment Corporation
34	MART03 Radioactive Material Analysis Laboratory
35	MDPH01 MDPH-Radiation Control Program
36	MKME01 MKM Engineers, Inc
37	MSTH99 Radioecology
38	NARL01 National Air and Radiation Environmental Laboratory
39	NESI01 B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory
40	NJDH01 New Jersey Dept. of Health & Senior Services, PHEL, ECLS
41	NTSI01 Nuclear Technology Services, Inc.
42	OBGL01 Life Science Laboratories, Inc.

43 ODHL01 Ohio Department of Health Laboratory
44 ORIS01 ORISE/ESSAP
45 OTLI01 Outreach Technologies, Inc.
46 QUAN01 TestAmerica St. Louis
47 QUAN03 TestAmerica
48 **RMCL99 Royal Scientific Society - Radiation Measurements Lab**
49 RPCR01 CH2M Hill RadCon Program Count Room
50 RPSC01 Radiation Protection Service
51 **RSAL01 RSA Laboratories, Inc.**
52 SCAL01 GPL Laboratories Alabama, LLC
53 SEML01 SRS Environmental Monitoring Laboratory
54 **SLDL01 Scientific Laboratory Division**
55 SOUT01 Southwest Research Institute
56 SRPD01 Sandia National Laboratories, Radiation Protection Sample Diagnostics
57 **SSFL01 Santa Susana Field Laboratory**
58 TDHL01 Texas Department of State Health Services Laboratory
59 TELE01 TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
60 TELE02 Environmental, Inc., Midwest Lab
61 TMAO01 EBERLINE SERVICES OAK RIDGE LABORATORY
62 TMAR01 Eberline Services
63 TNUT01 FUSRAP
64 **URSL01 UNLV Radioanalytical Services Laboratory**
65 USED99 National Center for Energy, Science and Nuclear Tech.
66 WEST03 Waste Sampling and Characterization Facility
67 WEST04 PACE ANALYTICAL SERVICES, PITTSBURGH
68 WIPP01 WIPP Laboratories
69 WSHL01 Wisconsin State Laboratory of Hygiene
70 WVDP01 WVDP Environmental Laboratory
71 **WVPL01 WVDP Radiation Protection Lab**

17 Laboratories did not report data

Setup and Process Data

MAPEP-08-GrF19

Analyte	Ref. Value	Total Ref.	Uncertainty	F.P.	S.E.
Radiological					
Gross alpha				✓	
Gross beta	0.525		0.015		

Sample Statistical Summary

MAPEP-08-GrF19

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/sample)
Gross alpha	53	43					False Positive Test
Gross beta	53	48	0.548	0.053	0.525	0.015	0.263 - 0.788

Note: (1) T = Total number of laboratories reporting analyte.
(2) A = Number of laboratories with 'Acceptable' performance.

Gross Alpha Criteria:

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

Gross Beta Criteria:

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

Flag Summary Report

Generated December 17, 2008

MAPEP-08-GrF19

Radiological				
Analyte	A	W	RW	N
alpha	43			10
Gross beta	48			5



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

Laboratory Results For MAPEP-08-GrF19
 (ADEM01) Alabama Department of Environmental Management
 Montgomery Laboratory
 Montgomery, AL 36110

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	2.22e-4		N	(1)			0.0000	
Gross beta	6.67e-3	0.525	N		-98.7	0.263 - 0.788	0.0005	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ANTE01) Paragon Analytics a Division of DataChem Laboratories, Inc.
 225 Commerce Drive
 Fort Collins, CO 80524-1416

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0026		A				0.0028	
Gross beta	0.6070	0.525	A		15.6	0.263 - 0.788	0.0530	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ARPL01) Analytical Support Operations - Radiochemical Processing Lab
 PO Box 999
 Richland, WA 99354

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.001		A				0.002	
Gross beta	0.495	0.525	A		-5.7	0.263 - 0.788	0.017	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ARSL01) American Radiation Services Inc.
 2609 North River Road
 Port Allen, LA 70767

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.006		A				0.010	
Gross beta	0.497	0.525	A		-5.3	0.263 - 0.788	0.050	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (AY1201) B&W Y-12, Analytical Chemistry Organization Laboratory
 Y12, NSC, Bldg. 9995, Rm 142
 Oak Ridge, TN 37831-8189

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.007		A				0.008	
Gross beta	0.581	0.525	A		10.7	0.263 - 0.788	0.036	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (CESL01) Lawrence Livermore National Laboratory - EMRL
 7000 East Avenue
 Livermore, CA 94551

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	5.73E-01	0.525	A		9.1	0.263 - 0.788	3.45E-	L
Gross alpha	-6.58E-04		A				4.28E-	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (CHMH01) 222-S Laboratory
 P.O. Box 250, MS T6-10
 Richland, WA 99354

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	0.559	0.525	A		6.5	0.263 - 0.788	0.0322	
Gross alpha	0.00936		A				0.0082	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (CMRC01) Carlsbad Environmental Monitoring and Research Center
 1400 University Dr.
 Carlsbad, NM 88220

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	.520	0.525	A		-1.0	0.263 - 0.788	.004	L
Gross alpha	.00013		N	(1)			.00001	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (DEHS01) Department of Environmental Health & Safety
 North Carolina State Univ.
 Raleigh, NC 27695-8007

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0003		A				0.001	
Gross beta	0.480	0.525	A		-8.6	0.263 - 0.788	0.025	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ENES01) Energy Northwest Environmental Services
 350 Hills St., Suite 107
 Richland, WA 99354

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.003		A				0.003	
Gross beta	0.48	0.525	A		-8.6	0.263 - 0.788	0.02	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ERCL01) Washington State Public Health Laboratories
 1610 N.E. 150 th Srteet
 Shoreline, WA 98155-9701

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	0.500	0.525	A		-4.8	0.263 - 0.788	0.015	
Gross alpha	-0.0003		A				0.0023	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ERLG01) Environmental Radiation Laboratory
 Georgia Institute of Tech.
 Atlanta, GA 30332

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.005		A				.01	
Gross beta	.44	0.525	A		-16.2	0.263 - 0.788	.02	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ERPD99) Ministry Of Health,Radiation Protection Department Lab
 Al-Awqaf Complex-Tower#12
 Sharq, Kuwait 656

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0102		N	(1)			0.0011	
Gross beta	1.8540	0.525	N		253.1	0.263 - 0.788	0.2500	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (FDHE01) Florida Dept of Health Environmental Laboratory
 PO Box 680069
 Orlando, FL 32868-0069

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.001		A				0.005	
Gross beta	0.551	0.525	A		5.0	0.263 - 0.788	0.023	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (FMEC99) Foods and Water Laboratories Center
 Ministry of Regional Municipalities and Water Resources
 Muscat, Sultanate of Oman 111

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.2275		N	(1)			0.002	
Gross beta	0.5834	0.525	A		11.1	0.263 - 0.788	0.003	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (GENE01) GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.003		A				0.002	
Gross beta	0.564	0.525	A		7.4	0.263 - 0.788	0.010	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (HCAL01) Hazards Control Analytical Lab
 Lawrence Livermore National
 Livermore, CA 94551

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.0005		A				.0046	
Gross beta	0.59	0.525	A		12.4	0.263 - 0.788	.059	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (HECR01) SC Dept. Health and Environmental Control Radiological Laboratory
 2600 Bull St.
 Columbia, SC 29201

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0162		A				0.0144	
Gross beta	0.601	0.525	A		14.5	0.263 - 0.788	0.046	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (HERR01) Washington Closure Hanford
 Radiological Counting Facility
 Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.015		A				.007	
Gross beta	.49	0.525	A		-6.7	0.263 - 0.788	.12	H

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (KDHE01) Kansas Dept. of Health & Environment
 Forbes Bldg. 740
 Topeka, KS 66620

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0125		N	(1)			0.0002	
Gross beta	0.6601	0.525	A		25.7	0.263 - 0.788	0.0110	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (KSCF01) Kennedy Space Center, HP Laboratory
 CHS-022
 Kennedy Space Center, FL 32899

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.00282		N	(1)			0.0001	
Gross beta	0.5546	0.525	A		5.6	0.263 - 0.788	0.0196	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (LOCK01) ICP Analytical Services Laboratories
 CH2M-WG Idaho, LLC
 Idaho Falls, ID 83415-5210

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.014		A				0.017	
Gross beta	1.18	0.525	N		124.8	0.263 - 0.788	0.03	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (LOCK03) Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
 INL/Battelle Energy Alliance, LLC
 Scoville, ID 83415-7111

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.005		A				0.004	
Gross beta	0.59	0.525	A		12.4	0.263 - 0.788	0.03	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (MART02) United States Enrichment Corporation
 PO Box 1410
 Paducah, KY 42002

Radiological							Units: (Bq/sample)	
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0606		N	(1)			0.0106	
Gross beta	0.539	0.525	A		2.7	0.263 - 0.788	0.0138	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (MART03) Radioactive Material Analysis Laboratory
 ORNL
 Oak Ridge, TN 37831-6223

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0054		A				0.011	
Gross beta	0.624	0.525	A		18.9	0.263 - 0.788	0.044	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (MDPH01) MDPH-Radiation Control Program
 MERL-Room 002
 Jamaica Plain, MA 02130-3597

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.01		A				0.01	
Gross beta	0.51	0.525	A		-2.9	0.263 - 0.788	0.01	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(MKME01) MKM Engineers, Inc

5025 Arnold Ave

McClellan, CA 95652

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.005		A				.13	
Gross beta	4.327	0.525	N		724.2	0.263 - 0.788	.135	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (NARL01) National Air and Radiation Environmental Laboratory
 540 S. Morris Ave.
 Montgomery, AL 36115-2601

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.016		A				0.053	
Gross beta	0.697	0.525	A		32.8	0.263 - 0.788	0.063	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (NESI01) B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory
 Lynchburg Technology Center
 Lynchburg, VA 24504-5447

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.024		A				0.011	
Gross beta	0.82	0.525	N		56.2	0.263 - 0.788	0.017	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (NJDH01) New Jersey Dept. of Health & Senior Services, PHEL, ECLS
 Market and Warren Streets
 Trenton, NJ 08625-0361

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.0216		A				0.0021	
Gross beta	0.4937	0.525	A		-6.0	0.263 - 0.788	0.0039	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (ODHL01) Ohio Department of Health Laboratory
 8995 E Main Street
 Reynoldsburg, OH 43068

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.001		A				0.0004	
Gross beta	0.501	0.525	A		-4.6	0.263 - 0.788	0.024	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(ORIS01) ORISE/ESSAP

PO Box 117

Oak Ridge, TN 37831-0117

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.001		A				0.005	
Gross beta	0.50	0.525	A		-4.8	0.263 - 0.788	0.02	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(OTLI01) Outreach Technologies, Inc.

311 N. Aspen

Broken Arrow, OK 74012-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.002		A				.030	
Gross beta	.507	0.525	A		-3.4	0.263 - 0.788	.030	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(QUAN01) TestAmerica St. Louis

13715 Rider Trail North

Earth City, MO 63045-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.002194		A				0.0008	
Gross beta	0.6234	0.525	A		18.7	0.263 - 0.788	0.0069	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (QUAN03) TestAmerica
 2800 GEORGE WASHINGTON WAY
 RICHLAND, WA 99354-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.008		N	(1)			0.002	
Gross beta	0.57	0.525	A		8.6	0.263 - 0.788	0.046	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (RPCR01) WRPS RadCon Program Count Room
 2440 Steven Drive
 Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.003		A				0.001	
Gross beta	0.579	0.525	A		10.3	0.263 - 0.788	0.008	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (RPSC01) Radiation Protection Service
 Ontario Ministry of Labour
 Weston, Ontario M9P 3T1

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.002		A				0.004	
Gross beta	0.63	0.525	A		20.0	0.263 - 0.788	.06	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (SCAL01) GPL Laboratories Alabama, LLC
 1000 Monticello Court
 Montgomery, AL 36117-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.015		A				0.005	
Gross beta	0.537	0.525	A		2.3	0.263 - 0.788	0.032	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (SEML01) SRS Environmental Monitoring Laboratory
 Bldg 735-B
 Aiken, SC 29808

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.00075		A				0.0039	
Gross beta	0.538	0.525	A		2.5	0.263 - 0.788	0.035	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (SOUT01) Southwest Research Institute
 6220 Culebra Rd.
 San Antonio, TX 78228-0510

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	0.544	0.525	A		3.6	0.263 - 0.788	0.036	
Gross alpha	0.0124		A				0.060	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(SRPD01) Sandia National Laboratories, Radiation Protection Sample Diagnostics

PO Box 5800, MS1103

Albuquerque, NM 87185-1103

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.052		A				0.034	
Gross beta	0.500	0.525	A		-4.8	0.263 - 0.788	0.072	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TDHL01) Texas Department of State Health Services Laboratory
 1100 W 49th Street
 Austin, TX 78756

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.003		A				.002	
Gross beta	.599	0.525	A		14.1	0.263 - 0.788	.033	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TELE01) TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
 2508 Quality Lane
 Knoxville, TN 37931-6819

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.0037		A				0.014	
Gross beta	0.5397	0.525	A		2.8	0.263 - 0.788	0.0441	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TELE02) Environmental, Inc., Midwest Lab
 700 Landwehr Road
 Northbrook, IL 60062-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.005		A				0.006	
Gross beta	0.56	0.525	A		6.7	0.263 - 0.788	0.049	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TMAO01) EBERLINE SERVICES OAK RIDGE LABORATORY
 601 SCARBORO RD
 OAK RIDGE, TN 37830-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0057		A				0.004	
Gross beta	0.594	0.525	A		13.1	0.263 - 0.788	0.027	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TMAR01) Eberline Services
 2030 Wright Ave
 Richmond, CA 94804-3849

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.006		A				0.006	
Gross beta	0.572	0.525	A		9.0	0.263 - 0.788	0.035	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (TNUT01) FUSRAP
 8945 LATTY AVE
 BERKELEY, MO 63134-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.001		A				0.002	
Gross beta	0.514	0.525	A		-2.1	0.263 - 0.788	0.022	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (USED99) National Center for Energy, Science and Nuclear Tech.
 CNESTEN BP 1382
 RP 10001

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	-0.00009		A				0.0053	
Gross beta	0.59	0.525	A		12.4	0.263 - 0.788	0.07	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (WEST03) Waste Sampling and Characterization Facility
 PO Box 1000, S3-30
 Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.005		N	(1)			0.001	
Gross beta	0.493	0.525	A		-6.1	0.263 - 0.788	0.027	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (WEST04) PACE ANALYTICAL SERVICES, PITTSBURGH
 1638 Roseytown Road
 Greensburg, PA 15601

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.008		A				0.006	
Gross beta	0.514	0.525	A		-2.1	0.263 - 0.788	0.097	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19

(WIPP01) WIPP Laboratories

1400 University Drive

Carlsbad, NM 88220

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	5.09E-03		N	(1)			1.02E-	
Gross beta	5.01E-01	0.525	A		-4.6	0.263 - 0.788	1.65E-	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (WSHL01) Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive
 Madison, WI 53718

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.02		A				0.03	
Gross beta	0.48	0.525	A		-8.6	0.263 - 0.788	0.04	

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

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

Notes:

(1) = False Positive



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

Laboratory Results For MAPEP-08-GrF19
 (WVDP01) WVDP Environmental Laboratory
 10282 Rock Springs Road
 West Valley, NY 14171

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.00159		A				0.0012	
Gross beta	0.515	0.525	A		-1.9	0.263 - 0.788	0.0094	L

Radiological Reference Date: August 1, 2008

Gross Alpha Flags:

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

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

Gross Beta Flags:

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

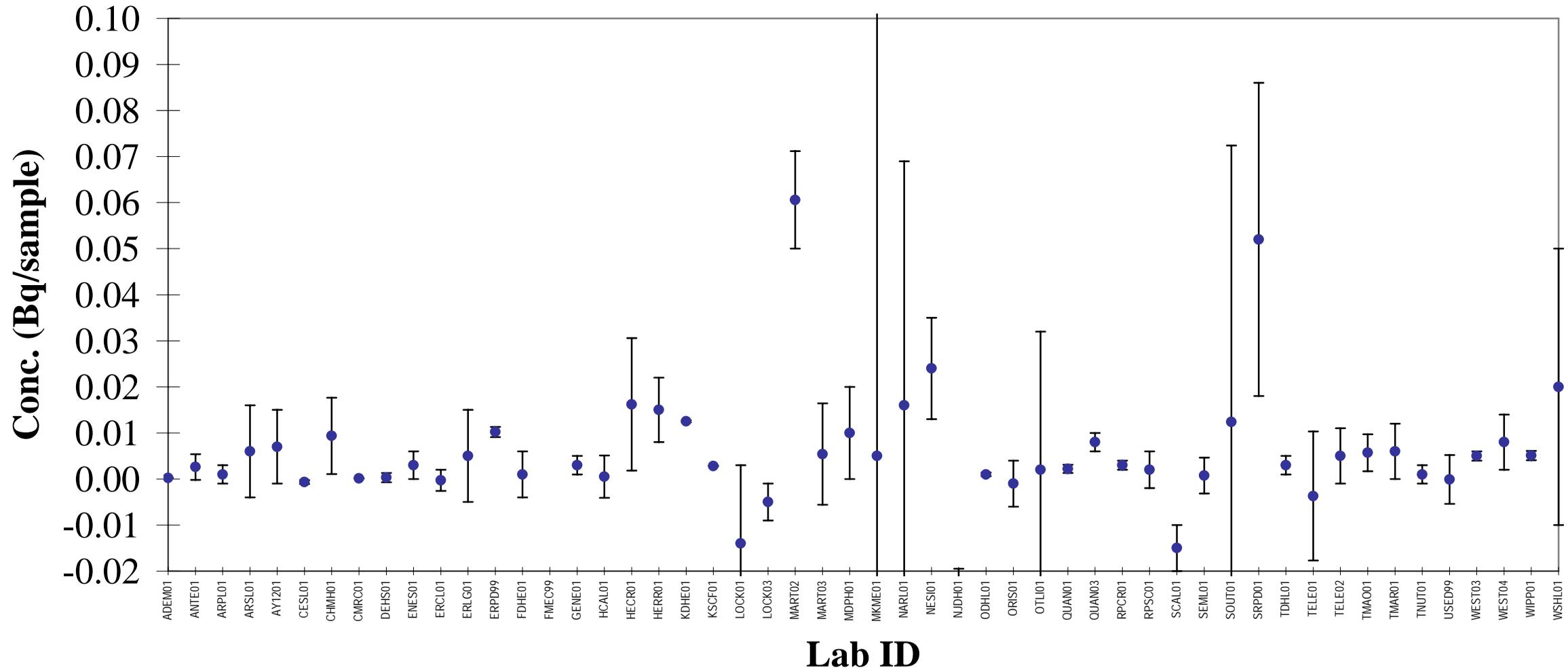
N = Result not acceptable, Bias $>$ +/- 50% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Notes:

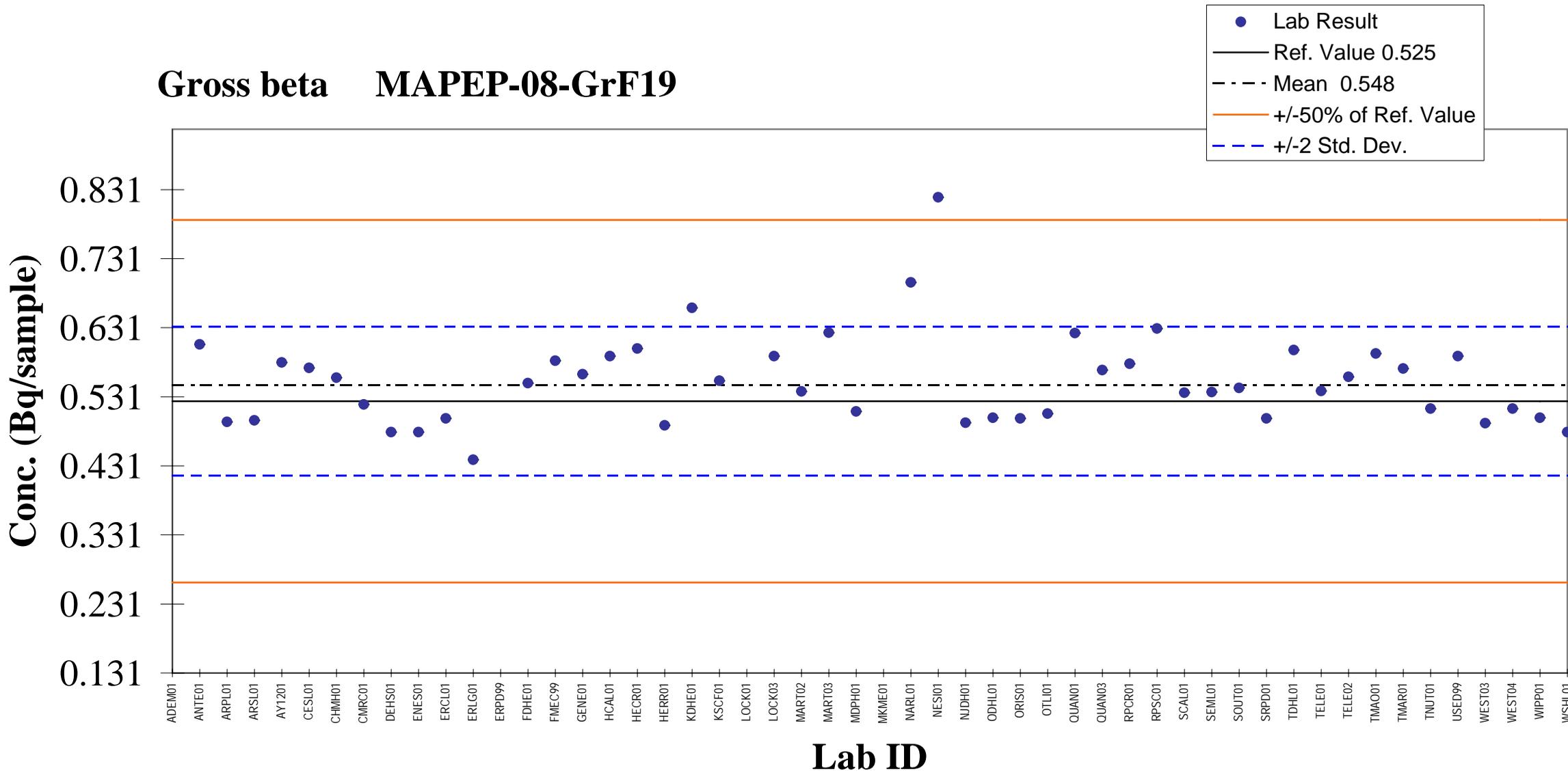
(1) = False Positive

Gross alpha MAPEP-08-GrF19

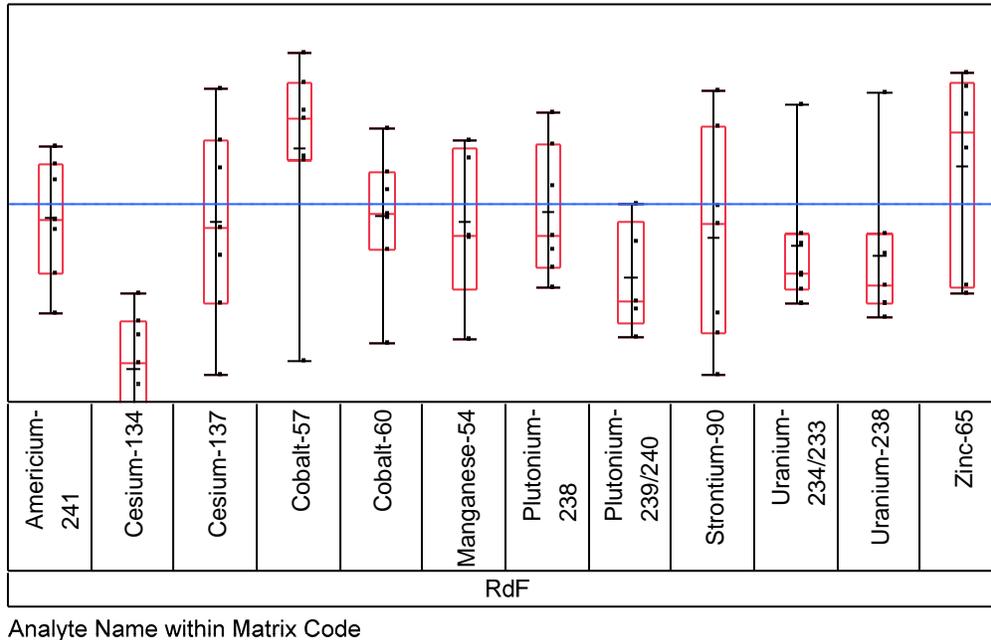
● Lab Result



Gross beta MAPEP-08-GrF19



The intent of the historical graphs contained within this report is to graphically illustrate how laboratories are historically performing within the MAPEP program. The data points (small 'dots') plot the bias (or z-score for organic constituents) of each of the analytes in each of the matrices for each of the studies for MAPEP since Series 12. The BLACK small horizontal line is the mean of the population of the bias shown for that analyte in the matrix. The red box is a typical "box plot" of the data.



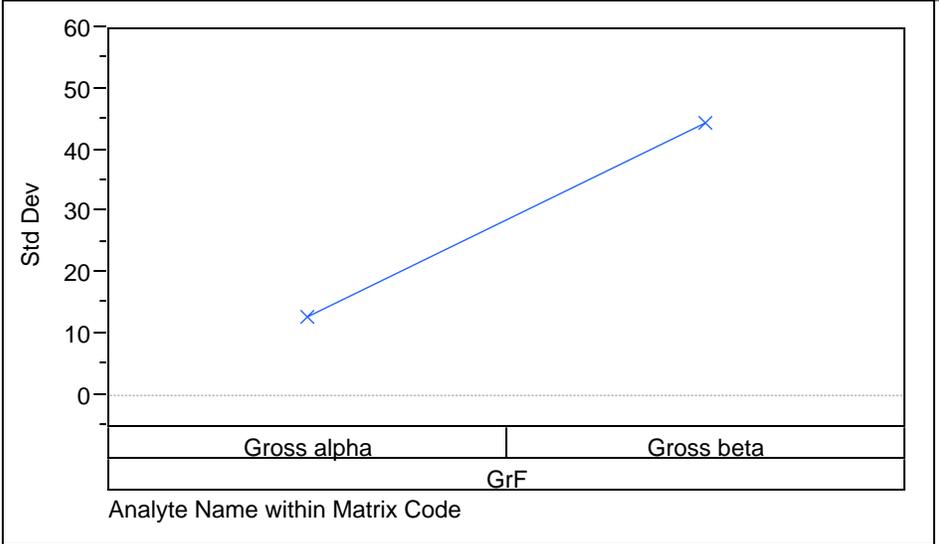
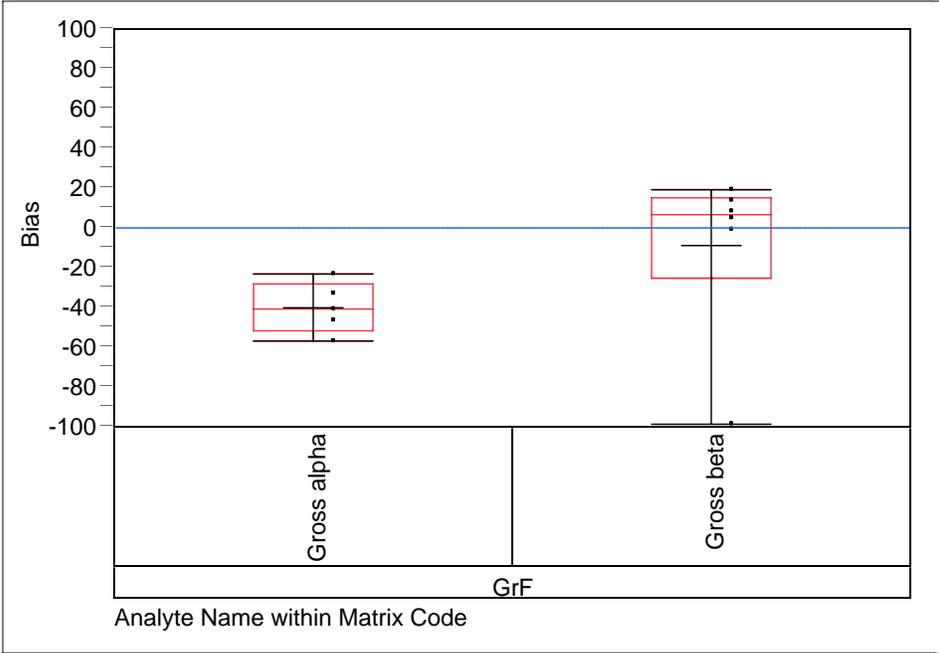
The box plots summarize the distribution of points for each analyte. The ends of the box are the 25th and 75th quantiles. The difference between the quartiles is the interquartile range. The line across the middle of the box identifies the median sample value. Each box has lines, sometimes called whiskers,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

The box plot along with the laboratory bias data points and the mean visually illustrate the breadth of the distribution and where any potential outliers in the distribution might lie. The ideal visual representation would be to have a very small box plot on top of a very small distribution of data thus indicating very good precision. Accuracy would be reflected by having the mean bias very close to zero (i.e. the box plot overlaps zero at some point).

The Standard Deviation plot below the Bias plot is just that, the standard deviation of the % bias shown above. The ideal plot would be to have the standard deviation as small as possible.

Variability Gauge Lab Code=ADEM01

Variability Chart for Bias

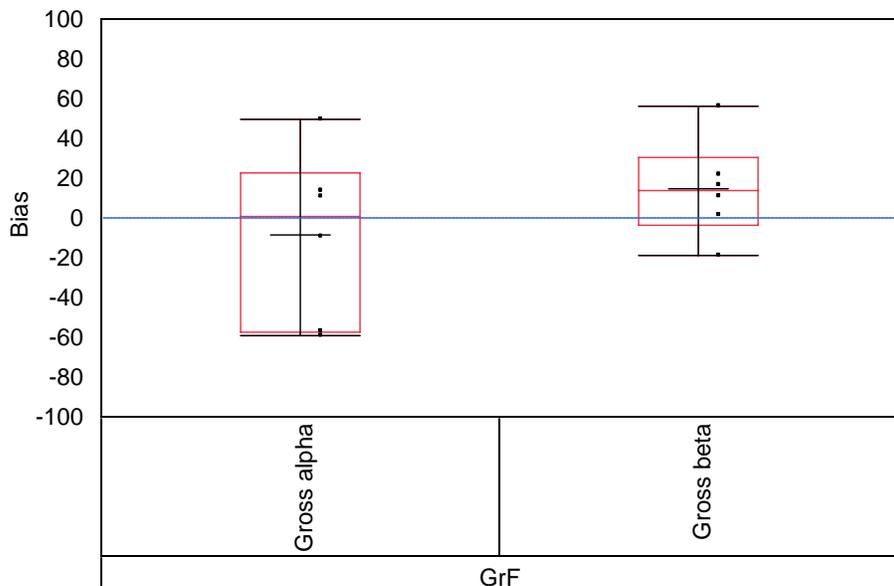


Variability Gauge Lab Code=AFOH01

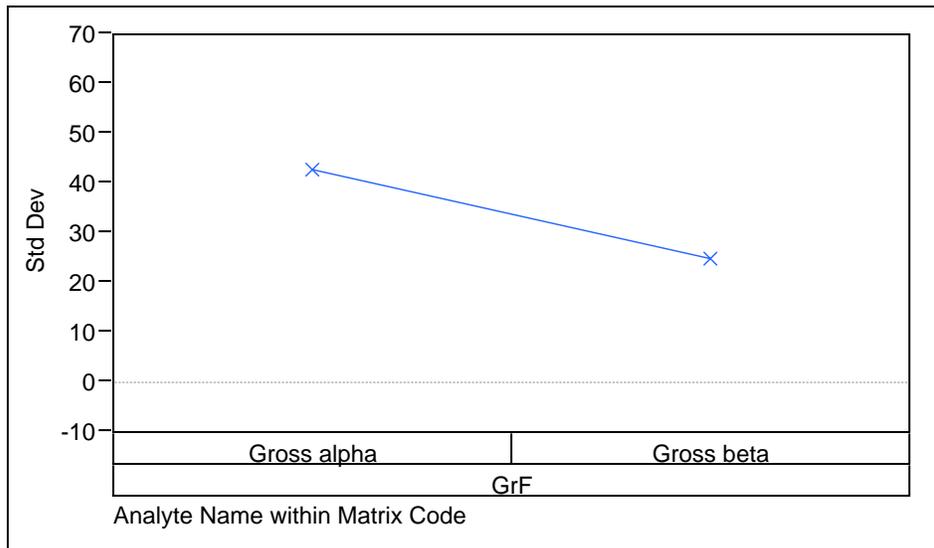
Variability Chart for Bias

Variability Gauge Lab Code=AFOH01

Variability Chart for Bias



Analyte Name within Matrix Code



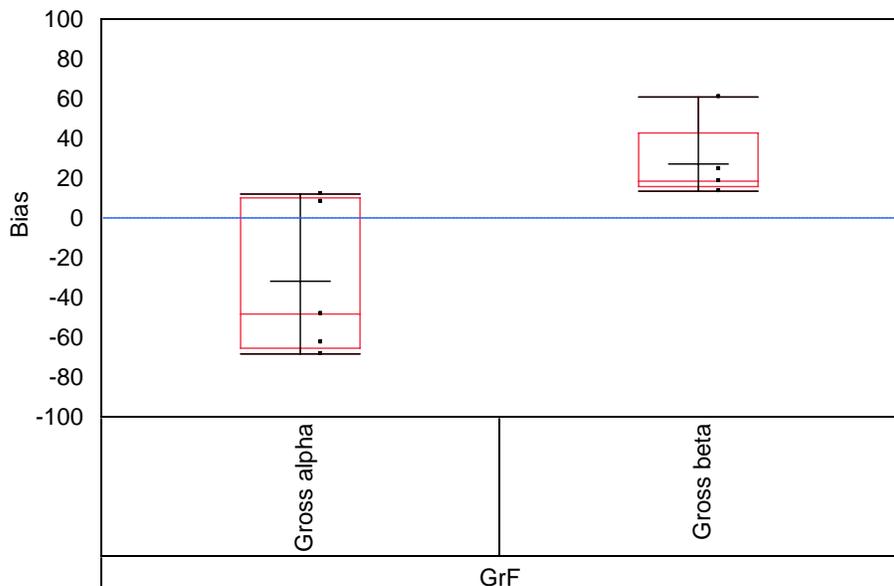
Analyte Name within Matrix Code

Variability Gauge Lab Code=ANLA01

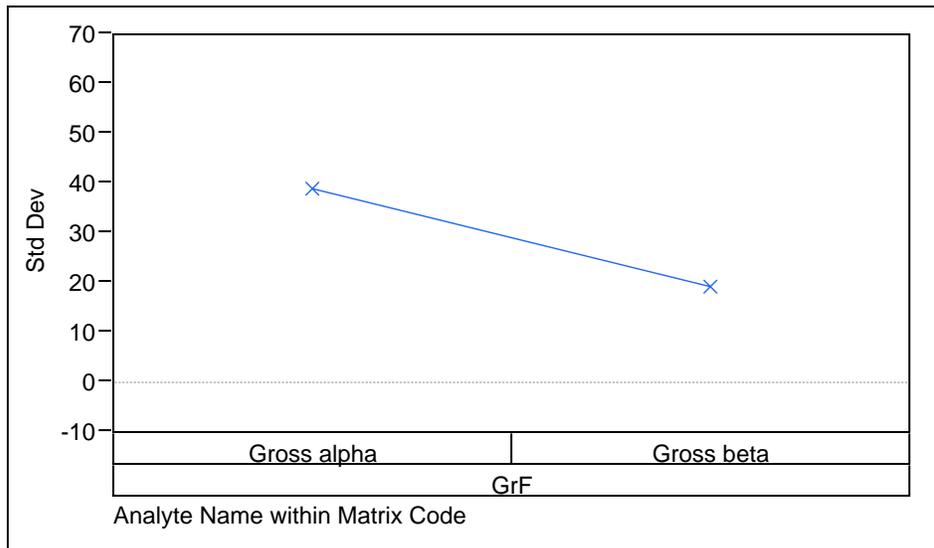
Variability Chart for Bias

Variability Gauge Lab Code=ANLA01

Variability Chart for Bias



Analyte Name within Matrix Code



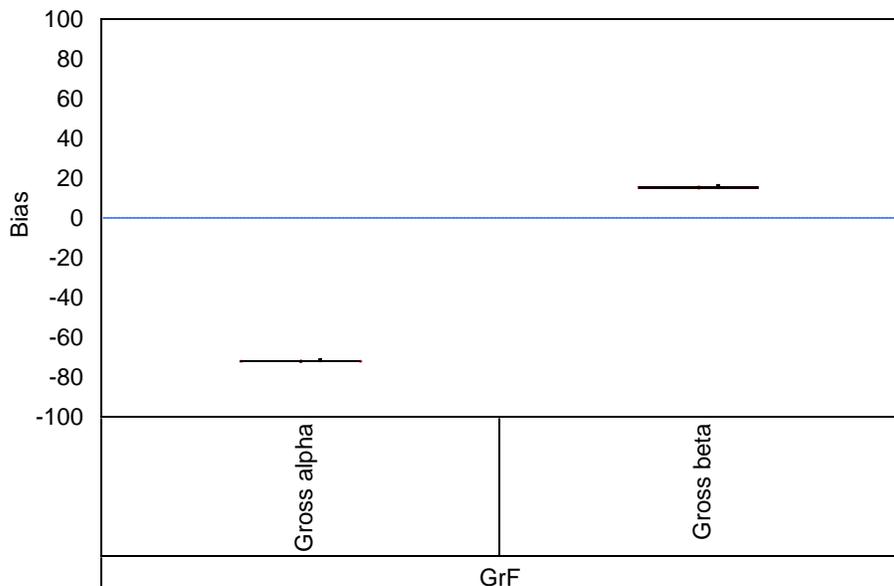
Analyte Name within Matrix Code

Variability Gauge Lab Code=ANTE01

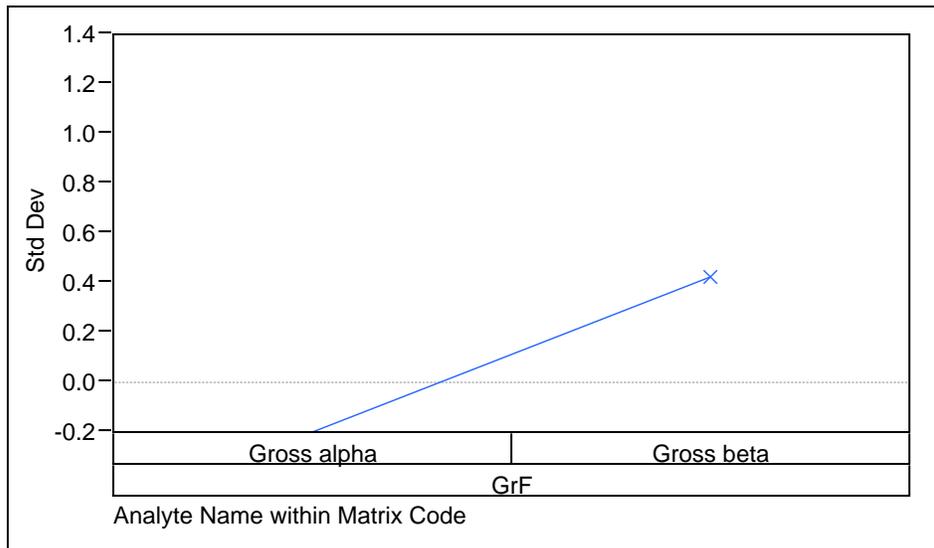
Variability Chart for Bias

Variability Gauge Lab Code=ANTE01

Variability Chart for Bias



Analyte Name within Matrix Code



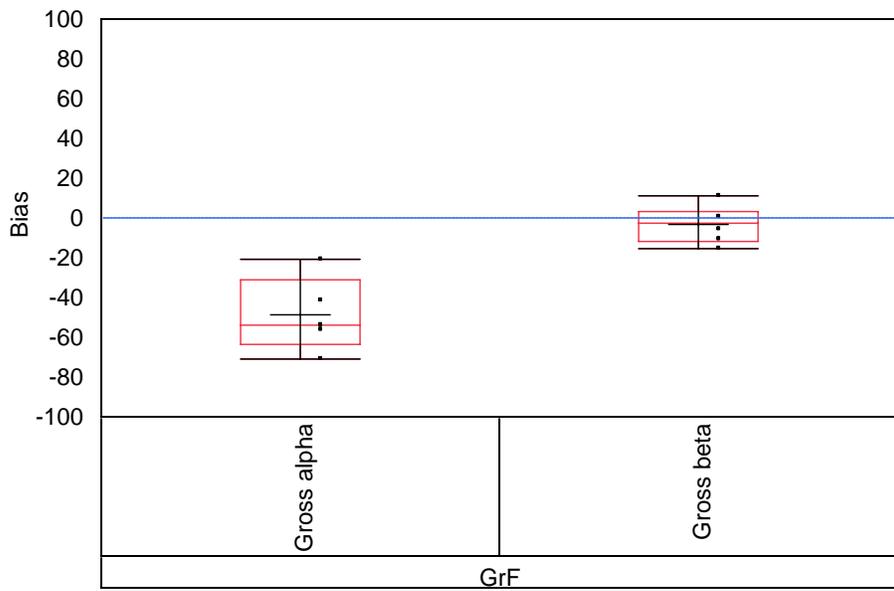
Analyte Name within Matrix Code

Variability Gauge Lab Code=ARPL01

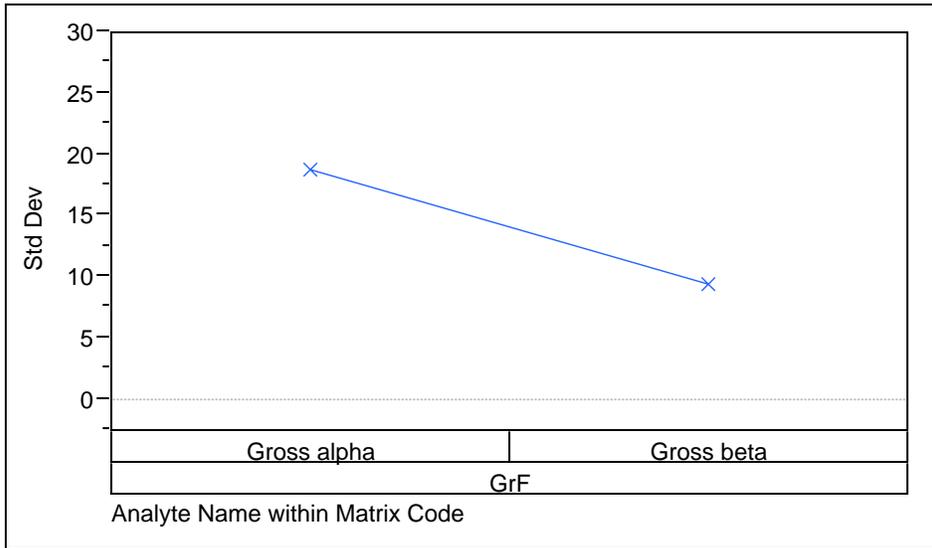
Variability Chart for Bias

Variability Gauge Lab Code=ARPL01

Variability Chart for Bias



Analyte Name within Matrix Code



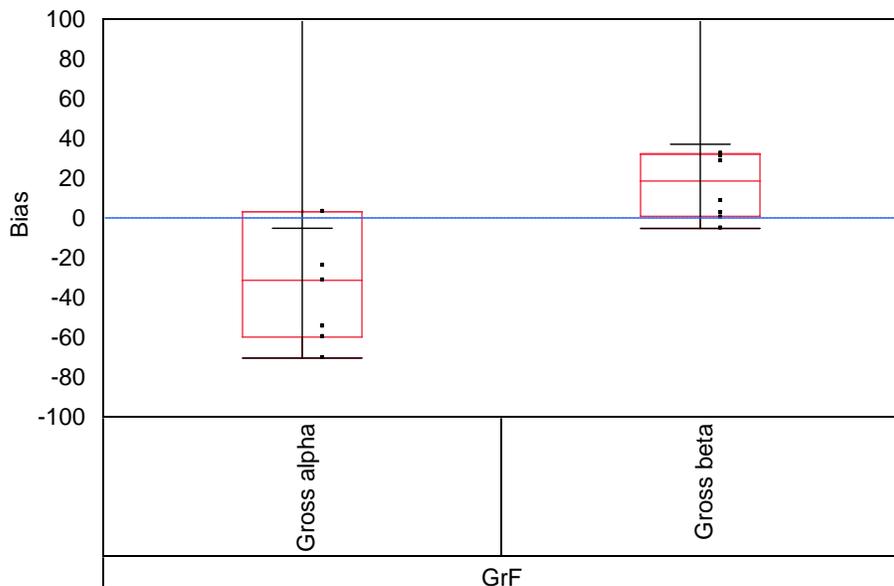
Analyte Name within Matrix Code

Variability Gauge Lab Code=ARSL01

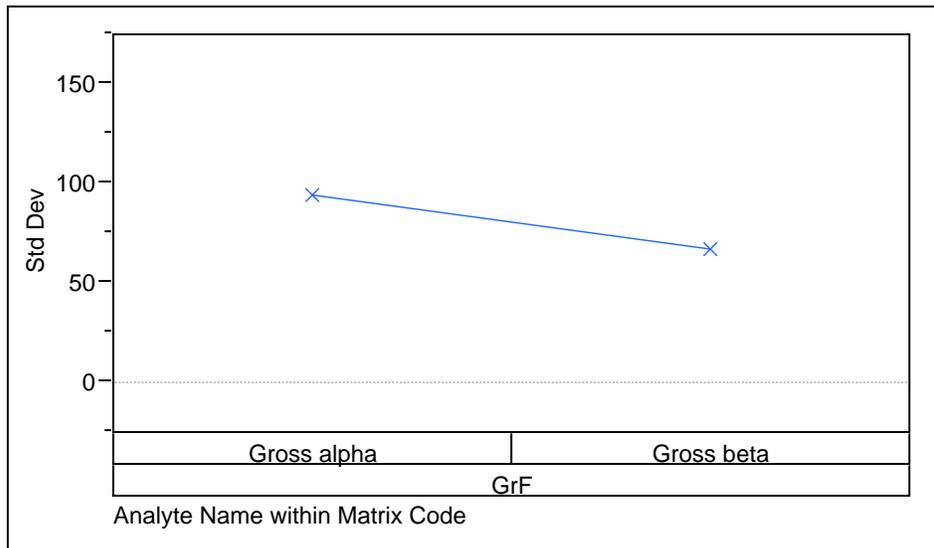
Variability Chart for Bias

Variability Gauge Lab Code=ARSL01

Variability Chart for Bias



Analyte Name within Matrix Code



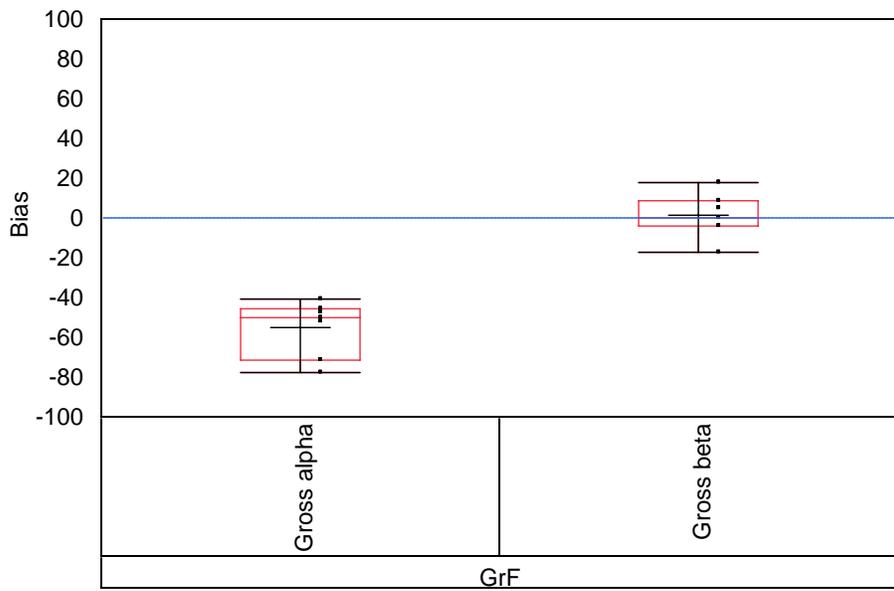
Analyte Name within Matrix Code

Variability Gauge Lab Code=ATLI01

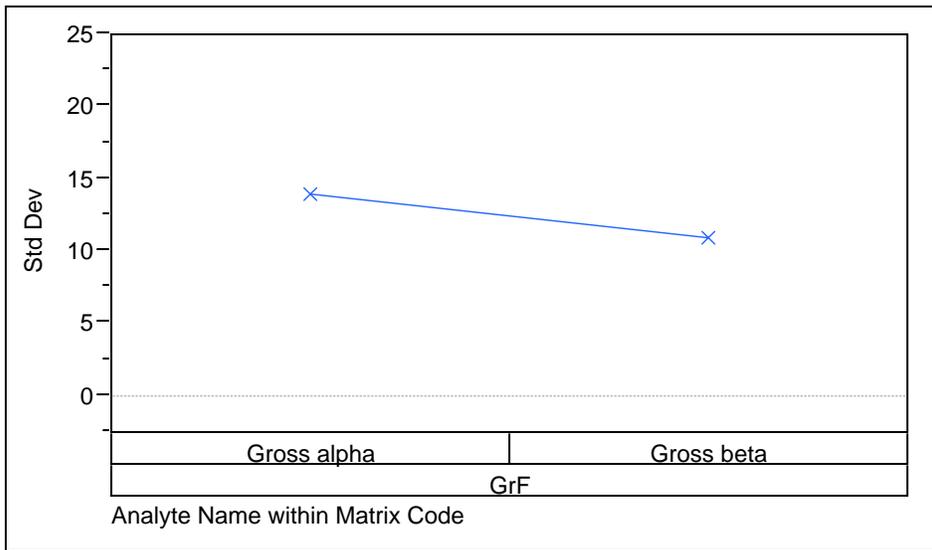
Variability Chart for Bias

Variability Gauge Lab Code=ATLI01

Variability Chart for Bias



Analyte Name within Matrix Code



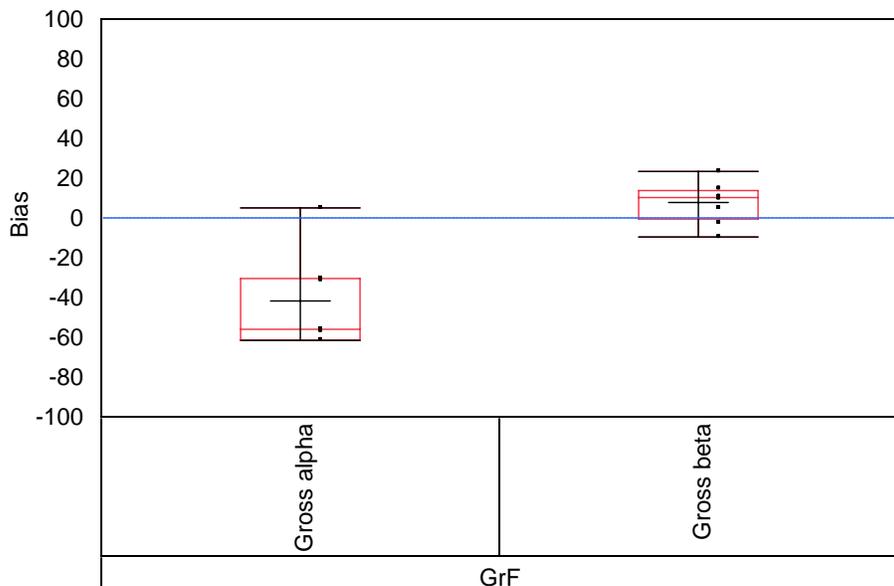
Analyte Name within Matrix Code

Variability Gauge Lab Code=AY1201

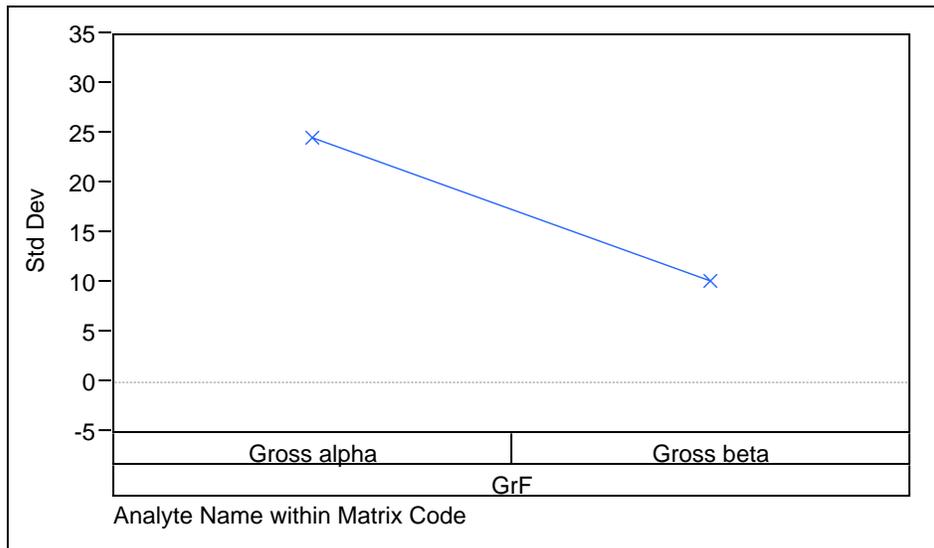
Variability Chart for Bias

Variability Gauge Lab Code=AY1201

Variability Chart for Bias



Analyte Name within Matrix Code



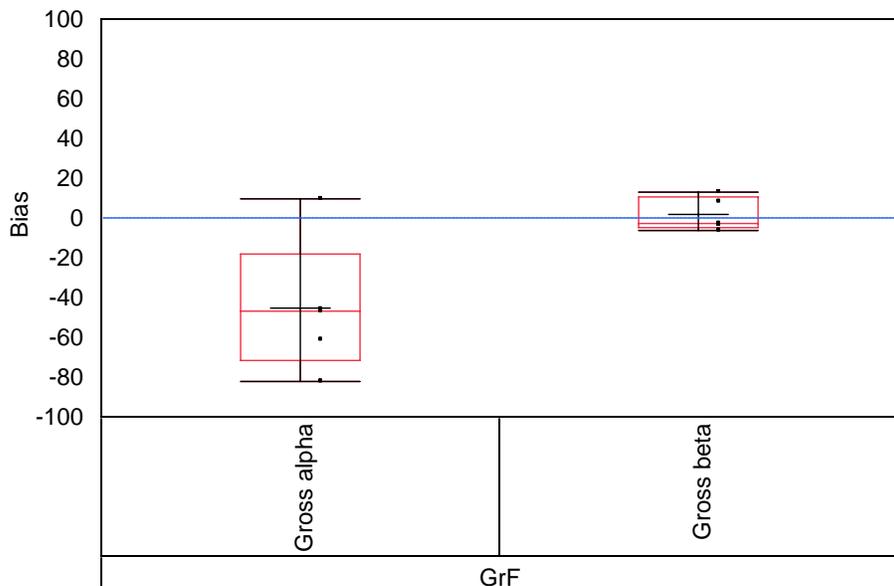
Analyte Name within Matrix Code

Variability Gauge Lab Code=CDHS01

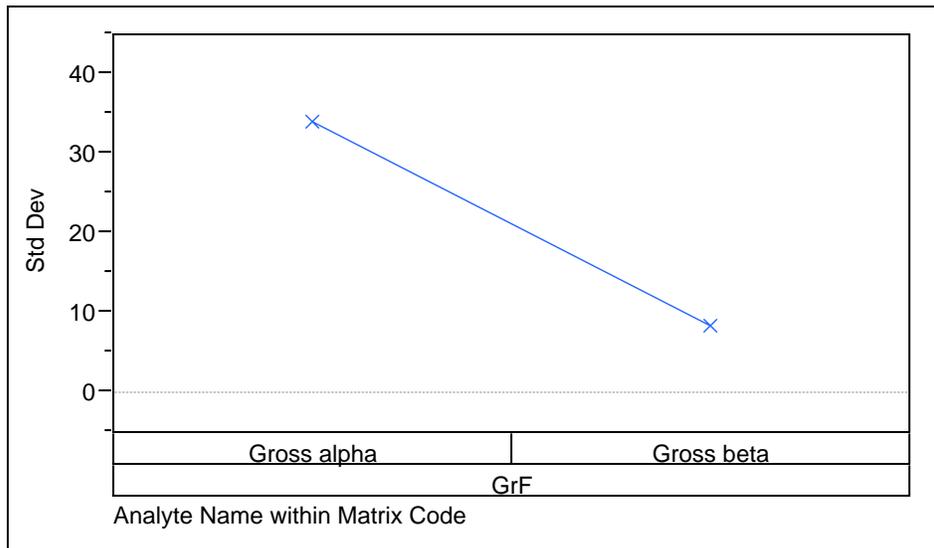
Variability Chart for Bias

Variability Gauge Lab Code=CDHS01

Variability Chart for Bias



Analyte Name within Matrix Code



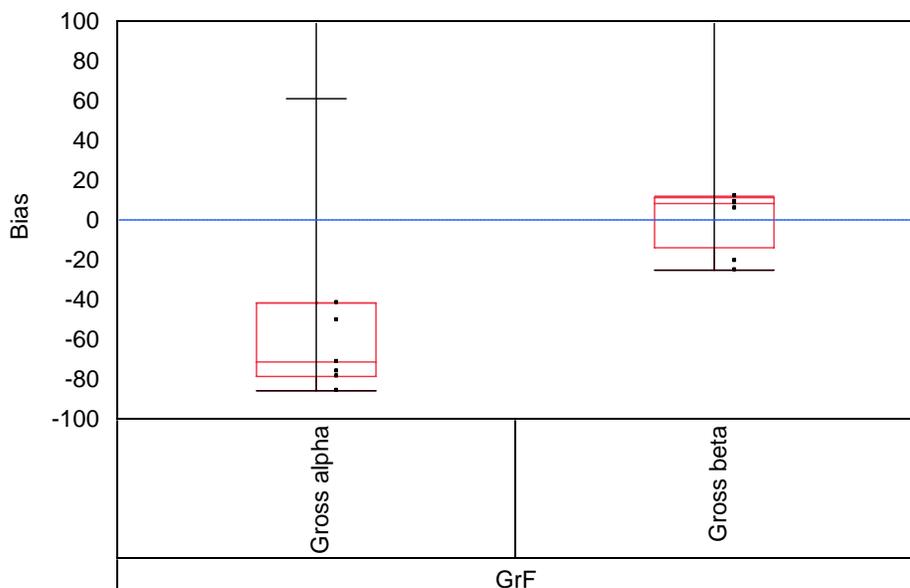
Analyte Name within Matrix Code

Variability Gauge Lab Code=CESL01

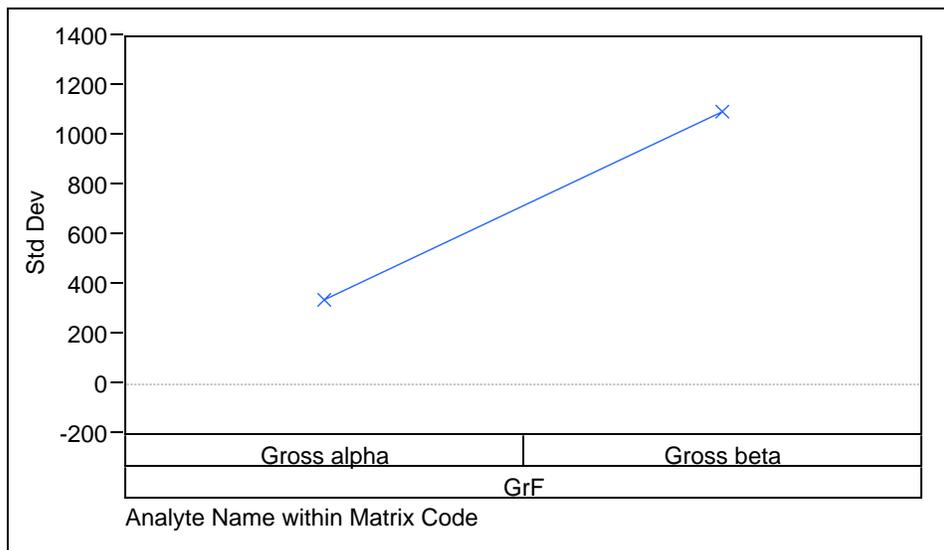
Variability Chart for Bias

Variability Gauge Lab Code=CESL01

Variability Chart for Bias



Analyte Name within Matrix Code



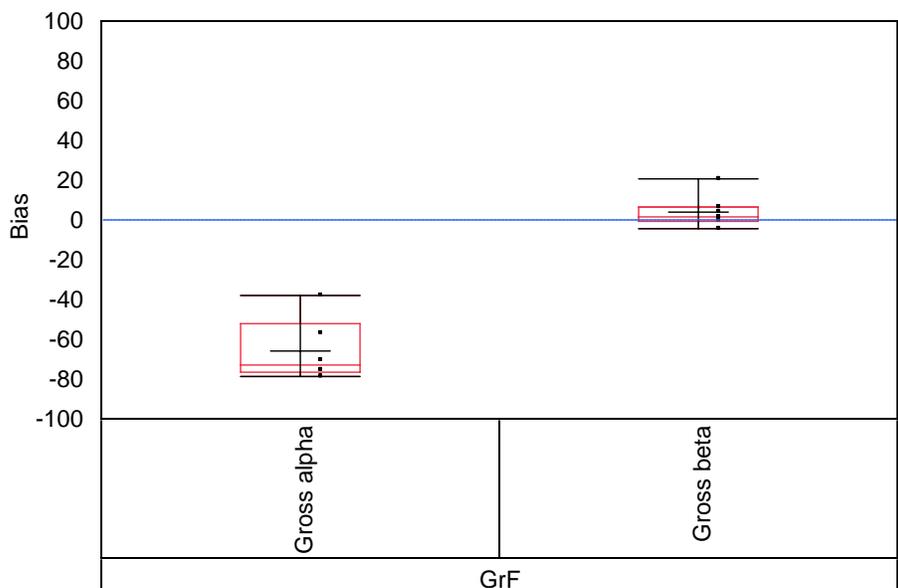
Analyte Name within Matrix Code

Variability Gauge Lab Code=CHMH01

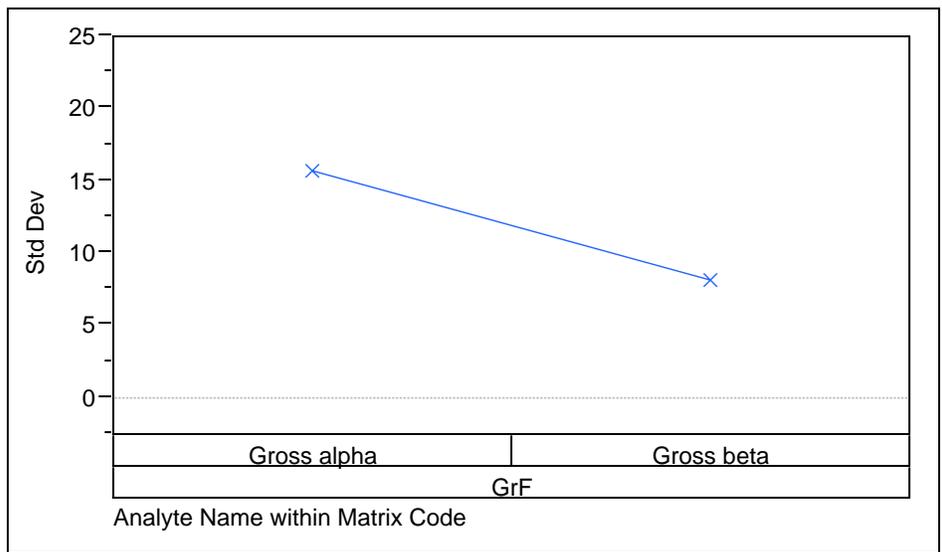
Variability Chart for Bias

Variability Gauge Lab Code=CHMH01

Variability Chart for Bias



Analyte Name within Matrix Code



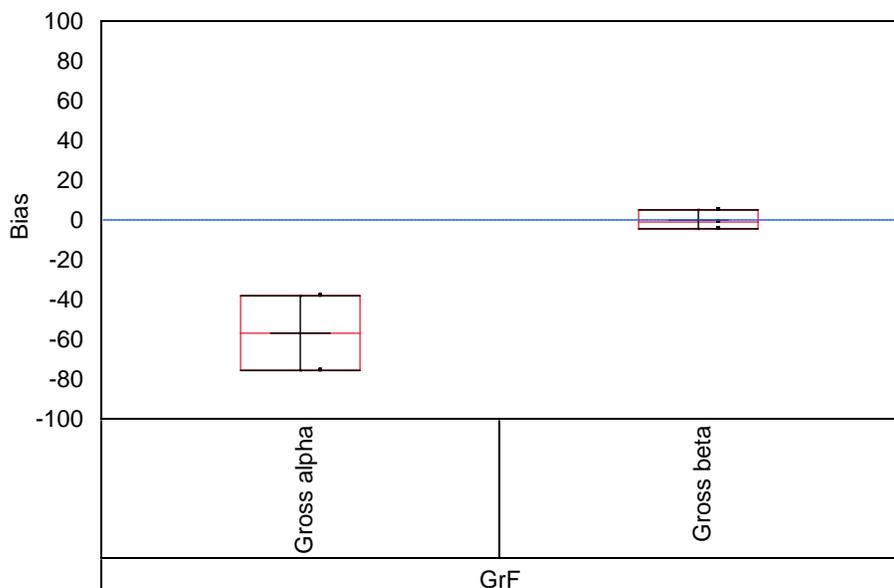
Analyte Name within Matrix Code

Variability Gauge Lab Code=CMRC01

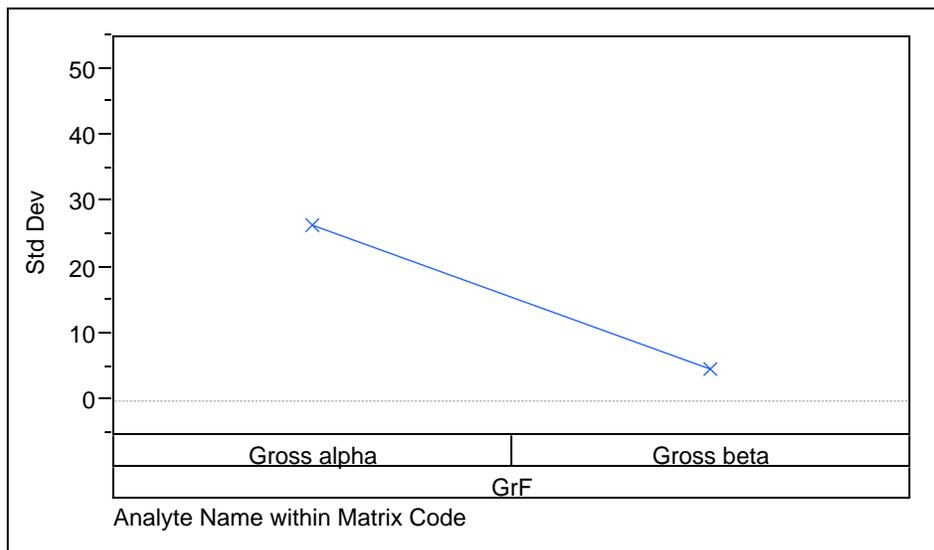
Variability Chart for Bias

Variability Gauge Lab Code=CMRC01

Variability Chart for Bias



Analyte Name within Matrix Code



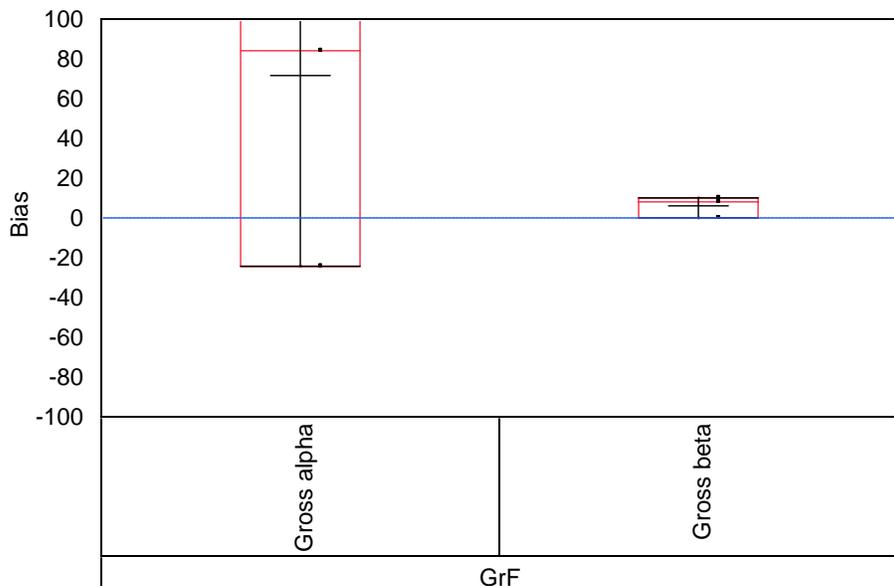
Analyte Name within Matrix Code

Variability Gauge Lab Code=CORE02

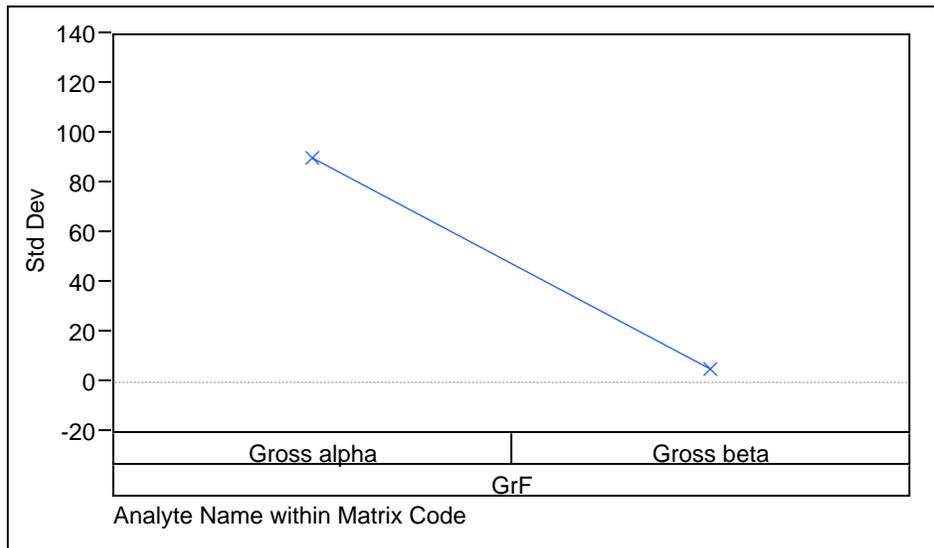
Variability Chart for Bias

Variability Gauge Lab Code=CORE02

Variability Chart for Bias



Analyte Name within Matrix Code



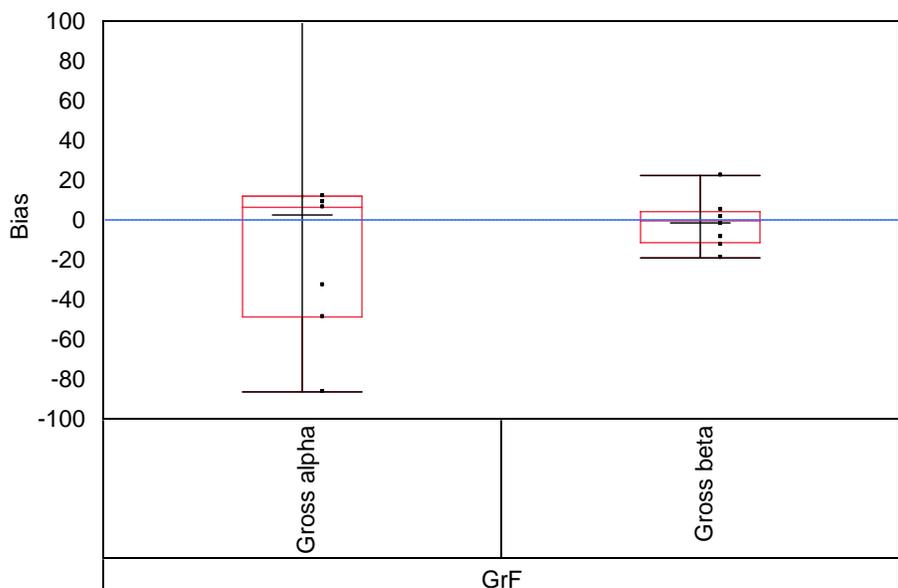
Analyte Name within Matrix Code

Variability Gauge Lab Code=DEHS01

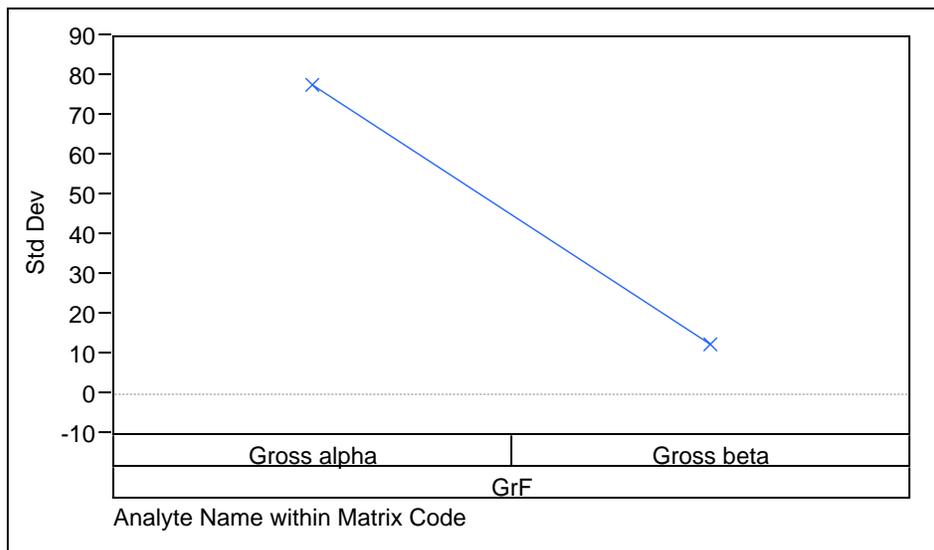
Variability Chart for Bias

Variability Gauge Lab Code=DEHS01

Variability Chart for Bias



Analyte Name within Matrix Code



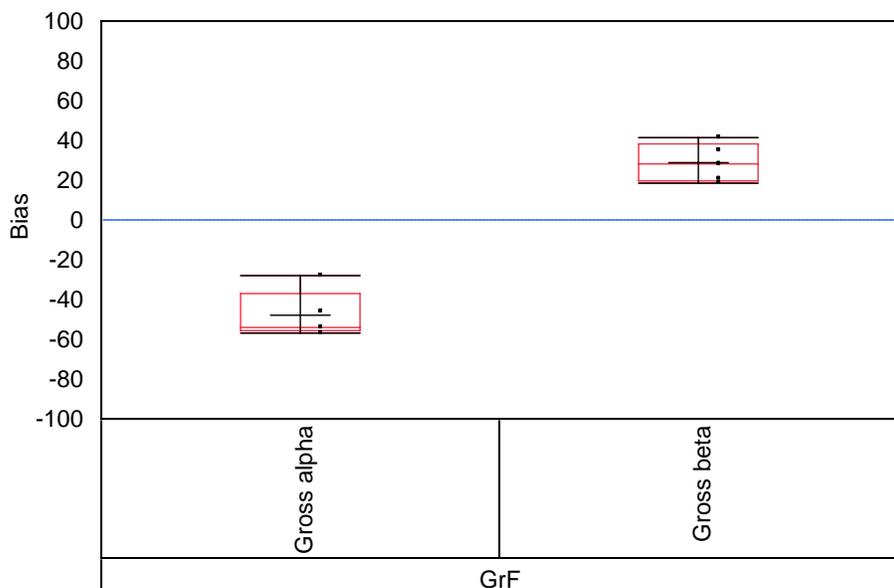
Analyte Name within Matrix Code

Variability Gauge Lab Code=DRMG01

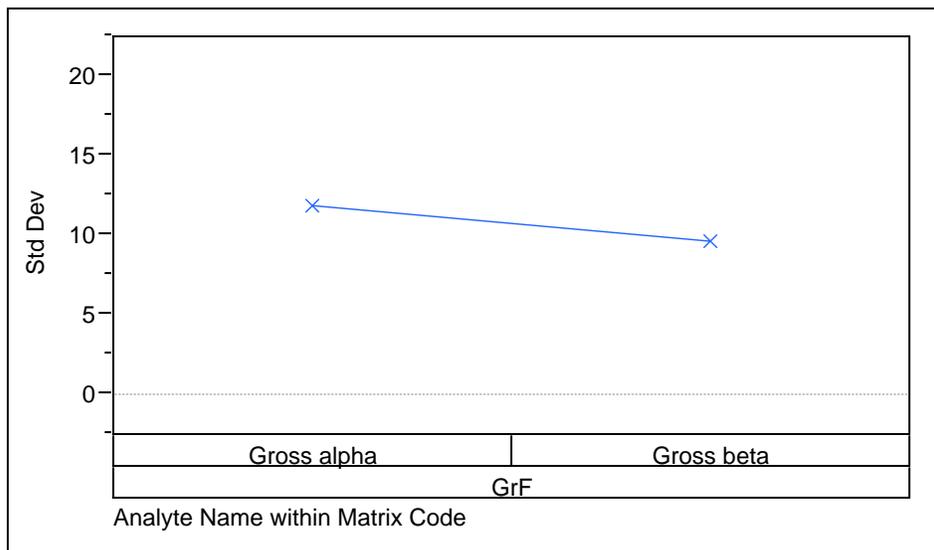
Variability Chart for Bias

Variability Gauge Lab Code=DRMG01

Variability Chart for Bias



Analyte Name within Matrix Code



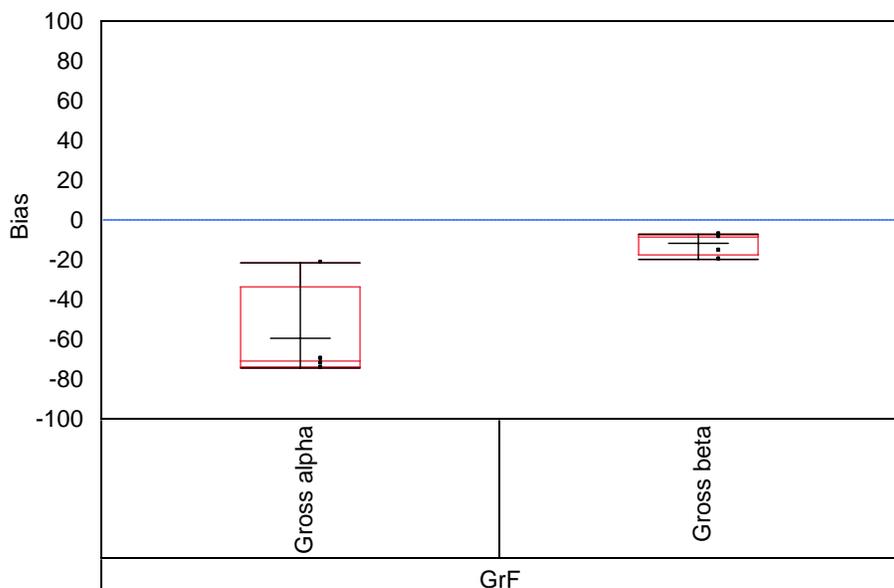
Analyte Name within Matrix Code

Variability Gauge Lab Code=ENES01

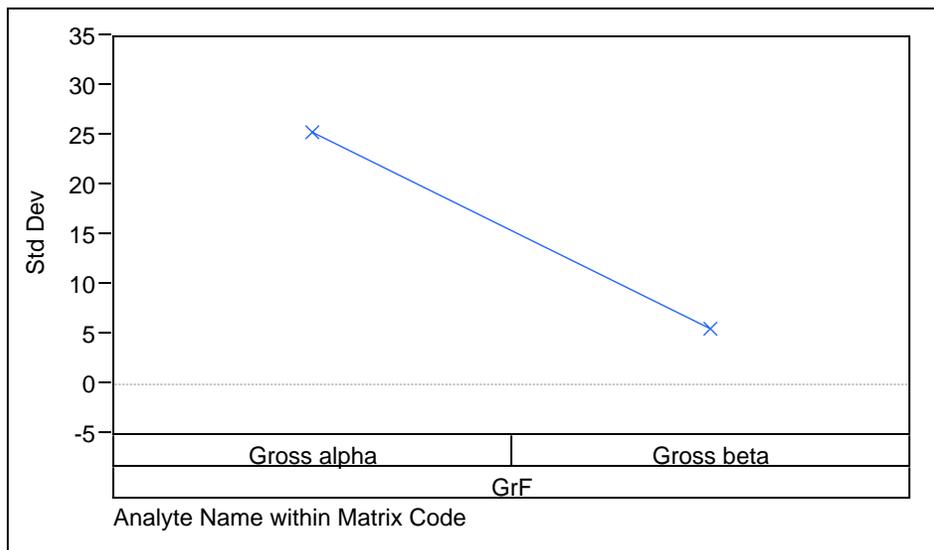
Variability Chart for Bias

Variability Gauge Lab Code=ENES01

Variability Chart for Bias



Analyte Name within Matrix Code



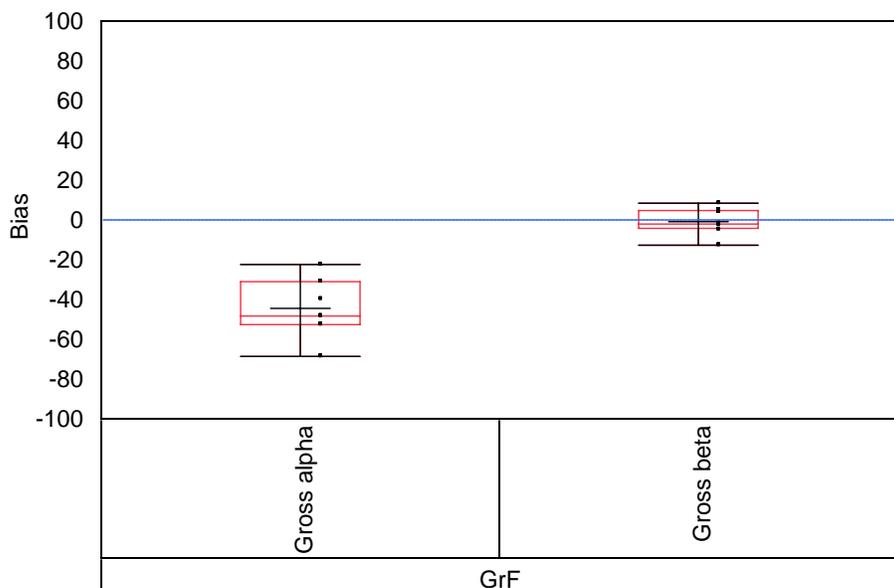
Analyte Name within Matrix Code

Variability Gauge Lab Code=ERCL01

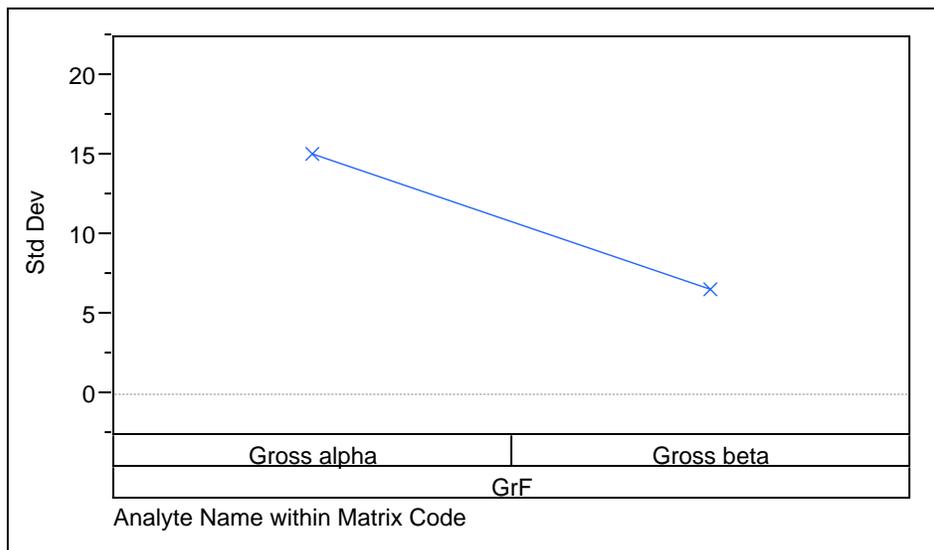
Variability Chart for Bias

Variability Gauge Lab Code=ERCL01

Variability Chart for Bias



Analyte Name within Matrix Code



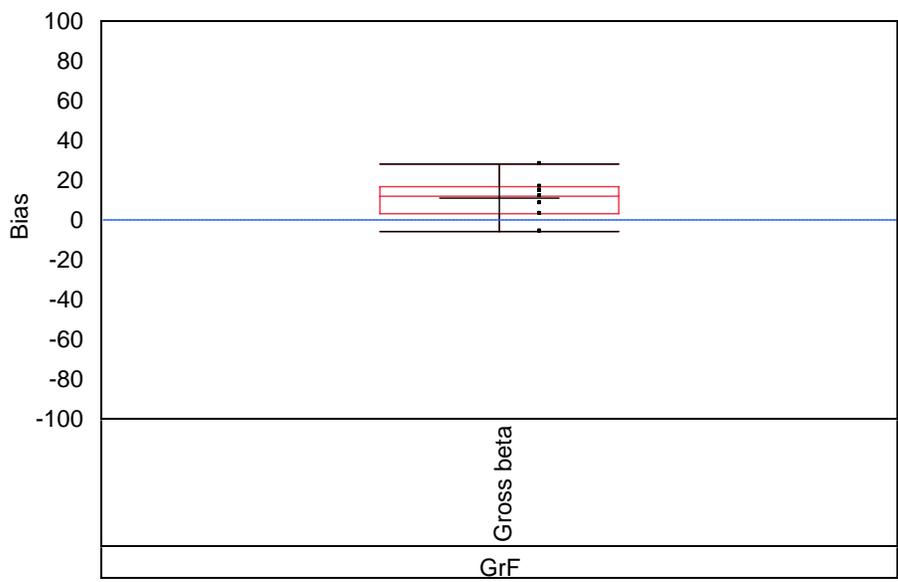
Analyte Name within Matrix Code

Variability Gauge Lab Code=ERHD99

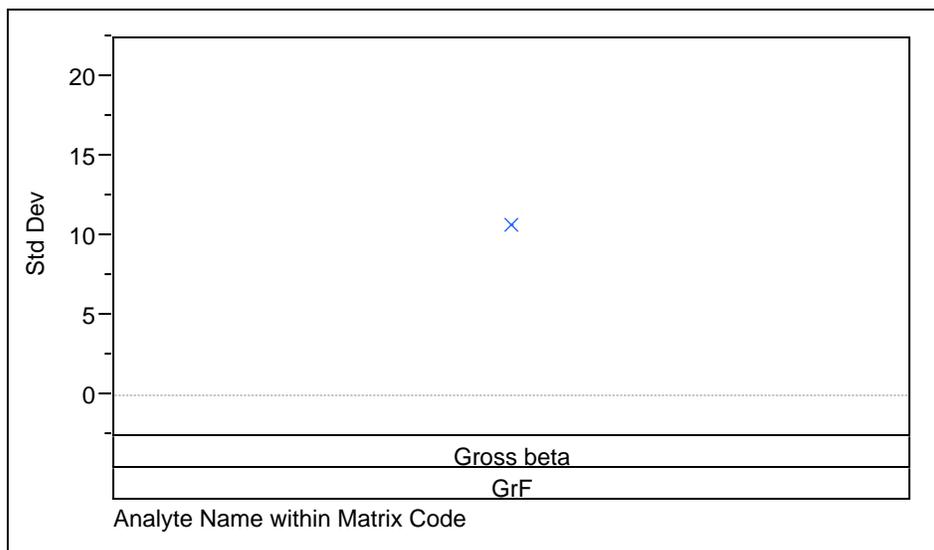
Variability Chart for Bias

Variability Gauge Lab Code=ERHD99

Variability Chart for Bias



Analyte Name within Matrix Code



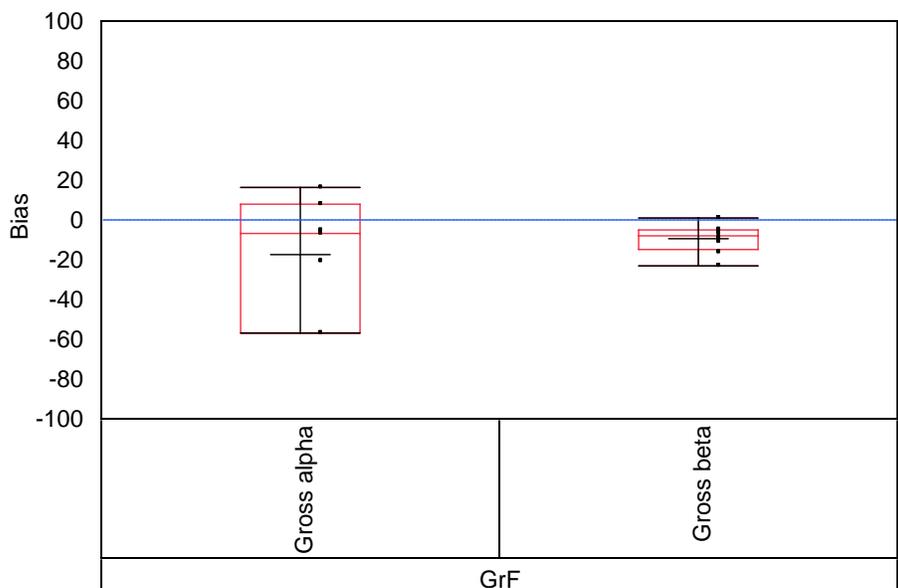
Analyte Name within Matrix Code

Variability Gauge Lab Code=ERLG01

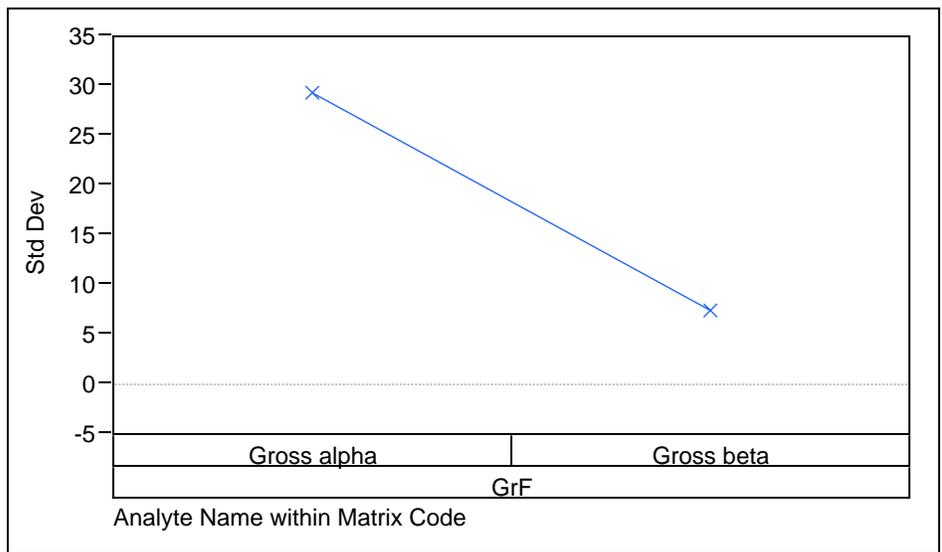
Variability Chart for Bias

Variability Gauge Lab Code=ERLG01

Variability Chart for Bias



Analyte Name within Matrix Code



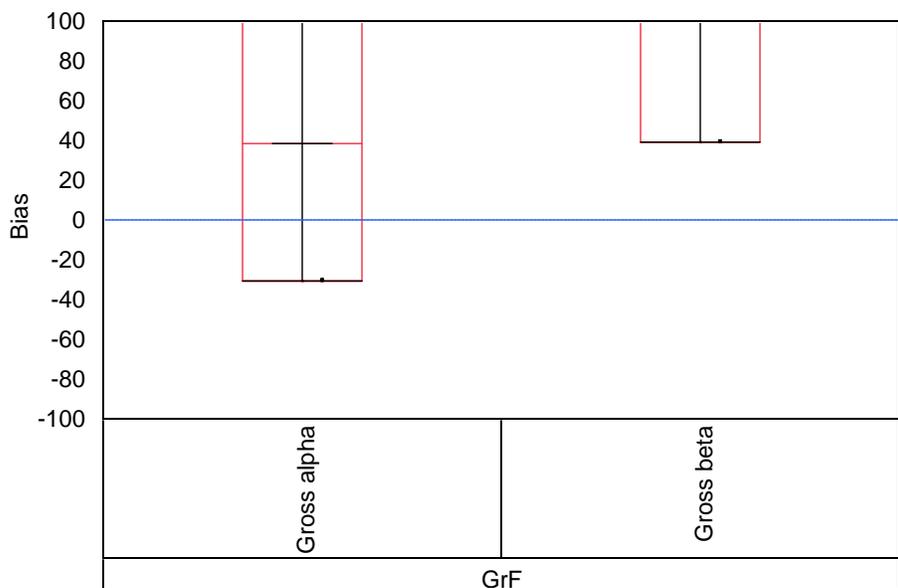
Analyte Name within Matrix Code

Variability Gauge Lab Code=ERPD99

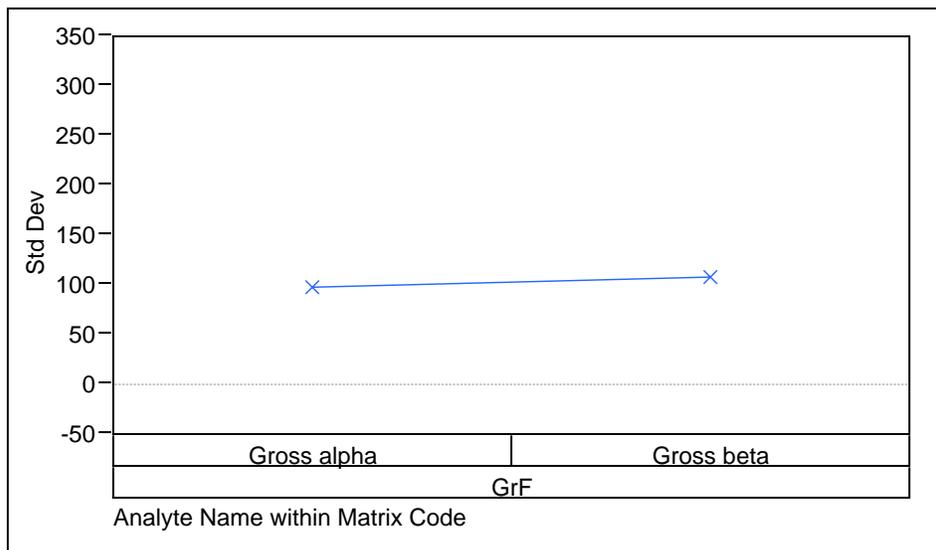
Variability Chart for Bias

Variability Gauge Lab Code=ERPD99

Variability Chart for Bias



Analyte Name within Matrix Code



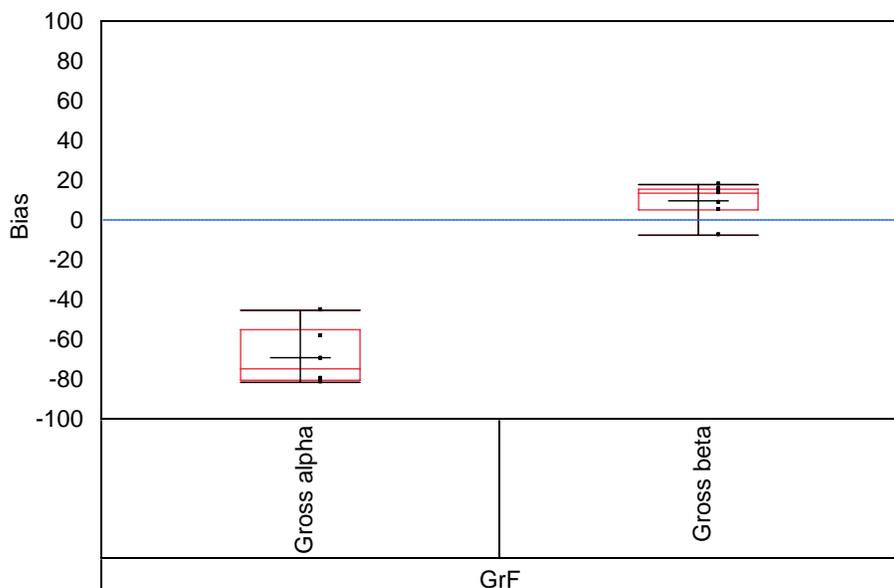
Analyte Name within Matrix Code

Variability Gauge Lab Code=FDHE01

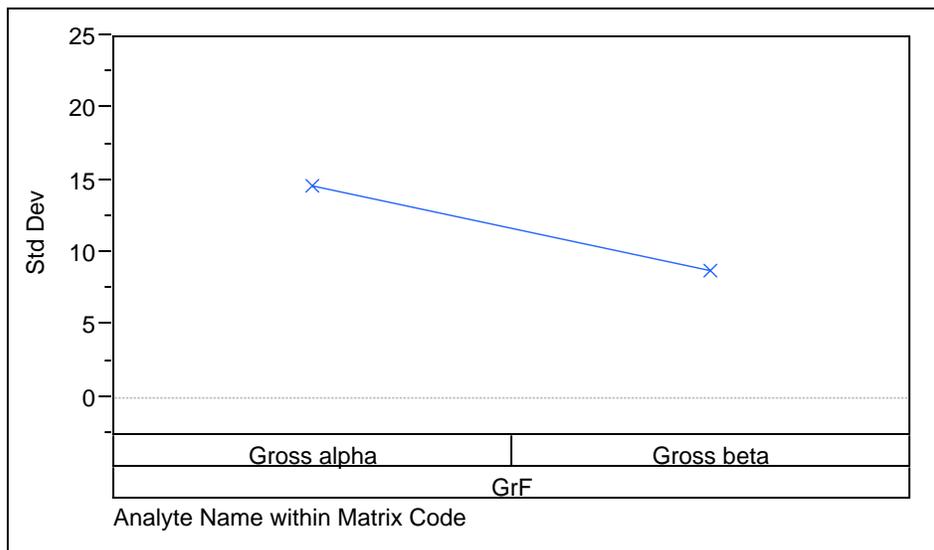
Variability Chart for Bias

Variability Gauge Lab Code=FDHE01

Variability Chart for Bias



Analyte Name within Matrix Code



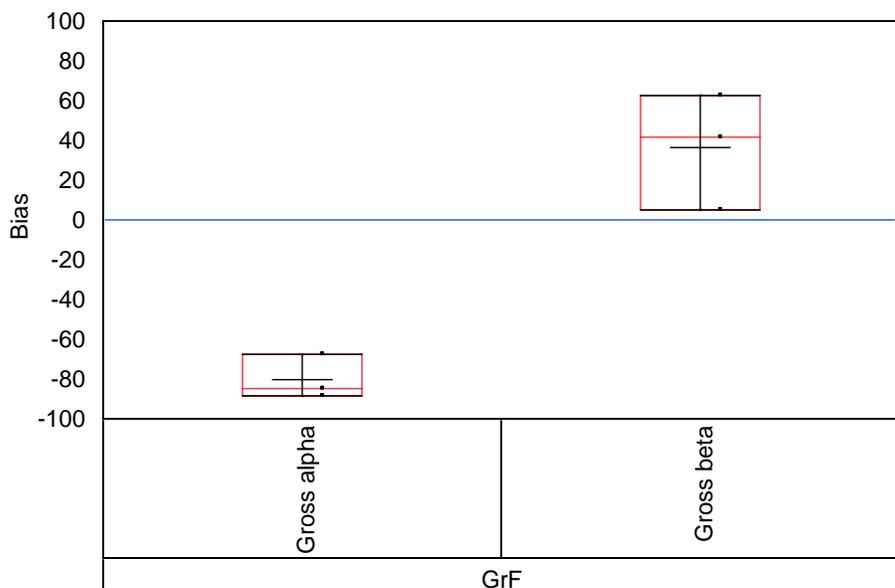
Analyte Name within Matrix Code

Variability Gauge Lab Code=FDOH01

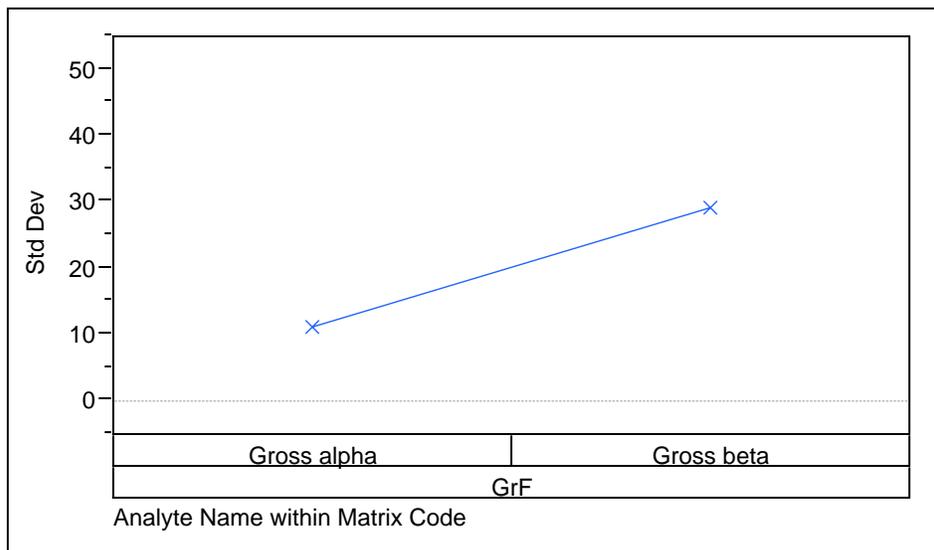
Variability Chart for Bias

Variability Gauge Lab Code=FDOH01

Variability Chart for Bias



Analyte Name within Matrix Code



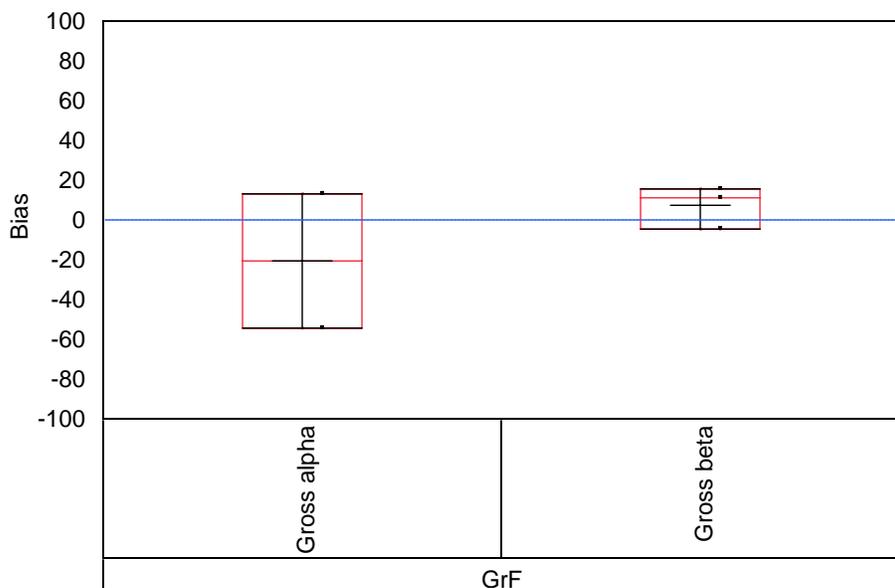
Analyte Name within Matrix Code

Variability Gauge Lab Code=FMEC99

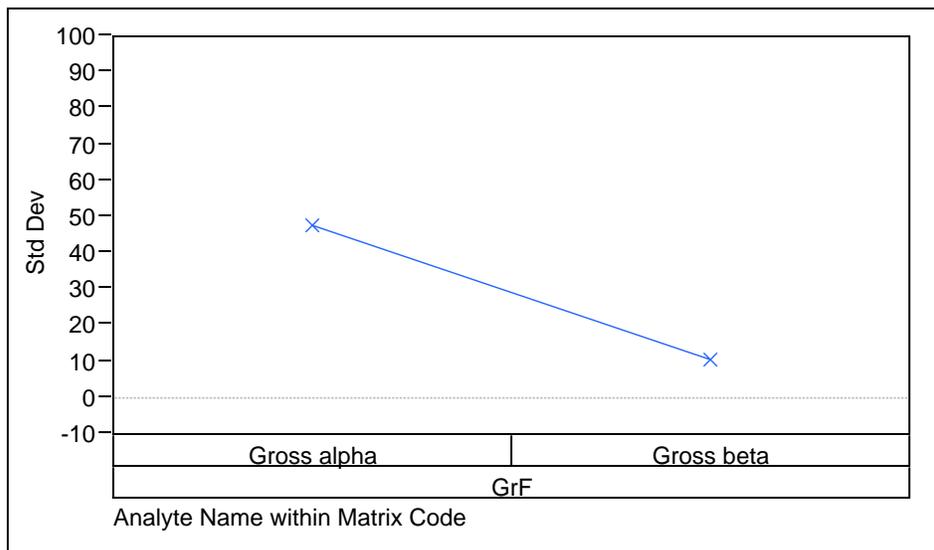
Variability Chart for Bias

Variability Gauge Lab Code=FMEC99

Variability Chart for Bias



Analyte Name within Matrix Code



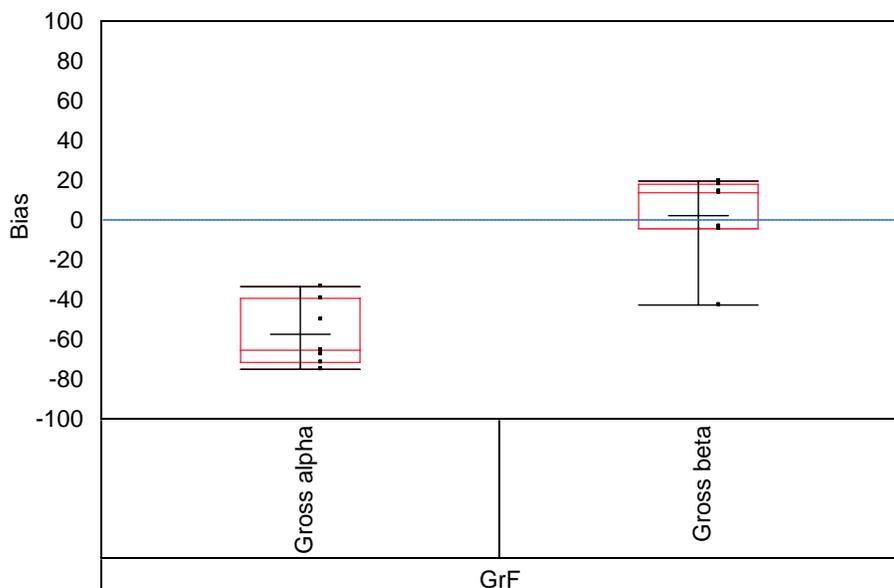
Analyte Name within Matrix Code

Variability Gauge Lab Code=FNAL01

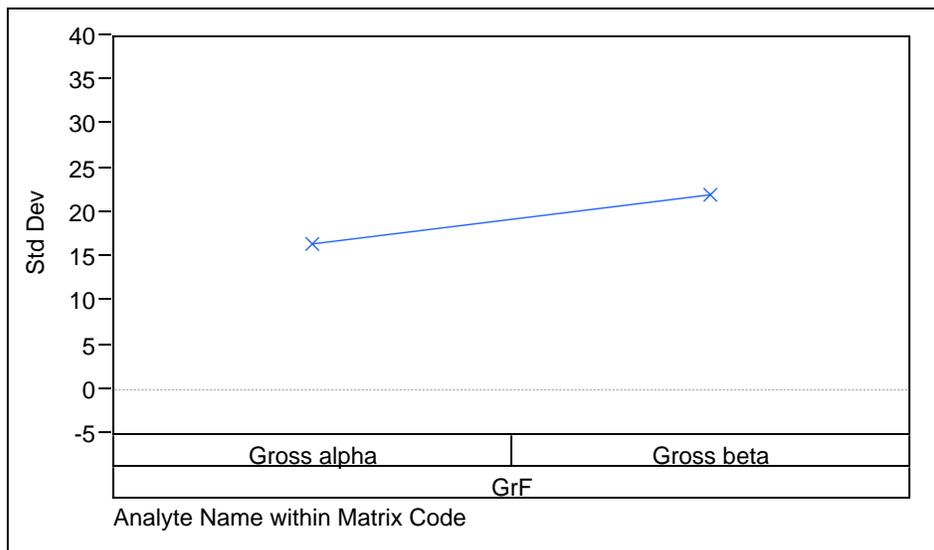
Variability Chart for Bias

Variability Gauge Lab Code=FNAL01

Variability Chart for Bias



Analyte Name within Matrix Code



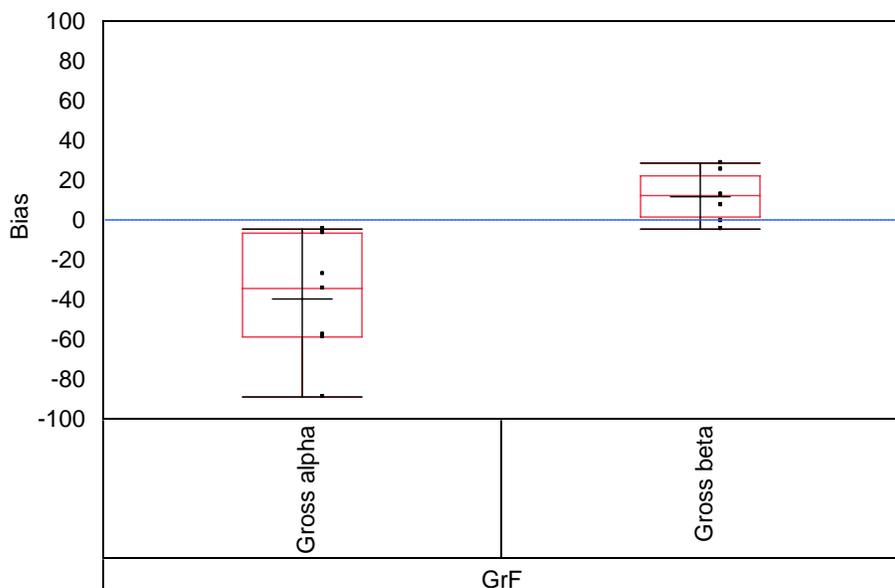
Analyte Name within Matrix Code

Variability Gauge Lab Code=GENE01

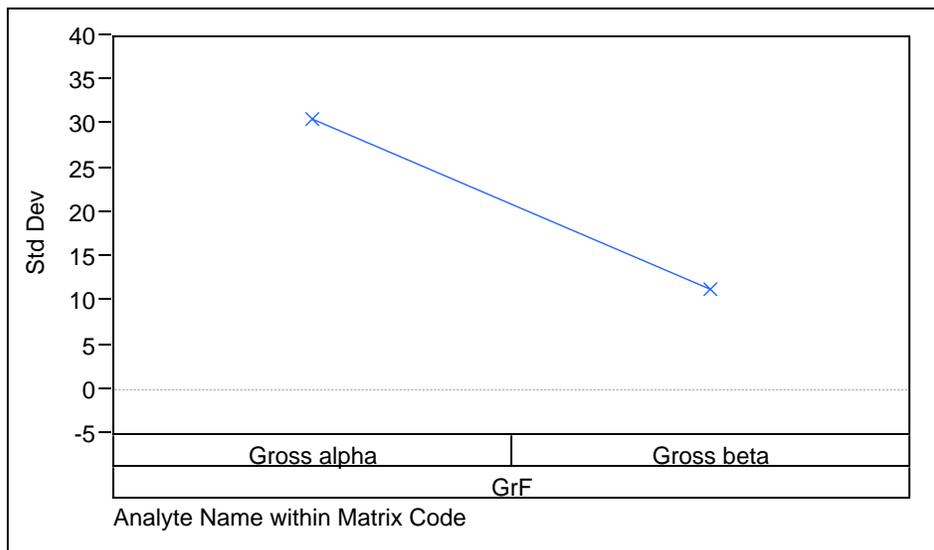
Variability Chart for Bias

Variability Gauge Lab Code=GENE01

Variability Chart for Bias



Analyte Name within Matrix Code



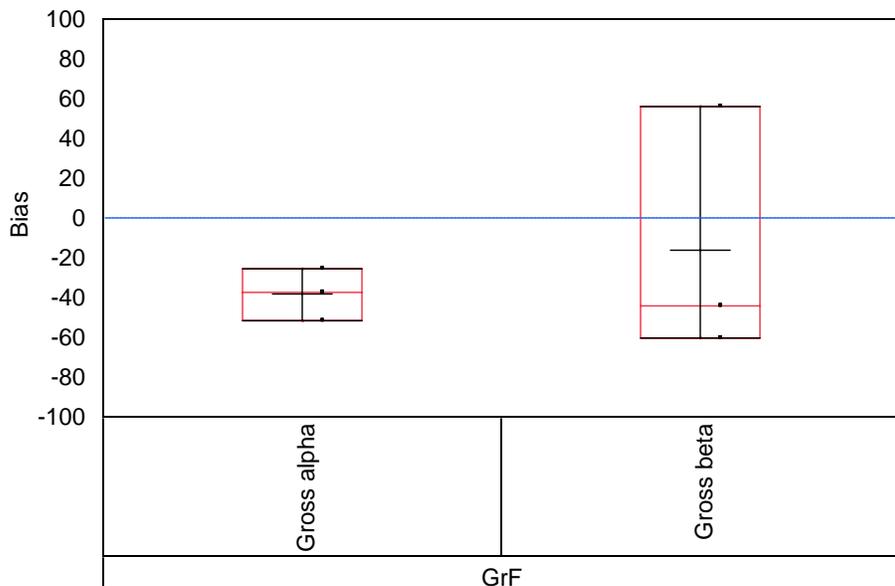
Analyte Name within Matrix Code

Variability Gauge Lab Code=GPLP01

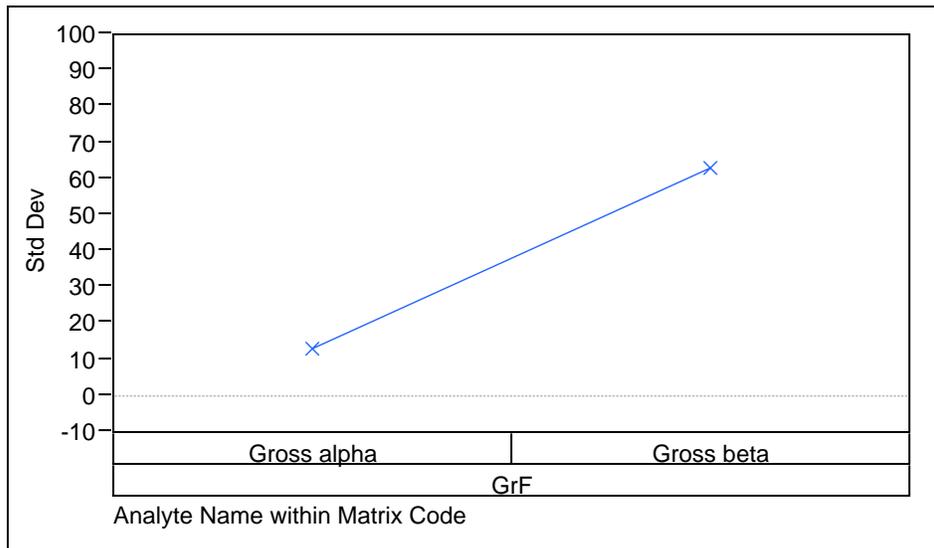
Variability Chart for Bias

Variability Gauge Lab Code=GPLP01

Variability Chart for Bias



Analyte Name within Matrix Code



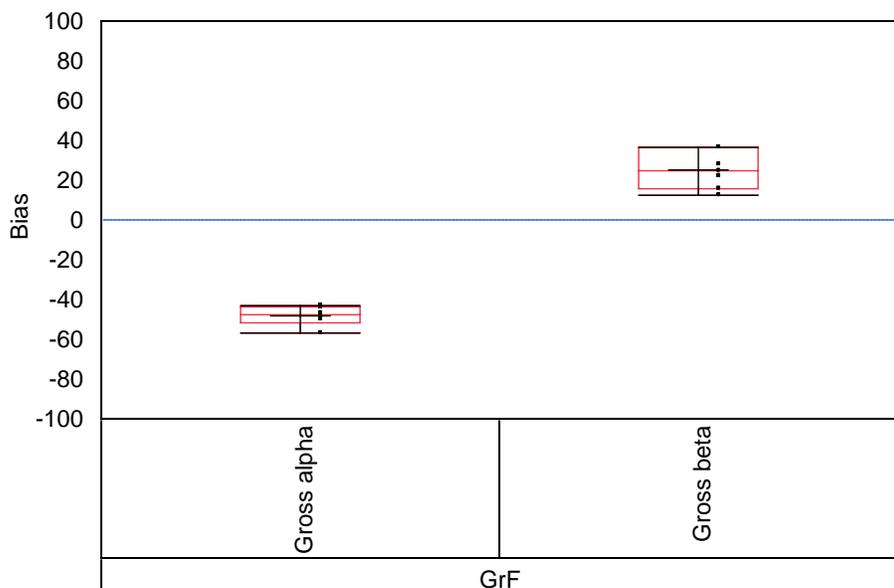
Analyte Name within Matrix Code

Variability Gauge Lab Code=HCAL01

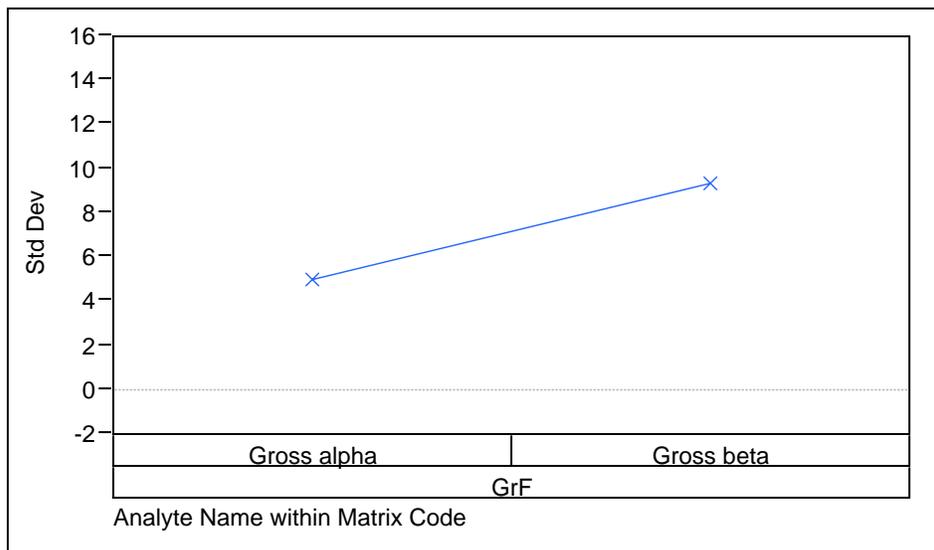
Variability Chart for Bias

Variability Gauge Lab Code=HCAL01

Variability Chart for Bias



Analyte Name within Matrix Code



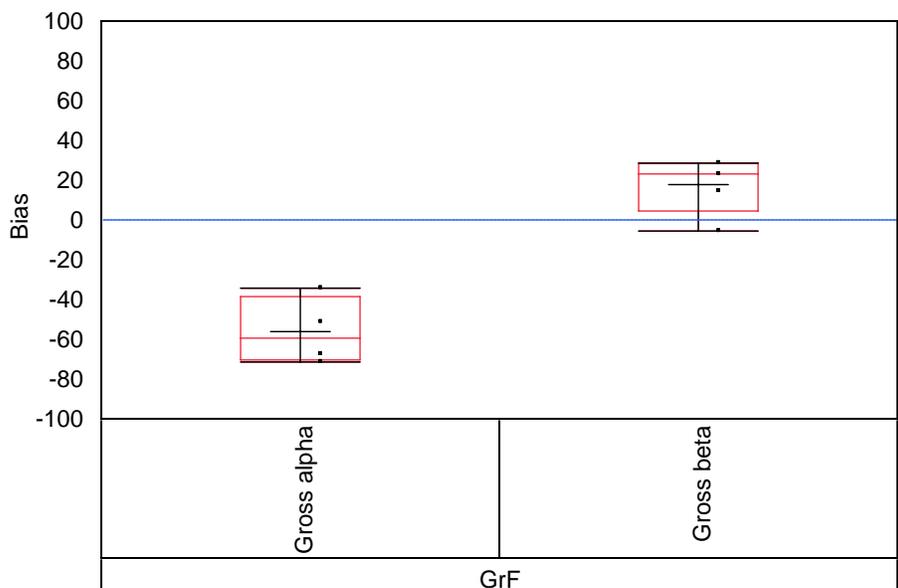
Analyte Name within Matrix Code

Variability Gauge Lab Code=HECR01

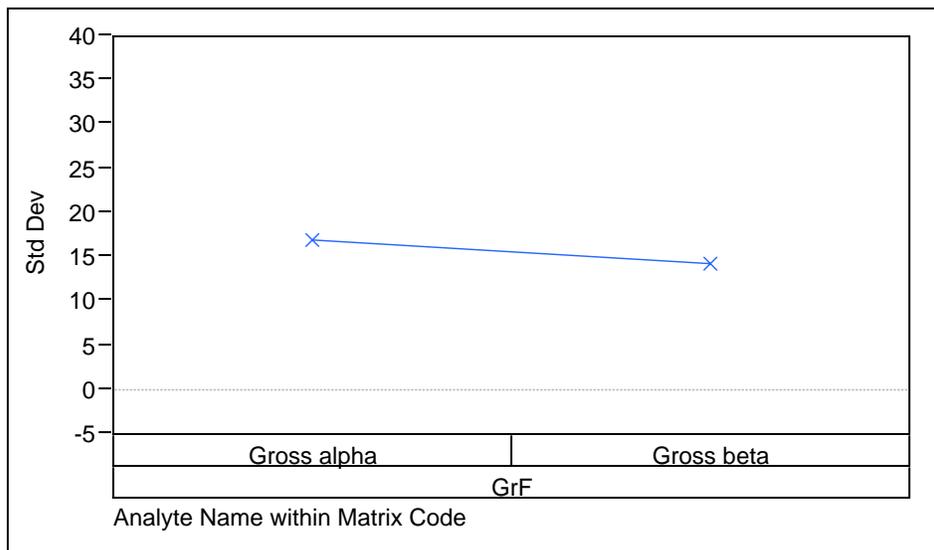
Variability Chart for Bias

Variability Gauge Lab Code=HECR01

Variability Chart for Bias



Analyte Name within Matrix Code



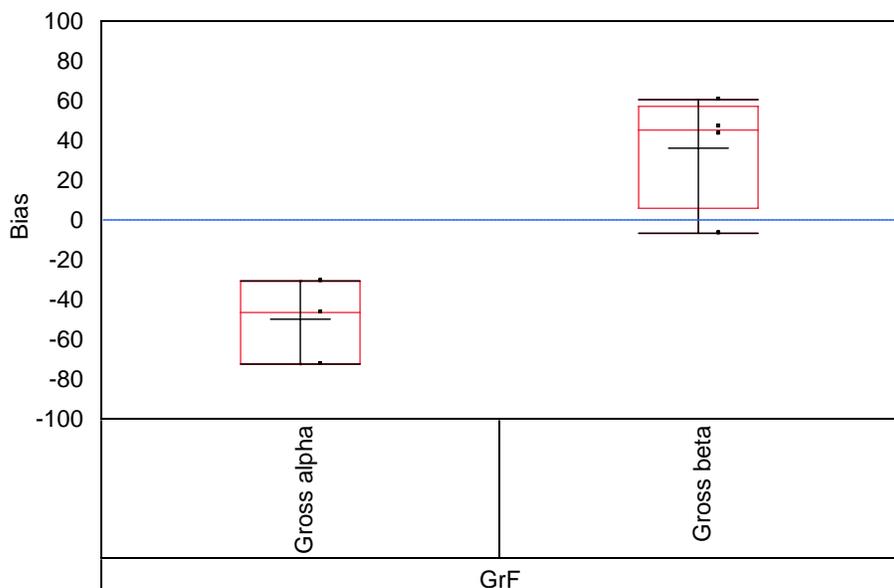
Analyte Name within Matrix Code

Variability Gauge Lab Code=HERR01

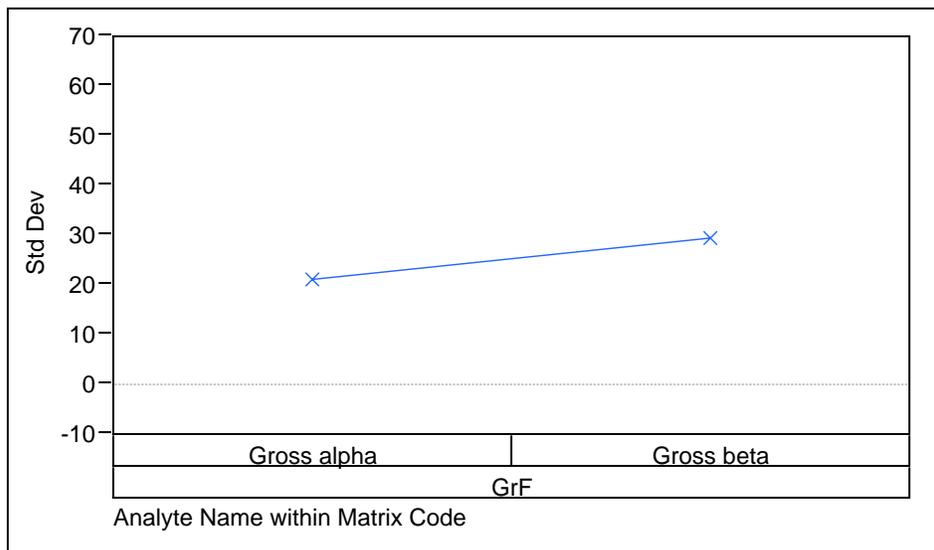
Variability Chart for Bias

Variability Gauge Lab Code=HERR01

Variability Chart for Bias



Analyte Name within Matrix Code



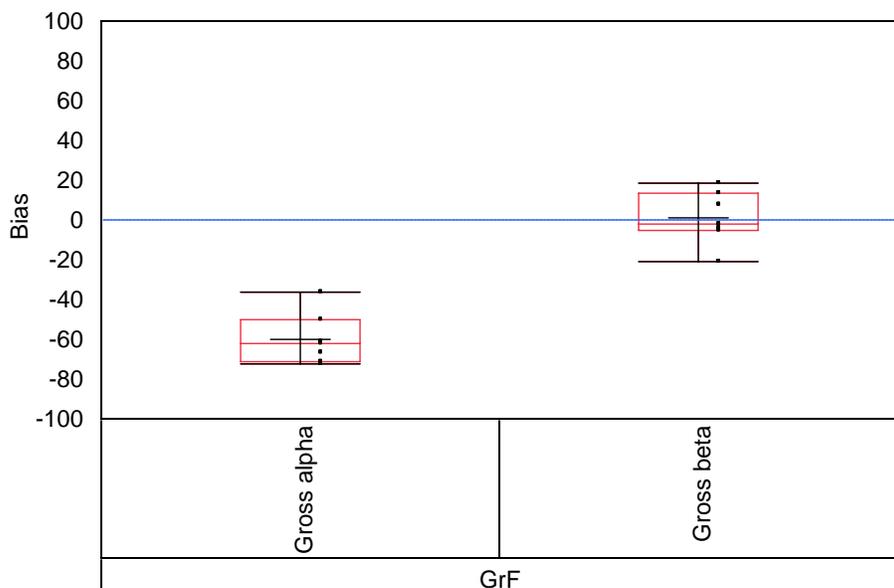
Analyte Name within Matrix Code

Variability Gauge Lab Code=ISUP01

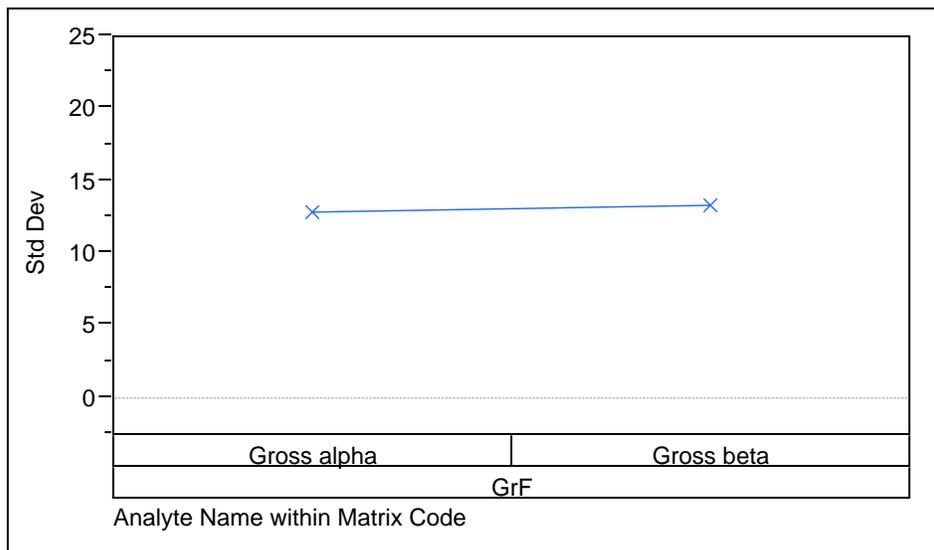
Variability Chart for Bias

Variability Gauge Lab Code=ISUP01

Variability Chart for Bias



Analyte Name within Matrix Code



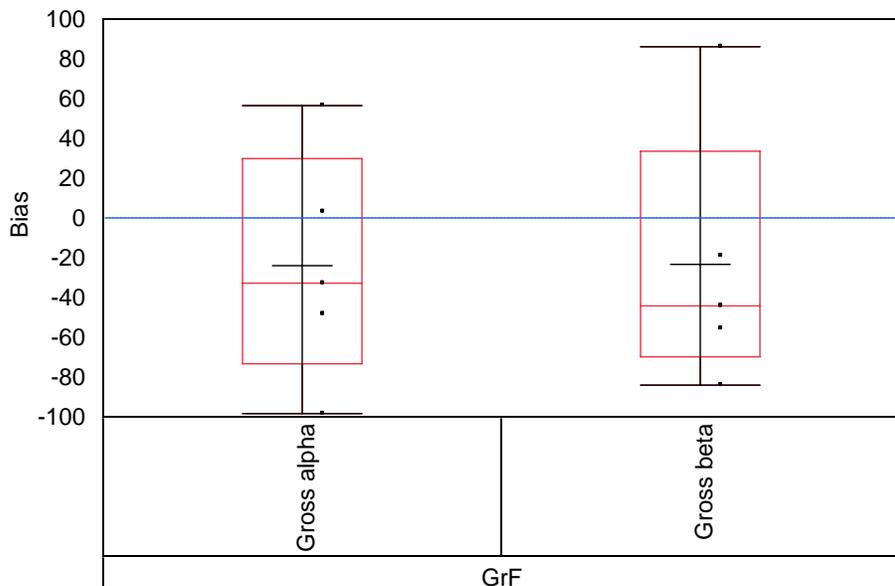
Analyte Name within Matrix Code

Variability Gauge Lab Code=JAEC99

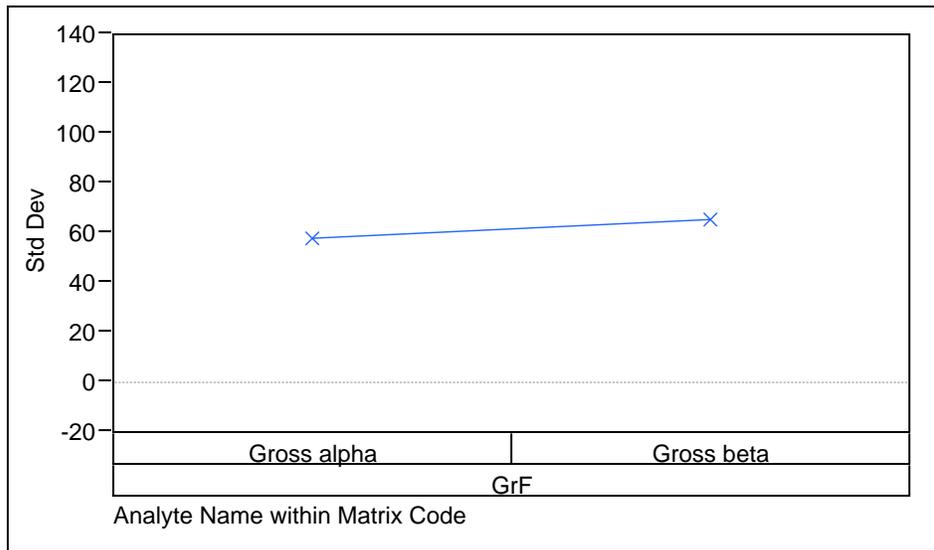
Variability Chart for Bias

Variability Gauge Lab Code=JAEC99

Variability Chart for Bias



Analyte Name within Matrix Code



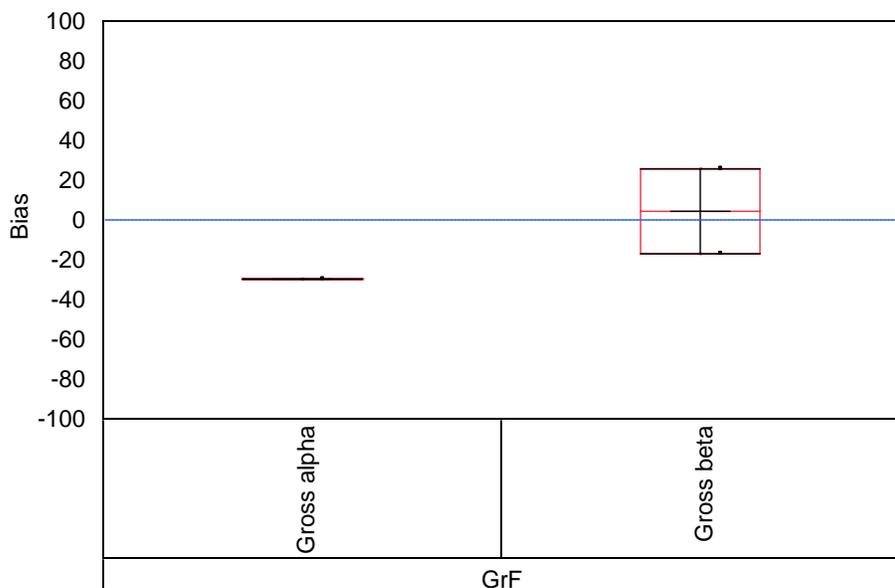
Analyte Name within Matrix Code

Variability Gauge Lab Code=KDHE01

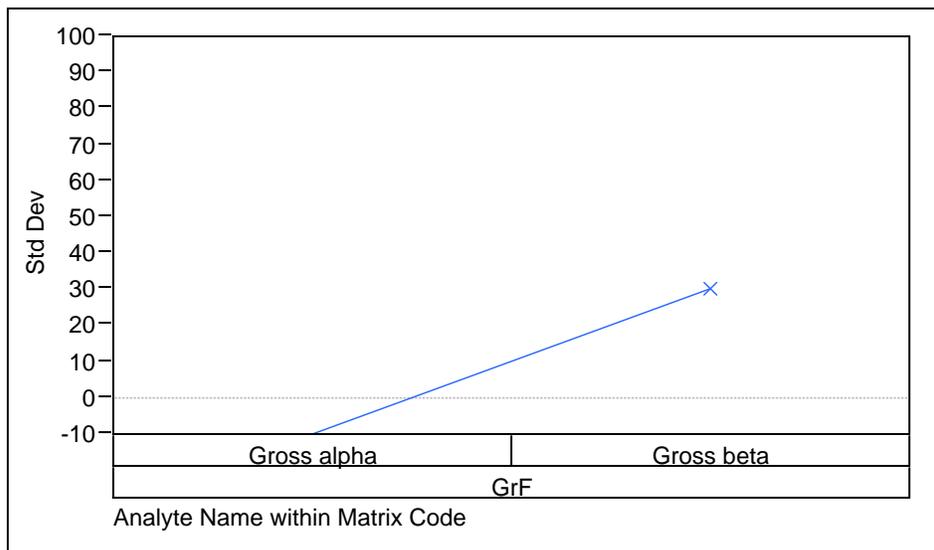
Variability Chart for Bias

Variability Gauge Lab Code=KDHE01

Variability Chart for Bias



Analyte Name within Matrix Code



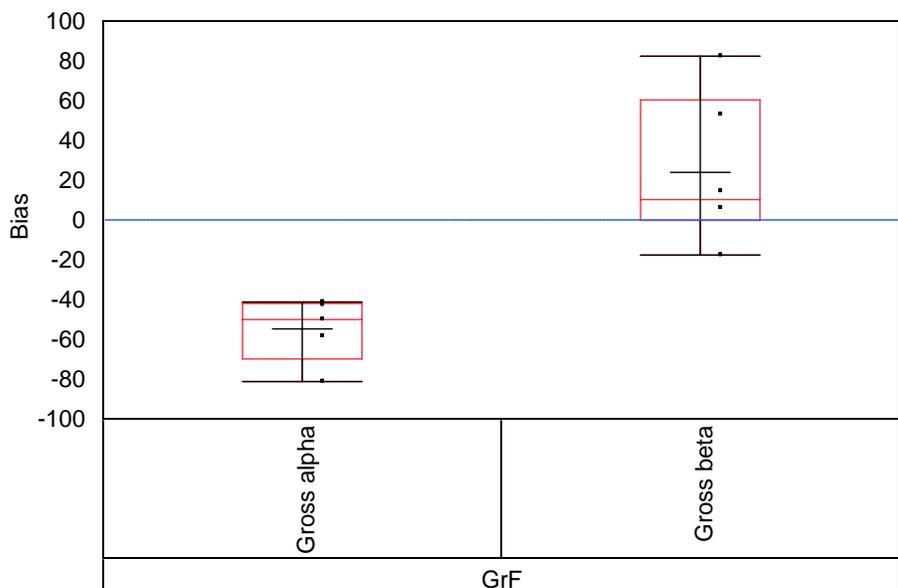
Analyte Name within Matrix Code

Variability Gauge Lab Code=KSCF01

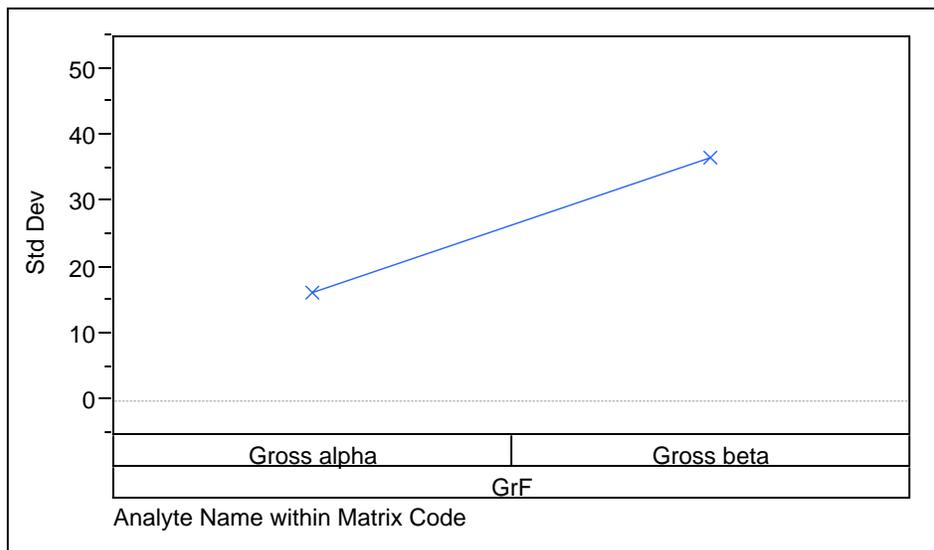
Variability Chart for Bias

Variability Gauge Lab Code=KSCF01

Variability Chart for Bias



Analyte Name within Matrix Code



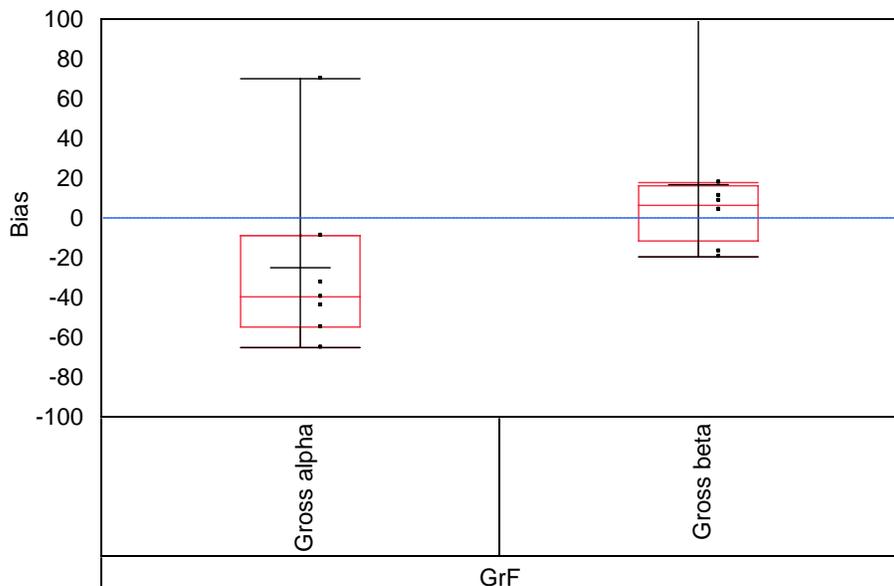
Analyte Name within Matrix Code

Variability Gauge Lab Code=LOCK01

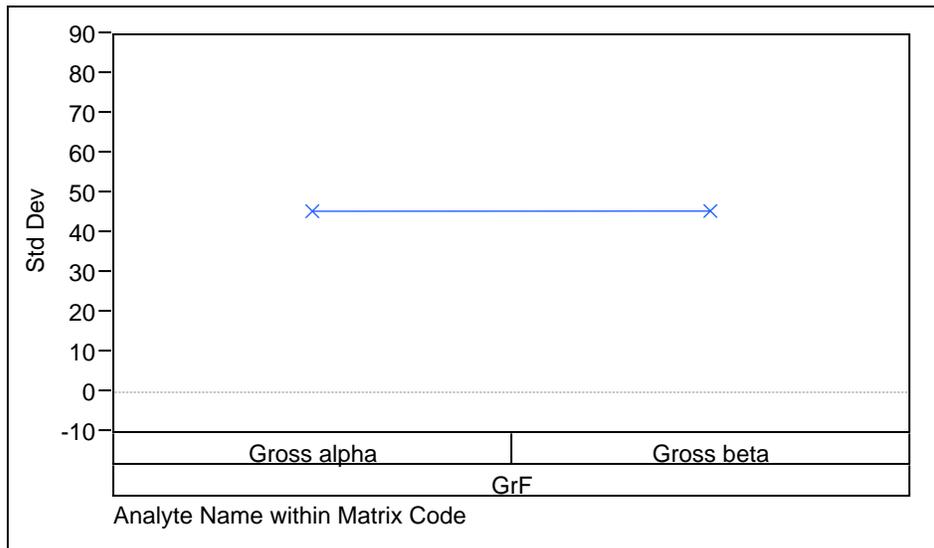
Variability Chart for Bias

Variability Gauge Lab Code=LOCK01

Variability Chart for Bias



Analyte Name within Matrix Code



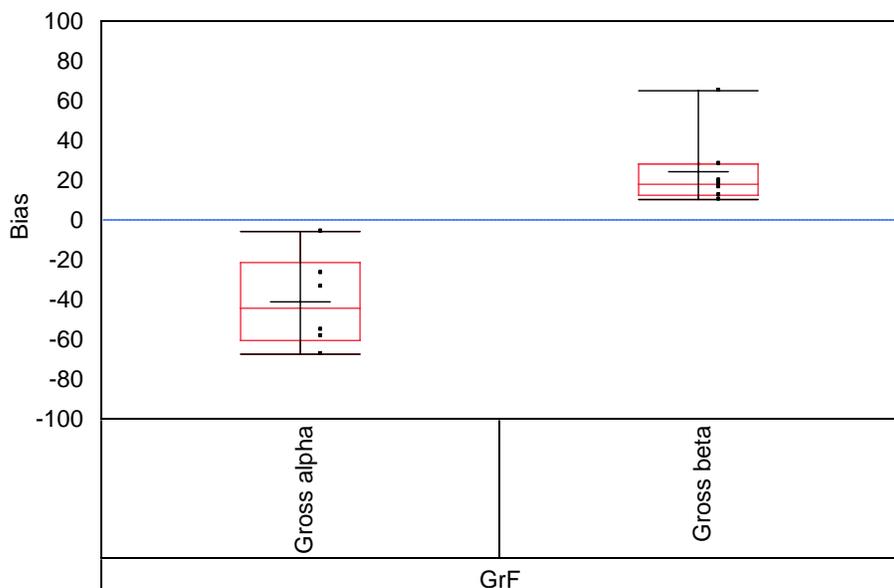
Analyte Name within Matrix Code

Variability Gauge Lab Code=LOCK03

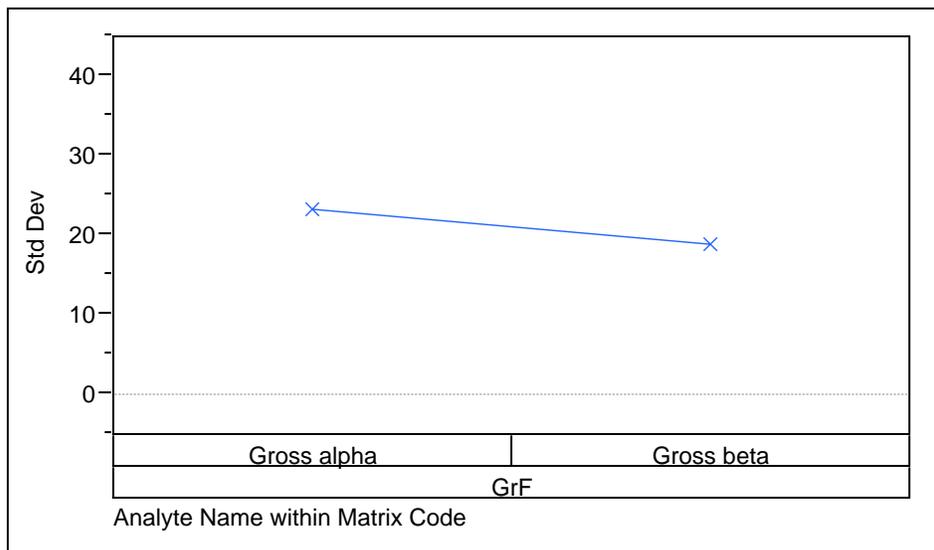
Variability Chart for Bias

Variability Gauge Lab Code=LOCK03

Variability Chart for Bias



Analyte Name within Matrix Code



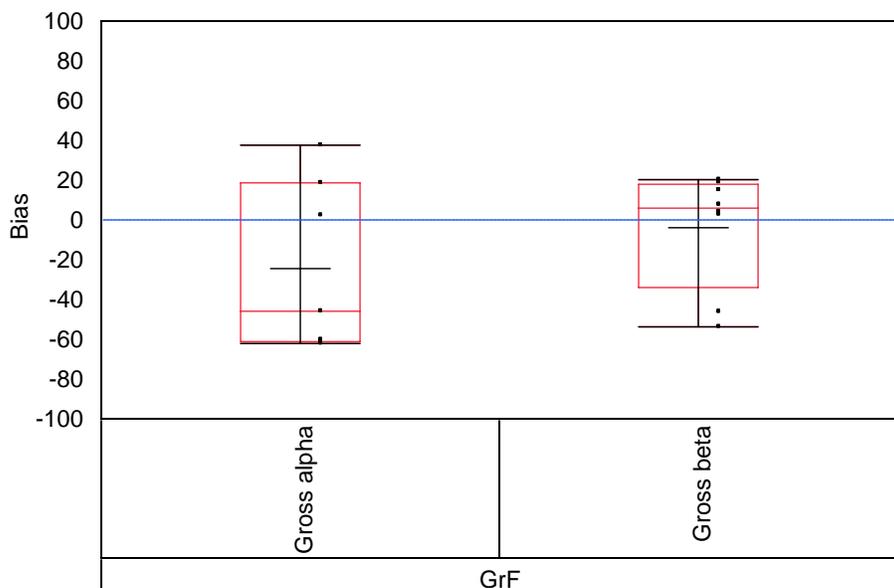
Analyte Name within Matrix Code

Variability Gauge Lab Code=MART02

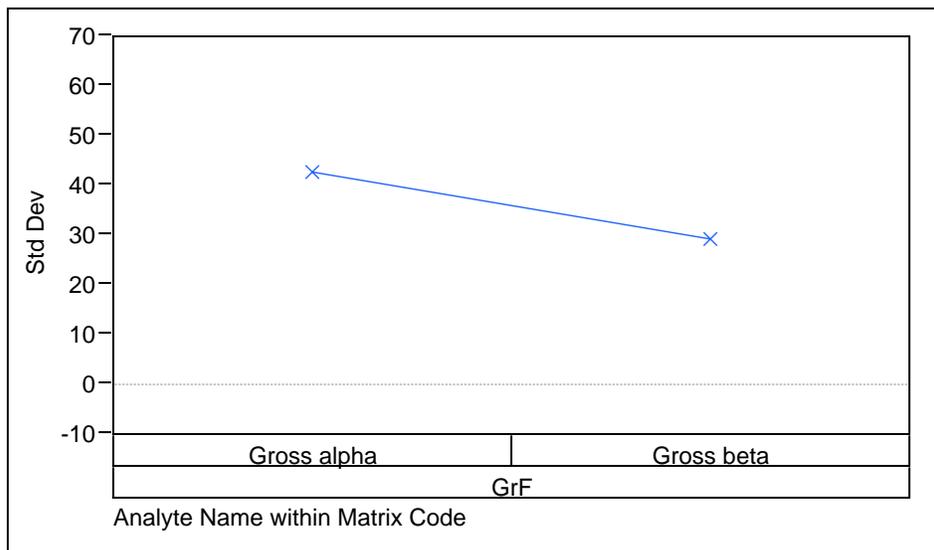
Variability Chart for Bias

Variability Gauge Lab Code=MART02

Variability Chart for Bias



Analyte Name within Matrix Code



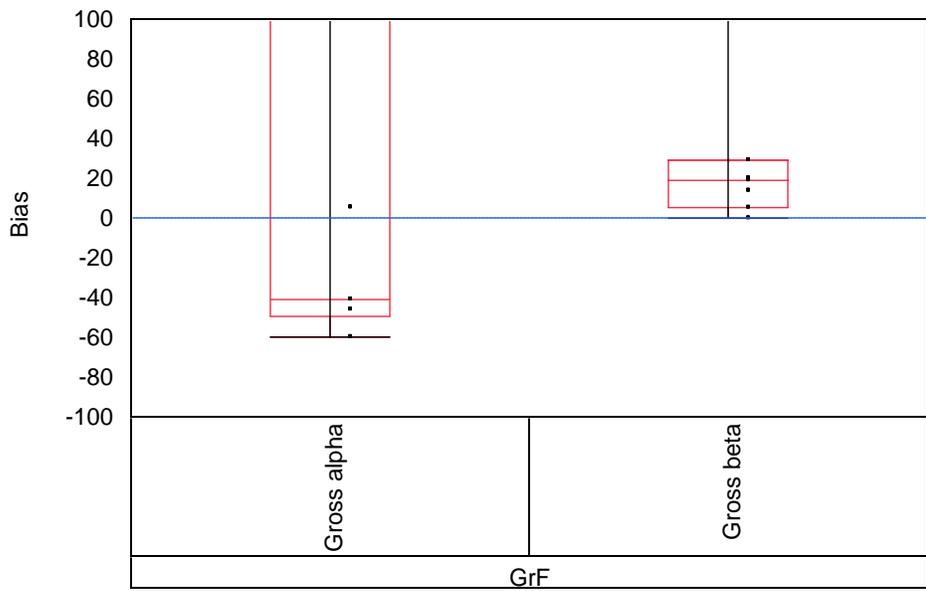
Analyte Name within Matrix Code

Variability Gauge Lab Code=MART03

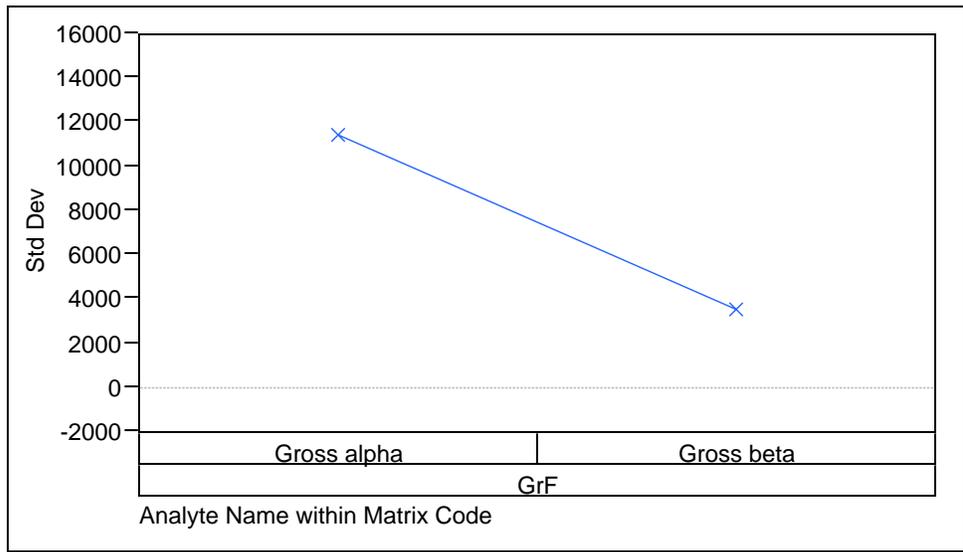
Variability Chart for Bias

Variability Gauge Lab Code=MART03

Variability Chart for Bias



Analyte Name within Matrix Code



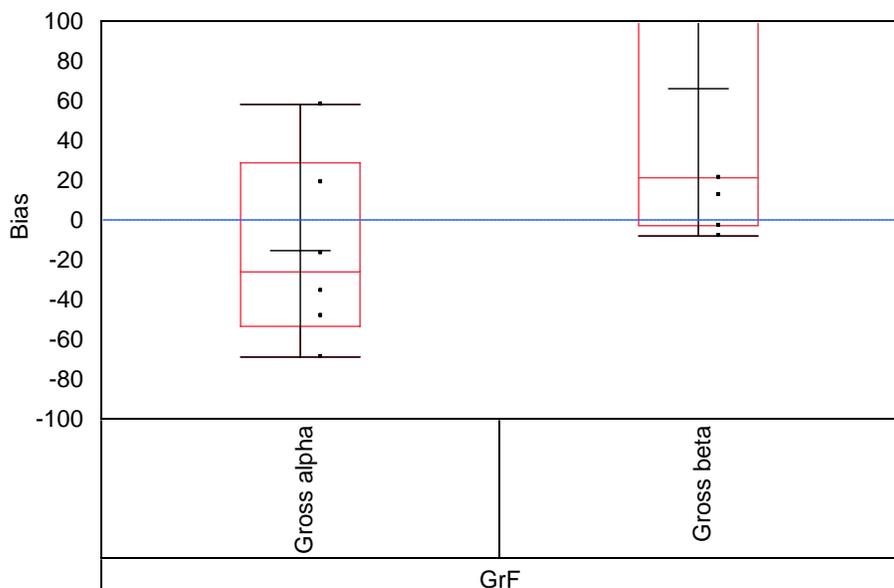
Analyte Name within Matrix Code

Variability Gauge Lab Code=MDPH01

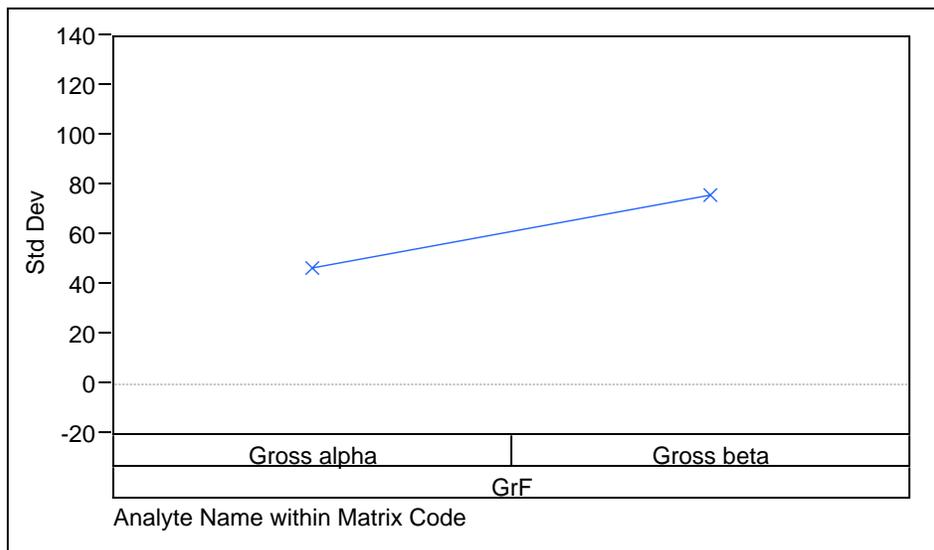
Variability Chart for Bias

Variability Gauge Lab Code=MDPH01

Variability Chart for Bias



Analyte Name within Matrix Code



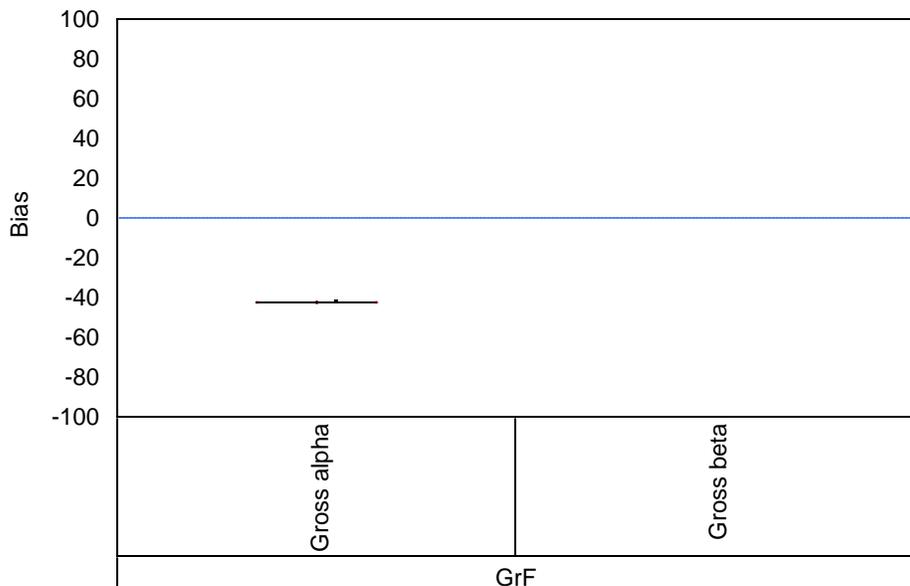
Analyte Name within Matrix Code

Variability Gauge Lab Code=MKME01

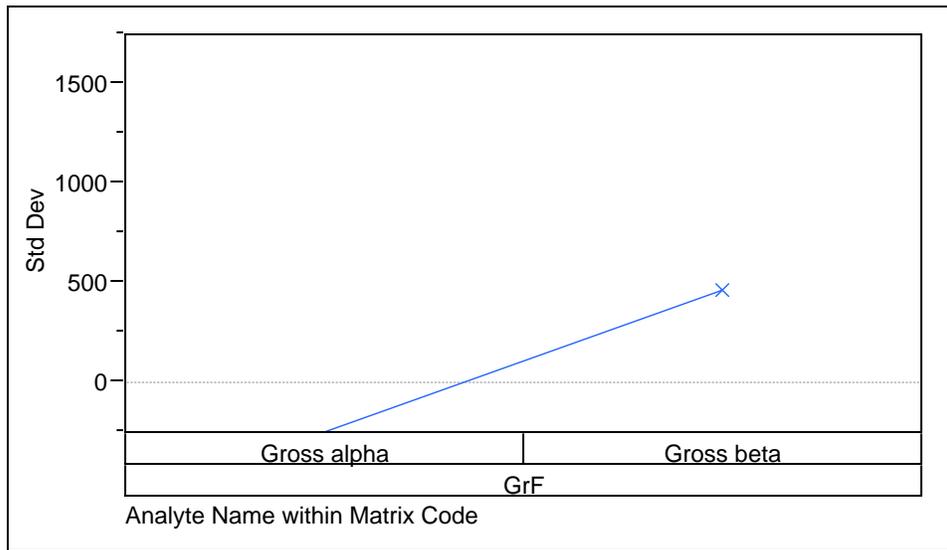
Variability Chart for Bias

Variability Gauge Lab Code=MKME01

Variability Chart for Bias



Analyte Name within Matrix Code



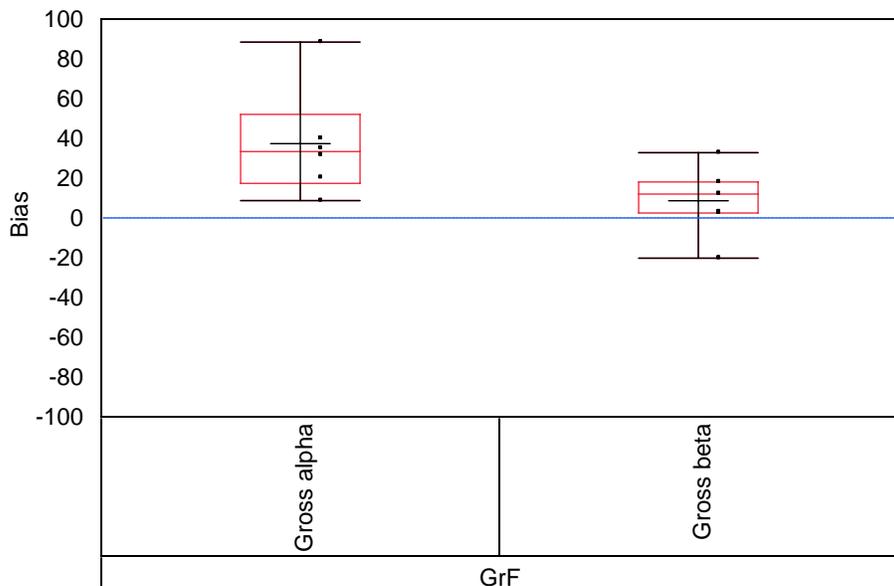
Analyte Name within Matrix Code

Variability Gauge Lab Code=NARL01

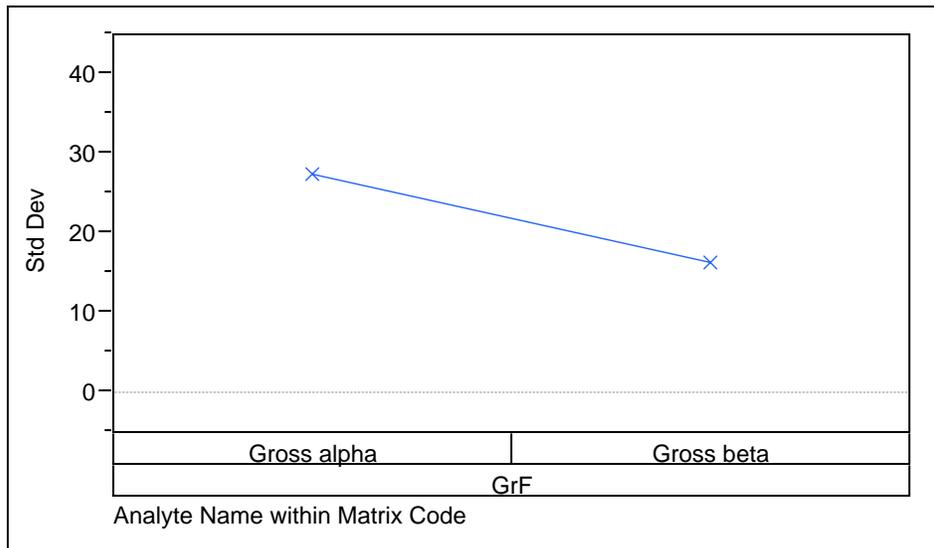
Variability Chart for Bias

Variability Gauge Lab Code=NARL01

Variability Chart for Bias



Analyte Name within Matrix Code



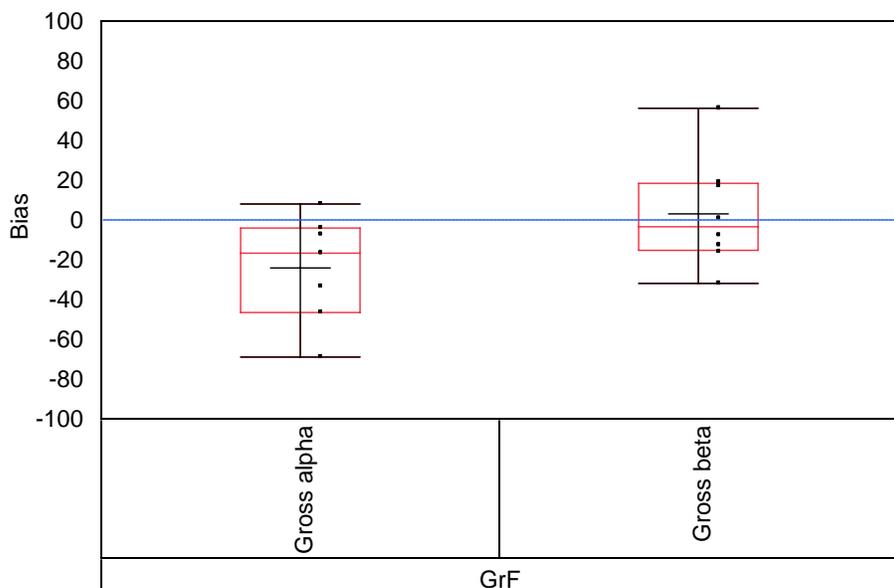
Analyte Name within Matrix Code

Variability Gauge Lab Code=NESI01

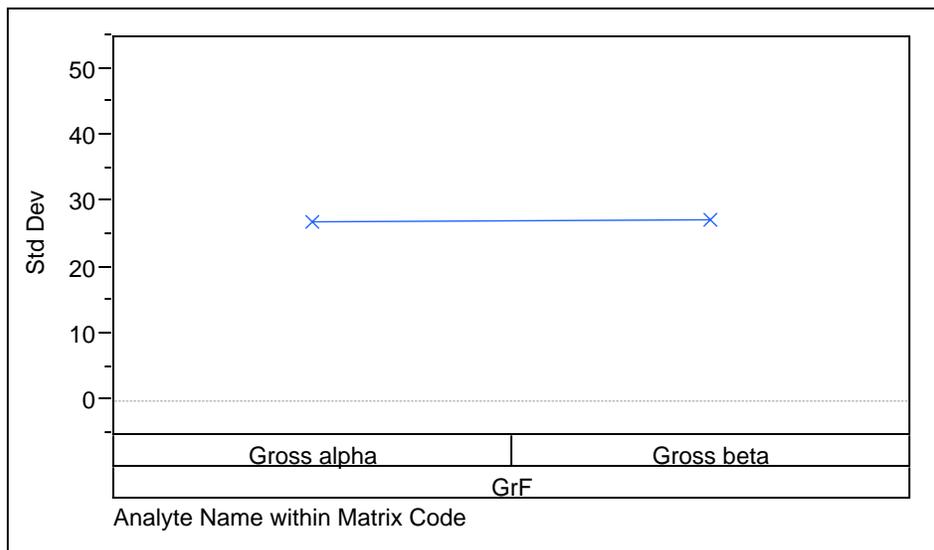
Variability Chart for Bias

Variability Gauge Lab Code=NESI01

Variability Chart for Bias



Analyte Name within Matrix Code



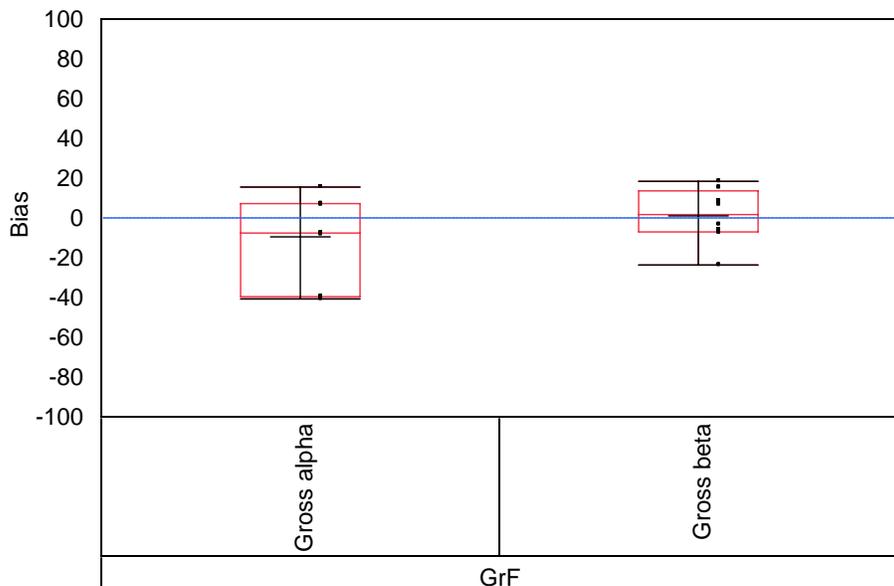
Analyte Name within Matrix Code

Variability Gauge Lab Code=NJDH01

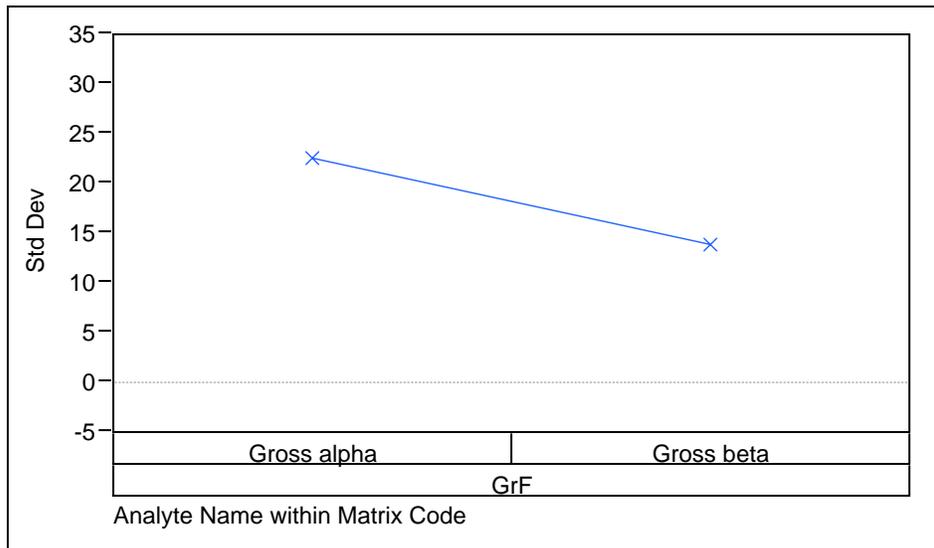
Variability Chart for Bias

Variability Gauge Lab Code=NJDH01

Variability Chart for Bias



Analyte Name within Matrix Code



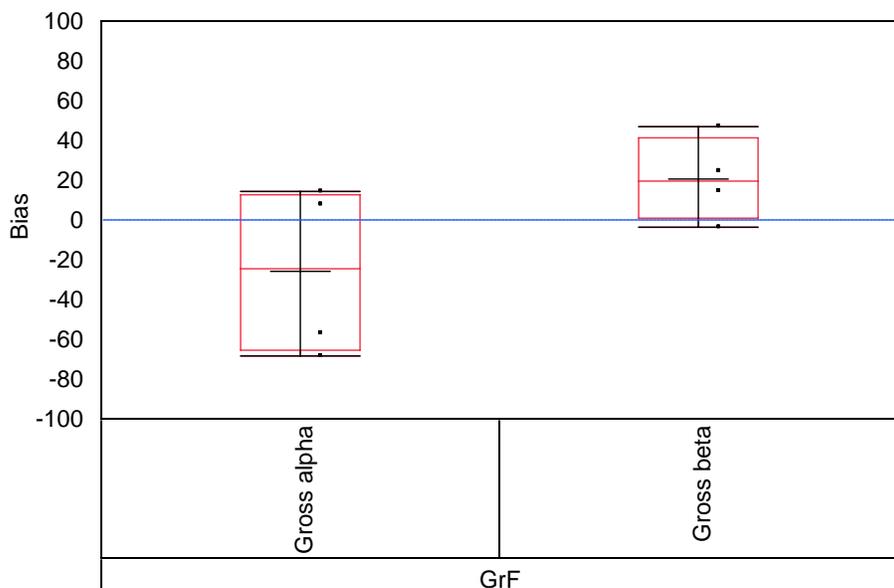
Analyte Name within Matrix Code

Variability Gauge Lab Code=NTSI01

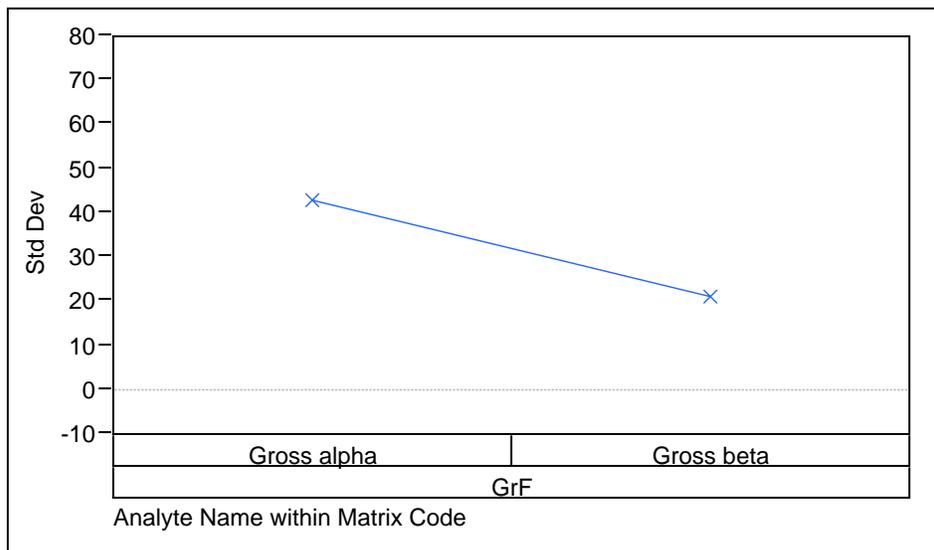
Variability Chart for Bias

Variability Gauge Lab Code=NTSI01

Variability Chart for Bias



Analyte Name within Matrix Code



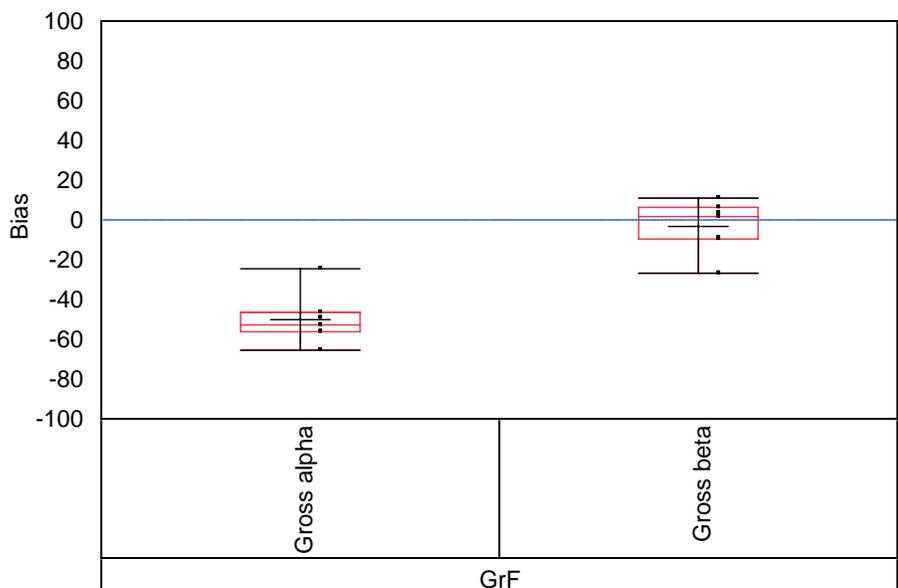
Analyte Name within Matrix Code

Variability Gauge Lab Code=OBGL01

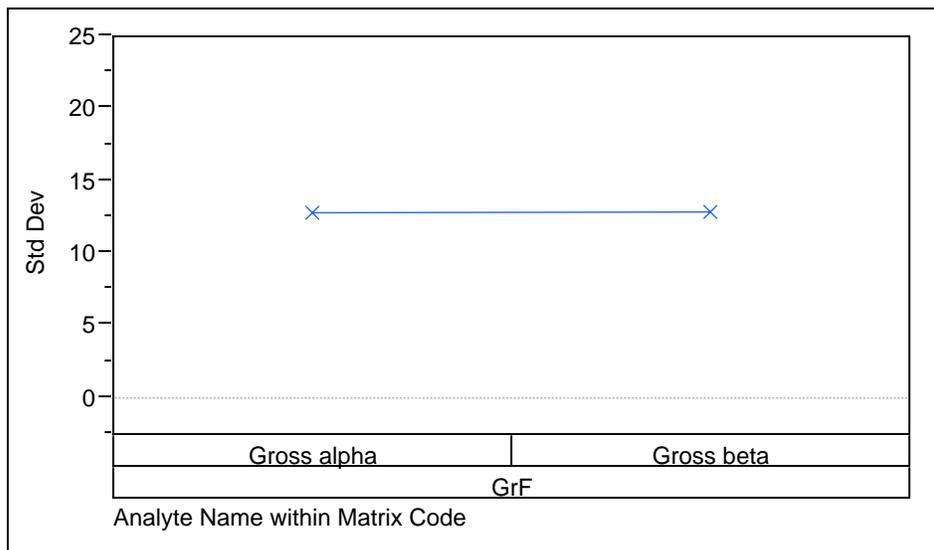
Variability Chart for Bias

Variability Gauge Lab Code=OBGL01

Variability Chart for Bias



Analyte Name within Matrix Code



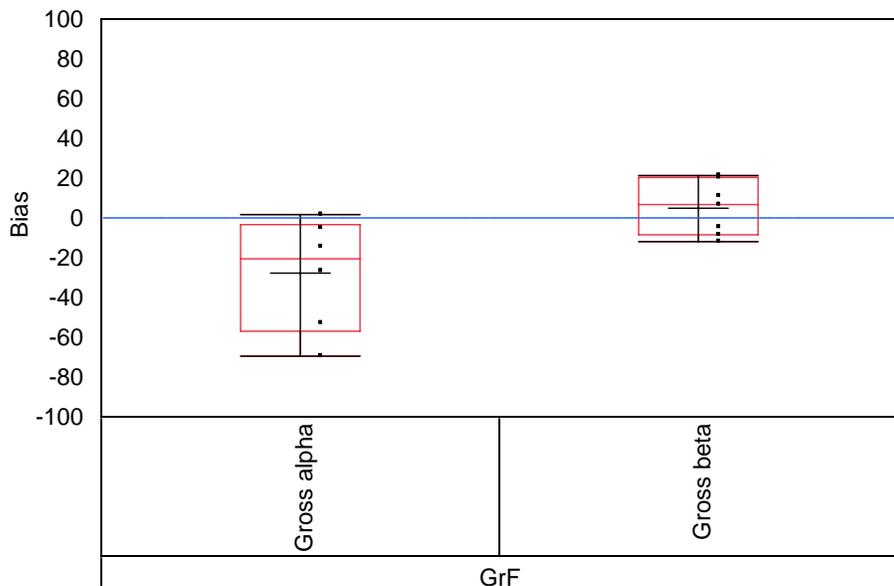
Analyte Name within Matrix Code

Variability Gauge Lab Code=ODHL01

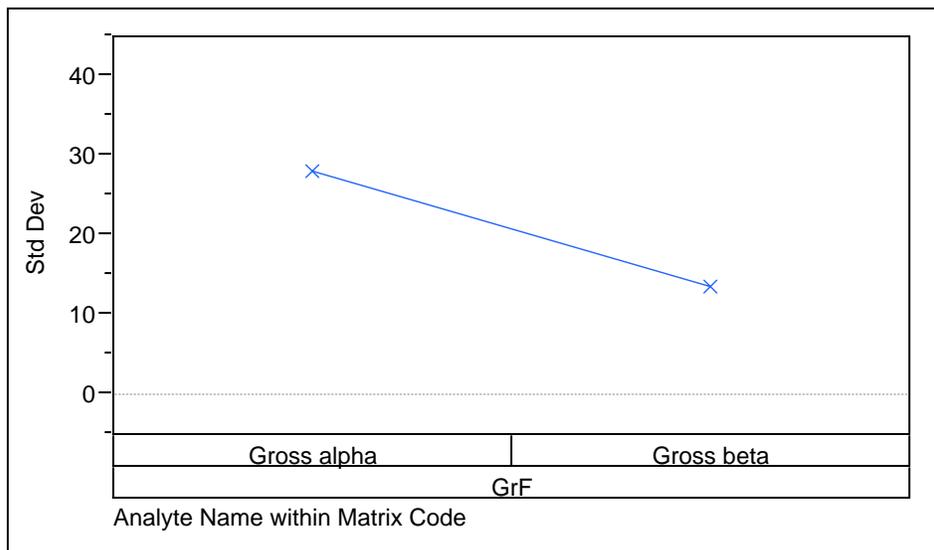
Variability Chart for Bias

Variability Gauge Lab Code=ODHL01

Variability Chart for Bias



Analyte Name within Matrix Code



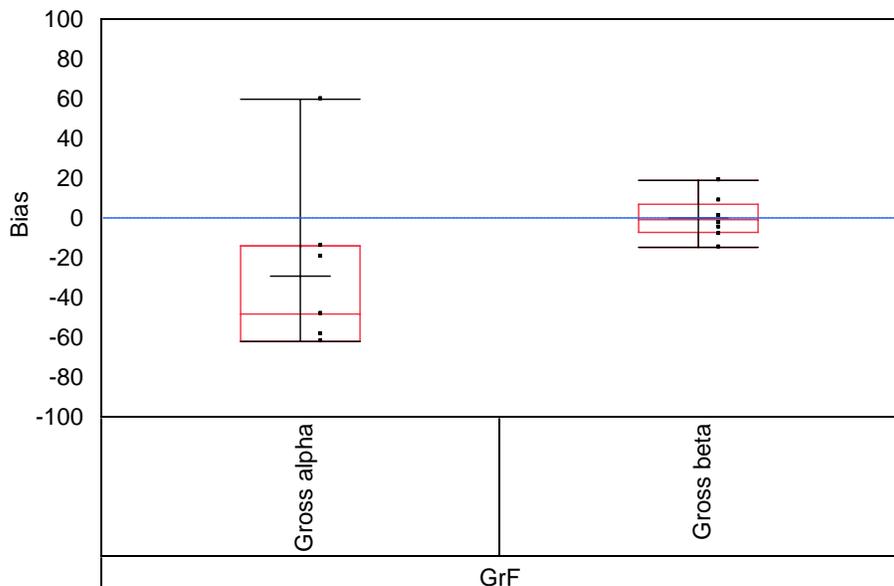
Analyte Name within Matrix Code

Variability Gauge Lab Code=ORIS01

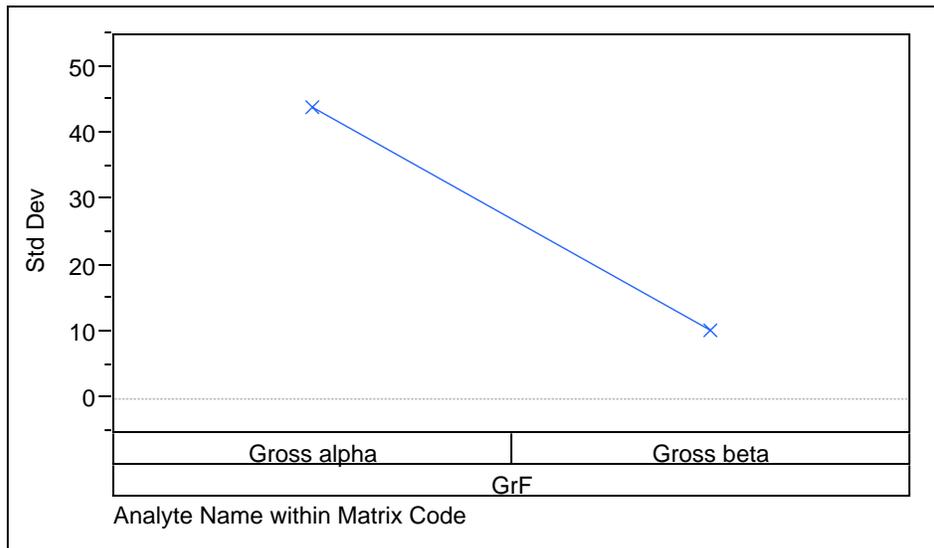
Variability Chart for Bias

Variability Gauge Lab Code=ORIS01

Variability Chart for Bias



Analyte Name within Matrix Code



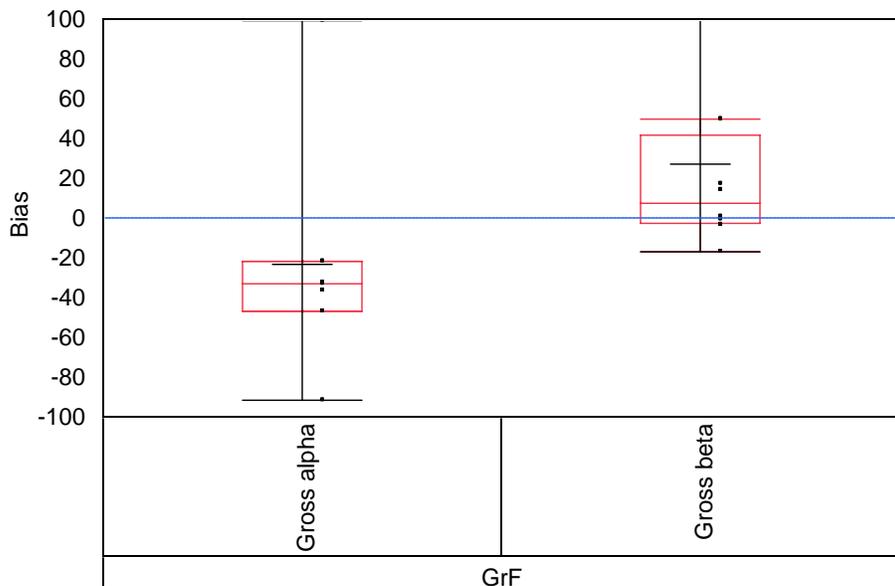
Analyte Name within Matrix Code

Variability Gauge Lab Code=OTLI01

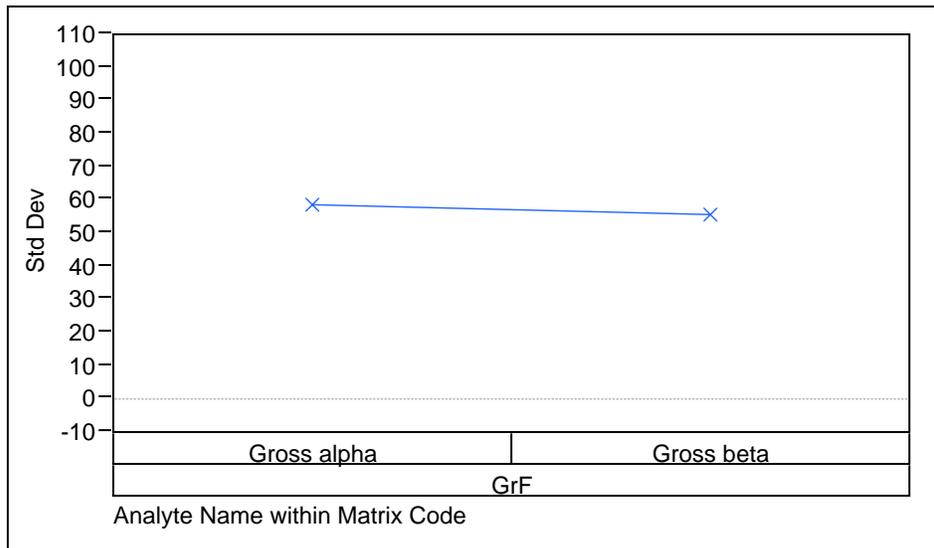
Variability Chart for Bias

Variability Gauge Lab Code=OTLI01

Variability Chart for Bias



Analyte Name within Matrix Code



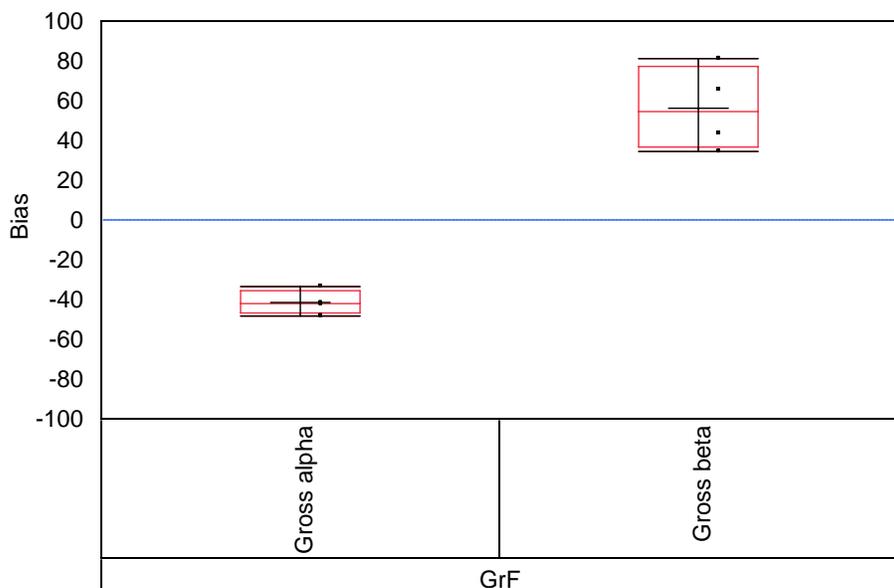
Analyte Name within Matrix Code

Variability Gauge Lab Code=PBRF01

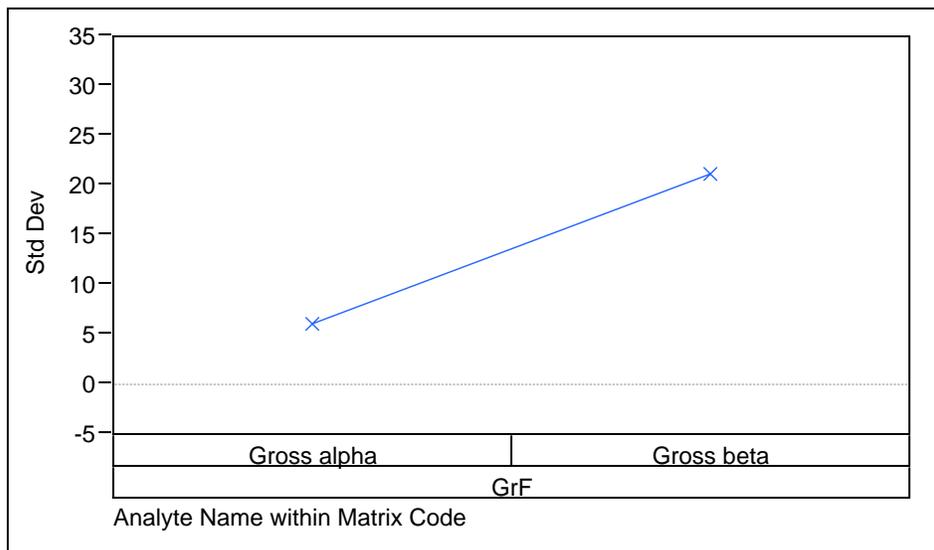
Variability Chart for Bias

Variability Gauge Lab Code=PBRF01

Variability Chart for Bias



Analyte Name within Matrix Code



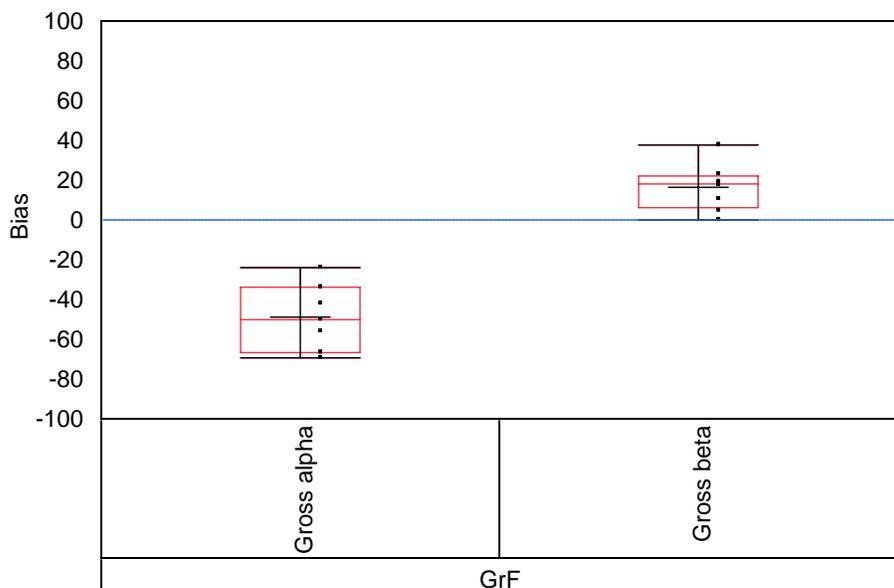
Analyte Name within Matrix Code

Variability Gauge Lab Code=QUAN01

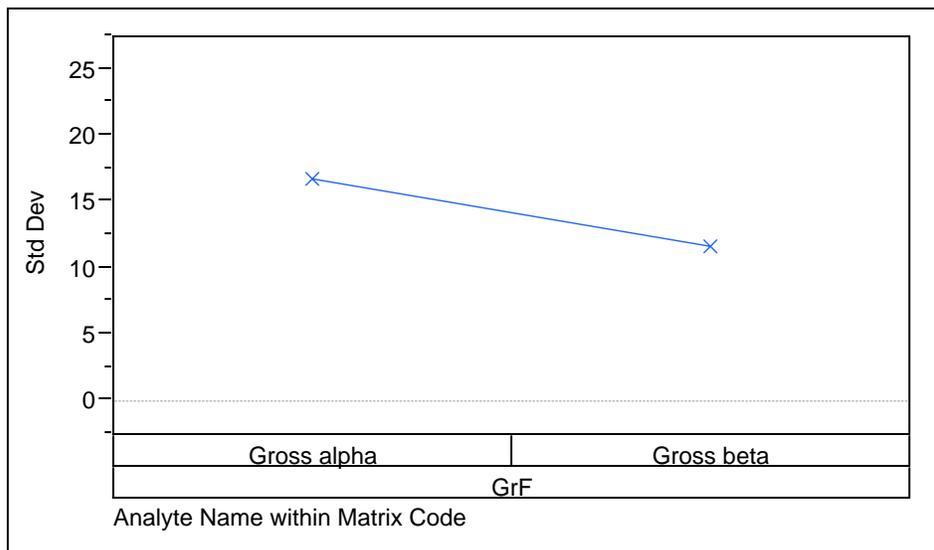
Variability Chart for Bias

Variability Gauge Lab Code=QUAN01

Variability Chart for Bias



Analyte Name within Matrix Code



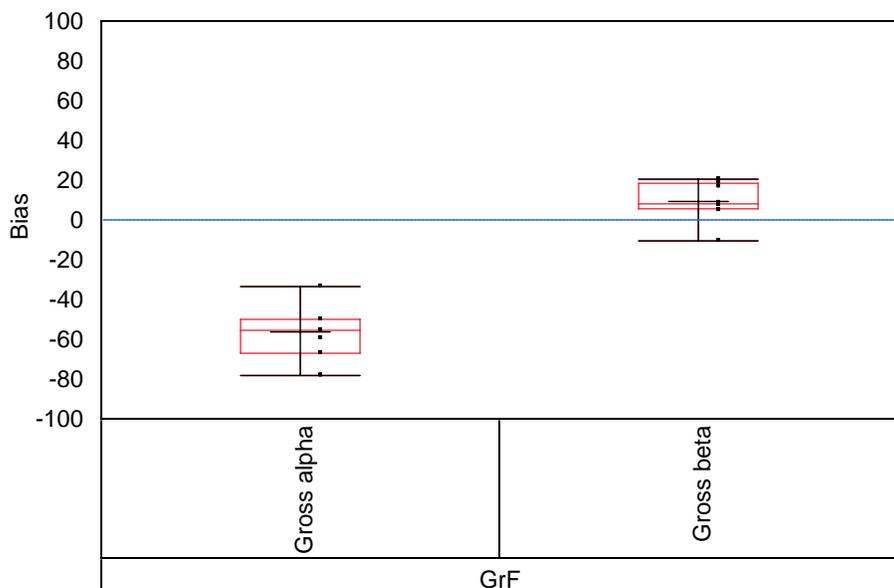
Analyte Name within Matrix Code

Variability Gauge Lab Code=QUAN03

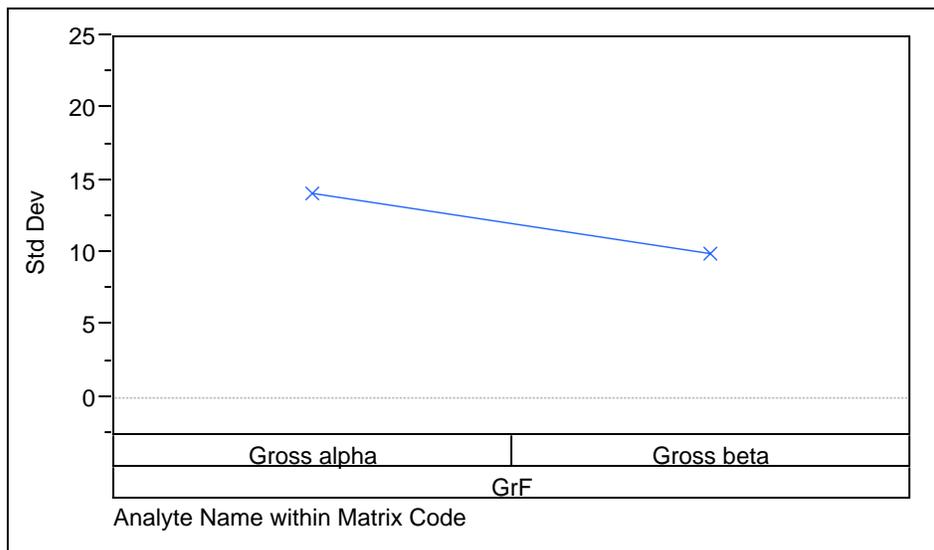
Variability Chart for Bias

Variability Gauge Lab Code=QUAN03

Variability Chart for Bias



Analyte Name within Matrix Code



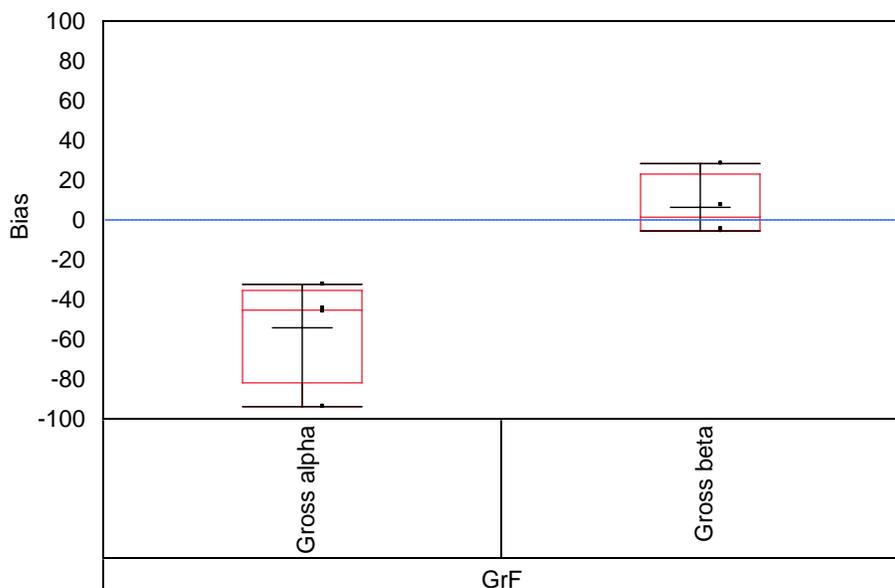
Analyte Name within Matrix Code

Variability Gauge Lab Code=RECC01

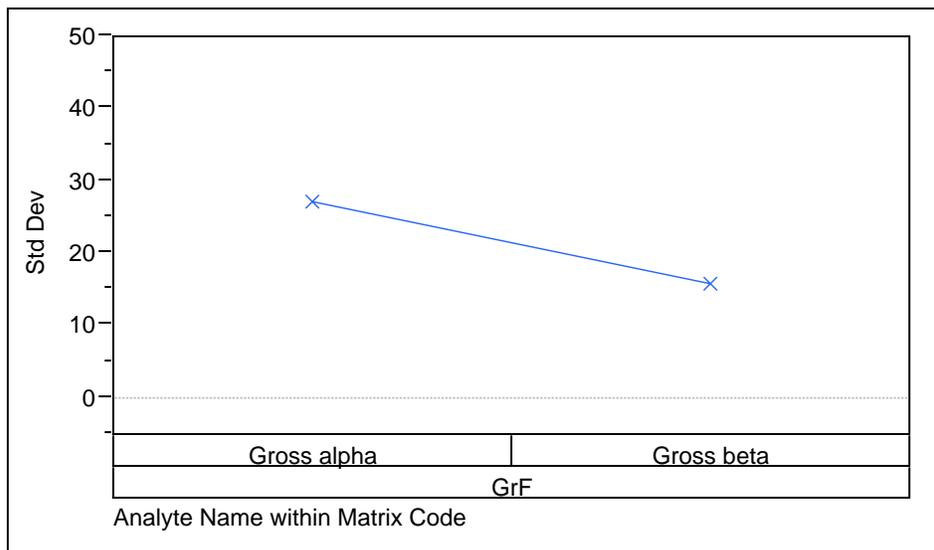
Variability Chart for Bias

Variability Gauge Lab Code=RECC01

Variability Chart for Bias



Analyte Name within Matrix Code



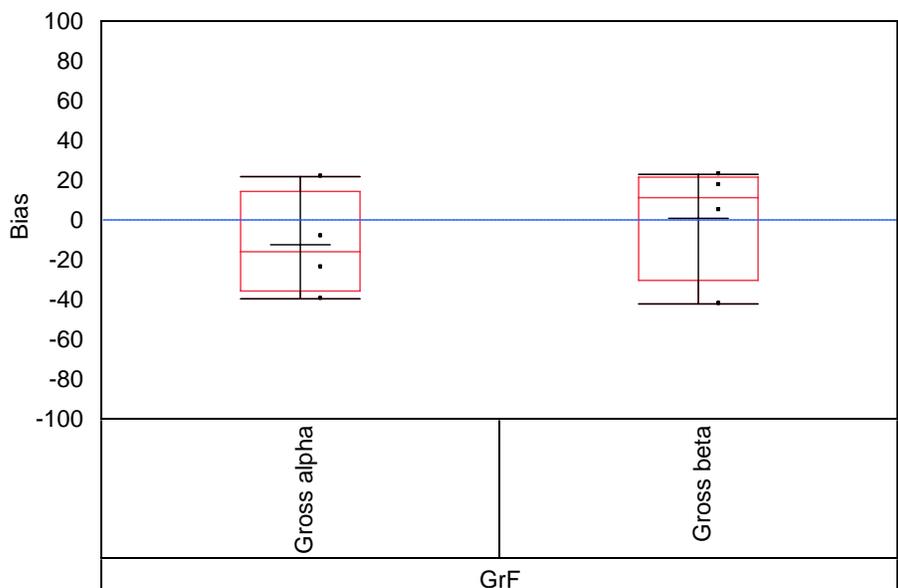
Analyte Name within Matrix Code

Variability Gauge Lab Code=RMCL99

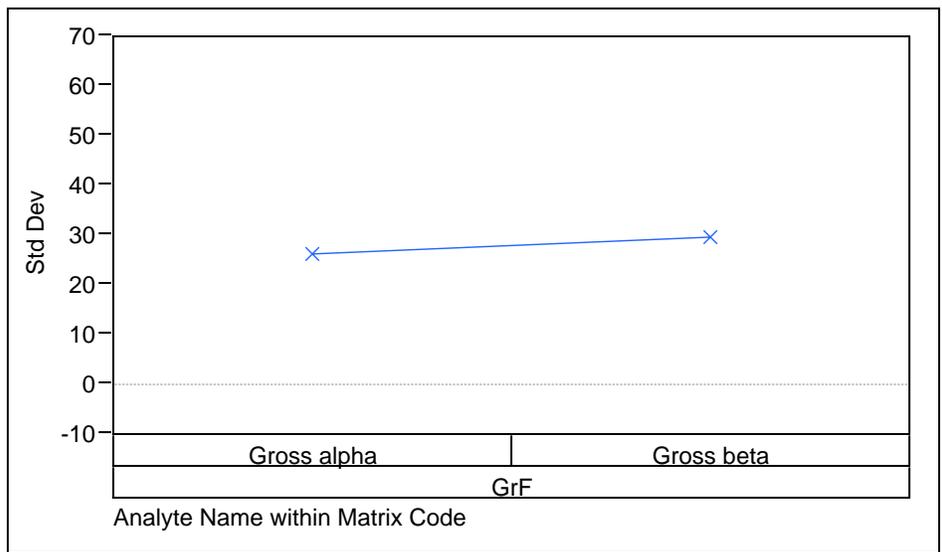
Variability Chart for Bias

Variability Gauge Lab Code=RMCL99

Variability Chart for Bias



Analyte Name within Matrix Code



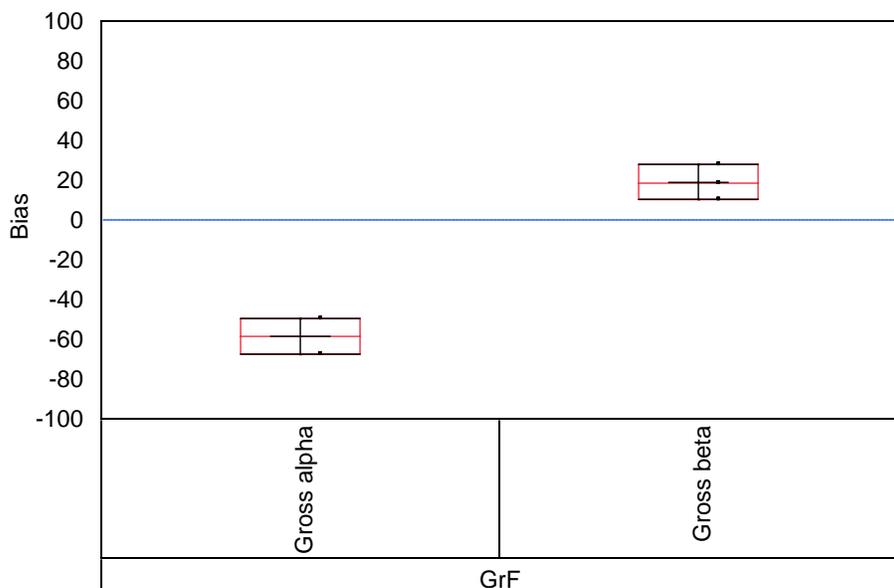
Analyte Name within Matrix Code

Variability Gauge Lab Code=RPCR01

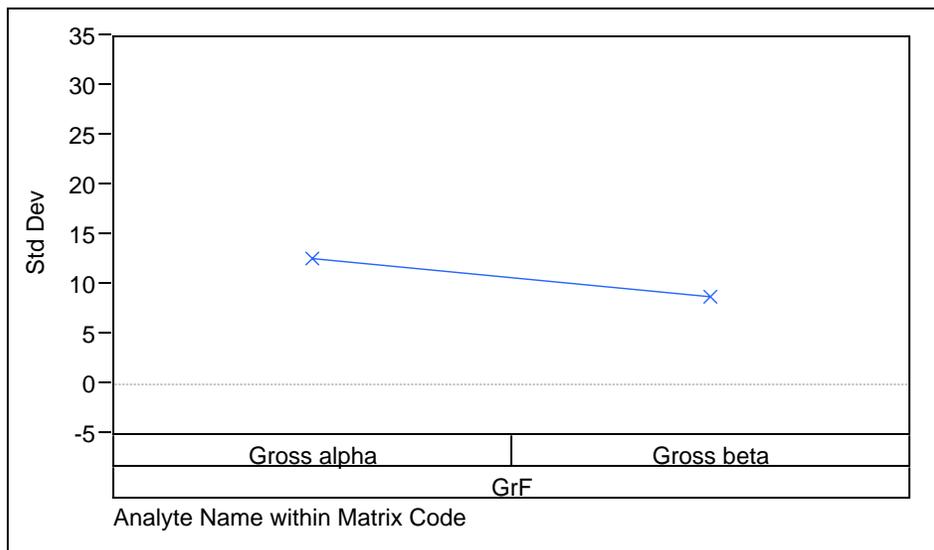
Variability Chart for Bias

Variability Gauge Lab Code=RPCR01

Variability Chart for Bias



Analyte Name within Matrix Code



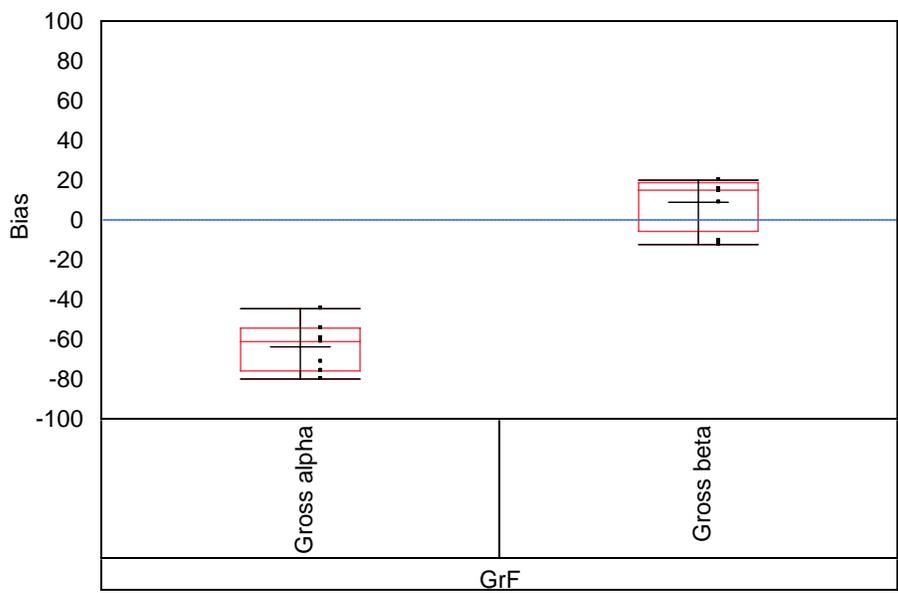
Analyte Name within Matrix Code

Variability Gauge Lab Code=RPSC01

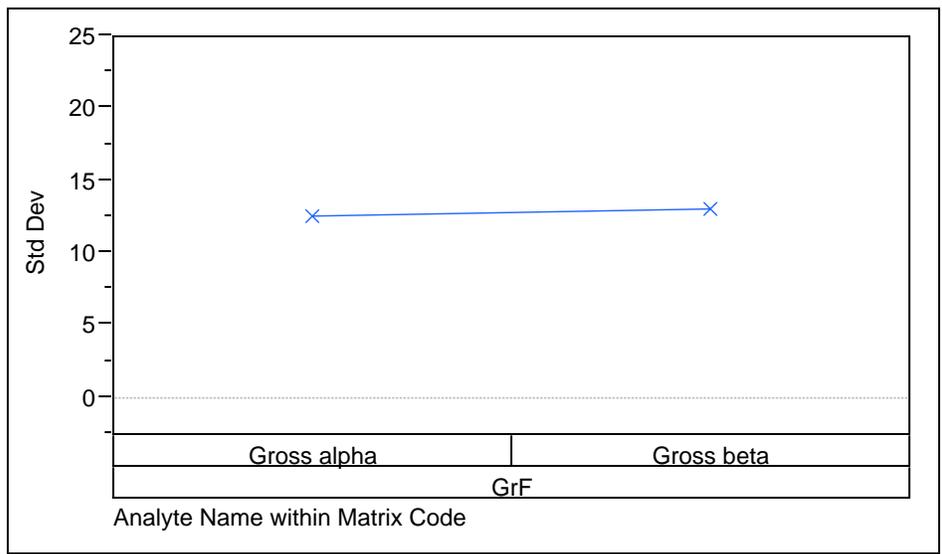
Variability Chart for Bias

Variability Gauge Lab Code=RPSC01

Variability Chart for Bias



Analyte Name within Matrix Code



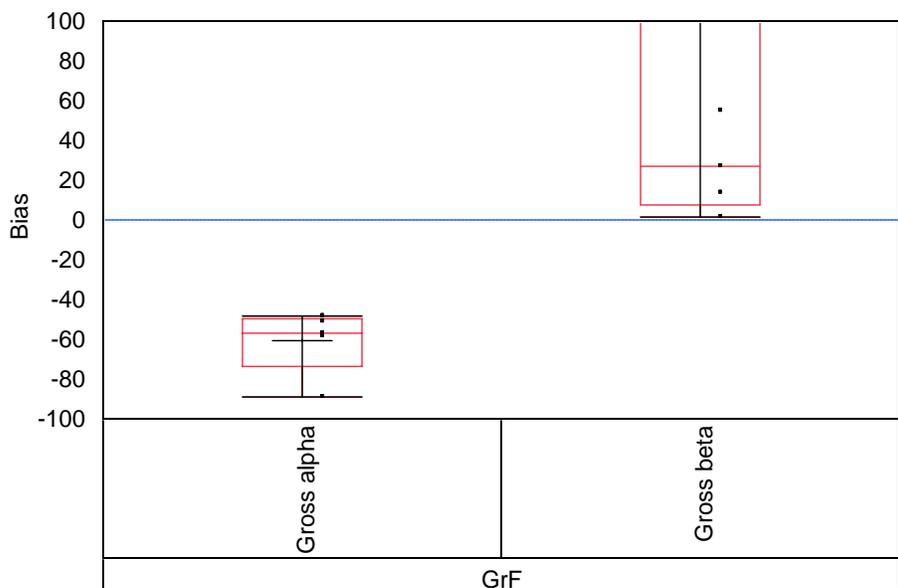
Analyte Name within Matrix Code

Variability Gauge Lab Code=RSAL01

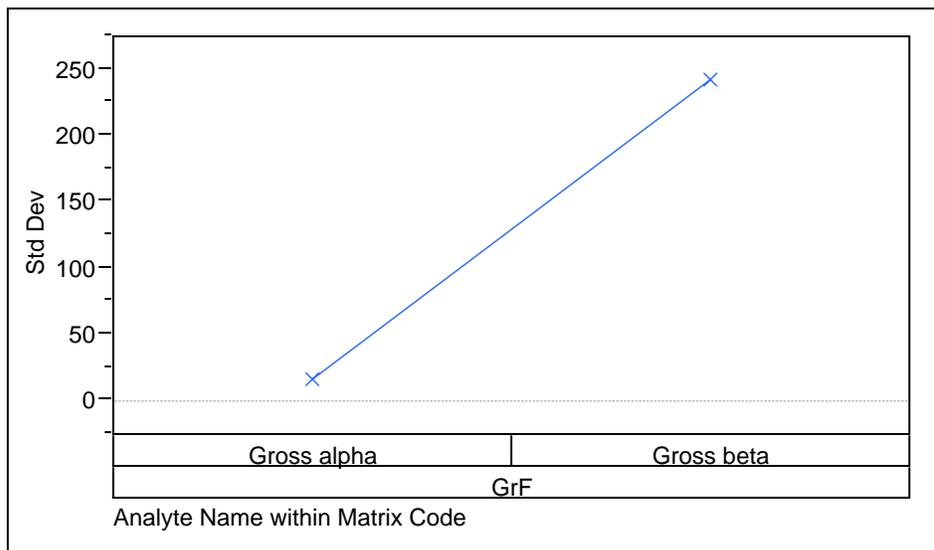
Variability Chart for Bias

Variability Gauge Lab Code=RSAL01

Variability Chart for Bias



Analyte Name within Matrix Code



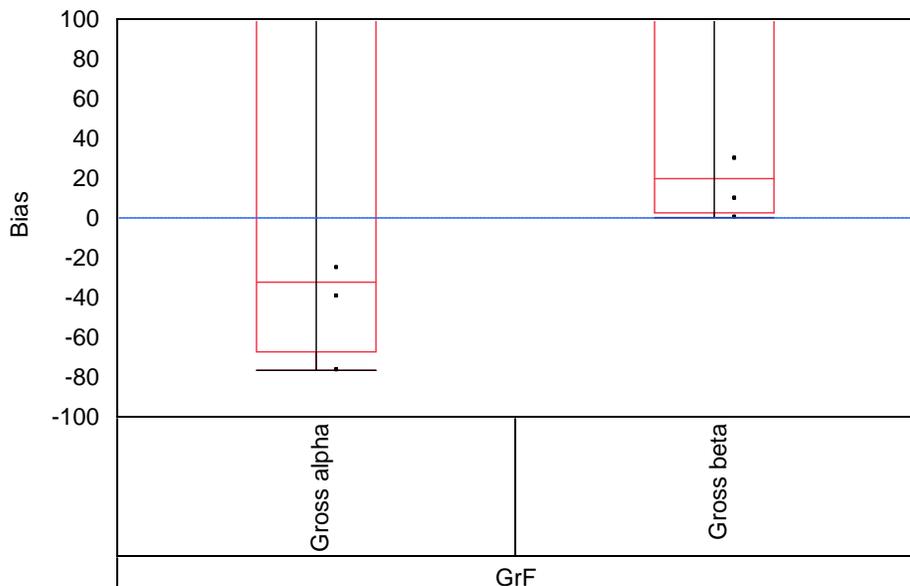
Analyte Name within Matrix Code

Variability Gauge Lab Code=SAIC01

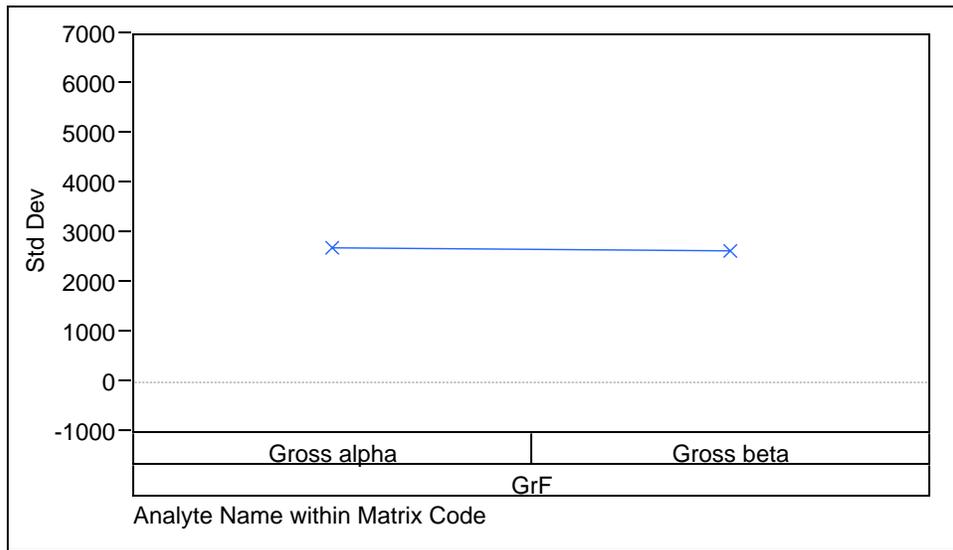
Variability Chart for Bias

Variability Gauge Lab Code=SAIC01

Variability Chart for Bias



Analyte Name within Matrix Code



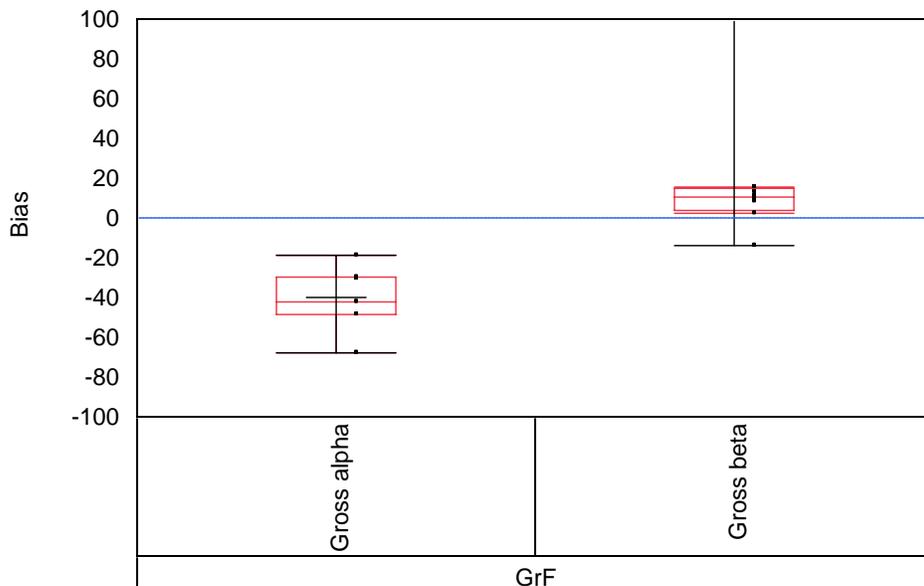
Analyte Name within Matrix Code

Variability Gauge Lab Code=SCAL01

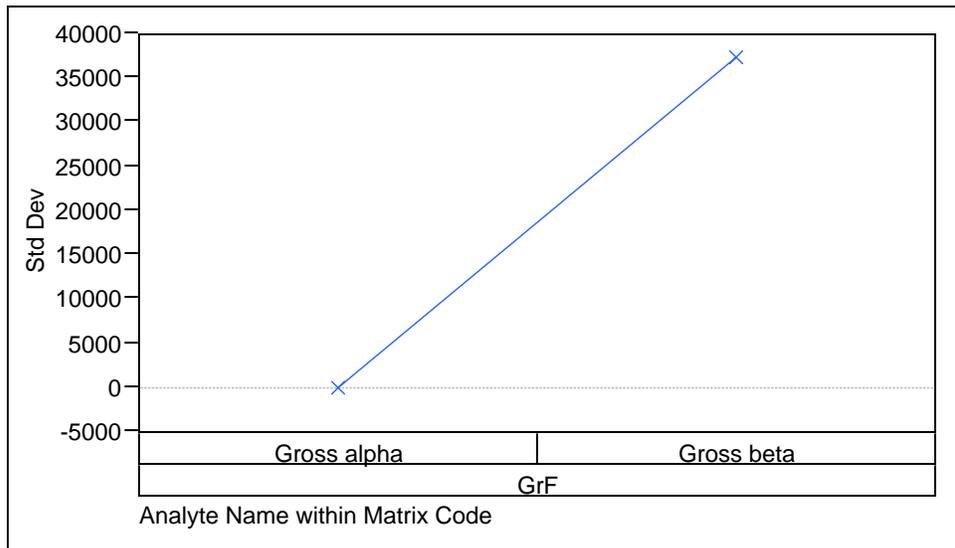
Variability Chart for Bias

Variability Gauge Lab Code=SCAL01

Variability Chart for Bias



Analyte Name within Matrix Code



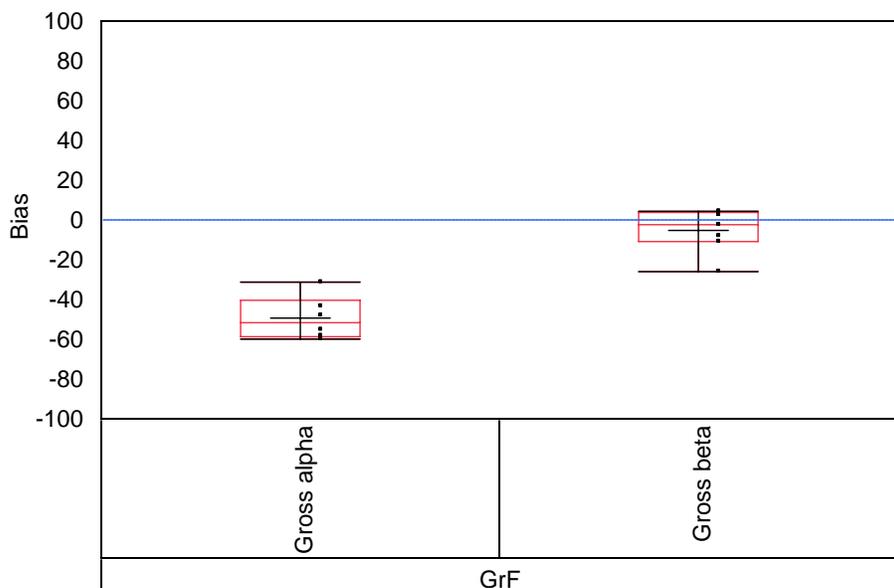
Analyte Name within Matrix Code

Variability Gauge Lab Code=SEML01

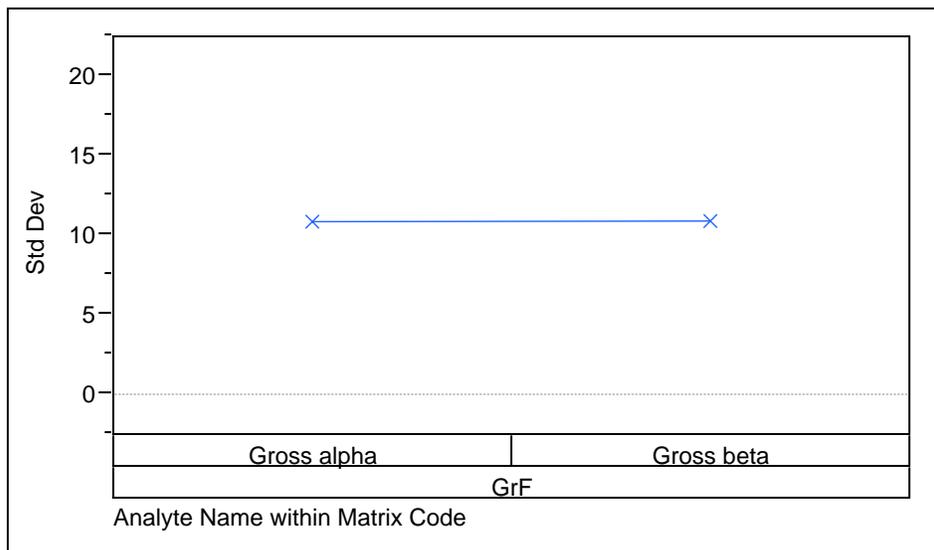
Variability Chart for Bias

Variability Gauge Lab Code=SEML01

Variability Chart for Bias



Analyte Name within Matrix Code



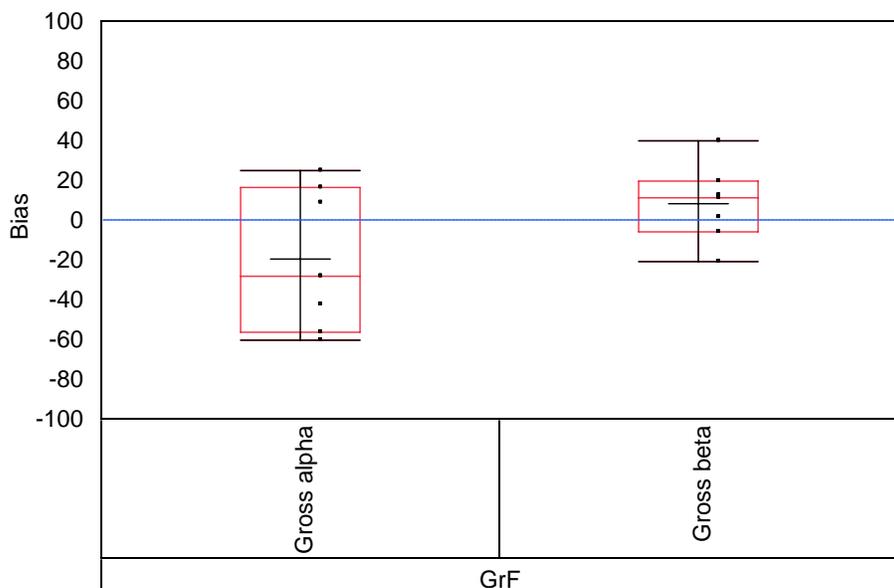
Analyte Name within Matrix Code

Variability Gauge Lab Code=SLDL01

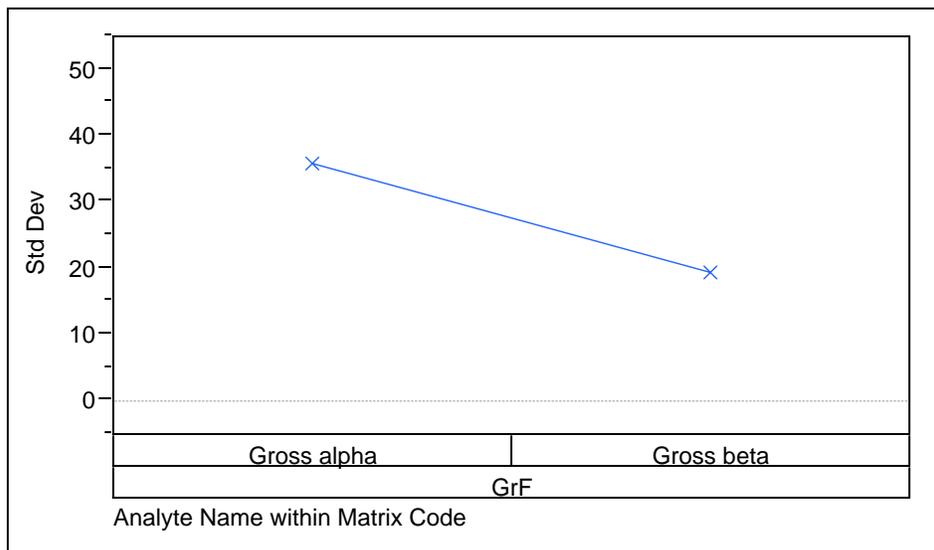
Variability Chart for Bias

Variability Gauge Lab Code=SLDL01

Variability Chart for Bias



Analyte Name within Matrix Code



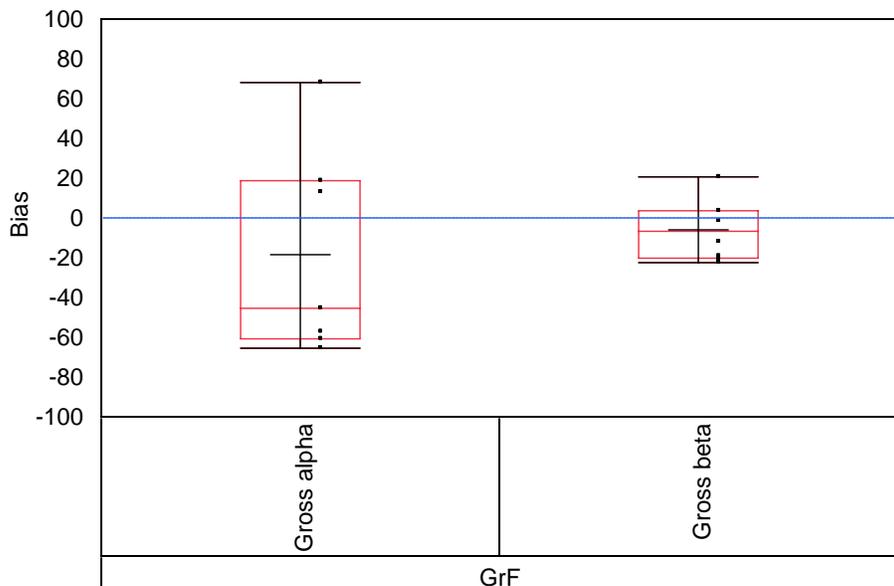
Analyte Name within Matrix Code

Variability Gauge Lab Code=SOUT01

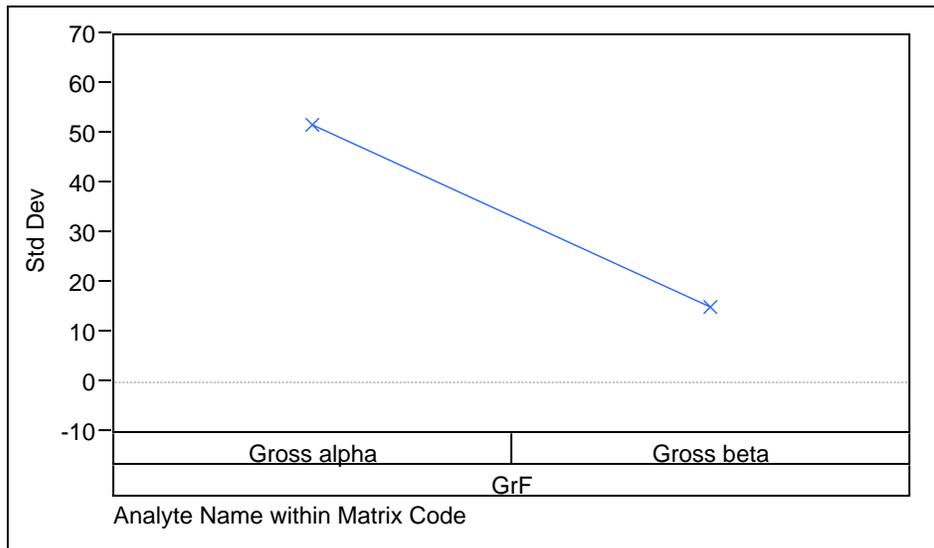
Variability Chart for Bias

Variability Gauge Lab Code=SOUT01

Variability Chart for Bias



Analyte Name within Matrix Code



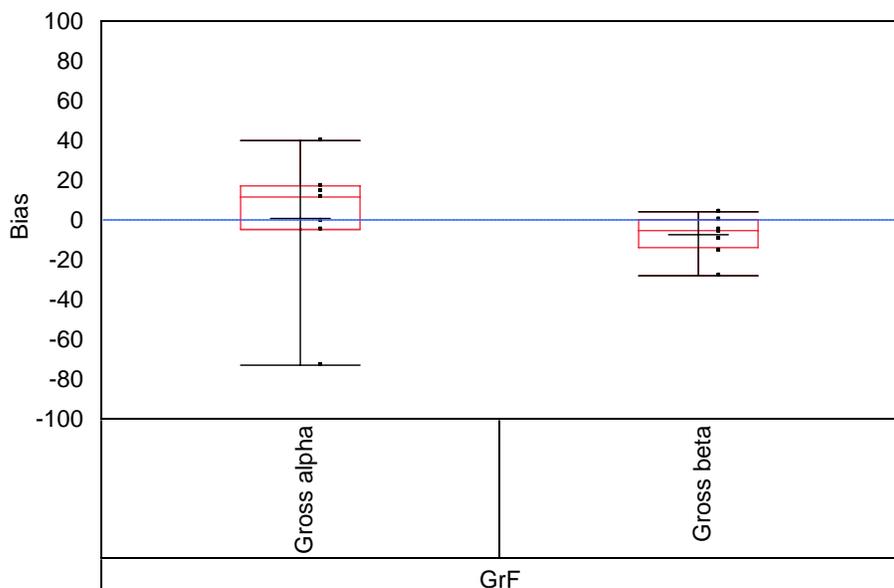
Analyte Name within Matrix Code

Variability Gauge Lab Code=SRPD01

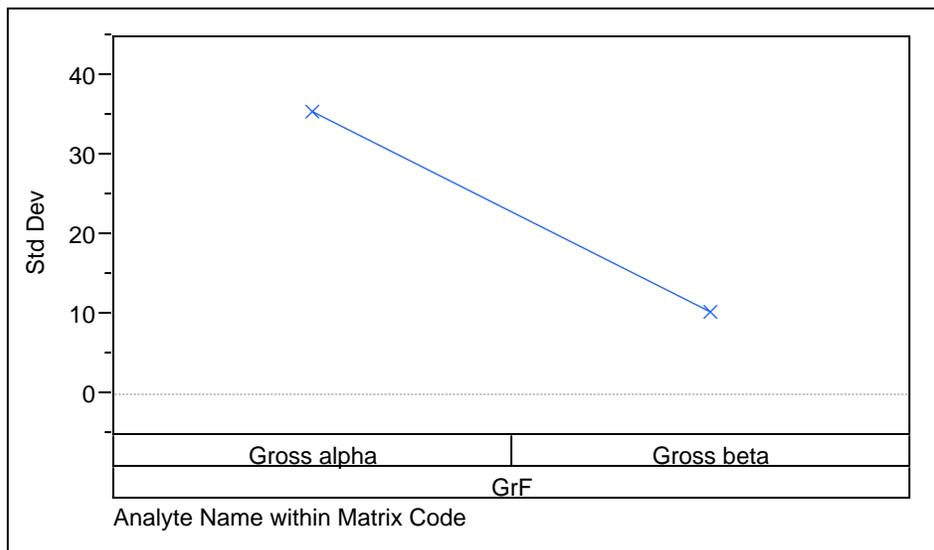
Variability Chart for Bias

Variability Gauge Lab Code=SRPD01

Variability Chart for Bias



Analyte Name within Matrix Code



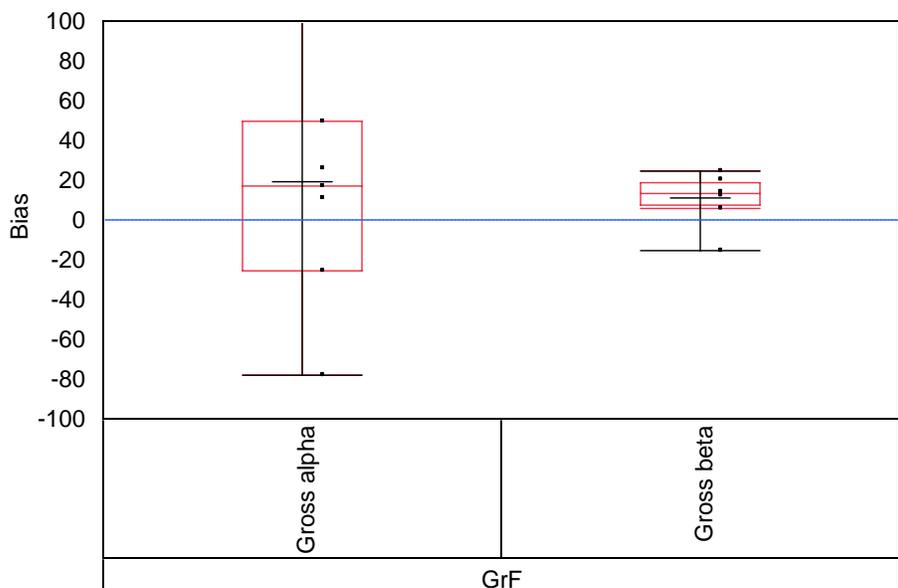
Analyte Name within Matrix Code

Variability Gauge Lab Code=TDHL01

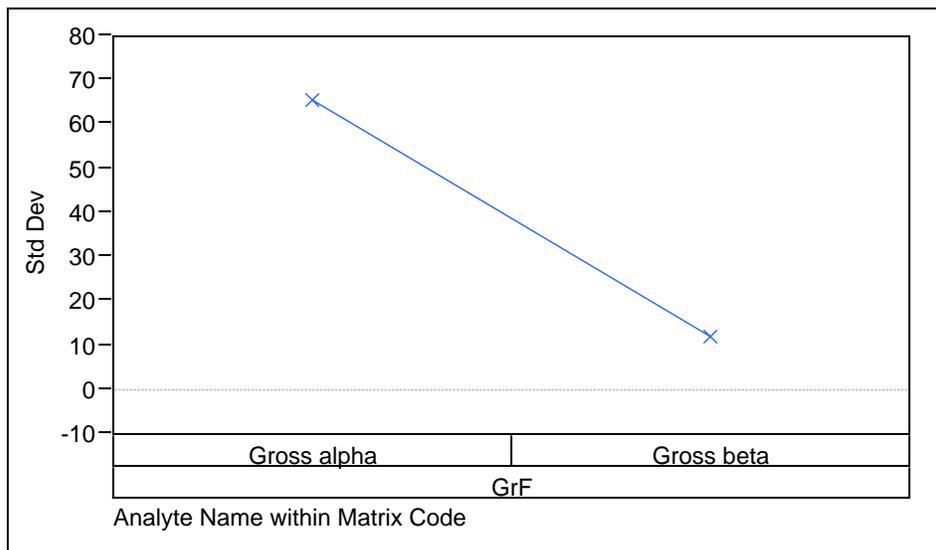
Variability Chart for Bias

Variability Gauge Lab Code=TDHL01

Variability Chart for Bias



Analyte Name within Matrix Code



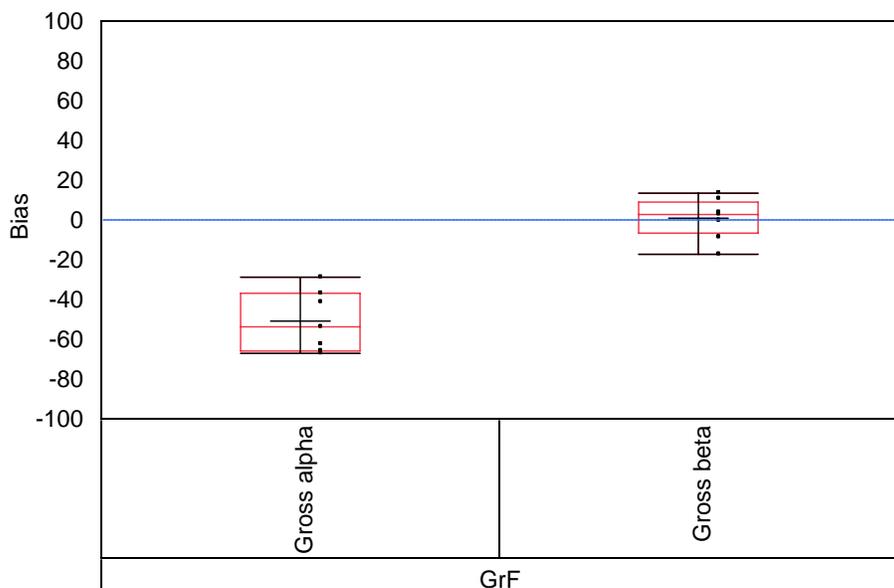
Analyte Name within Matrix Code

Variability Gauge Lab Code=TELE01

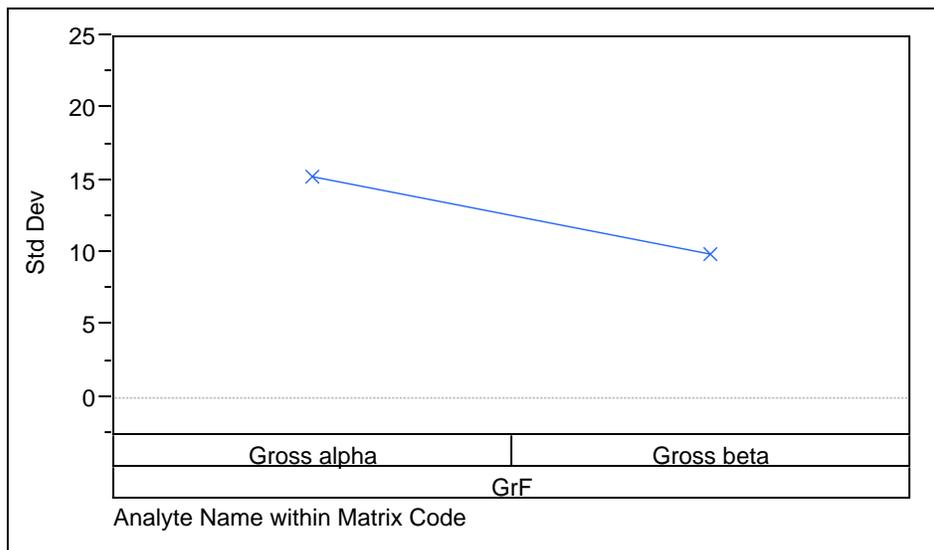
Variability Chart for Bias

Variability Gauge Lab Code=TELE01

Variability Chart for Bias



Analyte Name within Matrix Code



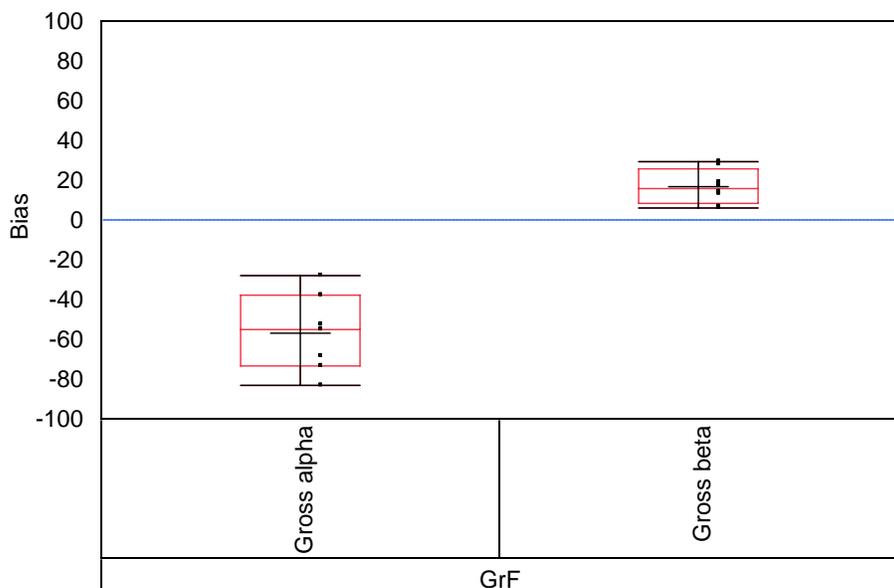
Analyte Name within Matrix Code

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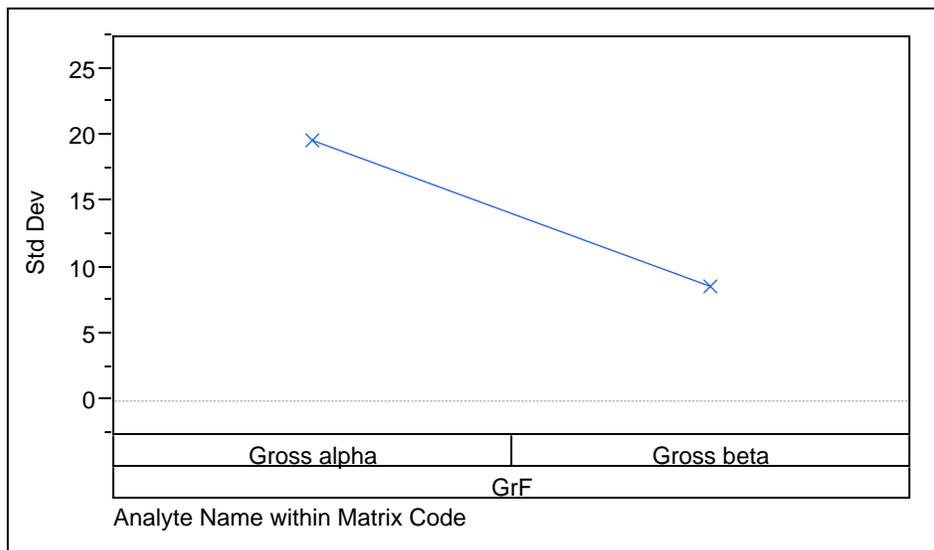
Variability Chart for Bias

Variability Gauge Lab Code=TELE02

Variability Chart for Bias



Analyte Name within Matrix Code



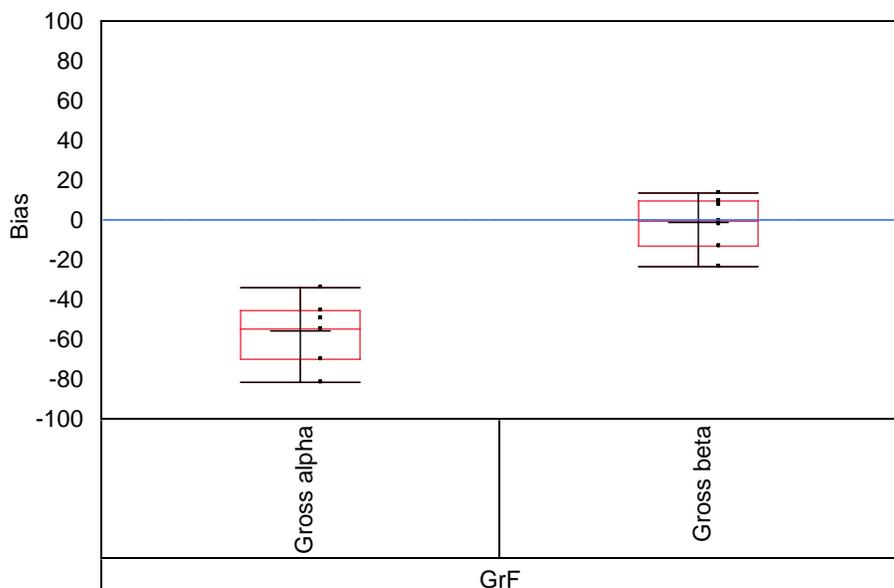
Analyte Name within Matrix Code

Variability Gauge Lab Code=TMAE01

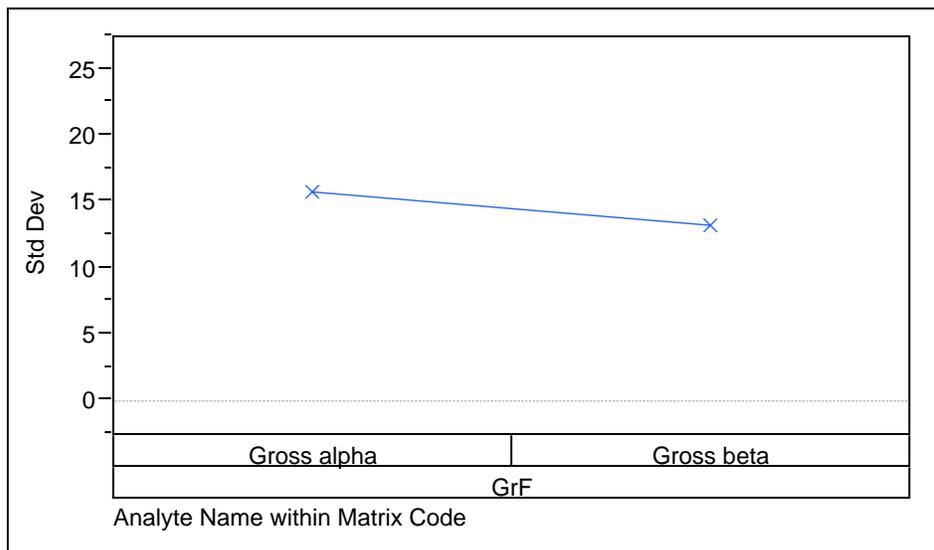
Variability Chart for Bias

Variability Gauge Lab Code=TMAE01

Variability Chart for Bias



Analyte Name within Matrix Code



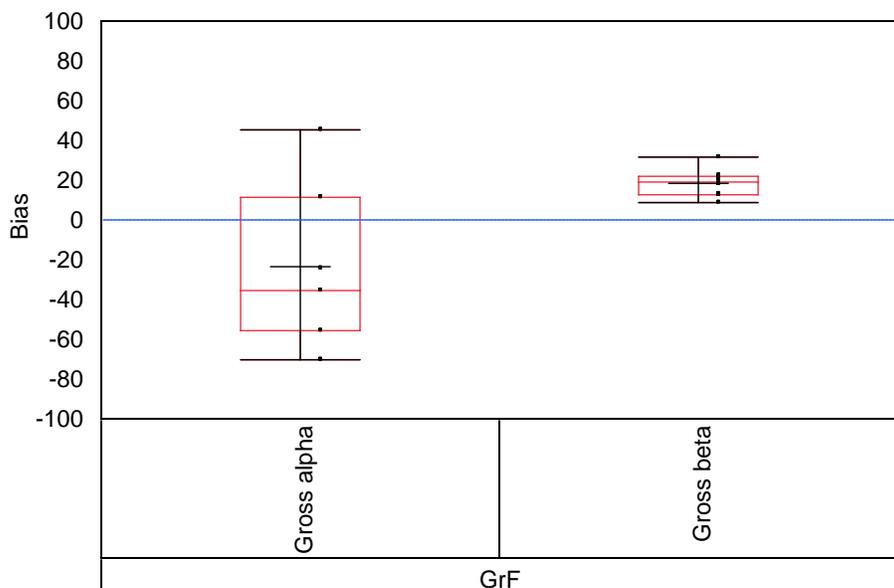
Analyte Name within Matrix Code

Variability Gauge Lab Code=TMAO01

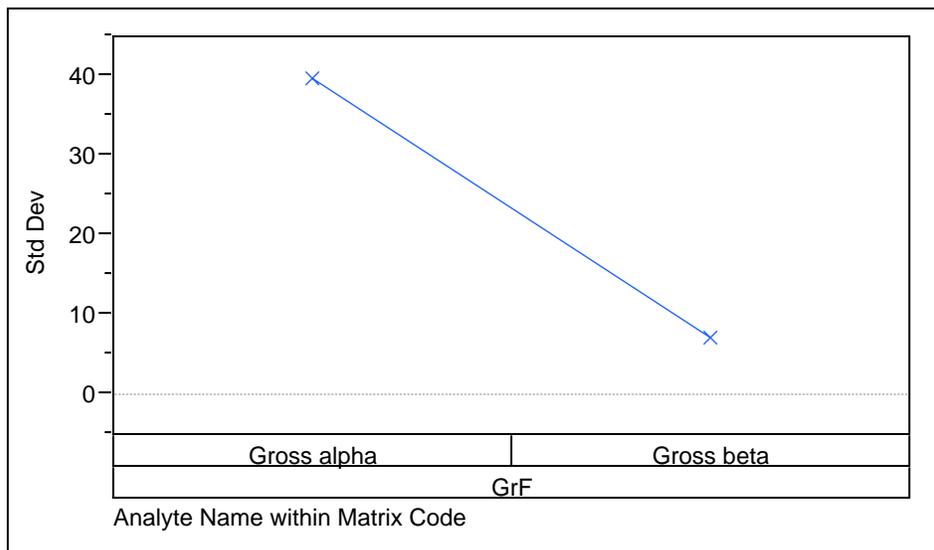
Variability Chart for Bias

Variability Gauge Lab Code=TMAO01

Variability Chart for Bias



Analyte Name within Matrix Code



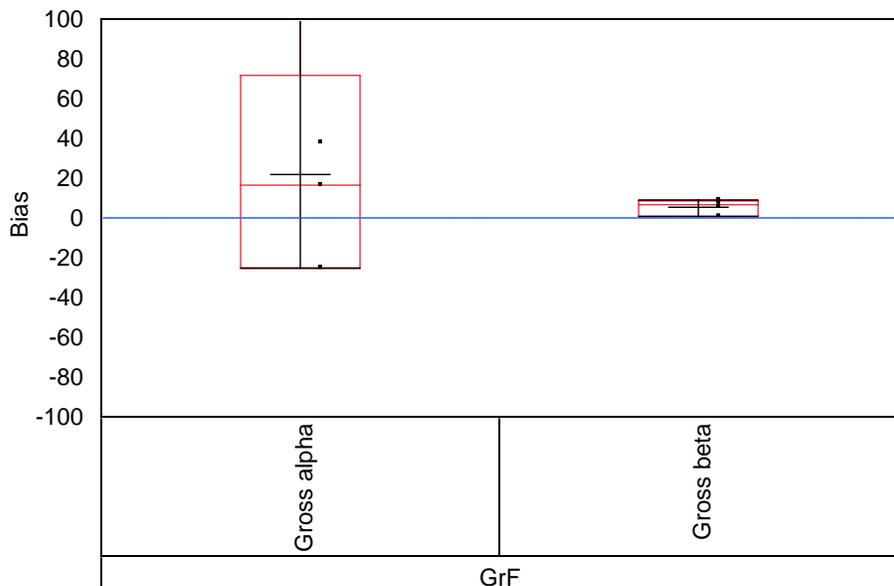
Analyte Name within Matrix Code

Variability Gauge Lab Code=TMAR01

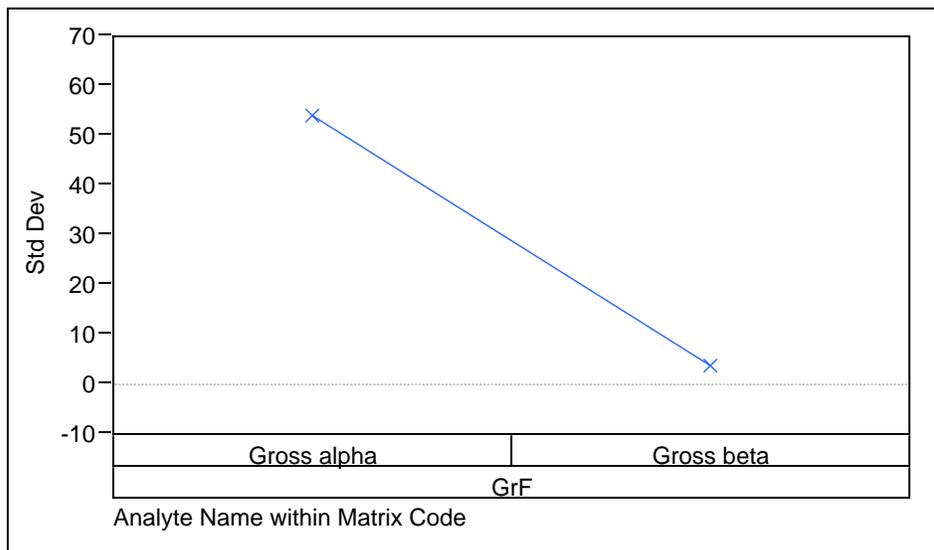
Variability Chart for Bias

Variability Gauge Lab Code=TMAR01

Variability Chart for Bias



Analyte Name within Matrix Code



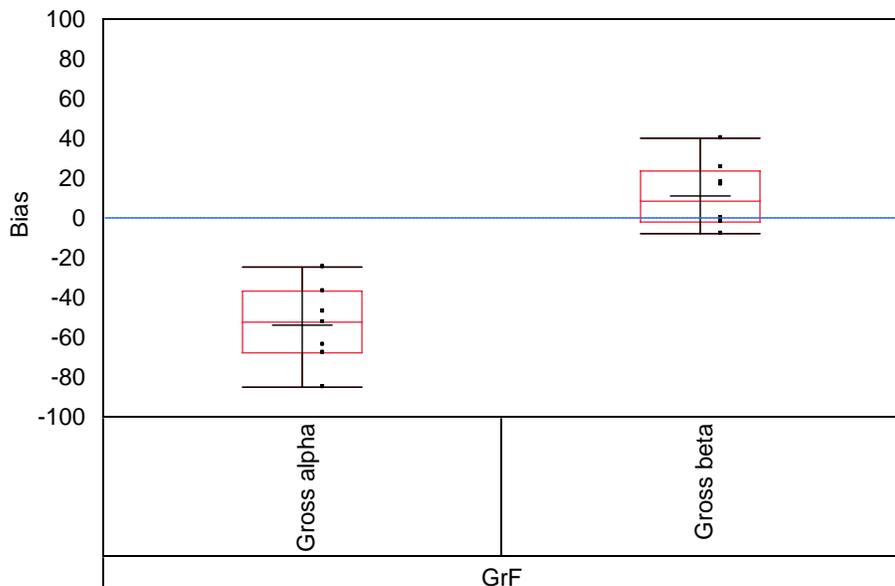
Analyte Name within Matrix Code

Variability Gauge Lab Code=TNUT01

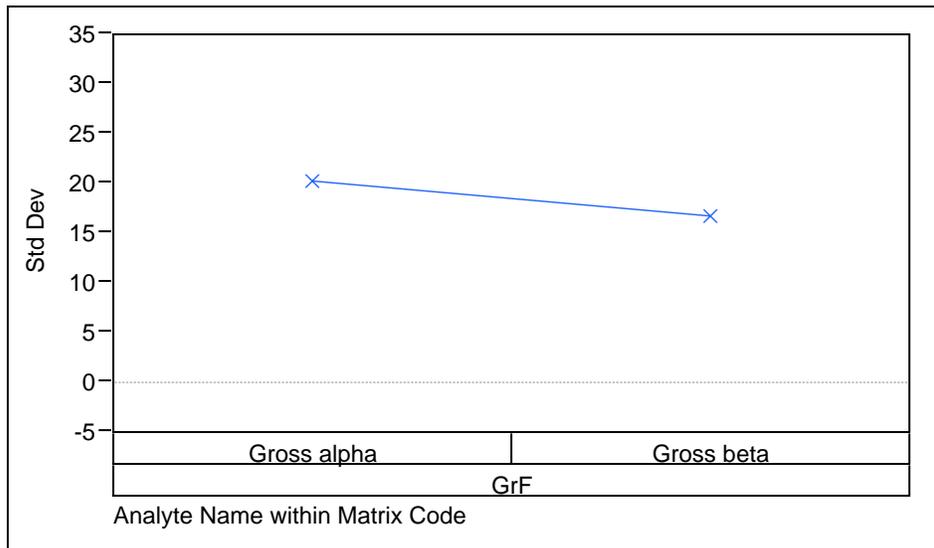
Variability Chart for Bias

Variability Gauge Lab Code=TNUT01

Variability Chart for Bias



Analyte Name within Matrix Code



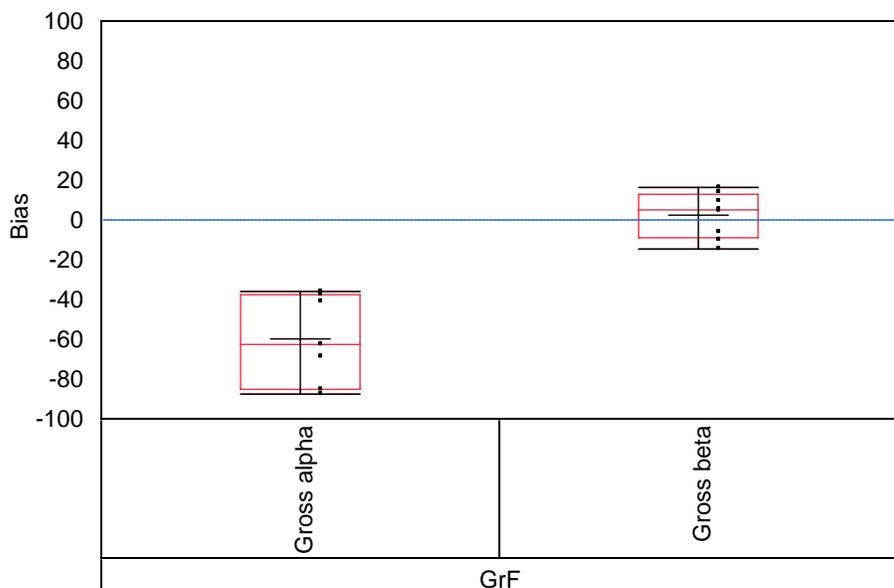
Analyte Name within Matrix Code

Variability Gauge Lab Code=WEST03

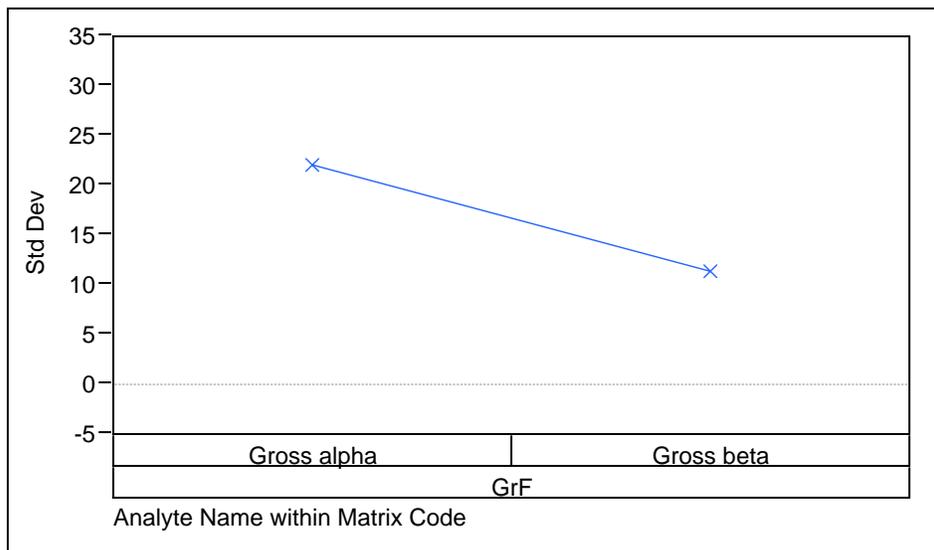
Variability Chart for Bias

Variability Gauge Lab Code=WEST03

Variability Chart for Bias



Analyte Name within Matrix Code



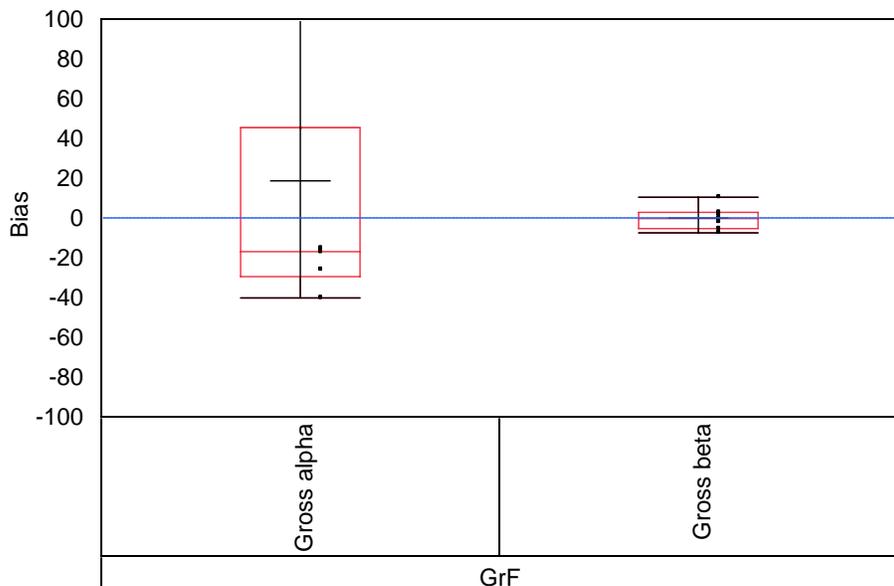
Analyte Name within Matrix Code

Variability Gauge Lab Code=WEST04

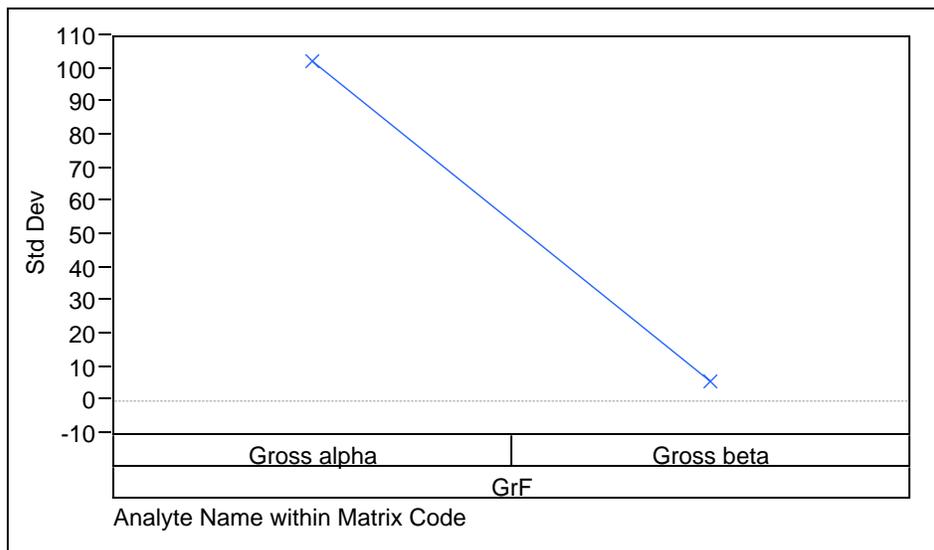
Variability Chart for Bias

Variability Gauge Lab Code=WEST04

Variability Chart for Bias



Analyte Name within Matrix Code



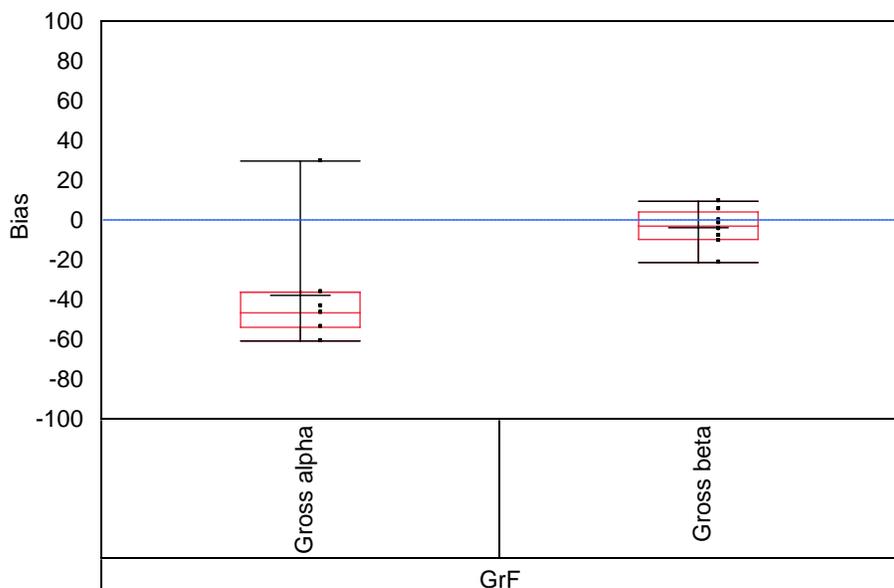
Analyte Name within Matrix Code

Variability Gauge Lab Code=WIPP01

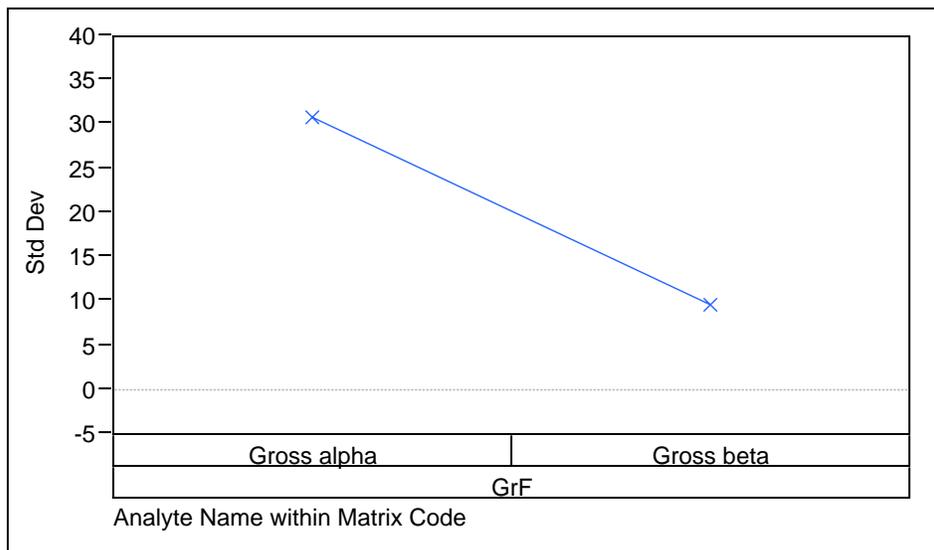
Variability Chart for Bias

Variability Gauge Lab Code=WIPP01

Variability Chart for Bias



Analyte Name within Matrix Code



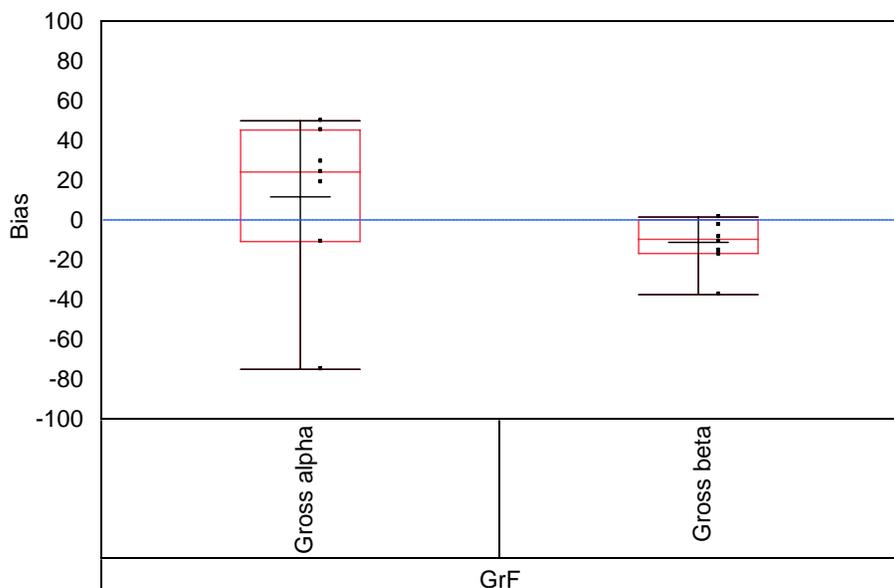
Analyte Name within Matrix Code

Variability Gauge Lab Code=WSHL01

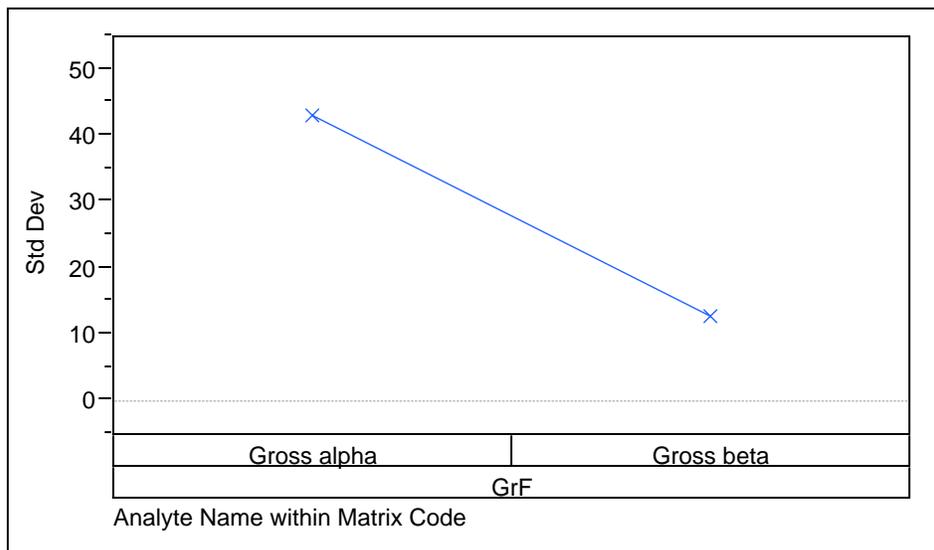
Variability Chart for Bias

Variability Gauge Lab Code=WSHL01

Variability Chart for Bias



Analyte Name within Matrix Code



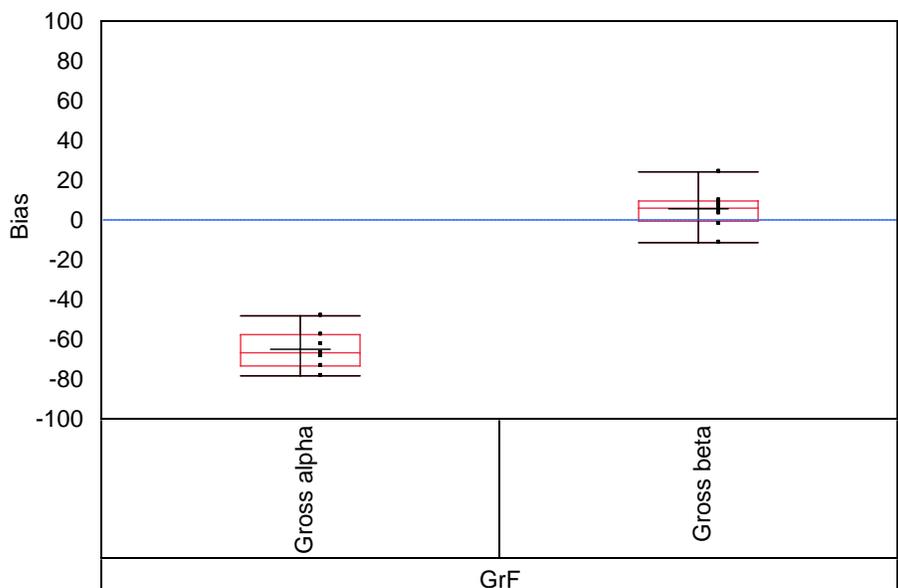
Analyte Name within Matrix Code

Variability Gauge Lab Code=WVDP01

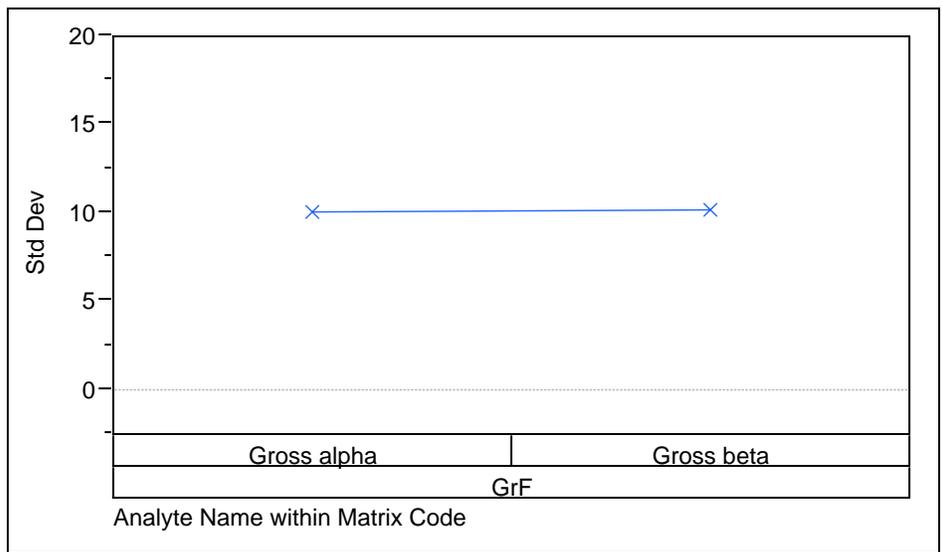
Variability Chart for Bias

Variability Gauge Lab Code=WVDP01

Variability Chart for Bias



Analyte Name within Matrix Code



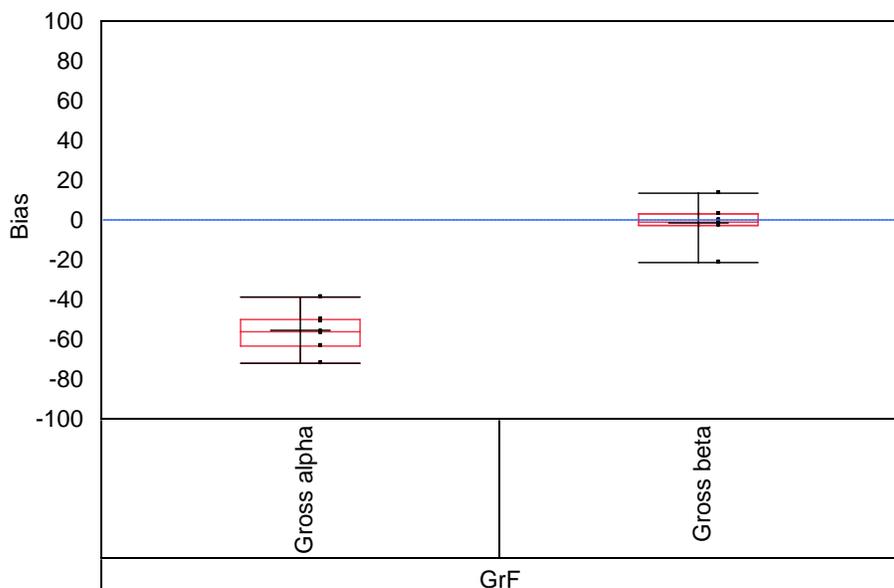
Analyte Name within Matrix Code

Variability Gauge Lab Code=WVPL01

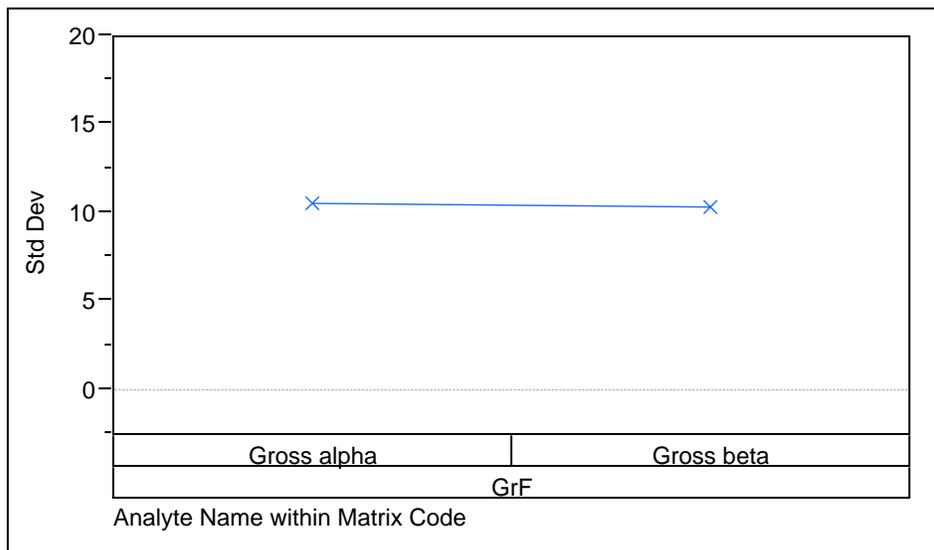
Variability Chart for Bias

Variability Gauge Lab Code=WVPL01

Variability Chart for Bias



Analyte Name within Matrix Code



Analyte Name within Matrix Code