MAPEP-08-GrW19 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	DEHS01	Department of Environmental Health & Safety
12	DLEA01	DLE Associates
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	ERHD99	Radiation Protection Bureau ERHD NMS
18	ERLG01	Environmental Radiation Laboratory
19	ERPD99	Ministry Of Health,Radiation Protection Department Lab
20	FDHE01	Florida Dept of Health Environmental Laboratory
21	FMEC99	Foods and Water Laboratories Center
22	FNAL01	Fermi National Accelerator Laboratory (FermiLab)
23	GENE01	GEL Laboratories, LLC
24	GROW01	FGL Environmental
25	HCAL01	Hazards Control Analytical Lab
26	HECR01	SC Dept. Health and Environmental Control Radiological Laboratory
27	HWRL01	Lawrence Livermore National Laboratory - HWRL
28	ISUP01	ISU - Department of Physics/Health Physics/EAL
29	JAEC99	Radiation Measurements Laboratory
30	KDHE01	Kansas Dept. of Health & Environment
31	LOCK01	ICP Analytical Services Laboratories
32	LOCK03	Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
33	MART01	USEC, Inc.
34	MART02	United States Enrichment Corporation
35	MART03	Radioactive Material Analysis Laboratory
36	MDPH01	MDPH-Radiation Control Program
37	MKME01	MKM Engineers, Inc
38	MSTH99	Radioecology
39	NARL01	National Air and Radiation Environmental Laboratory
40	NESI01	B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory
41	NJDH01	New Jersey Dept. of Health & Senior Services, PHEL, ECLS
42	NRLL99	National Radiation Laboratory

43	NTSI01	Nuclear Technology Services, Inc.
44	OBGL01	Life Science Laboratories, Inc.
45	ODHL01	Ohio Department of Health Laboratory
46	ORIS01	ORISE/ESSAP
47	OTLI01	Outreach Technologies, Inc.
48	QUAN01	TestAmerica St. Louis
49	QUAN03	TestAmerica
50	RMCL99	Royal Scientific Society - Radiation Measurements Lab
51	RPCR01	CH2M Hill RadCon Program Count Room
52	RPSC01	Radiation Protection Service
53	RSAL01	RSA Laboratories, Inc.
54	SCAL01	GPL Laboratories Alabama, LLC
55	SEML01	SRS Environmental Monitoring Laboratory
56	SLDL01	Scientific Laboratory Division
57	SNRC99	Soreq NRC
58	SOUT01	Southwest Research Institute
59	TDHL01	Texas Department of State Health Services Laboratory
60	TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
61	TELE02	Environmental, Inc., Midwest Lab
62	TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY
63	TMAR01	Eberline Services
64	TNUT01	FUSRAP
65	URSL01	UNLV Radioanalytical Services Laboratory
66	USED99	National Center for Energy, Science and Nuclear Tech.
67	WEST03	Waste Sampling and Characterization Facility
68	WEST04	PACE ANALYTICAL SERVICES, PITTSBURGH
69	WSHL01	Wisconsin State Laboratory of Hygiene
70	WVDP01	WVDP Environmental Laboratory
71	WVNS01	West Valley Process Chemistry

19 Laboratories did not report data

MAPEP Mixed Analyte Performance Evaluation Program

Setup and Process Data

MAPEP-08-GrW19

Analyte	Ref. Value	Total Ref.	Uncertainty	F.P.	S.E.
Radiological					
Gross alpha	0.56			✓	
Gross beta	1.85			✓	

MAPEP Mixed Analyte Performance Evaluation Program

Sample Statistical Summary

MAPEP-08-GrW19

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/L)
Gross alpha	52	51			<0.56		False Positive Test
Gross beta	52	51			<1.85		False Positive Test

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

Gross Alpha Criteria:

Acceptable Result: 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).

Gross Beta Criteria:

Acceptable Result: 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).

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable "A". Laboratories reporting values greater than these were found to be Not Acceptable "N".

Flag Summary Report

Generated December 17, 2008

MAPEP-08-GrW19

Radiological				
Analyte	**A**	**W**	**RW**	**N**
alpha	51			1
Gross beta	51			1

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ADEM01) Alabama Department of Environmental Management
Montgomery Laboratory
Montgomery, AL 36110

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.162	<0.56	A				0.001	
Gross beta	0.256	<1.85	A				0.008	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ANTE01) Paragon Analytics a Division of DataChem Laboratories, Inc.
225 Commerce Drive
Fort Collins, CO 80524-1416

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0638	<0.56	A				0.0093	
Gross beta	0.0960	<1.85	A				0.0135	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ARPL01) Analytical Support Operations - Radiochemical Processing Lab
PO Box 999
Richland, WA 99354

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.131	<0.56	A				0.038	
Gross beta	0.112	<1.85	A				0.016	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ARSL01) American Radiation Services Inc.
2609 North River Road
Port Allen, LA 70767

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.053	<0.56	A				0.053	
Gross beta	0.106	<1.85	A				0.037	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.108	<0.56	A				0.206	
Gross beta	0.121	<1.85	A				0.255	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(CESL01) Lawrence Livermore National Laboratory - EMRL
7000 East Avenue
Livermore, CA 94551

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.32E-02	<0.56	A				1.10E-	
Gross beta	1.54E-01	<1.85	A				3.50E-	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(CHMH01) 222-S Laboratory
P.O. Box 250, MS T6-10
Richland, WA 99354

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	NR	<0.56						
Gross beta	NR	<1.85						

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(DEHS01) Department of Environmental Health & Safety
North Carolina State Univ.
Raleigh, NC 27695-8007

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.09	<0.56	A				0.09	
Gross beta	0.136	<1.85	A				0.092	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(DLEA01) DLE Associates
730 Alfred Nobel Drive
Hercules, CA 94547

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	0.16	<1.85	A				0.08	
Gross alpha	0.22	<0.56	A				0.10	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ENES01) Energy Northwest Environmental Services
350 Hills St., Suite 107
Richland, WA 99354

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.082	<0.56	A				0.025	
Gross beta	0.049	<1.85	A				0.017	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ERCL01) Washington State Public Health Laboratories
1610 N.E. 150 th Srteet
Shoreline, WA 98155-9701

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.119	<0.56	A				0.020	
Gross beta	0.080	<1.85	A				0.020	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ERHD99) Radiation Protection Bureau ERHD NMS
775 Brookfield Road AL6302D1
Ottawa, Ontario K1A 1C1

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.24	<0.56	A				0.064	
Gross beta	0.318	<1.85	A				0.084	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.1	<0.56	A				.02	
Gross beta	.1	<1.85	A				.02	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0054	<0.56	A				0.0005	
Gross beta	0.293	<1.85	A				0.030	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(FDHE01) Florida Dept of Health Environmental Laboratory
PO Box 680069
Orlando, FL 32868-0069

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.20	<0.56	A				0.11	
Gross beta	0.14	<1.85	A				0.05	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(FMEC99) Foods and Water Laboratories Center
Ministry of Regional Municpalities and Water Resources
Muscat, Sultanate of Oman 111

Radiological — Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	NR	<0.56						
Gross beta	NR	<1.85						

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(GENE01) GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.158	<0.56	A				0.043	
Gross beta	0.260	<1.85	A				0.041	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(HCAL01) Hazards Control Analytical Lab
Lawrence Livermore National
Livermore, CA 94551

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.10	<0.56	A				0.02	
Gross beta	0.13	<1.85	A				.02	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(HECR01) SC Dept. Health and Environmental Control Radiological Laboratory
2600 Bull St.
Columbia, SC 29201

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.182	<0.56	A				0.158	
Gross beta	0.0549	<1.85	A				0.0599	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.06	<0.56	A				0.02	
Gross beta	0.18	<1.85	A				0.04	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19

(KDHE01) Kansas Dept. of Health & Environment
Forbes Bldg. 740
Topeka, KS 66620

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0842	<0.56	A				0.0126	
Gross beta	0.2162	<1.85	A				0.0324	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(LOCK01) ICP Analytical Services Laboratories
CH2M-WG Idaho, LLC
Idaho Falls, ID 83415-5210

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.023	<0.56	A				0.052	
Gross beta	0.187	<1.85	A				0.087	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.066	<0.56	A				0.049	
Gross beta	0.18	<1.85	A				0.11	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(MART01) USEC, Inc.
Lab COC, Bldg. X-710, Rm 222
Piketon, OH 45661-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.15022	<0.56	A				0.0566	
Gross beta	0.15614	<1.85	A				0.0651	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19

(MART02) United States Enrichment Corporation
PO Box 1410
Paducah, KY 42002

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.13	<0.56	A				0.05	
Gross beta	0.02	<1.85	A				0.05	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(MART03) Radioactive Material Analysis Laboratory
ORNL
Oak Ridge, TN 37831-6223

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.042	<0.56	A				0.048	
Gross beta	0.12	<1.85	A				0.07	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(MKME01) MKM Engineers, Inc
5025 Arnold Ave
McClellan, CA 95652

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	11.16	<0.56	N	(1)			.61	
Gross beta	23.75	<1.85	N	(1)			.58	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.04	<0.56	A				0.16	
Gross beta	0.166	<1.85	A				0.076	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.090	<0.56	A				0.017	
Gross beta	0.14	<1.85	A				0.009	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.146	<0.56	A				0.017	
Gross beta	0.152	<1.85	A				0.018	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(NRLL99) National Radiation Laboratory
108 Victoria St
Christchurch, Christchurch 8144

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0336	<0.56	A				0.0086	
Gross beta	0.368	<1.85	A				0.038	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(OBGL01) Life Science Laboratories, Inc.
5000 Brittonfield Pkwy, Ste. 200
East Syracuse, NY 13057

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.1569	<0.56	A				0.0909	
Gross beta	0.1204	<1.85	A				0.0545	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(ODHL01) Ohio Department of Health Laboratory
8995 E Main Street
Reynoldsburg, OH 43068

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.11	<0.56	A				0.08	
Gross beta	0.14	<1.85	A				0.11	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.15	<0.56	A				0.03	
Gross beta	0.19	<1.85	A				0.03	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(OTLI01) Outreach Technologies, Inc.
311 N. Aspen
Broken Arrow, OK 74012-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	.107	<1.85	A				.080	
Gross alpha	0.067	<0.56	A				0.032	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19
(QUAN01) TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0587	<0.56	A				0.011	
Gross beta	0.141	<1.85	A				0.0131	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(QUAN03) TestAmerica
2800 GEORGE WASHINGTON WAY
RICHLAND, WA 99354-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.063	<0.56	A				0.014	
Gross beta	0.195	<1.85	A				0.037	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(RPCR01) WRPS RadCon Program Count Room
2440 Steven Drive
Richland, WA 99352

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	NR	<0.56						
Gross beta	NR	<1.85						

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(RPSC01) Radiation Protection Service
Ontario Ministry of Labour
Weston, Ontario M9P 3T1

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.06	<0.56	A				.01	
Gross beta	0.09	<1.85	A				.01	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(SCAL01) GPL Laboratories Alabama, LLC
1000 Monticello Court
Montgomery, AL 36117-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.115	<0.56	A				0.052	
Gross beta	0.070	<1.85	A				0.019	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

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

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.088	<0.56	A				0.074	
Gross beta	0.908	<1.85	A				0.145	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19
(SNRC99) Soreq NRC
Radioactivity Measurement Section
Yavne, Israel 81800

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.13	<0.56	A				0.03	
Gross beta	0.25	<1.85	A				0.05	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(SOUT01) Southwest Research Institute
6220 Culebra Rd.
San Antonio, TX 78228-0510

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.103	<0.56	A				0.036	
Gross beta	0.148	<1.85	A				0.042	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(TDHL01) Texas Department of State Health Services Laboratory
1100 W 49th Street
Austin, TX 78756

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.089	<0.56	A				.033	
Gross beta	.118	<1.85	A				.056	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

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

Laboratory Results For MAPEP-08-GrW19

(TELE01) TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
2508 Quality Lane
Knoxville, TN 37931-6819

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0612	<0.56	A				0.124	
Gross beta	0.222	<1.85	A				0.103	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(TELE02) Environmental, Inc., Midwest Lab
700 Landwehr Road
Northbrook, IL 60062-

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.08	<0.56	A				0.04	
Gross beta	0.12	<1.85	A				0.05	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(TMAO01) EBERLINE SERVICES OAK RIDGE LABORATORY
601 SCARBORO RD
OAK RIDGE, TN 37830-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross beta	0.085	<1.85	A				0.111	
Gross alpha	0.096	<0.56	A				0.089	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(TMAR01) Eberline Services
2030 Wright Ave
Richmond, CA 94804-3849

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.10	<0.56	A				0.08	
Gross beta	0.08	<1.85	A				0.08	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(TNUT01) FUSRAP
8945 LATTY AVE
BERKELEY, MO 63134-

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0168	<0.56	A				0.0494	
Gross beta	0.0899	<1.85	A				0.0705	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

Mixed Analyte Performance Evaluation Program
Department of Energy RESL - 1955 Fremont Ave, MS4149 - Idaho Falls, ID 83415

Laboratory Results For MAPEP-08-GrW19
(USED99) National Center for Energy, Science and Nuclear Tech.
CNESTEN BP 1382
RP 10001

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0293	<0.56	A				0.0672	
Gross beta	0.0419	<1.85	A				0.2045	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(WEST03) Waste Sampling and Characterization Facility
PO Box 1000, S3-30
Richland, WA 99352

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.058	<0.56	A				0.03	
Gross beta	0.041	<1.85	A				0.041	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(WEST04) PACE ANALYTICAL SERVICES, PITTSBURGH
1638 Roseytown Road
Greensburg, PA 15601

Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.082	<0.56	A				0.056	
Gross beta	0.073	<1.85	A				0.036	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(WSHL01) Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive
Madison, WI 53718

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.13	<0.56	A				0.09	
Gross beta	0.14	<1.85	A				0.09	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19

(WVDP01) WVDP Environmental Laboratory
10282 Rock Springs Road
West Valley, NY 14171

Radiological

Units: (Bq/L)

Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.0796	<0.56	A				0.0233	
Gross beta	0.116	<1.85	A				0.0310	

Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

Notes:

(1) = False Positive

MAPEP Mixed Analyte Performance Evaluation Program

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

Laboratory Results For MAPEP-08-GrW19
(WVNS01) West Valley Process Chemistry
10282 Rock Springs Road
West Valley, NY 14171-9799

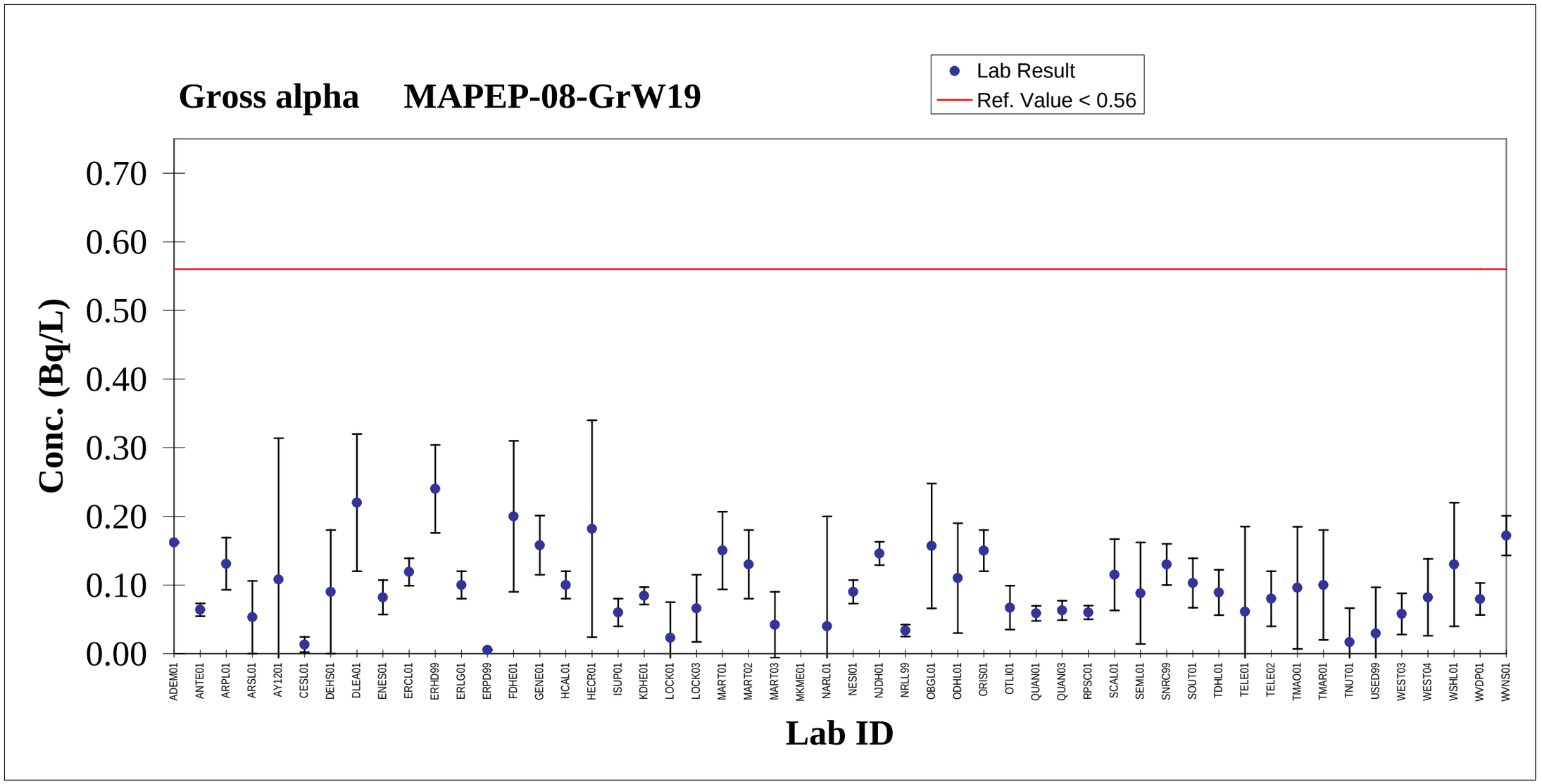
Radiological								Units: (Bq/L)
Analyte	Result	Ref Value	Flag	Notes	Bias	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.172	<0.56	A				0.0289	
Gross beta	0.151	<1.85	A				0.0249	

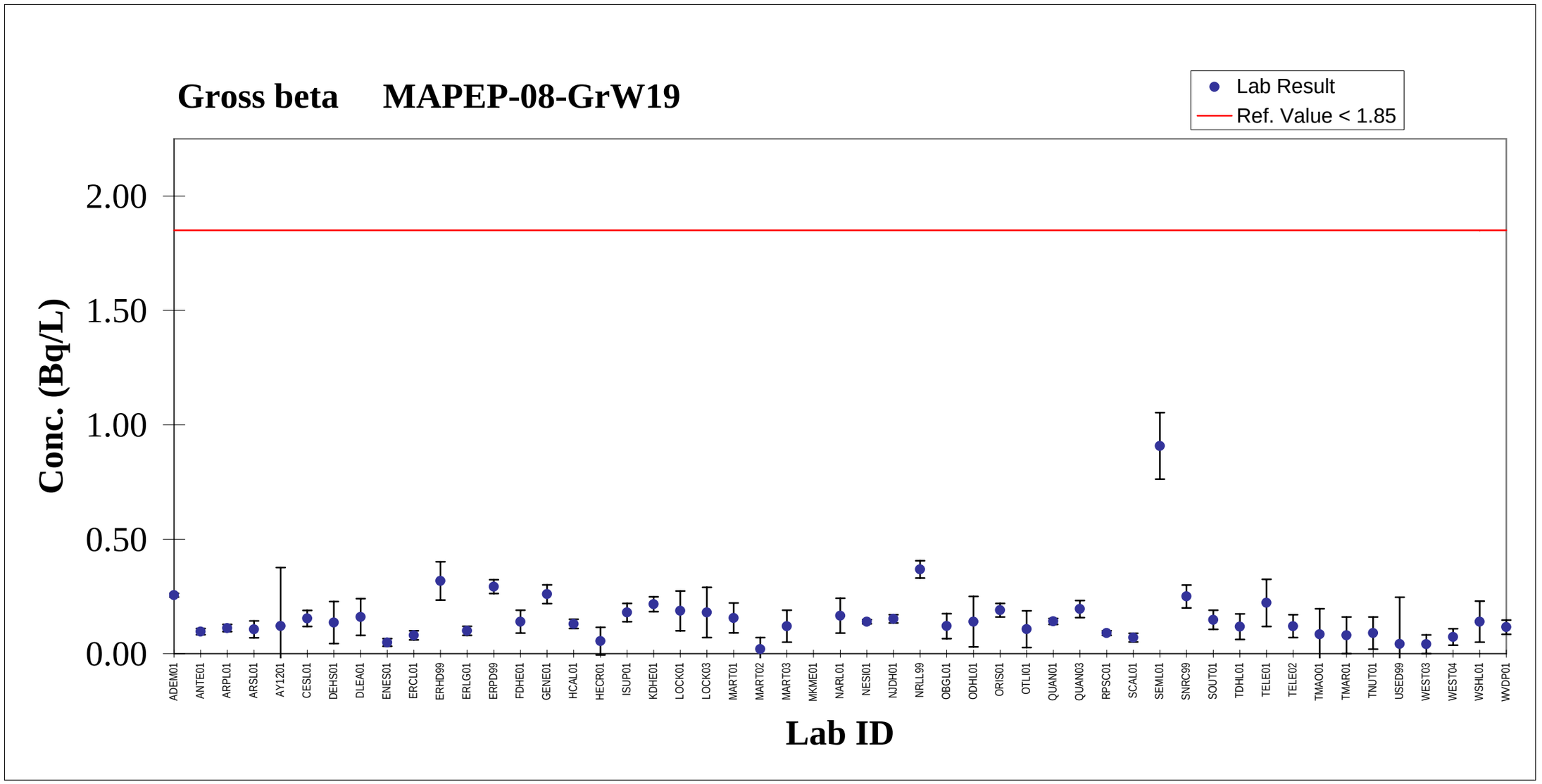
Radiological Reference Date: August 1, 2008

The MAPEP-08-GrW19 water standard was designed to test the Safe Drinking Water screening levels of 0.56 Bq/L (15 pCi/L) for gross alpha and 1.85 Bq/L (50 pCi/L) found in 40CFR141. Laboratories reporting values less than or equal to these screening levels were found to be Acceptable (A). Laboratories reporting values greater than these were found to be Not Acceptable (N).

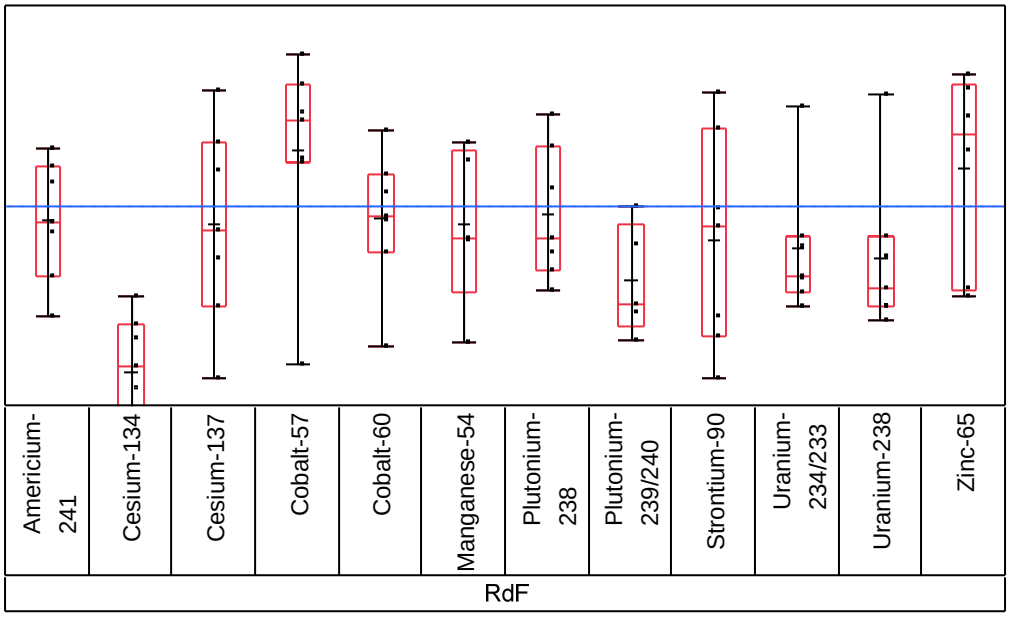
Notes:

(1) = False Positive


Gross alpha MAPEP-08-GrW19
Lab Result
Ref. Value < 0.56
Conc. (Bq/L)
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
ADEM01
ANTE01
ARPL01
ARSL01
AY1201
CESL01
DEHS01
DLEA01
ENES01
ERCL01
ERHD99
ERLG01
ERPD99
FDHE01
GENE01
HCAL01
HECR01
ISUP01
KDHE01
LOCK01
LOCK03
MART01
MART02
MART03
MKME01
NARL01
NESI01
NJDH01
NRLL99
OBGL01
ODHL01
ORIS01
OTLI01
QUAN01
QUAN03
RPSC01
SCAL01
SEML01
SNRC99
SOUT01
TDHL01
TELE01
TELE02
TMAO01
TMAR01
TNUT01
USED99
WEST03
WEST04
WSHL01
WVDP01
WVNS01
Lab ID


Gross beta MAPEP-08-GrW19
Lab Result
Ref. Value < 1.85
Conc. (Bq/L)
2.00
1.50
1.00
0.50
0.00
ADEM01
ANTE01
ARPL01
ARSL01
AY1201
CESL01
DEHS01
DLEA01
ENES01
ERCL01
ERHD99
ERLG01
ERPD99
FDHE01
GENE01
HCAL01
HECR01
ISUP01
KDHE01
LOCK01
LOCK03
MART01
MART02
MART03
MKME01
NARL01
NESI01
NJDH01
NRLL99
OBGL01
ODHL01
ORIS01
OTLI01
QUAN01
QUAN03
RPSC01
SCAL01
SEML01
SNRC99
SOUT01
TDHL01
TELE01
TELE02
TMAO01
TMAR01
TNUT01
USED99
WEST03
WEST04
WSHL01
WVDP01
Lab ID

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.



Analyte Name within Matrix Code

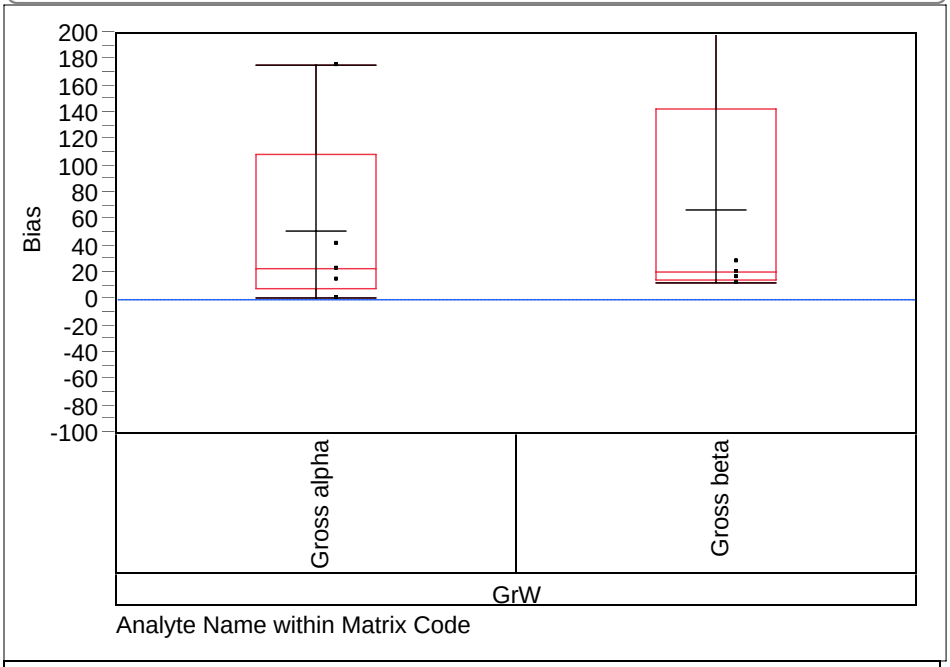
The box plots summarize the distribution of points for each analyte. The ends of the box are the 25th and 75th quantiles. The difference between the quartiles is the interquartile range. The line across the middle of the box identifies the median sample value. Each box has lines, sometimes called whiskers,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

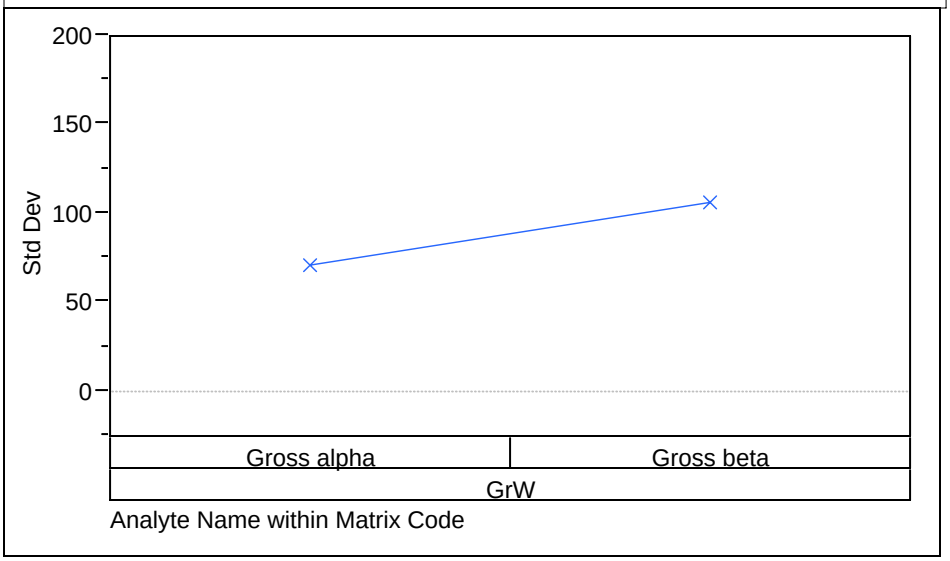
The box plot along with the laboratory bias data points and the mean visually illustrate the breadth of the distribution and where any potential outliers in the distribution might lie. The ideal visual representation would be to have a very small box plot on top of a very small distribution of data thus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

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

Variability Gauge Lab Code=ADEM01

Variability Chart for Bias



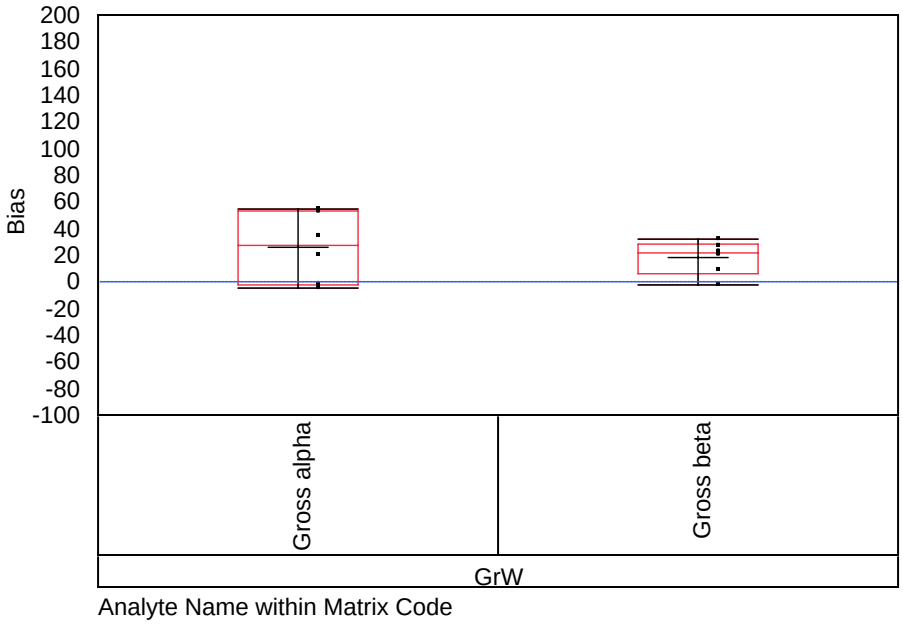


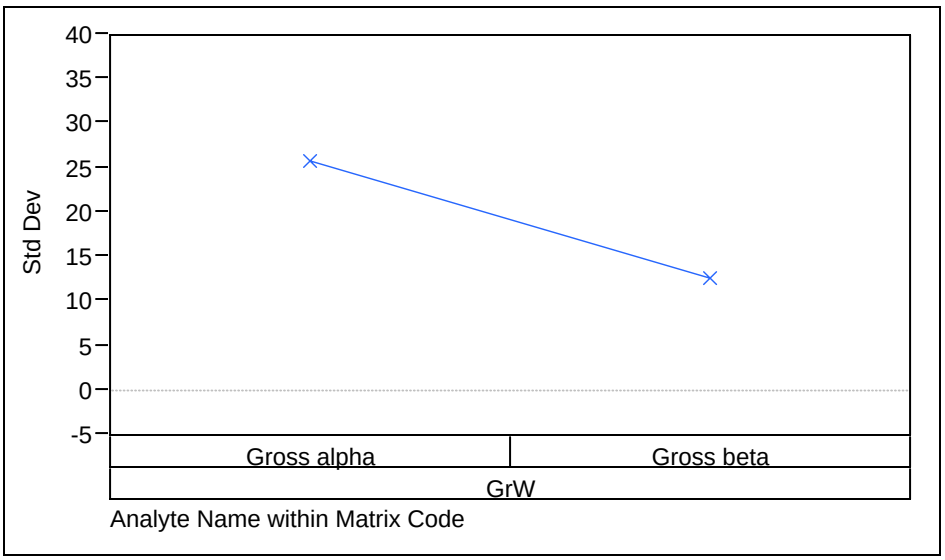
Variability Gauge Lab Code=AFOH01

Variability Chart for Bias

Variability Gauge Lab Code=AFOH01

Variability Chart for Bias



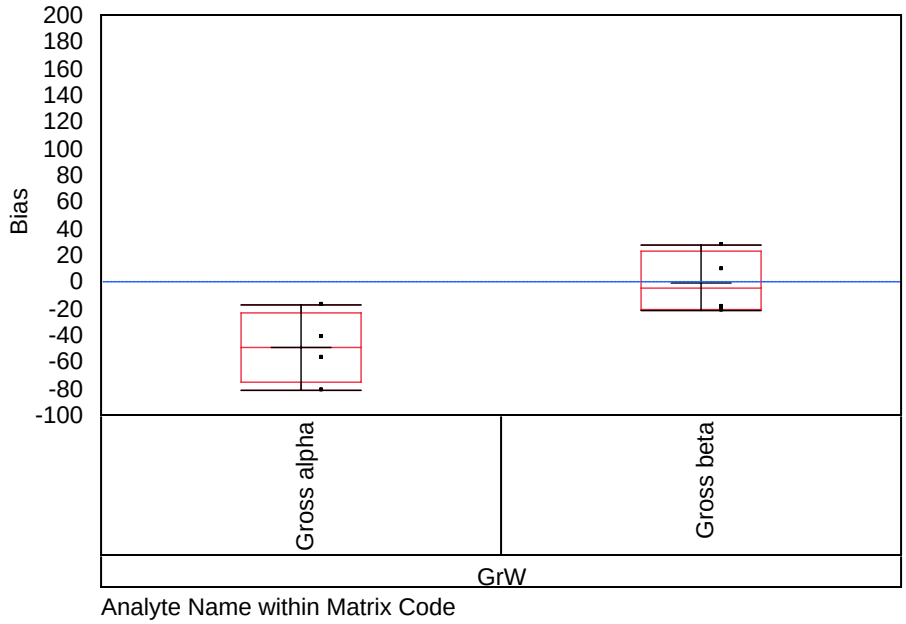


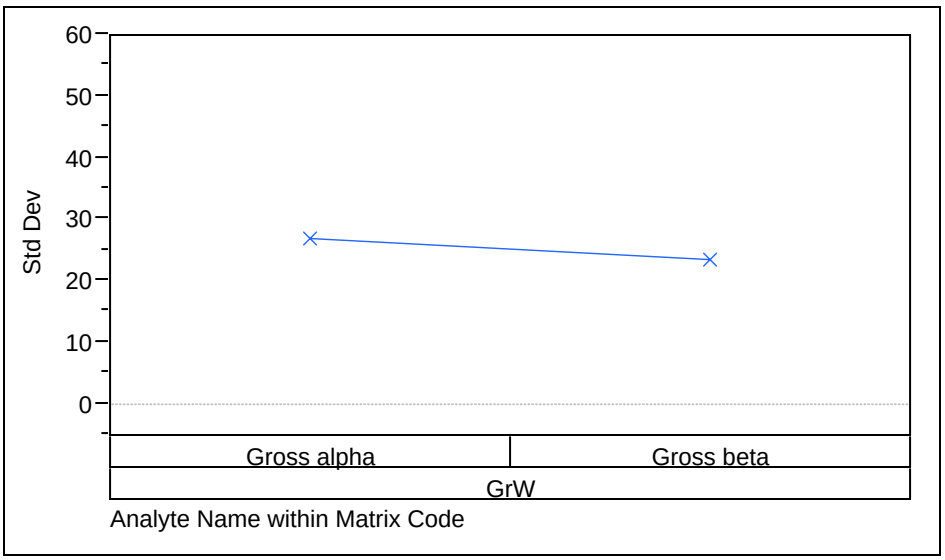
Variability Gauge Lab Code=ANLA01

Variability Chart for Bias

Variability Gauge Lab Code=ANLA01

Variability Chart for Bias



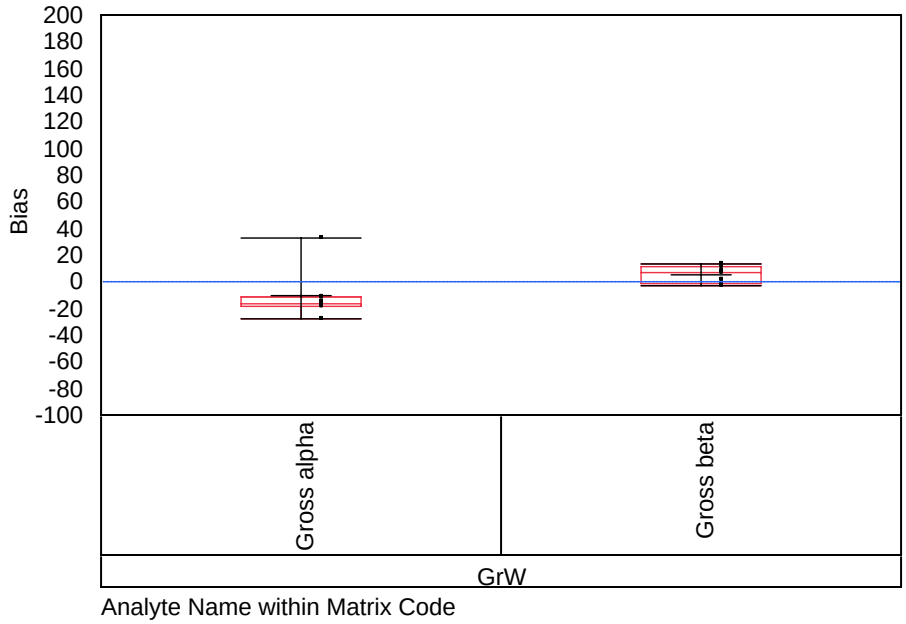


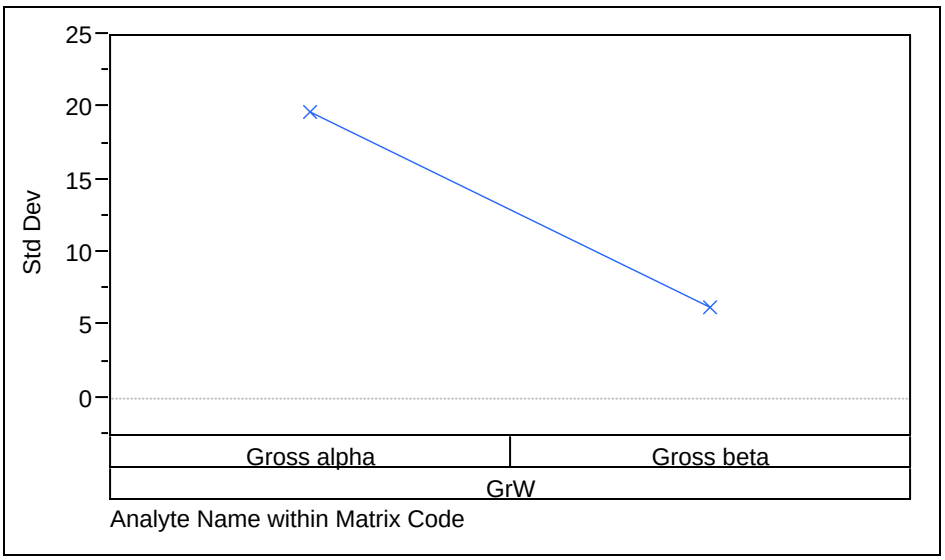
Variability Gauge Lab Code=ANTE01

Variability Chart for Bias

Variability Gauge Lab Code=ANTE01

Variability Chart for Bias



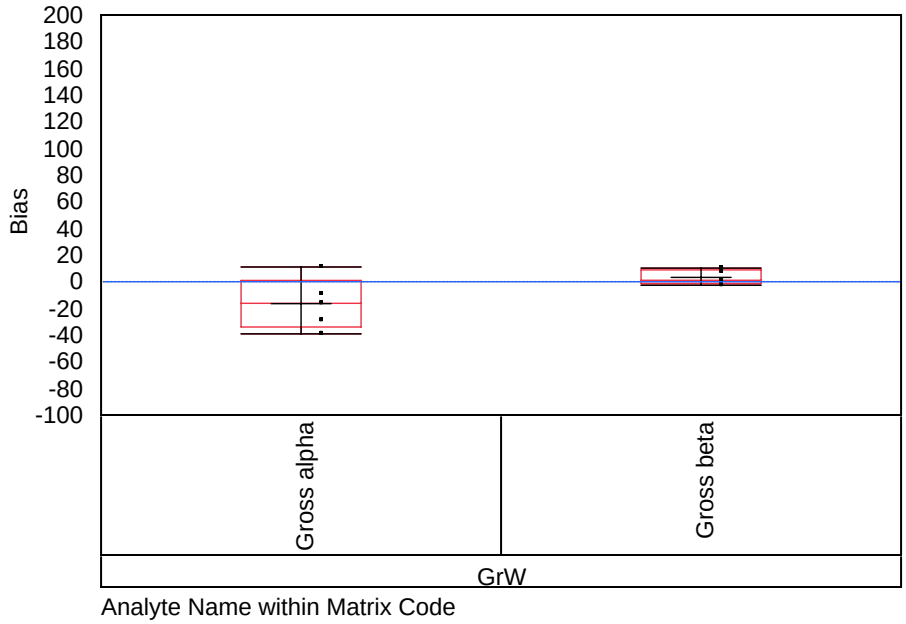


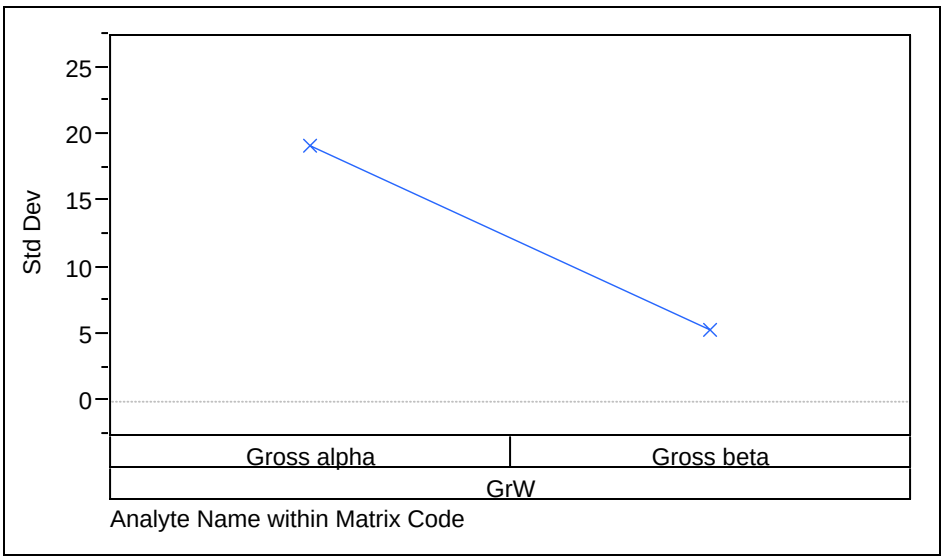
Variability Gauge Lab Code=ARPL01

Variability Chart for Bias

Variability Gauge Lab Code=ARPL01

Variability Chart for Bias



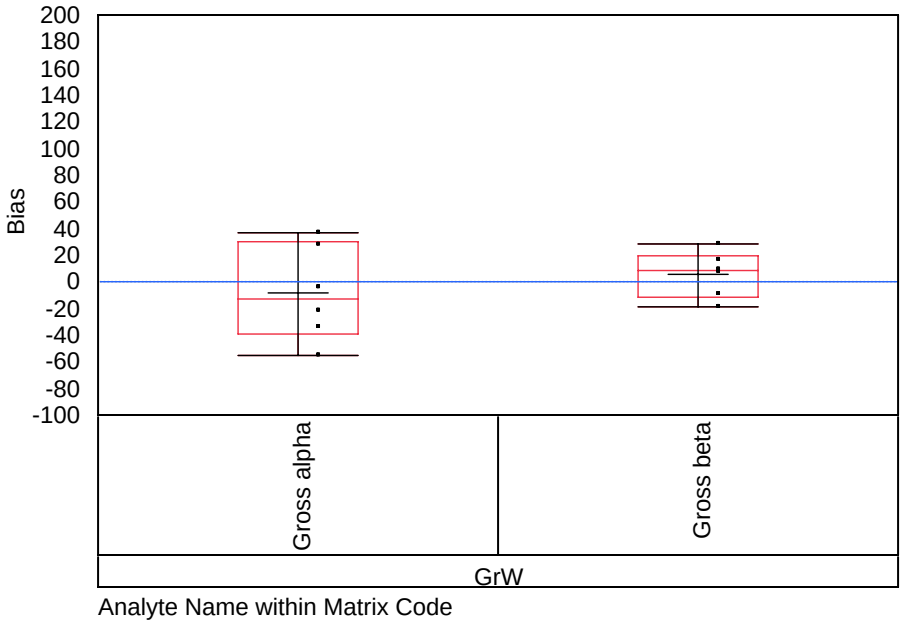


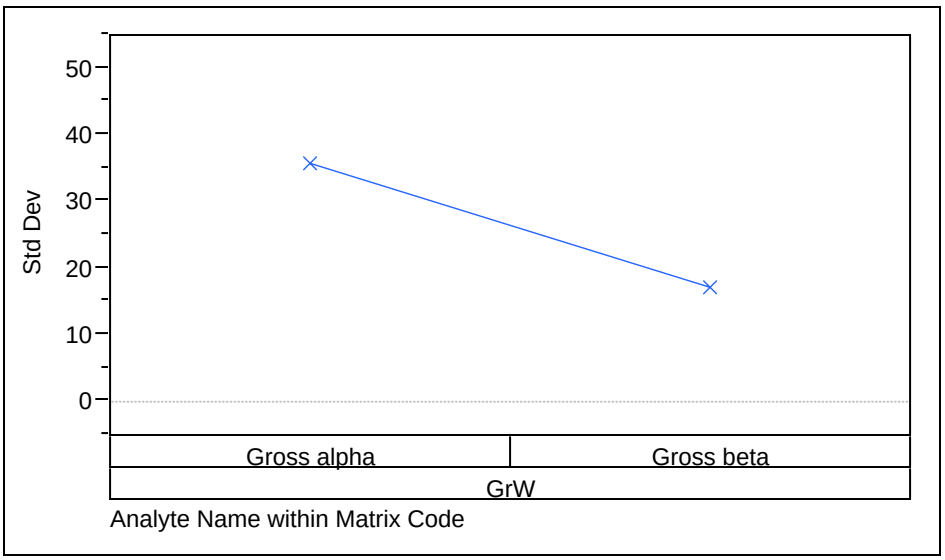
Variability Gauge Lab Code=ARSL01

Variability Chart for Bias

Variability Gauge Lab Code=ARSL01

Variability Chart for Bias



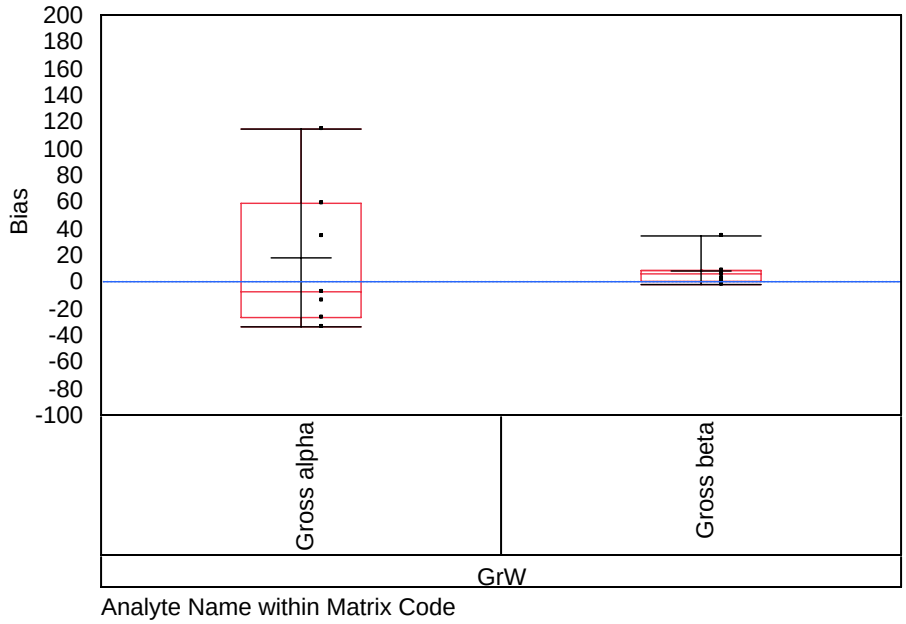


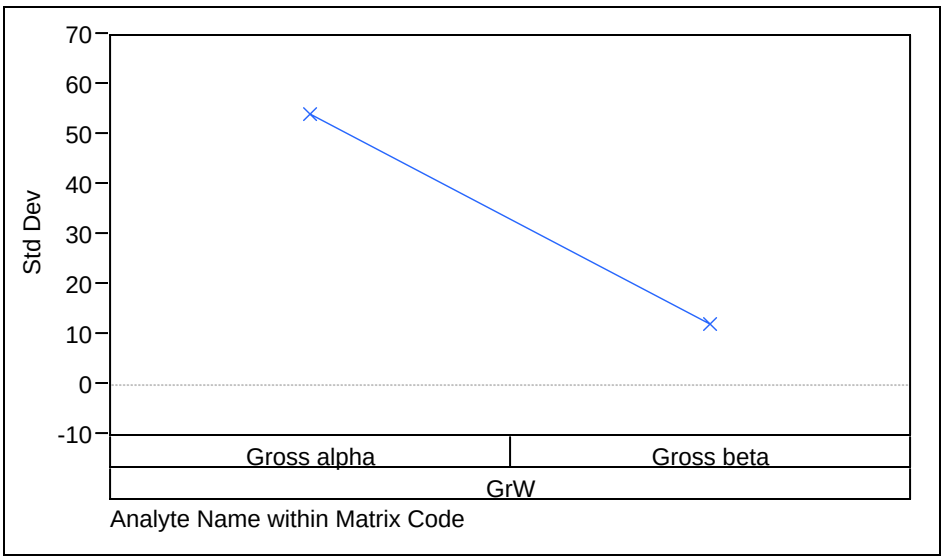
Variability Gauge Lab Code=ATLI01

Variability Chart for Bias

Variability Gauge Lab Code=ATLI01

Variability Chart for Bias



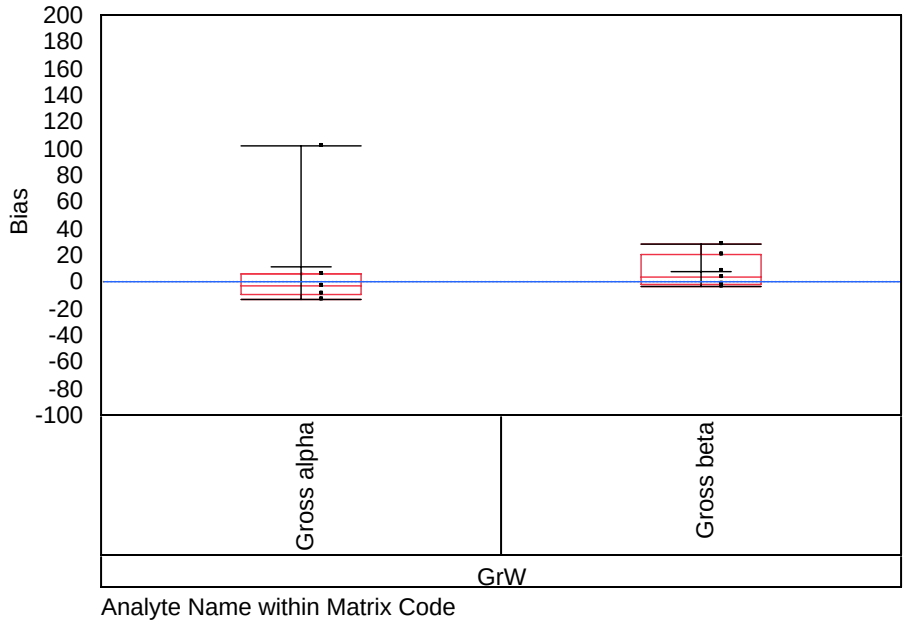


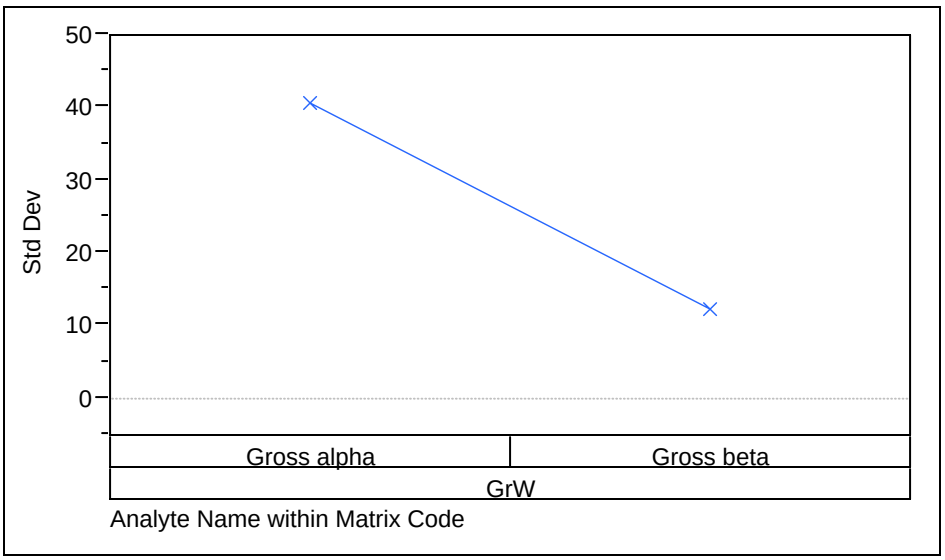
Variability Gauge Lab Code=AY1201

Variability Chart for Bias

Variability Gauge Lab Code=AY1201

Variability Chart for Bias



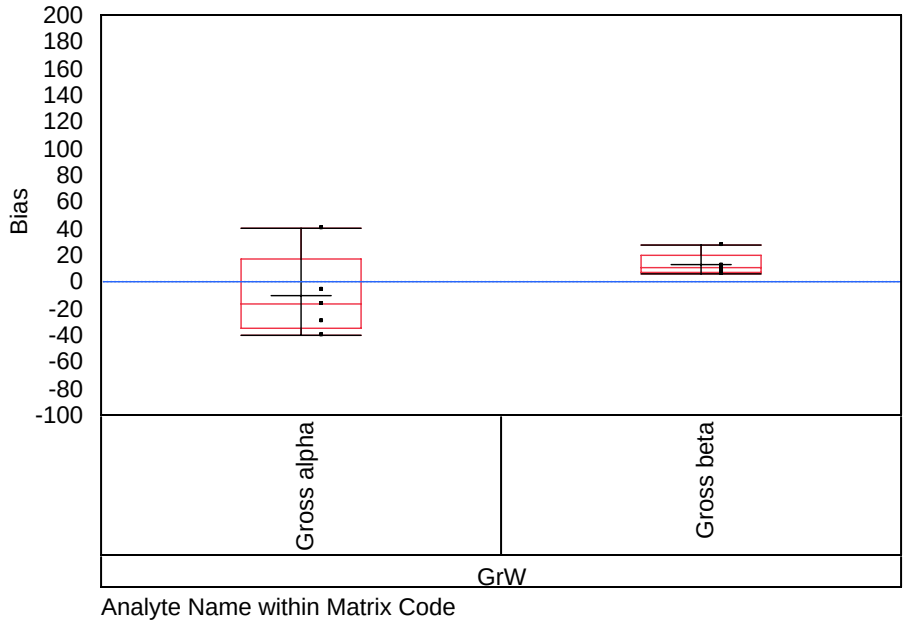


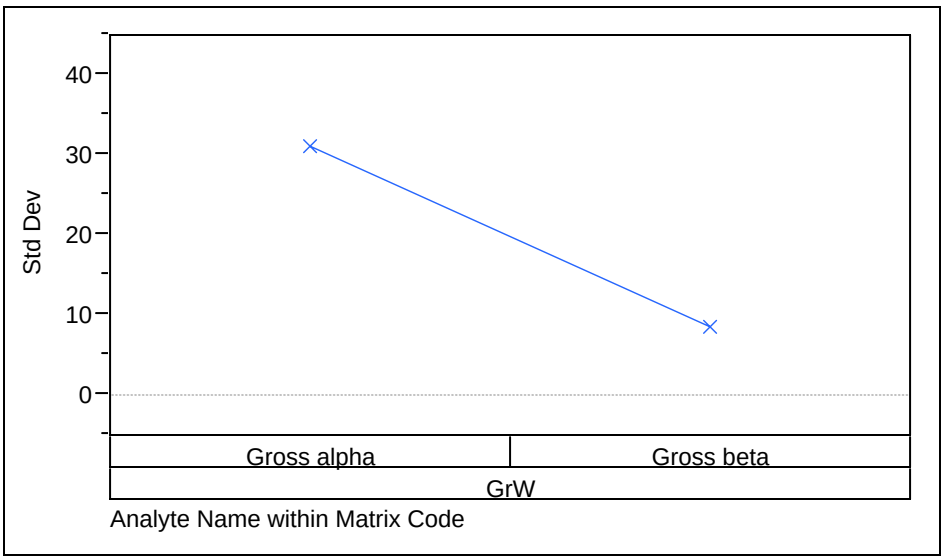
Variability Gauge Lab Code=CDHS01

Variability Chart for Bias

Variability Gauge Lab Code=CDHS01

Variability Chart for Bias



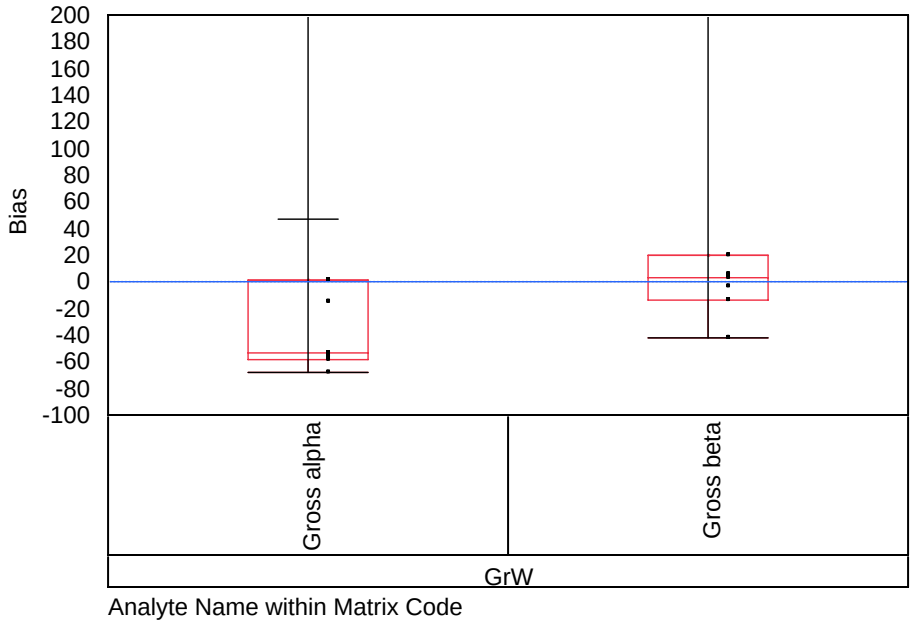


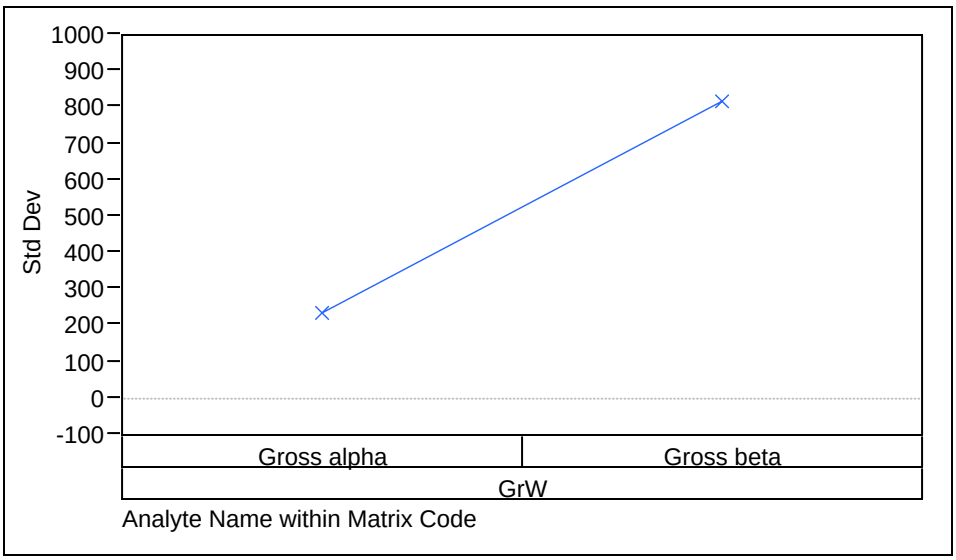
Variability Gauge Lab Code=CESL01

Variability Chart for Bias

Variability Gauge Lab Code=CESL01

Variability Chart for Bias



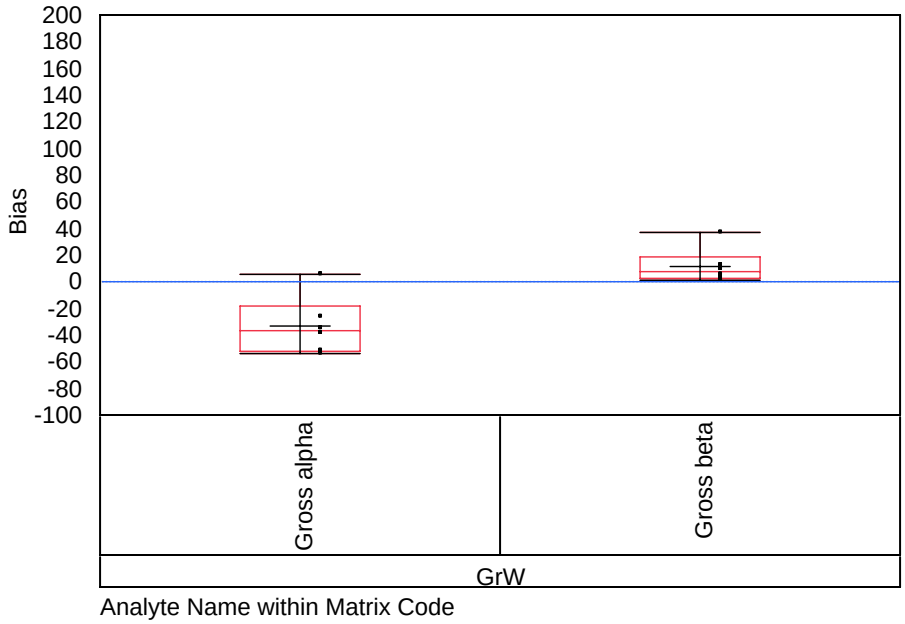


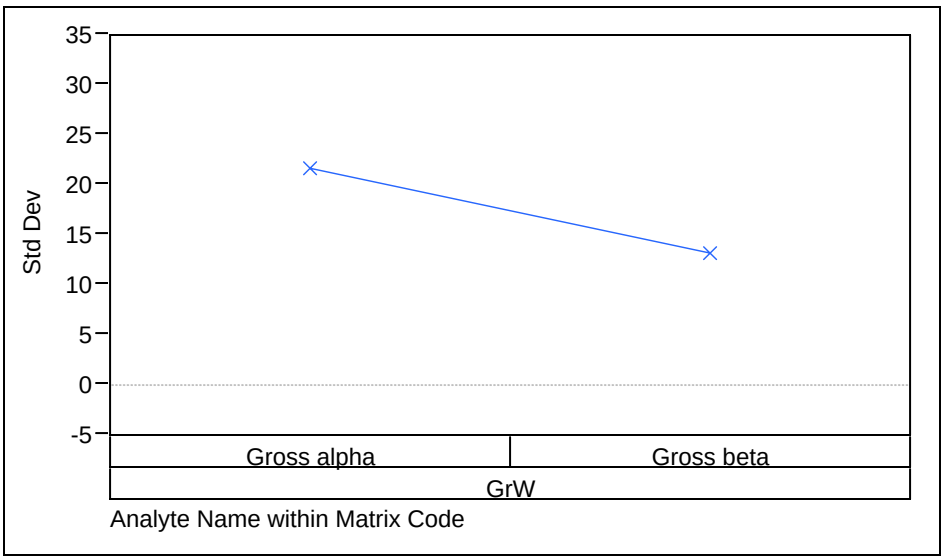
Variability Gauge Lab Code=CHMH01

Variability Chart for Bias

Variability Gauge Lab Code=CHMH01

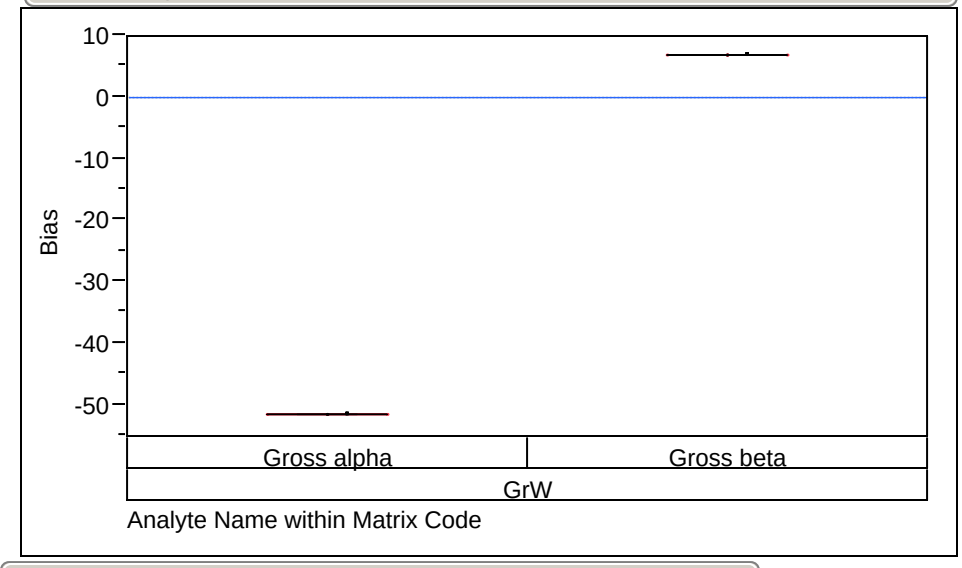
Variability Chart for Bias





Variability Gauge Lab Code=CMRC01

Variability Chart for Bias

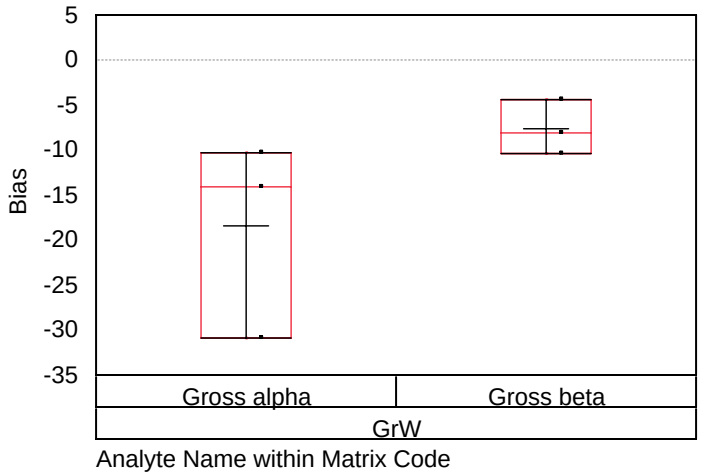


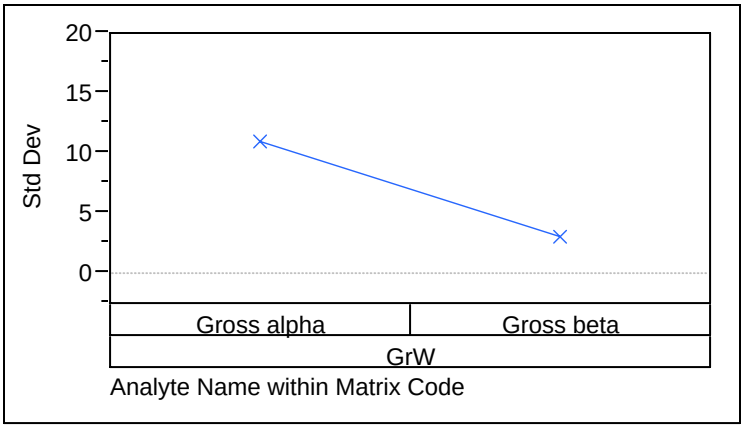
Variability Gauge Lab Code=CORE02

Variability Chart for Bias

Variability Gauge Lab Code=CORE02

Variability Chart for Bias



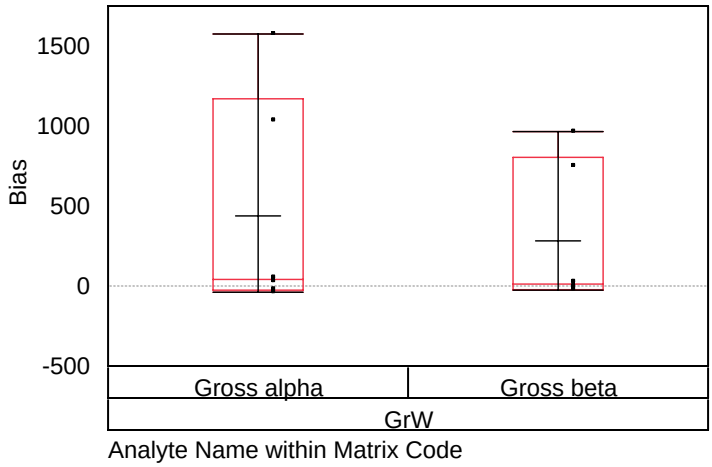


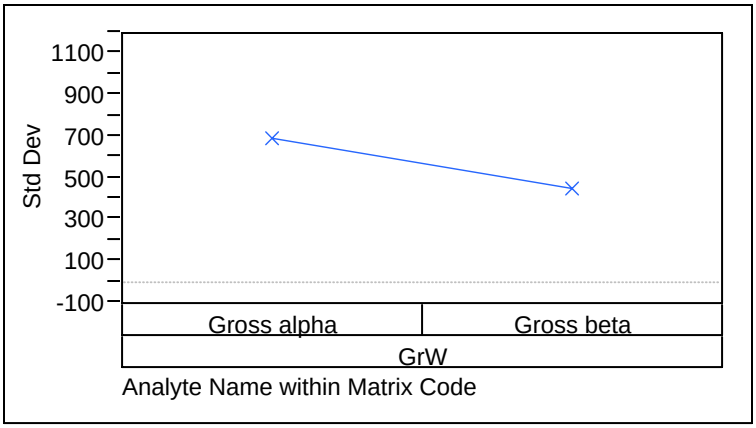
Variability Gauge Lab Code=DEHS01

Variability Chart for Bias

Variability Gauge Lab Code=DEHS01

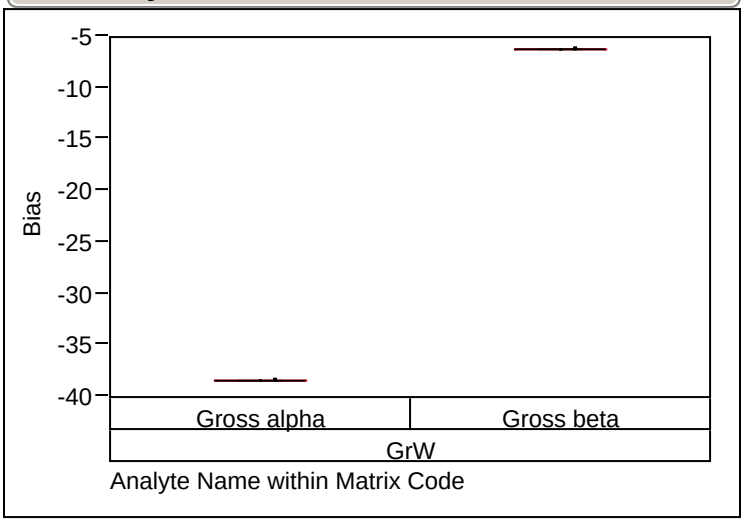
Variability Chart for Bias





Variability Gauge Lab Code=DRMG01

Variability Chart for Bias

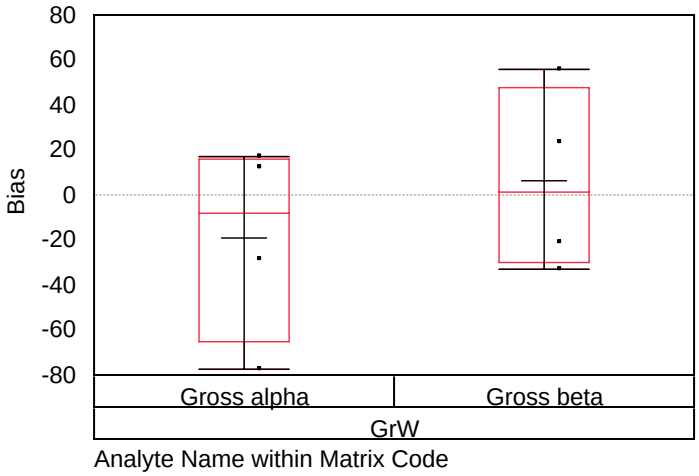


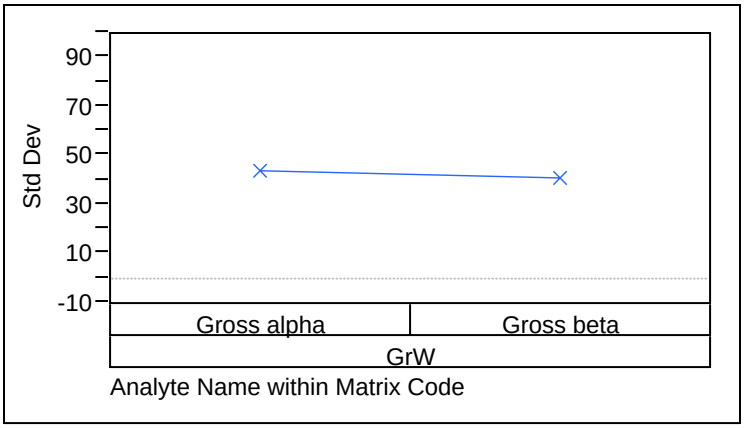
Variability Gauge Lab Code=ENES01

Variability Chart for Bias

Variability Gauge Lab Code=ENES01

Variability Chart for Bias



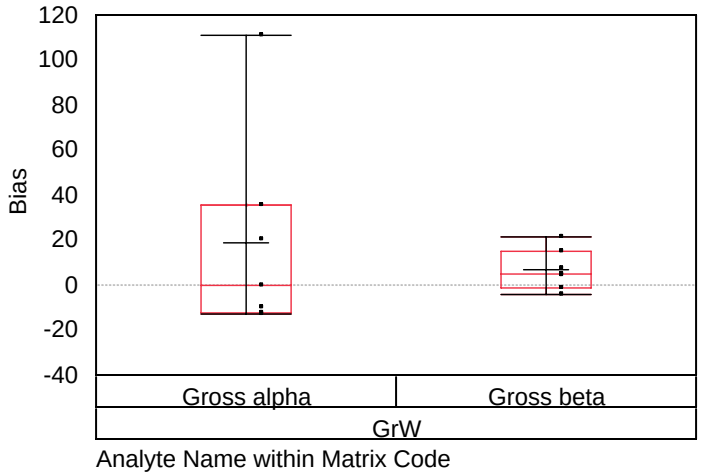


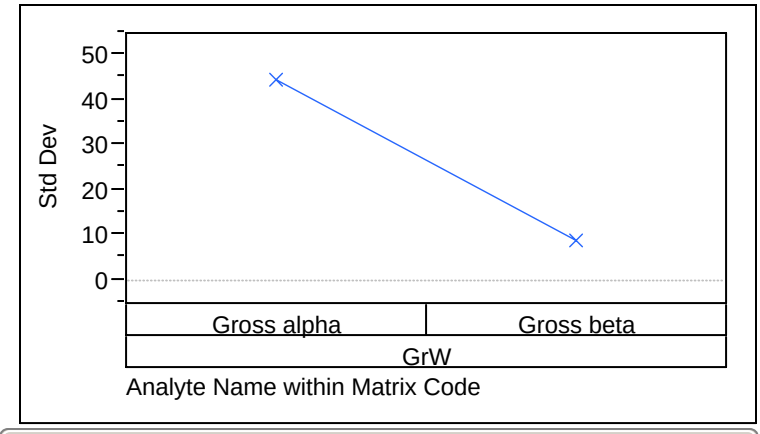
Variability Gauge Lab Code=ERCL01

Variability Chart for Bias

Variability Gauge Lab Code=ERCL01

Variability Chart for Bias



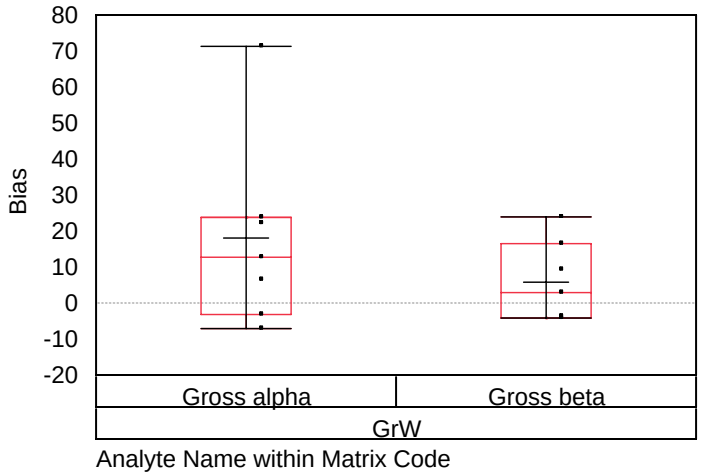


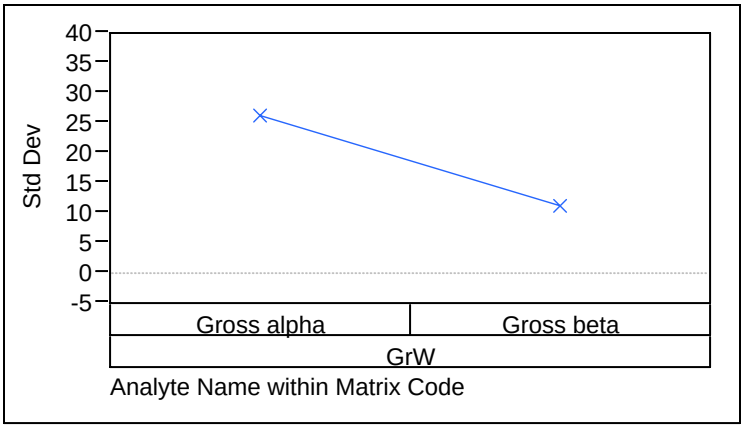
Variability Gauge Lab Code=ERLG01

Variability Chart for Bias

Variability Gauge Lab Code=ERLG01

Variability Chart for Bias



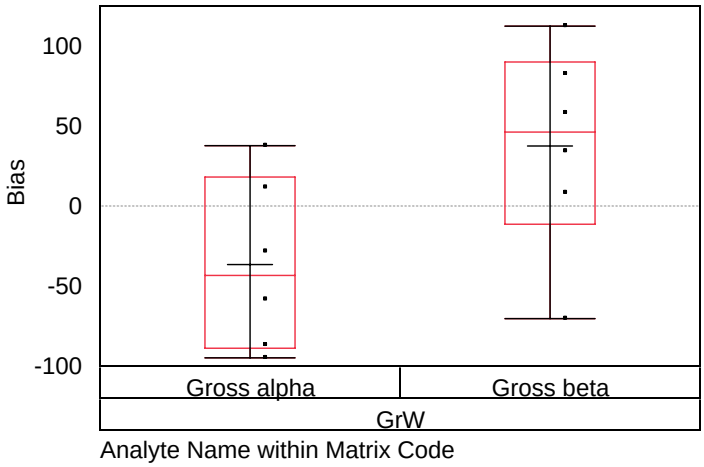


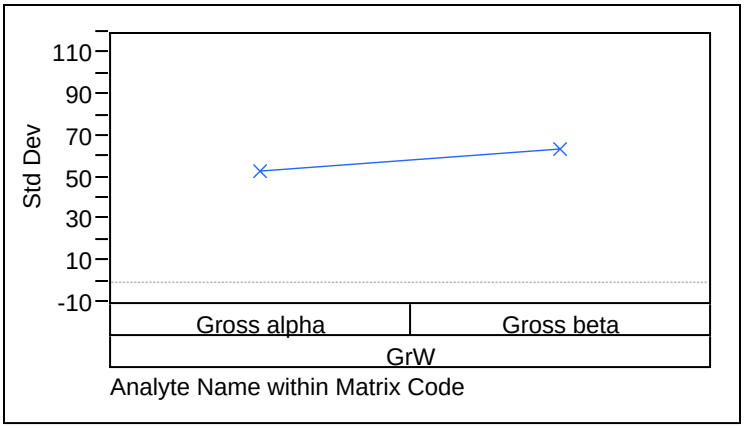
Variability Gauge Lab Code=ERPD99

Variability Chart for Bias

Variability Gauge Lab Code=ERPD99

Variability Chart for Bias



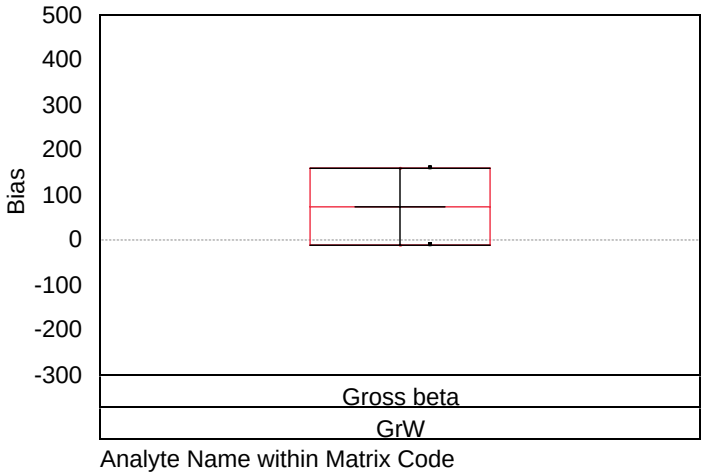


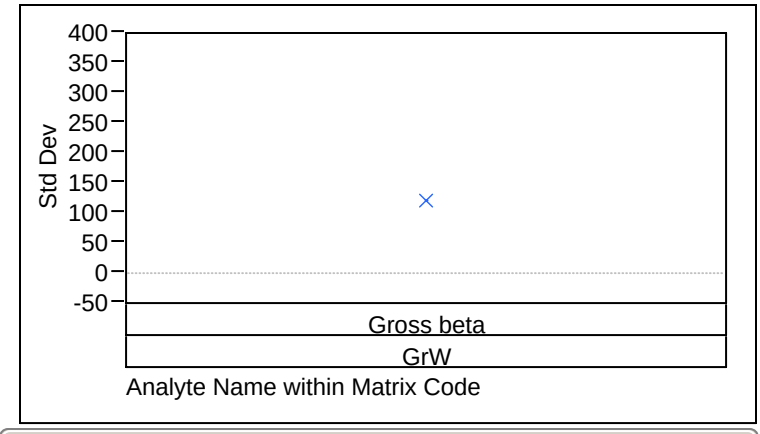
Variability Gauge Lab Code=ESDE01

Variability Chart for Bias

Variability Gauge Lab Code=ESDE01

Variability Chart for Bias



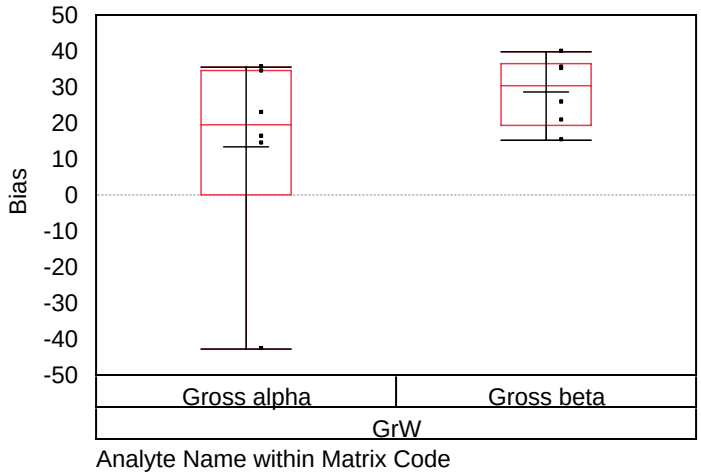


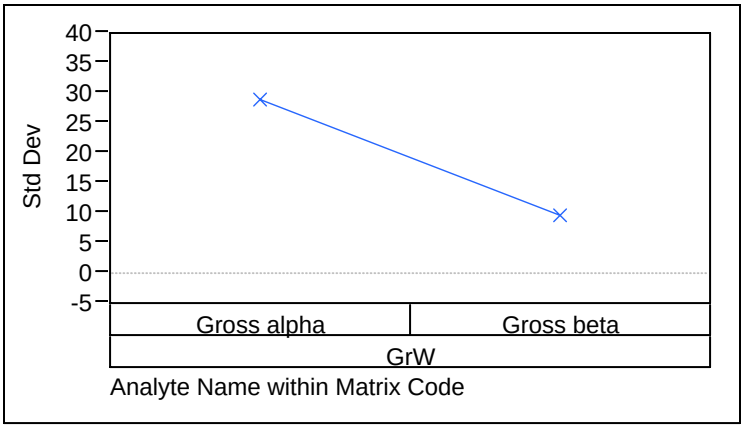
Variability Gauge Lab Code=FDHE01

Variability Chart for Bias

Variability Gauge Lab Code=FDHE01

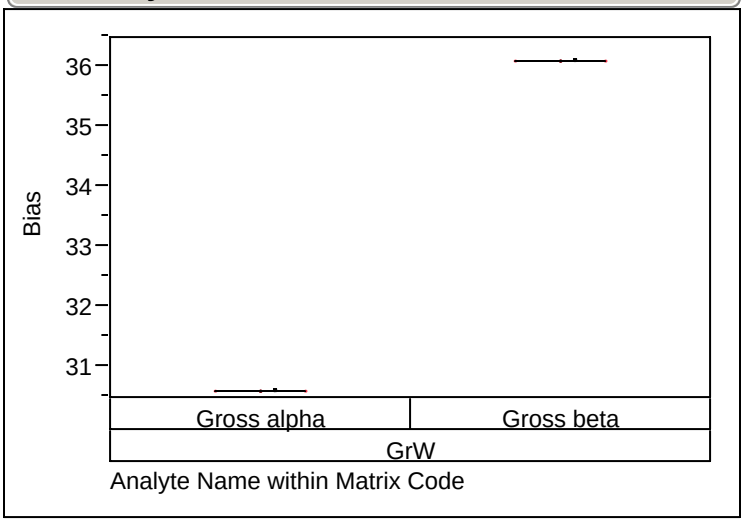
Variability Chart for Bias





Variability Gauge Lab Code=FERM01

Variability Chart for Bias

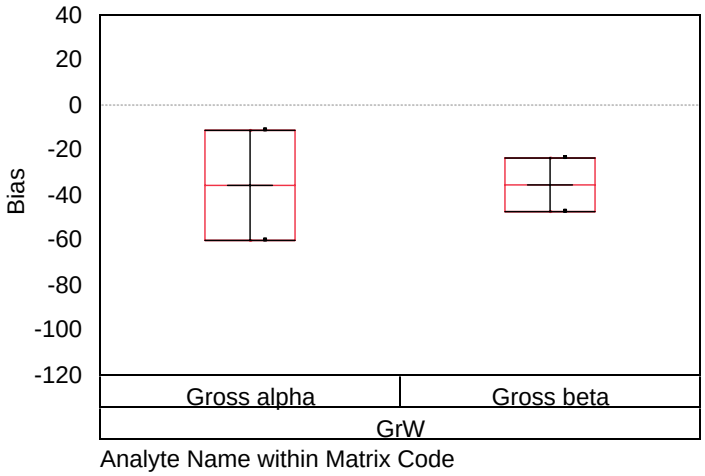


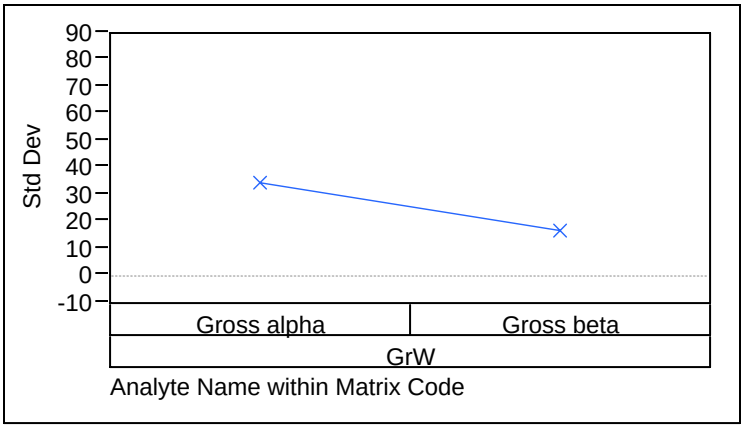
Variability Gauge Lab Code=FMEC99

Variability Chart for Bias

Variability Gauge Lab Code=FMEC99

Variability Chart for Bias



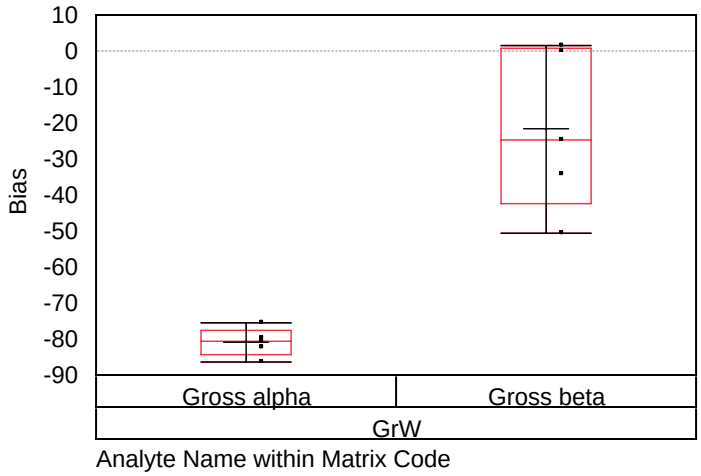


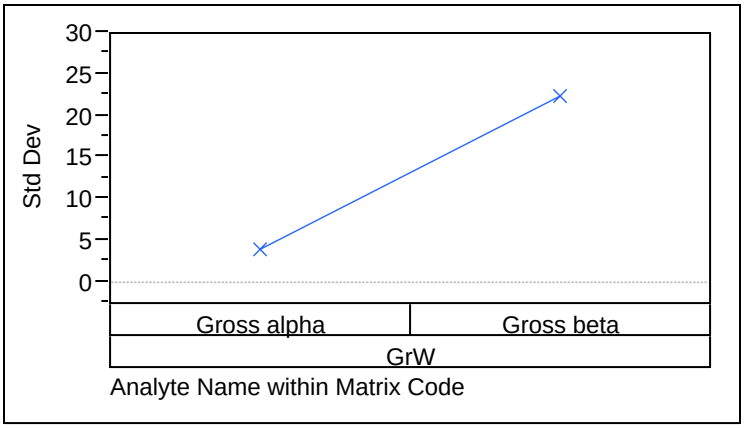
Variability Gauge Lab Code=FNAL01

Variability Chart for Bias

Variability Gauge Lab Code=FNAL01

Variability Chart for Bias



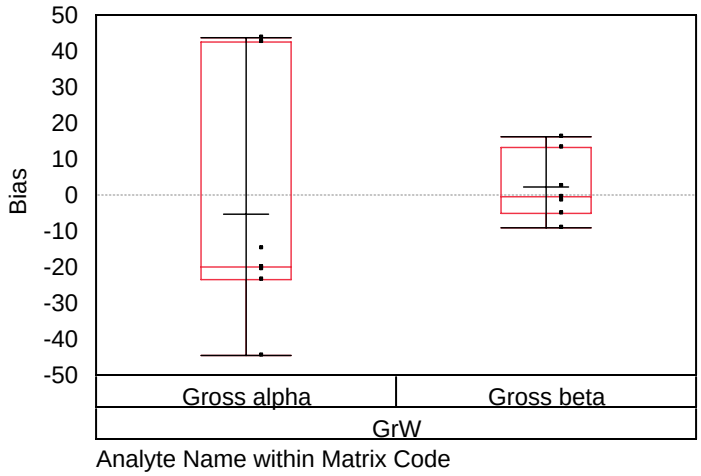


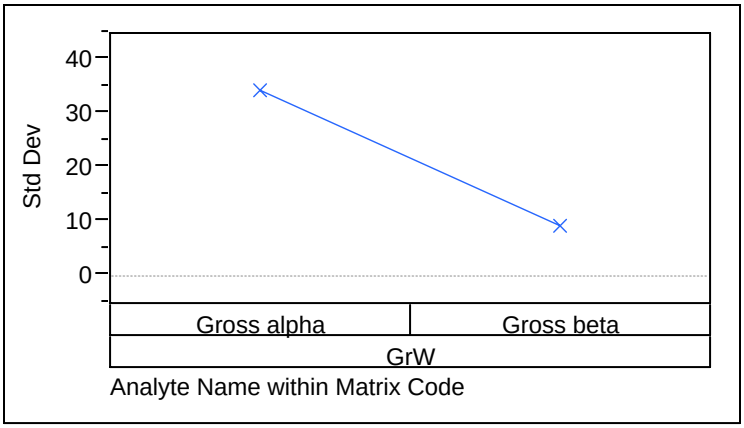
Variability Gauge Lab Code=GENE01

Variability Chart for Bias

Variability Gauge Lab Code=GENE01

Variability Chart for Bias



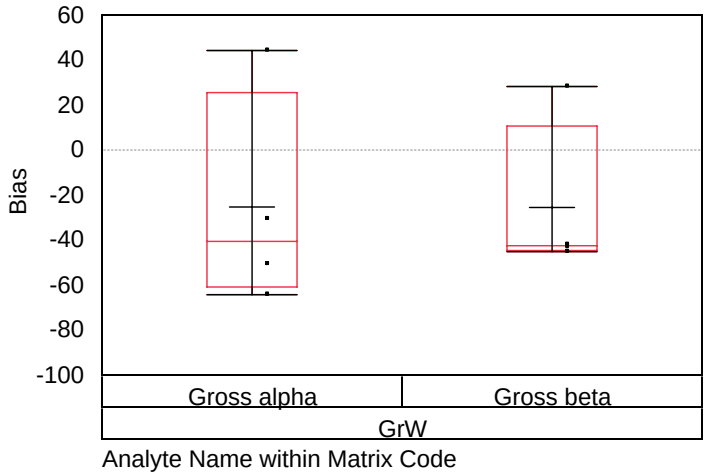


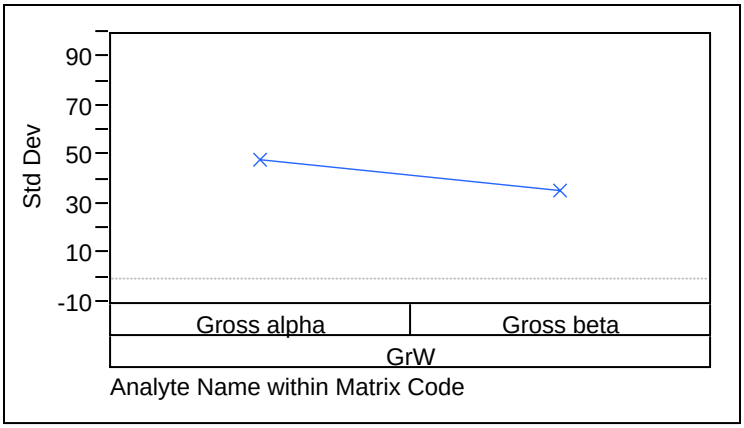
Variability Gauge Lab Code=GPLP01

Variability Chart for Bias

Variability Gauge Lab Code=GPLP01

Variability Chart for Bias



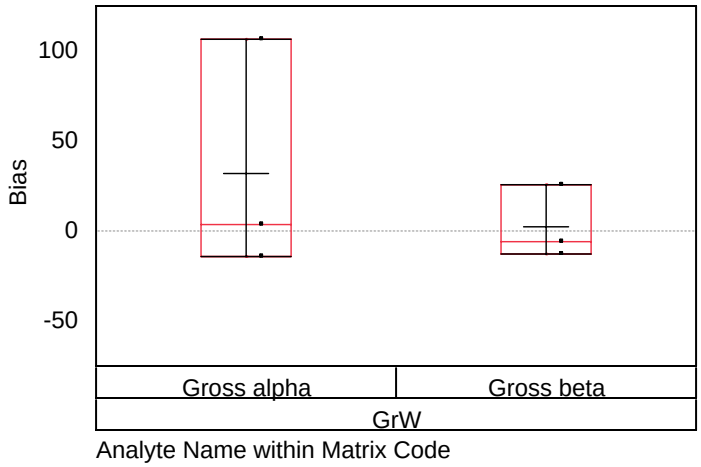


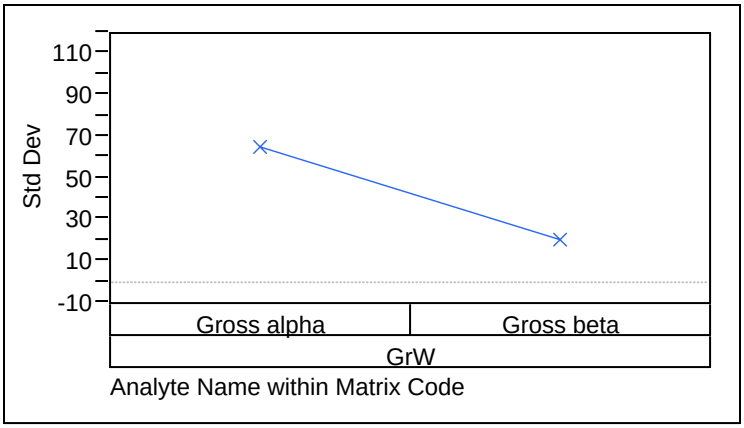
Variability Gauge Lab Code=GROW01

Variability Chart for Bias

Variability Gauge Lab Code=GROW01

Variability Chart for Bias



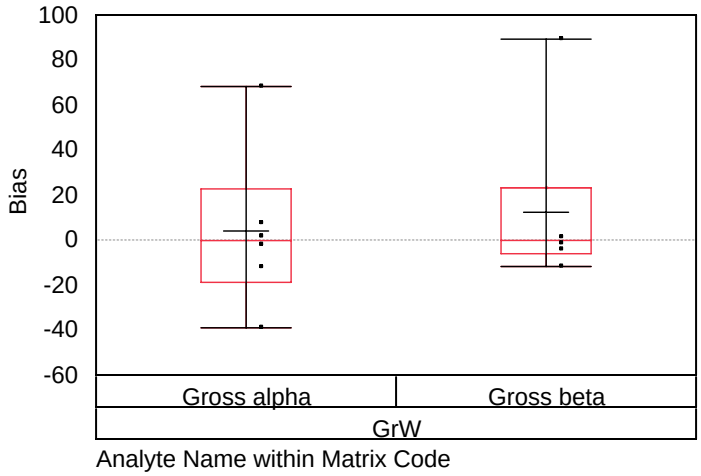


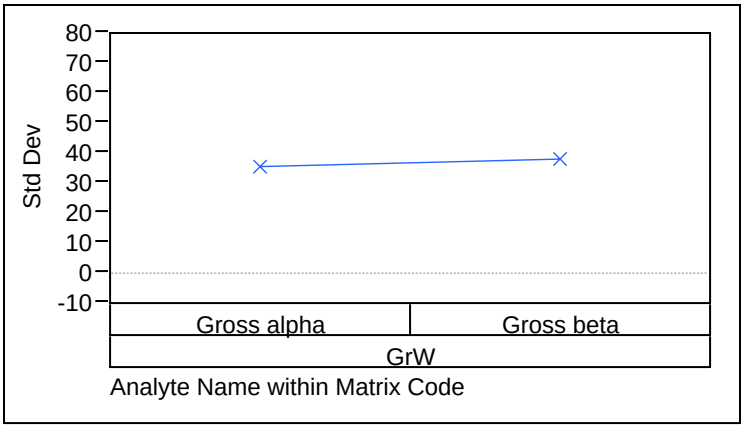
Variability Gauge Lab Code=HCAL01

Variability Chart for Bias

Variability Gauge Lab Code=HCAL01

Variability Chart for Bias



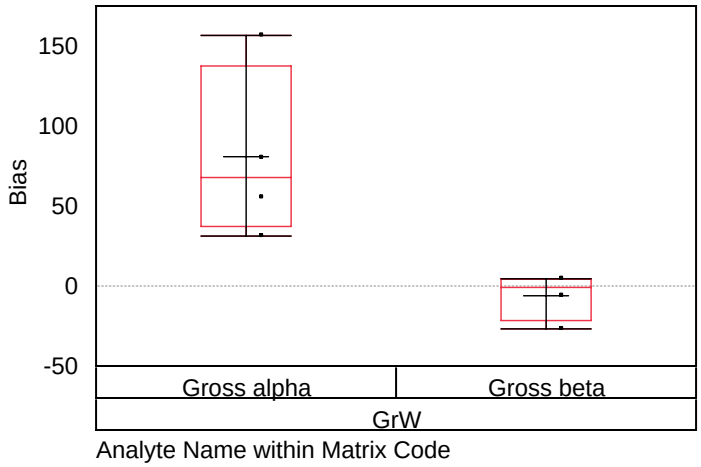


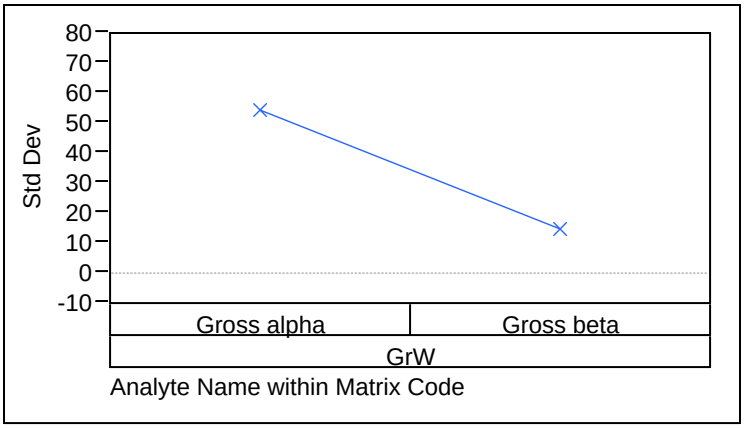
Variability Gauge Lab Code=HECR01

Variability Chart for Bias

Variability Gauge Lab Code=HECR01

Variability Chart for Bias



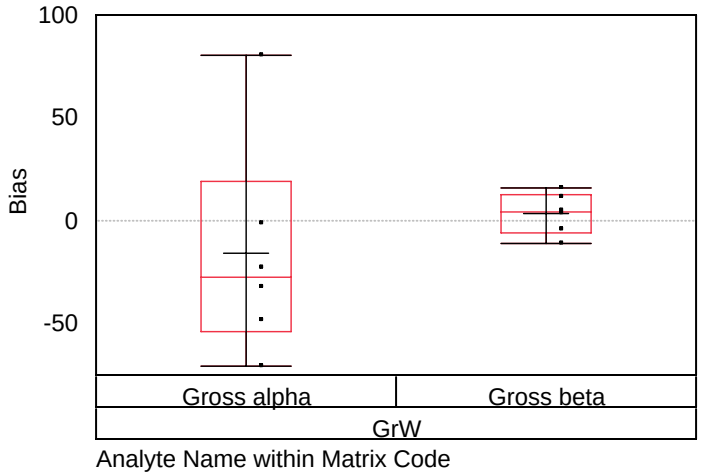


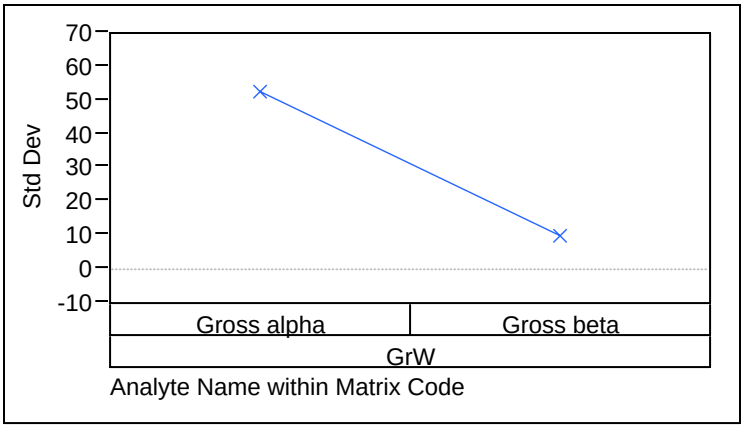
Variability Gauge Lab Code=HWRL01

Variability Chart for Bias

Variability Gauge Lab Code=HWRL01

Variability Chart for Bias



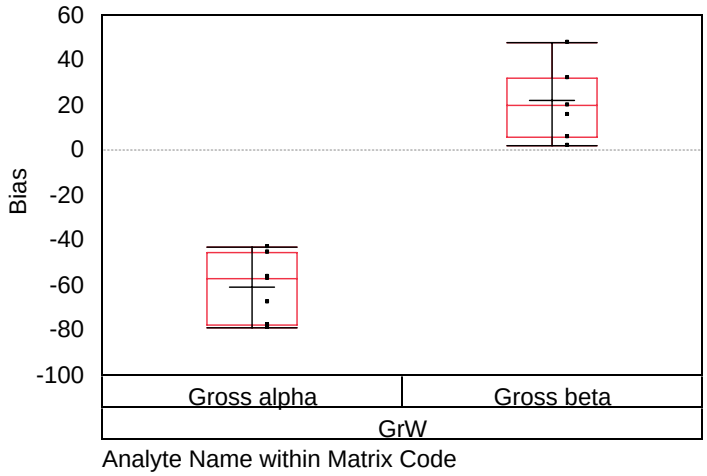


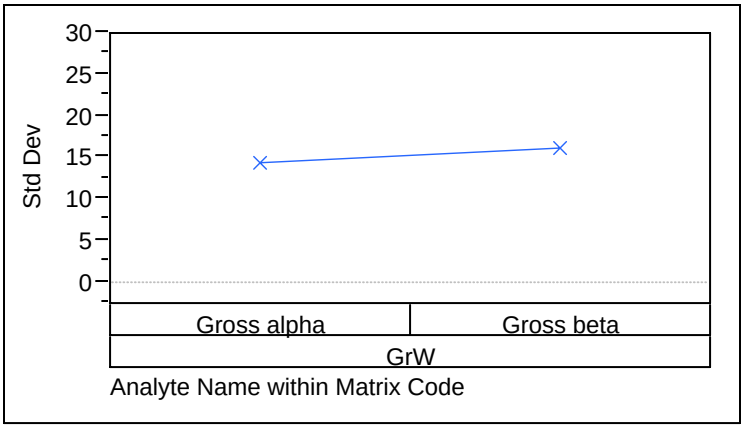
Variability Gauge Lab Code=ISUP01

Variability Chart for Bias

Variability Gauge Lab Code=ISUP01

Variability Chart for Bias



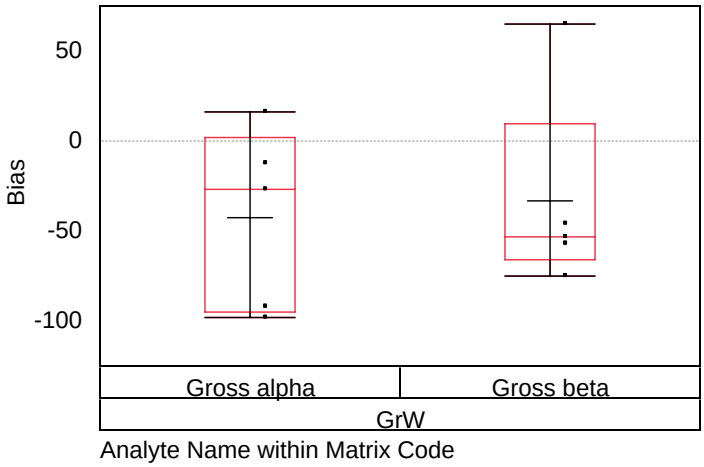


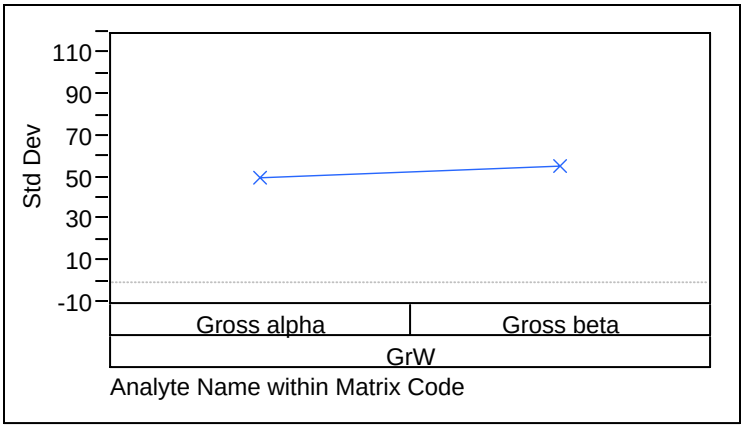
Variability Gauge Lab Code=JAEC99

Variability Chart for Bias

Variability Gauge Lab Code=JAEC99

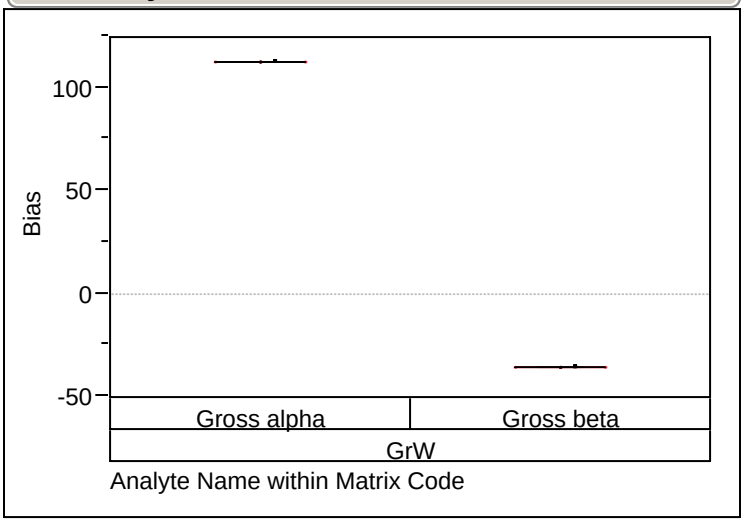
Variability Chart for Bias





Variability Gauge Lab Code=KDHE01

Variability Chart for Bias

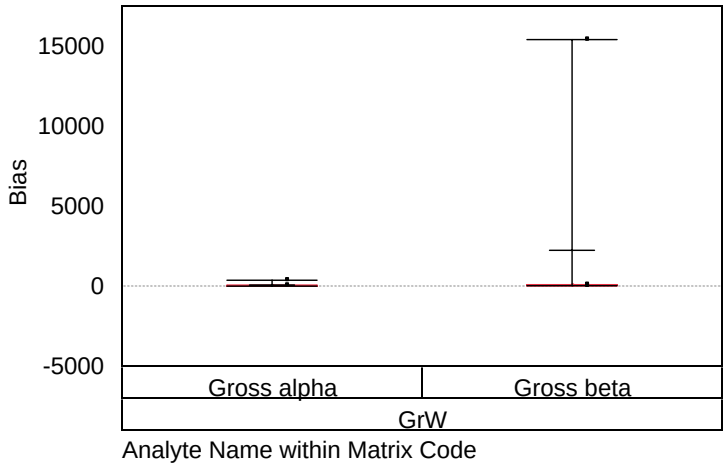


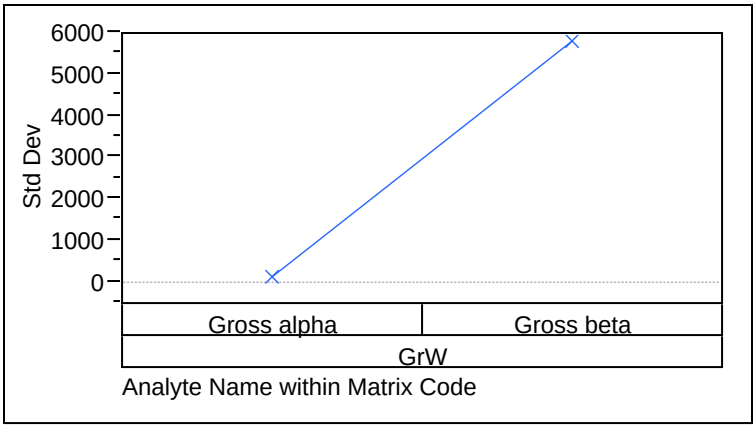
Variability Gauge Lab Code=LOCK01

Variability Chart for Bias

Variability Gauge Lab Code=LOCK01

Variability Chart for Bias



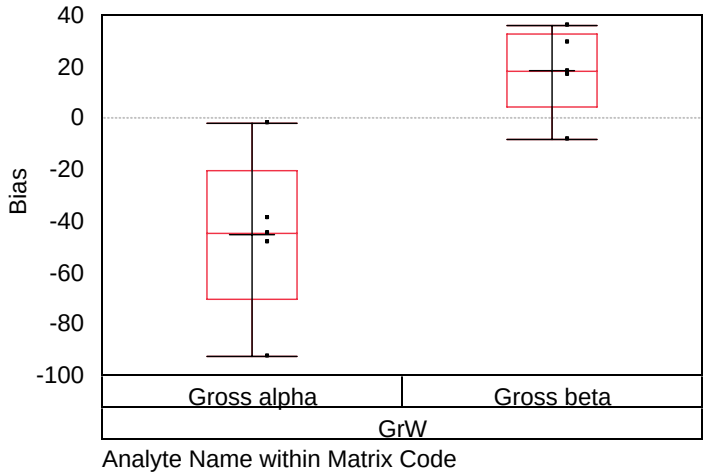


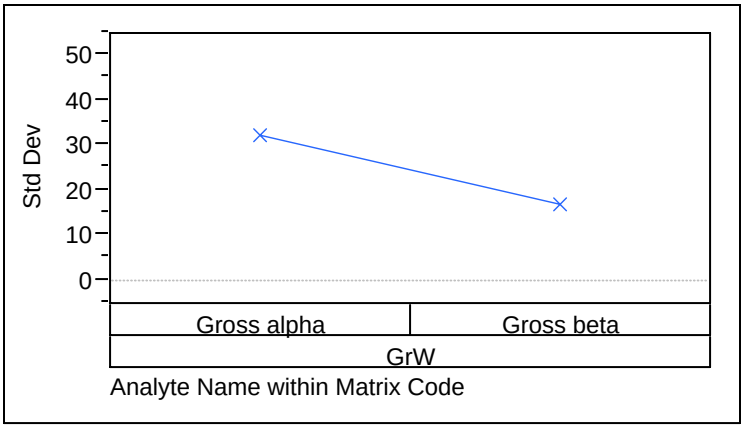
Variability Gauge Lab Code=LOCK03

Variability Chart for Bias

Variability Gauge Lab Code=LOCK03

Variability Chart for Bias



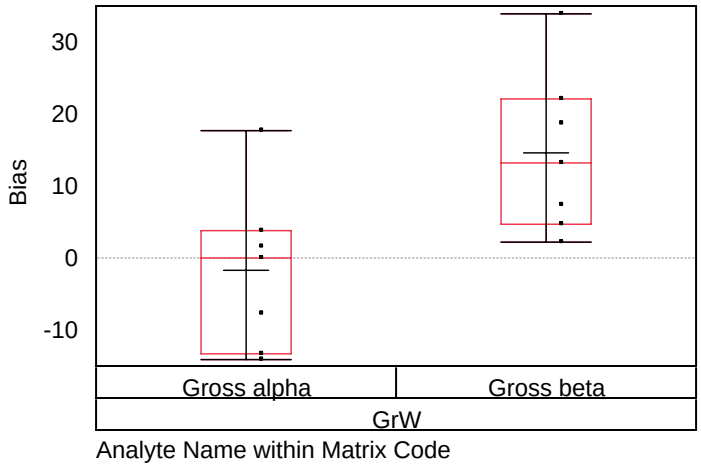


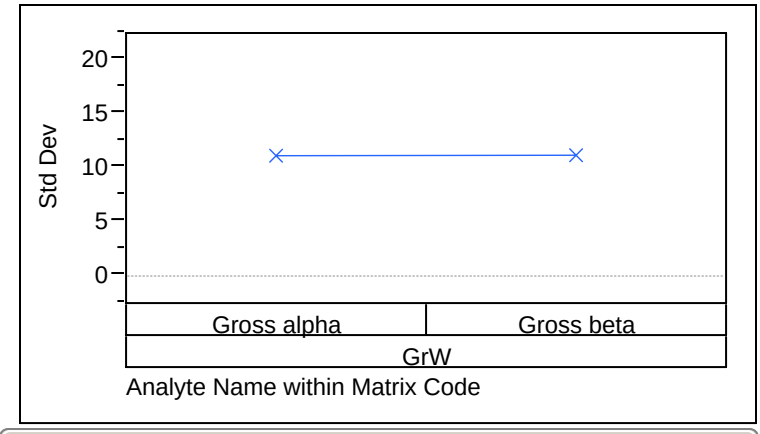
Variability Gauge Lab Code=MART01

Variability Chart for Bias

Variability Gauge Lab Code=MART01

Variability Chart for Bias



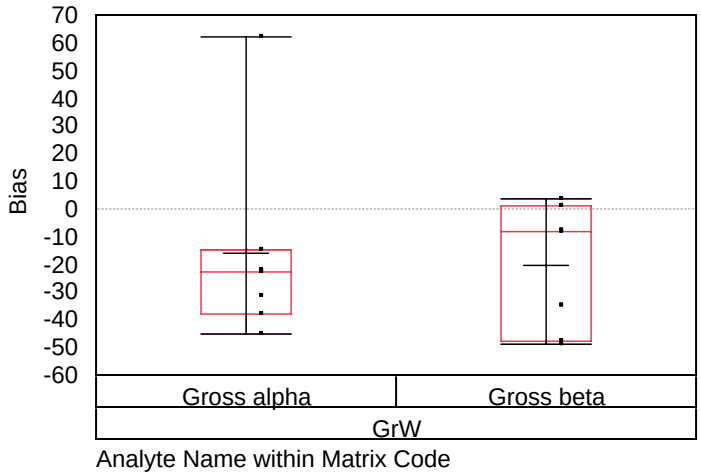


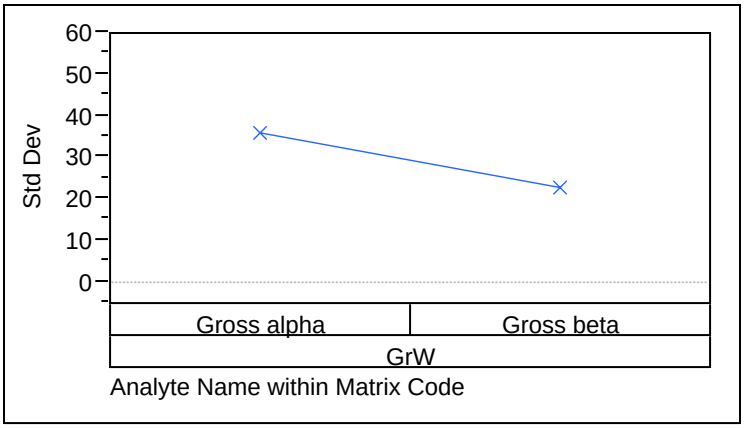
Variability Gauge Lab Code=MART02

Variability Chart for Bias

Variability Gauge Lab Code=MART02

Variability Chart for Bias



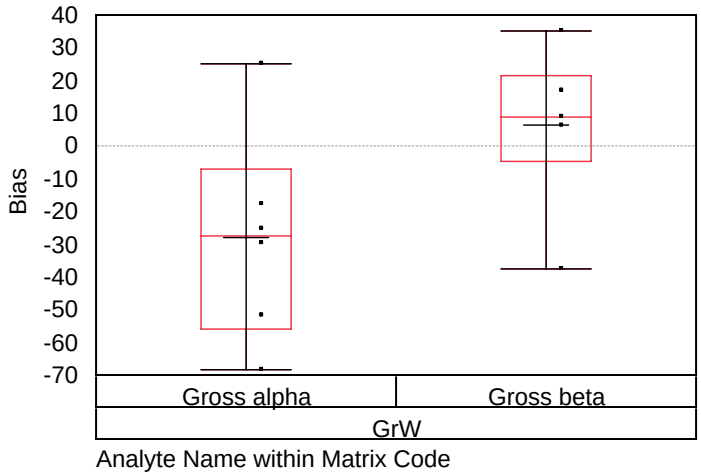


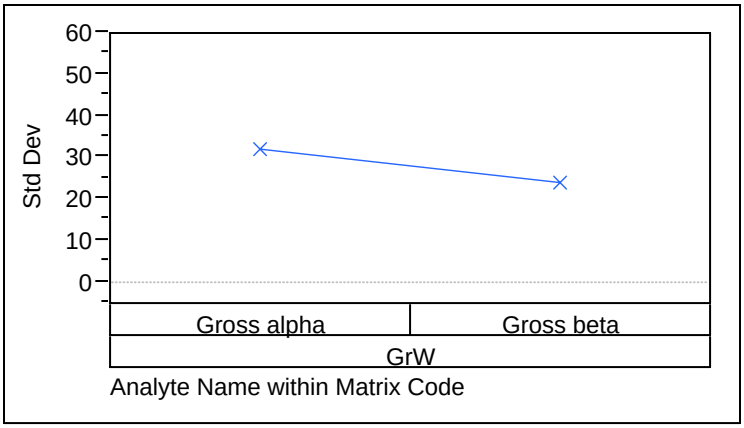
Variability Gauge Lab Code=MART03

Variability Chart for Bias

Variability Gauge Lab Code=MART03

Variability Chart for Bias



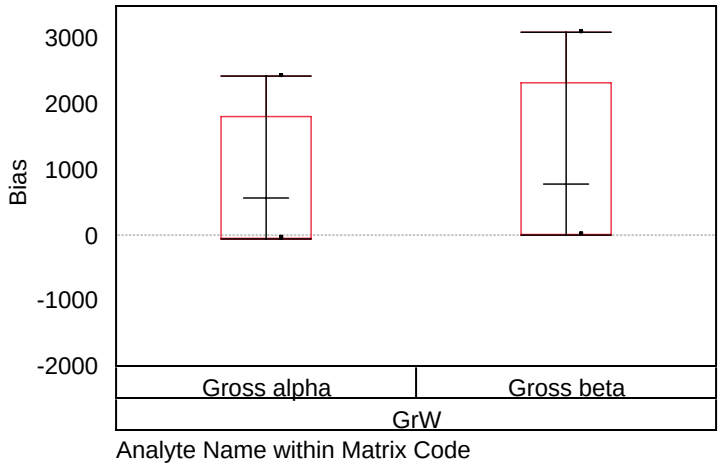


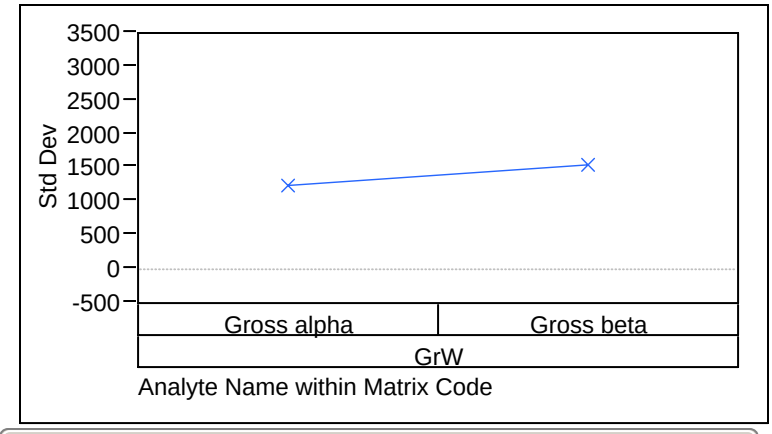
Variability Gauge Lab Code=MDPH01

Variability Chart for Bias

Variability Gauge Lab Code=MDPH01

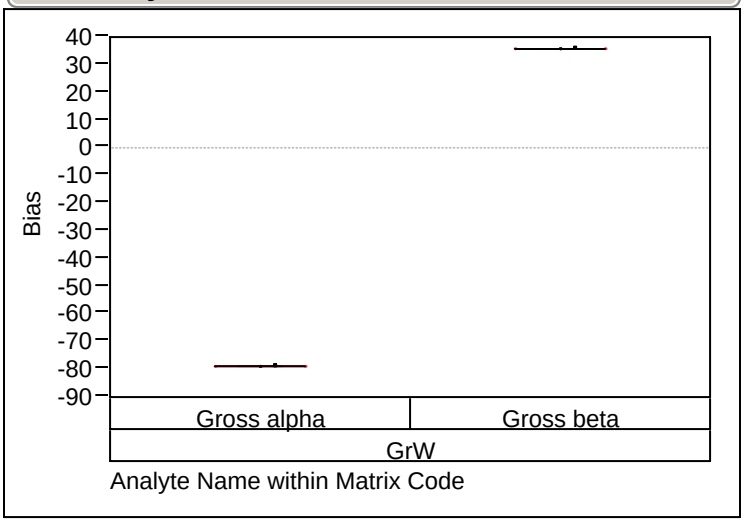
Variability Chart for Bias





Variability Gauge Lab Code=MKME01

Variability Chart for Bias

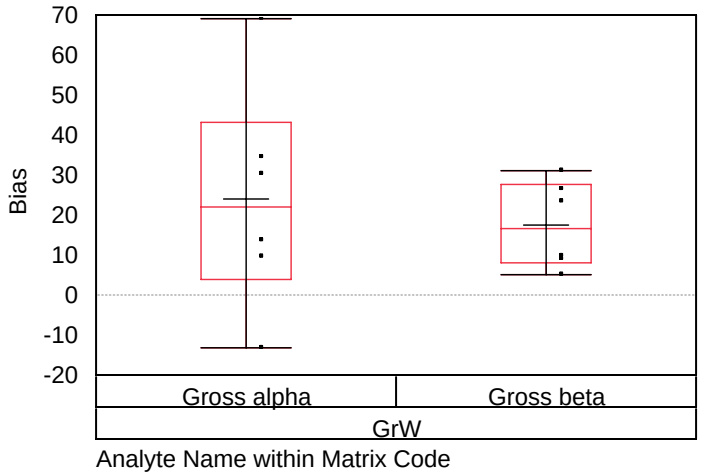


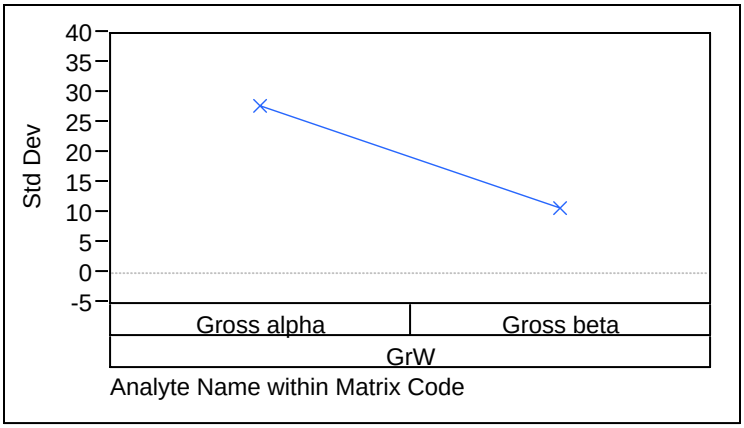
Variability Gauge Lab Code=NARL01

Variability Chart for Bias

Variability Gauge Lab Code=NARL01

Variability Chart for Bias



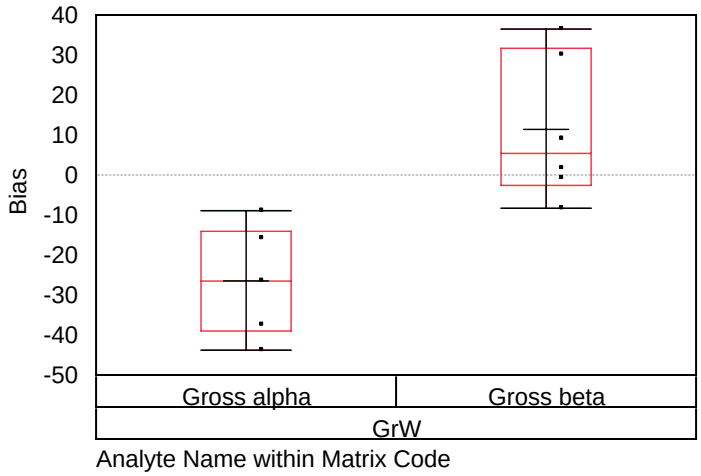


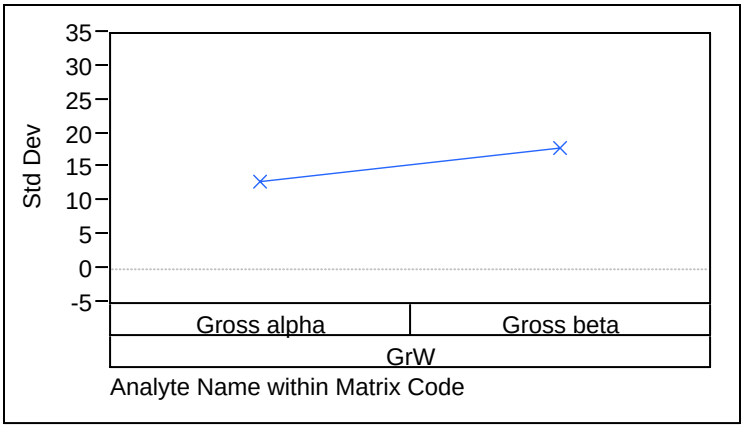
Variability Gauge Lab Code=NESI01

Variability Chart for Bias

Variability Gauge Lab Code=NESI01

Variability Chart for Bias



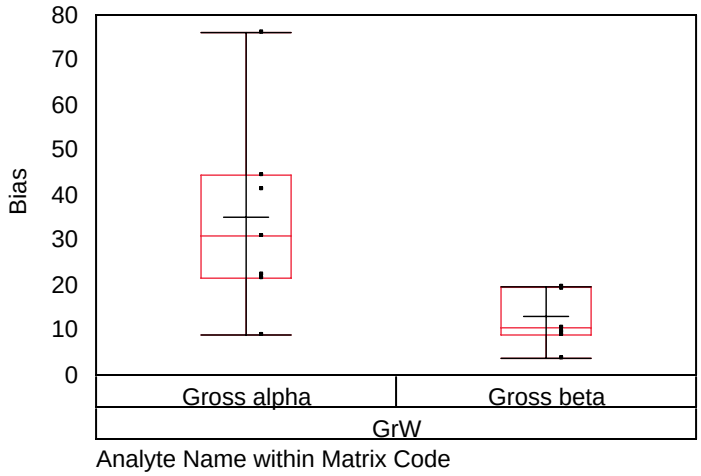


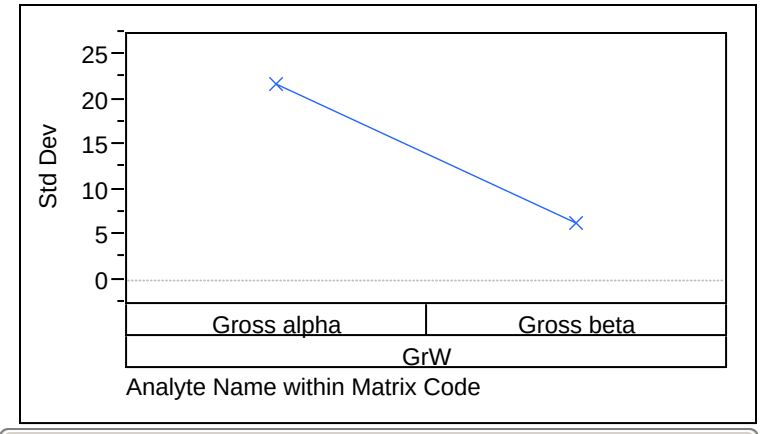
Variability Gauge Lab Code=NJDH01

Variability Chart for Bias

Variability Gauge Lab Code=NJDH01

Variability Chart for Bias



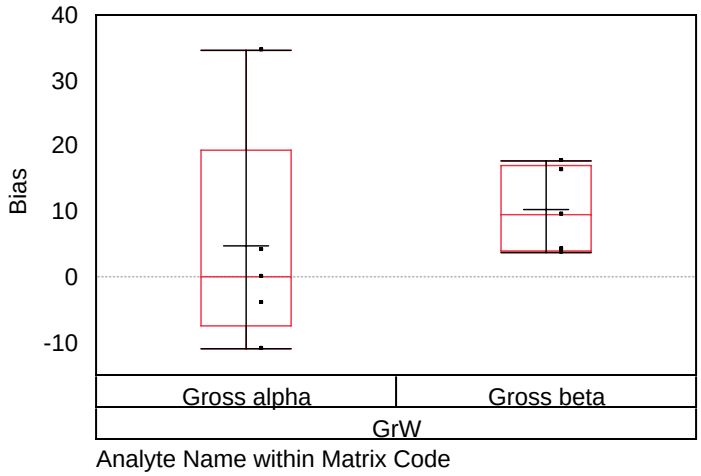


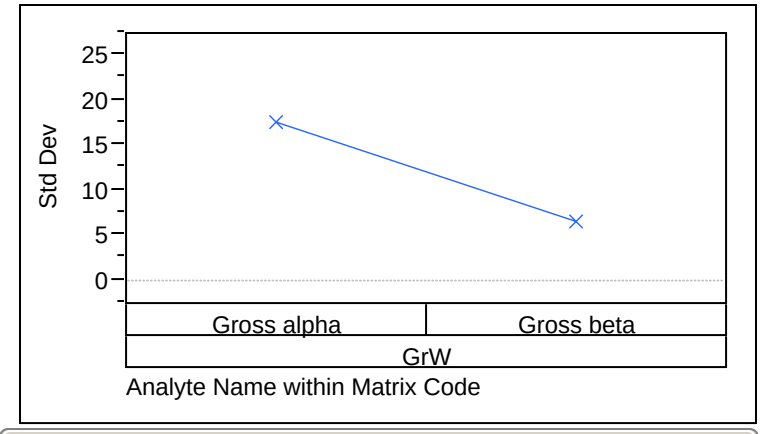
Variability Gauge Lab Code=NRLL99

Variability Chart for Bias

Variability Gauge Lab Code=NRLL99

Variability Chart for Bias



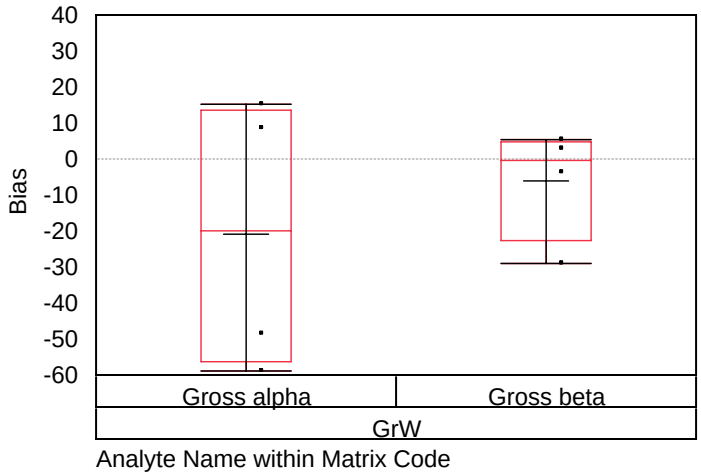


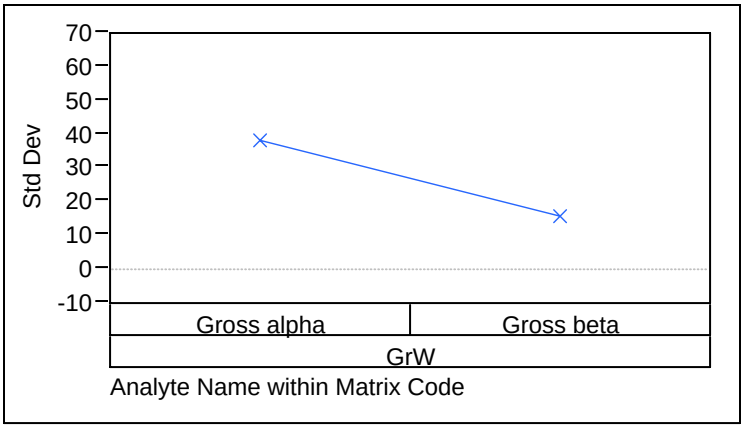
Variability Gauge Lab Code=NTSI01

Variability Chart for Bias

Variability Gauge Lab Code=NTSI01

Variability Chart for Bias



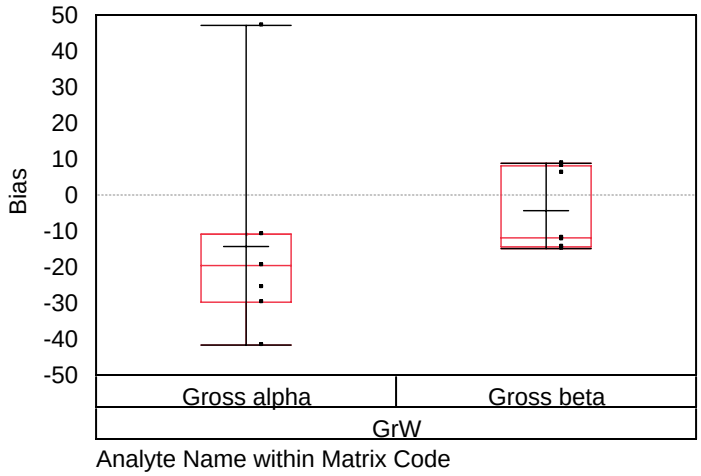


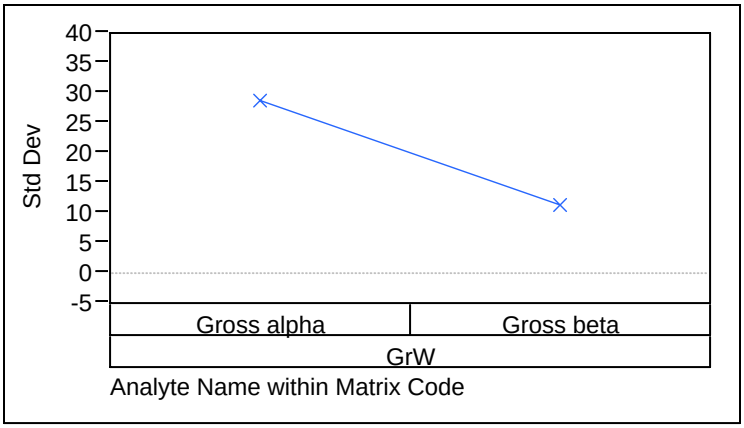
Variability Gauge Lab Code=OBGL01

Variability Chart for Bias

Variability Gauge Lab Code=OBGL01

Variability Chart for Bias



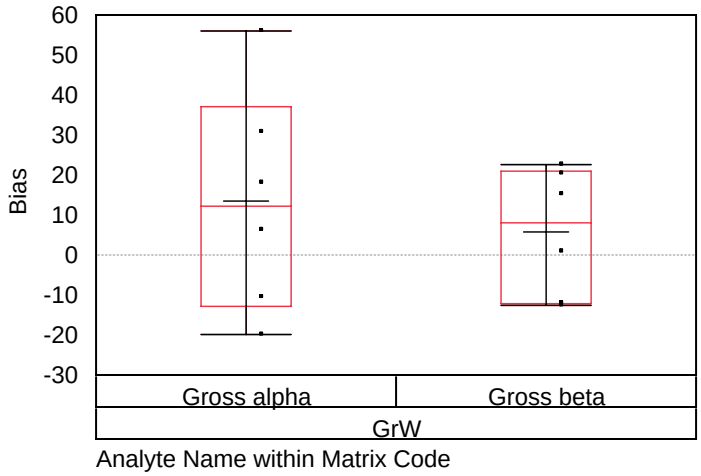


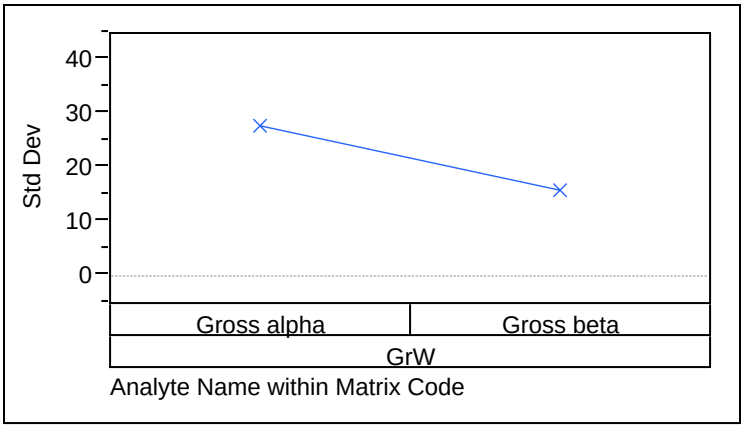
Variability Gauge Lab Code=ODHL01

Variability Chart for Bias

Variability Gauge Lab Code=ODHL01

Variability Chart for Bias



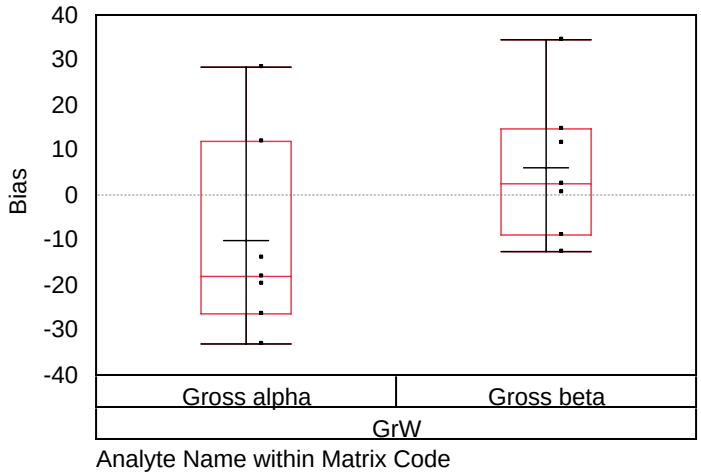


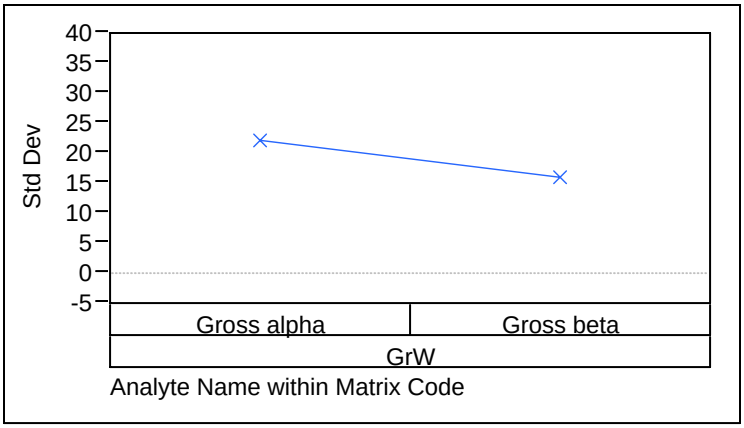
Variability Gauge Lab Code=ORIS01

Variability Chart for Bias

Variability Gauge Lab Code=ORIS01

Variability Chart for Bias



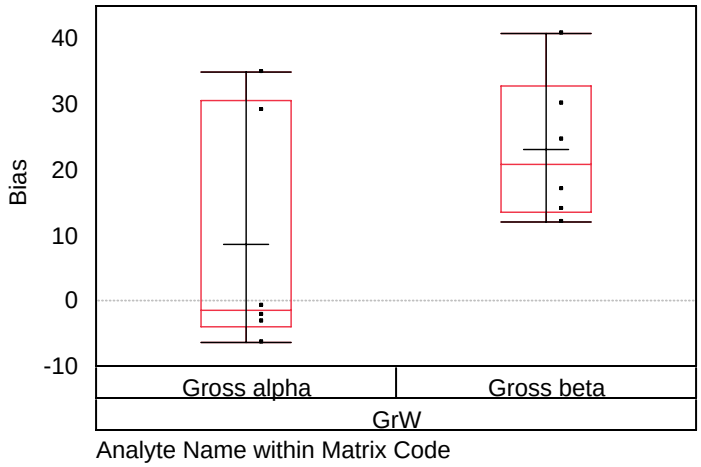


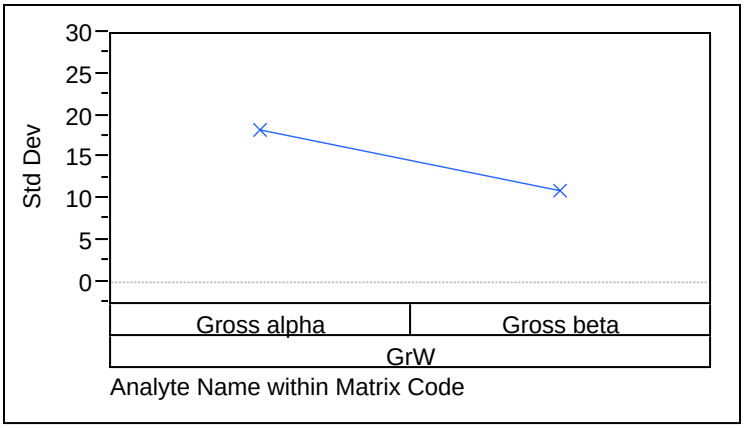
Variability Gauge Lab Code=OTLI01

Variability Chart for Bias

Variability Gauge Lab Code=OTLI01

Variability Chart for Bias



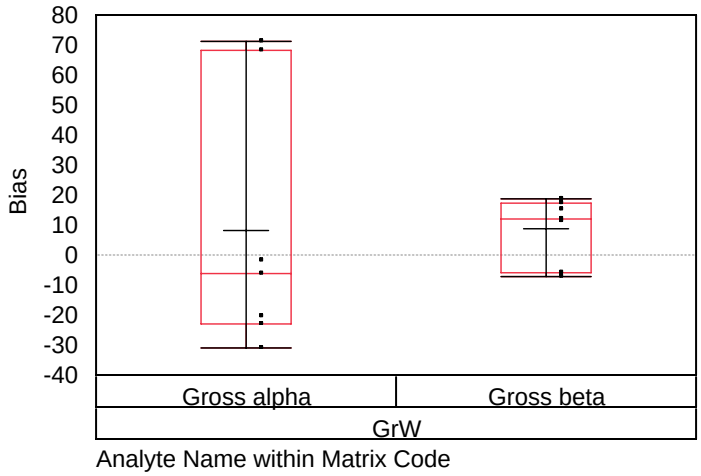


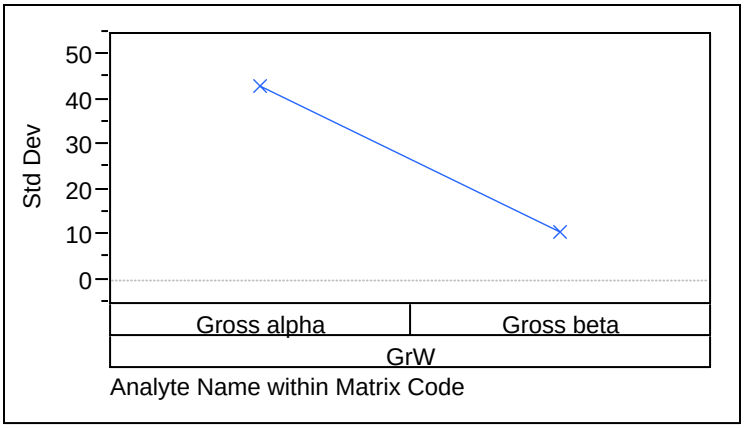
Variability Gauge Lab Code=QUAN01

Variability Chart for Bias

Variability Gauge Lab Code=QUAN01

Variability Chart for Bias



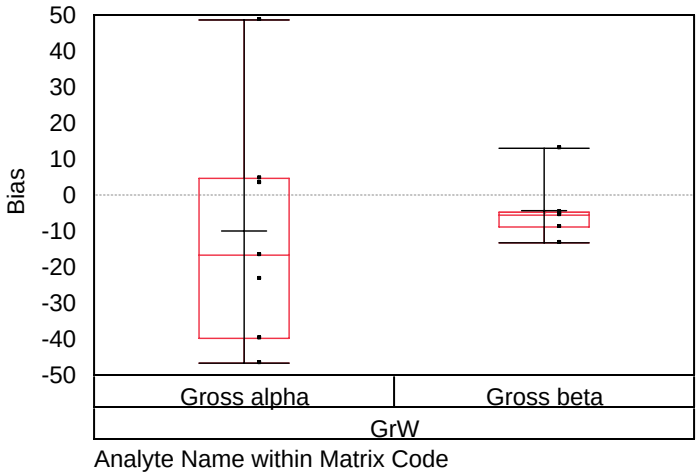


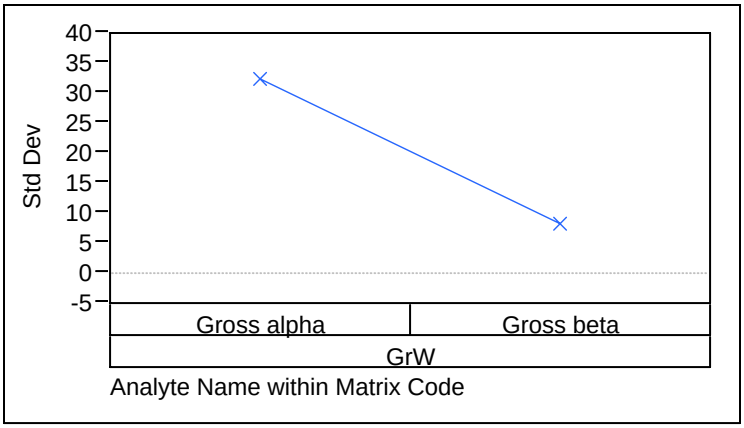
Variability Gauge Lab Code=QUAN03

Variability Chart for Bias

Variability Gauge Lab Code=QUAN03

Variability Chart for Bias



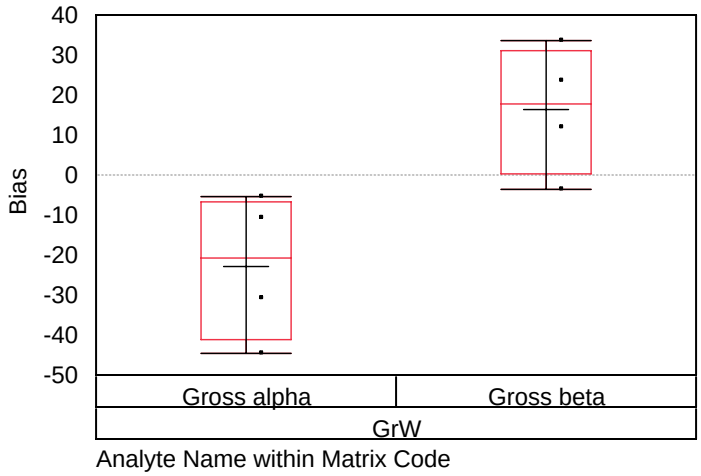


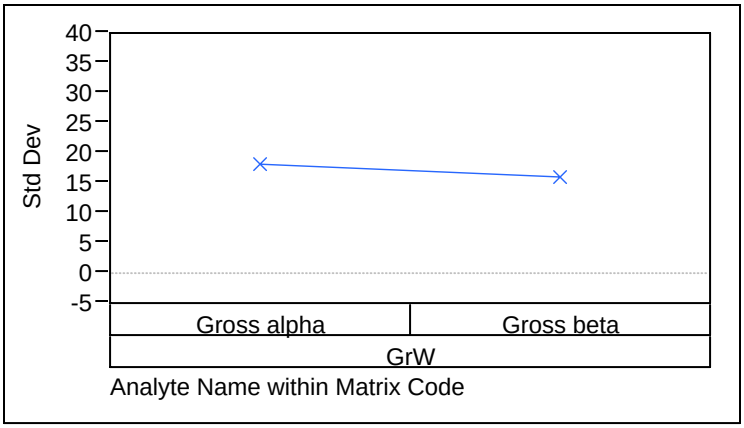
Variability Gauge Lab Code=RECC01

Variability Chart for Bias

Variability Gauge Lab Code=RECC01

Variability Chart for Bias



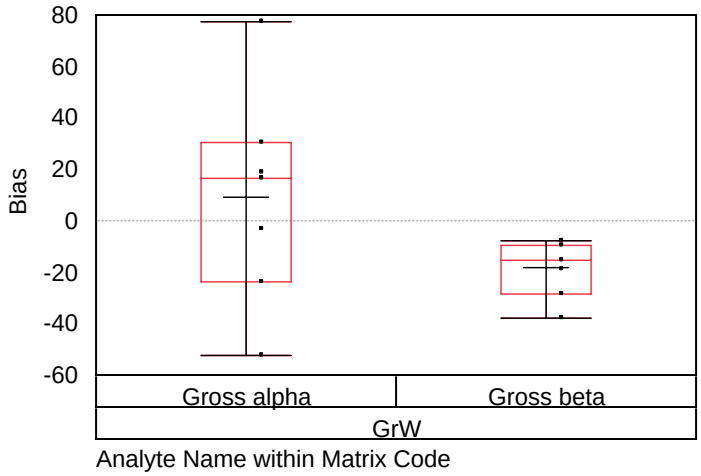


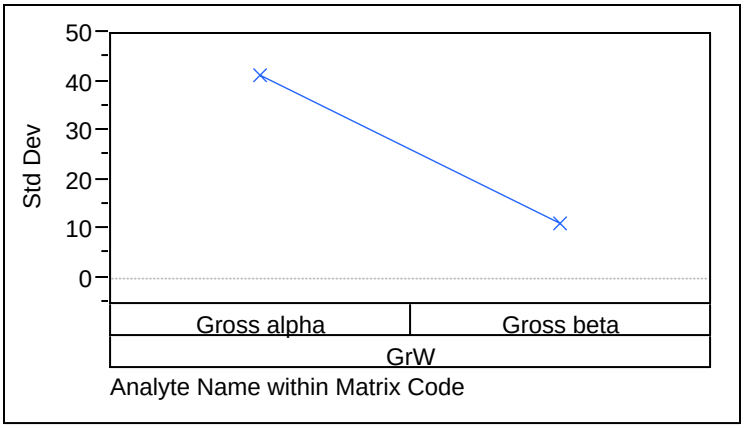
Variability Gauge Lab Code=RPSC01

Variability Chart for Bias

Variability Gauge Lab Code=RPSC01

Variability Chart for Bias



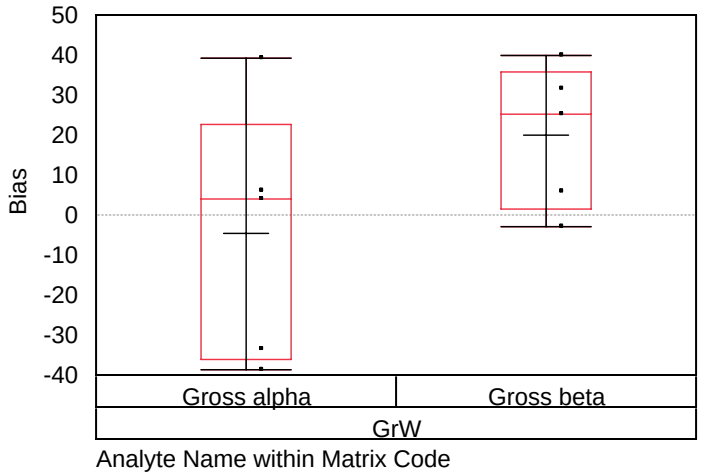


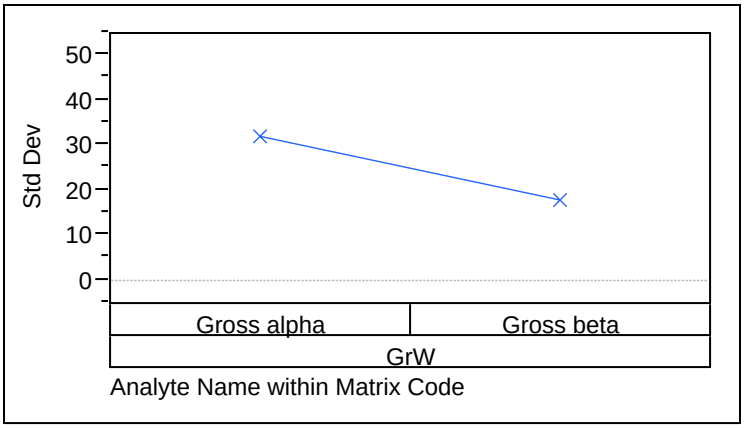
Variability Gauge Lab Code=RSAL01

Variability Chart for Bias

Variability Gauge Lab Code=RSAL01

Variability Chart for Bias



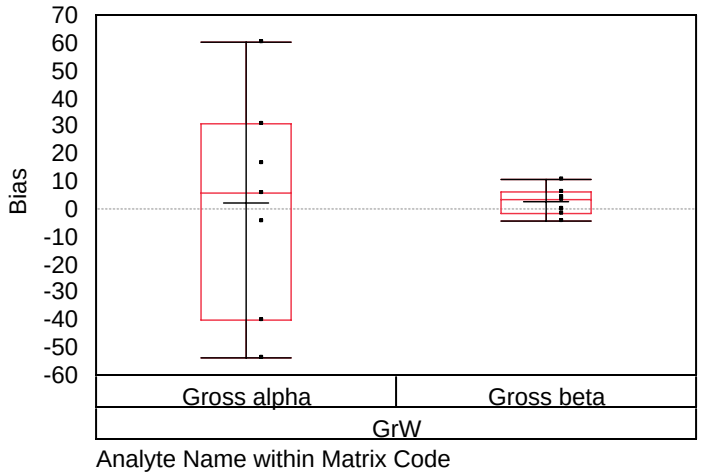


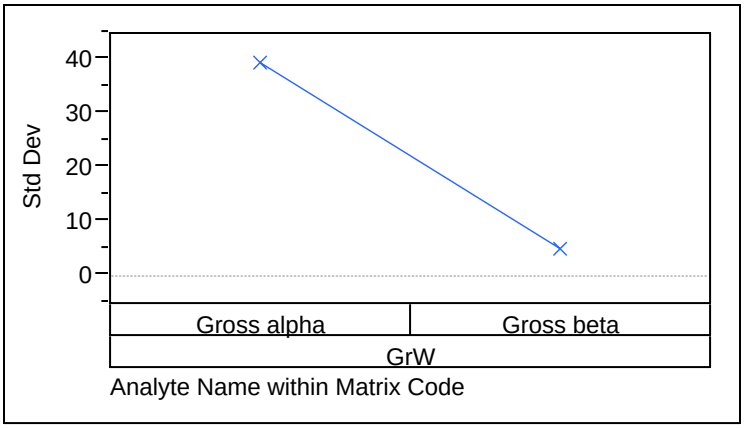
Variability Gauge Lab Code=SCAL01

Variability Chart for Bias

Variability Gauge Lab Code=SCAL01

Variability Chart for Bias



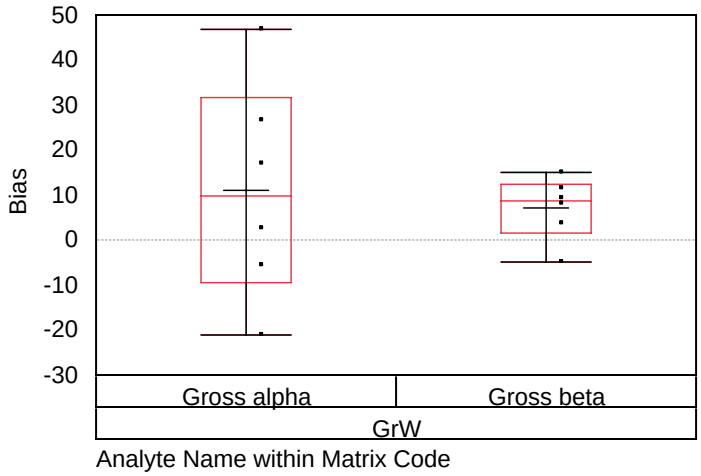


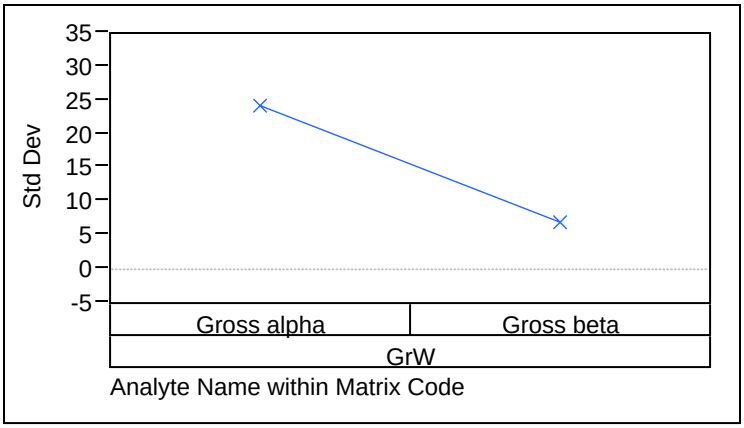
Variability Gauge Lab Code=SEML01

Variability Chart for Bias

Variability Gauge Lab Code=SEML01

Variability Chart for Bias



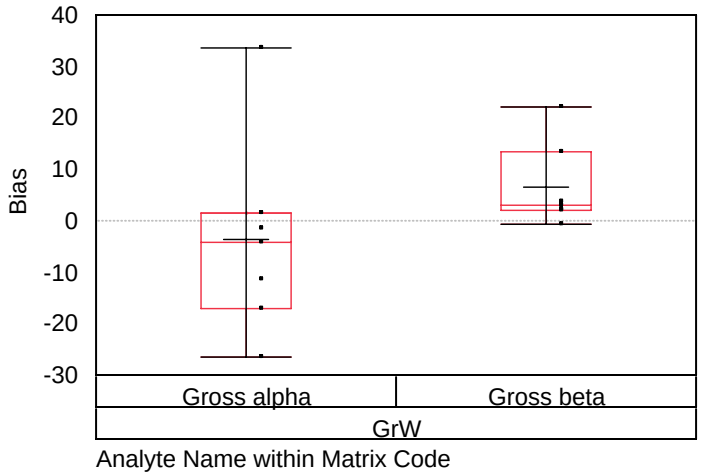


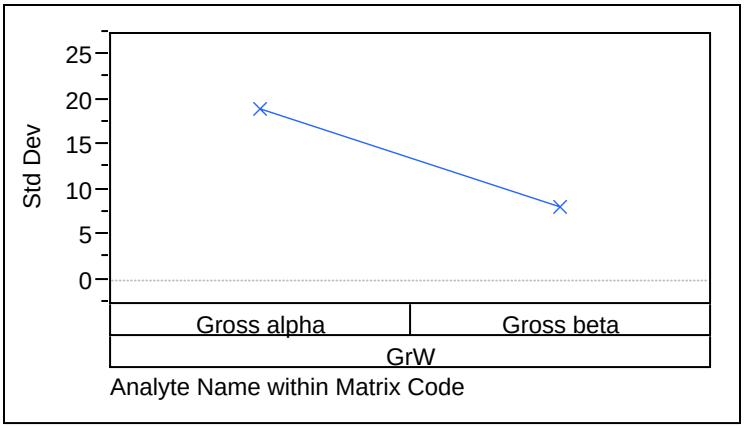
Variability Gauge Lab Code=SLDL01

Variability Chart for Bias

Variability Gauge Lab Code=SLDL01

Variability Chart for Bias



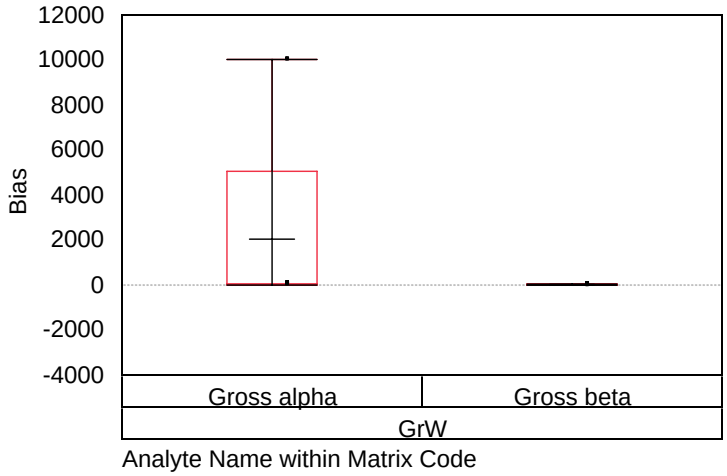


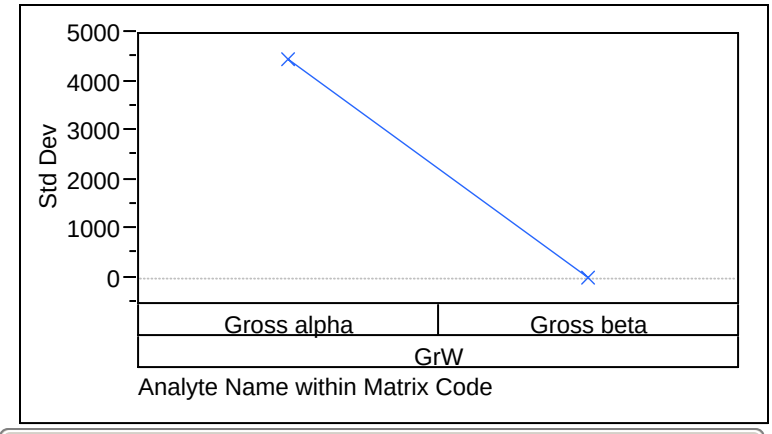
Variability Gauge Lab Code=SNRC99

Variability Chart for Bias

Variability Gauge Lab Code=SNRC99

Variability Chart for Bias



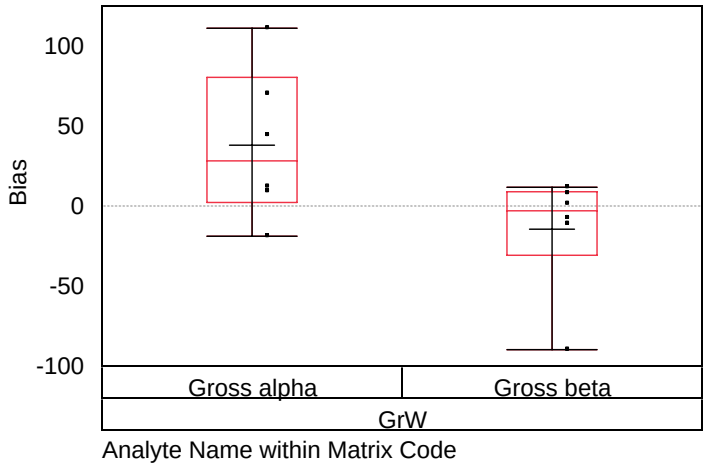


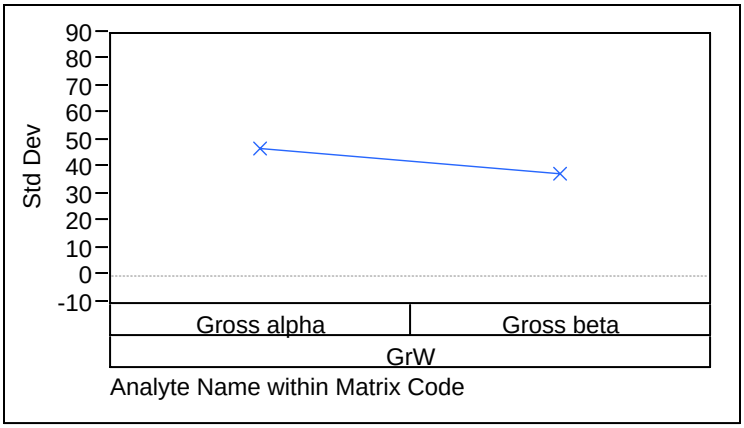
Variability Gauge Lab Code=SOUT01

Variability Chart for Bias

Variability Gauge Lab Code=SOUT01

Variability Chart for Bias



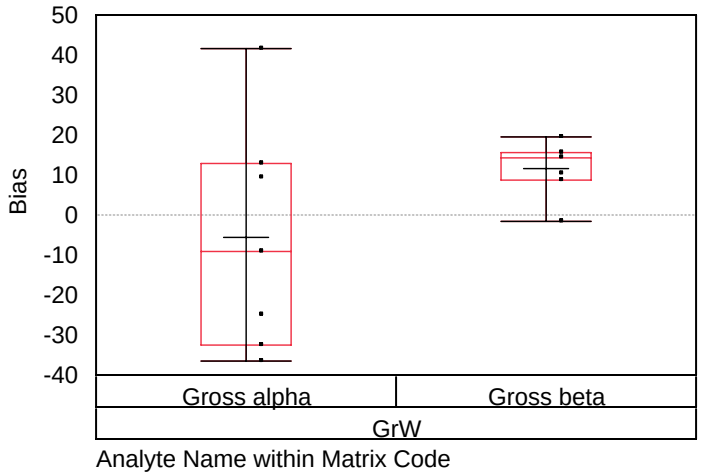


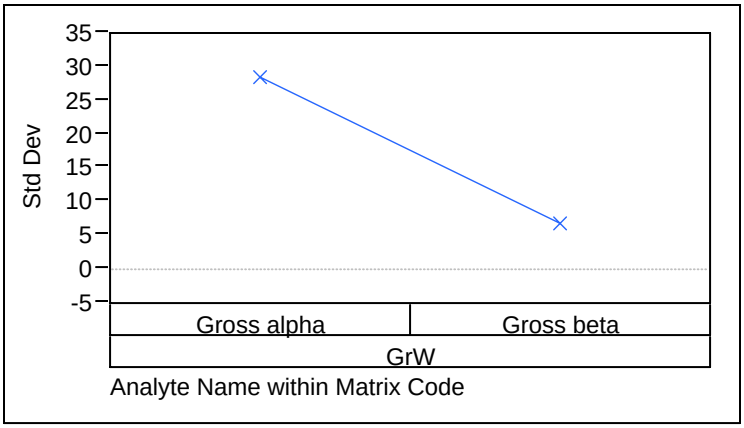
Variability Gauge Lab Code=TDHL01

Variability Chart for Bias

Variability Gauge Lab Code=TDHL01

Variability Chart for Bias



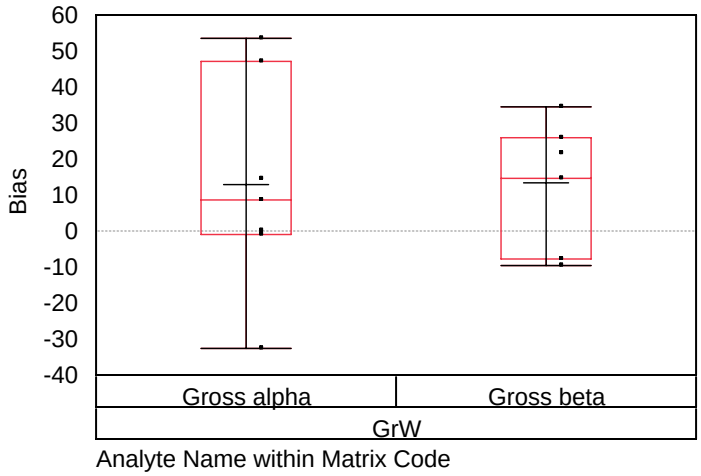


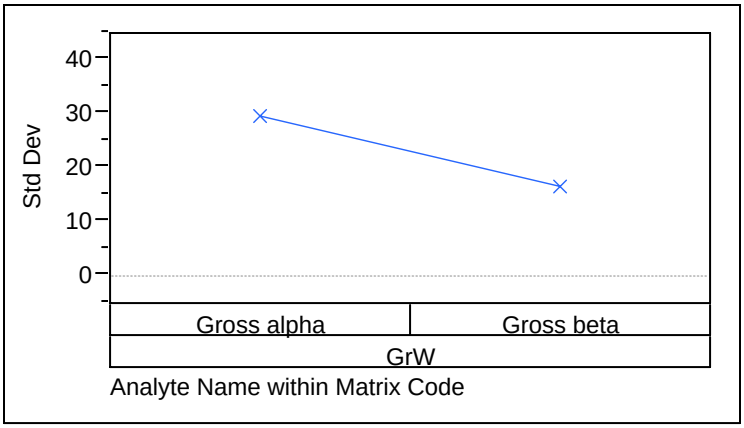
Variability Gauge Lab Code=TELE01

Variability Chart for Bias

Variability Gauge Lab Code=TELE01

Variability Chart for Bias



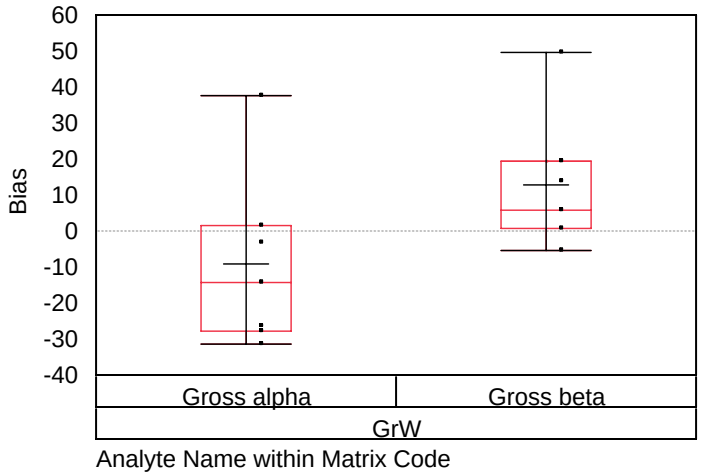


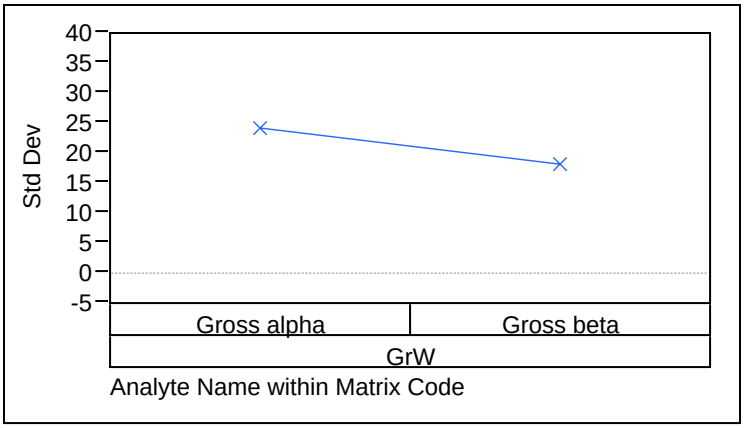
Variability Gauge Lab Code=TELE02

Variability Chart for Bias

Variability Gauge Lab Code=TELE02

Variability Chart for Bias



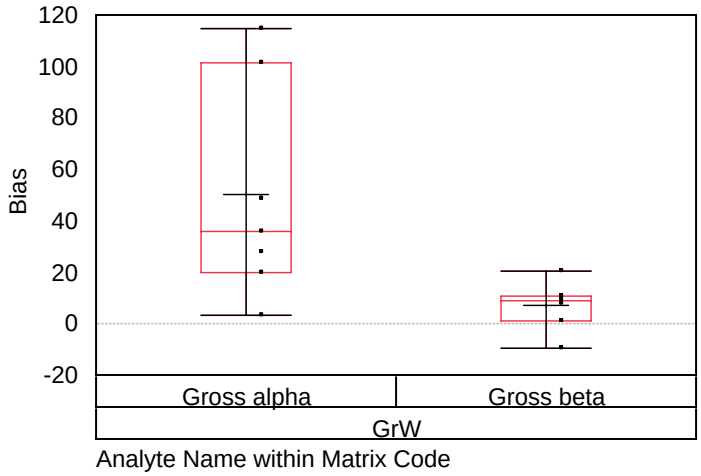


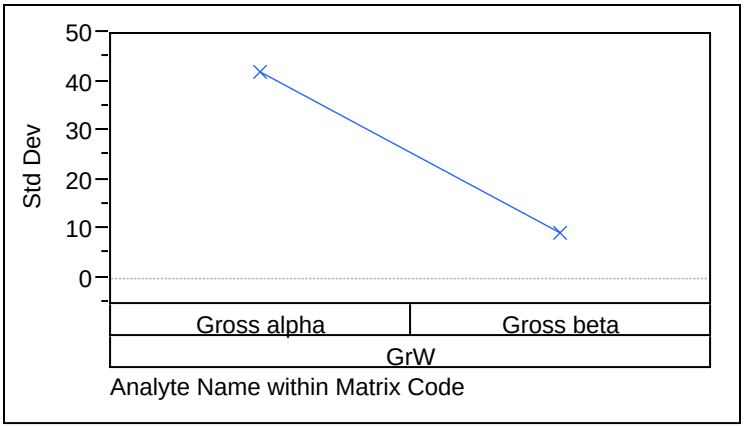
Variability Gauge Lab Code=TMAE01

Variability Chart for Bias

Variability Gauge Lab Code=TMAE01

Variability Chart for Bias



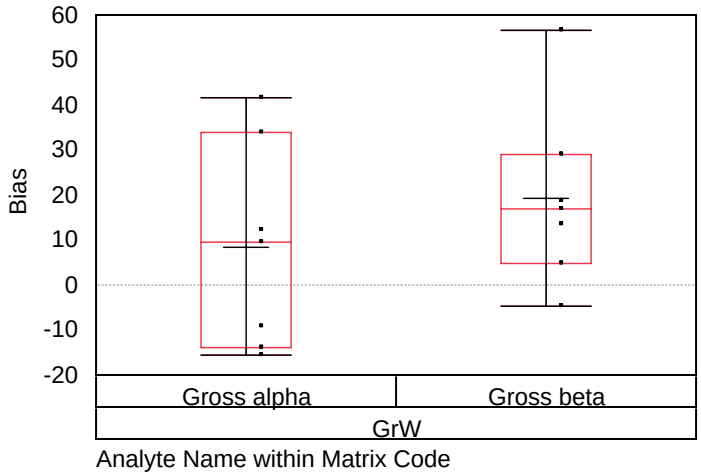


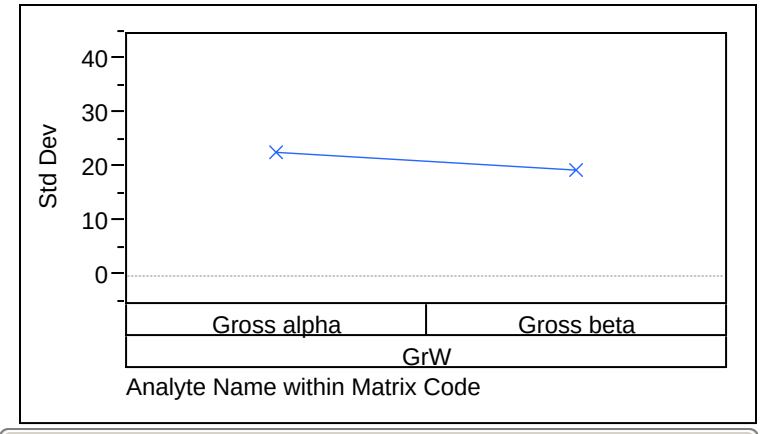
Variability Gauge Lab Code=TMAO01

Variability Chart for Bias

Variability Gauge Lab Code=TMAO01

Variability Chart for Bias



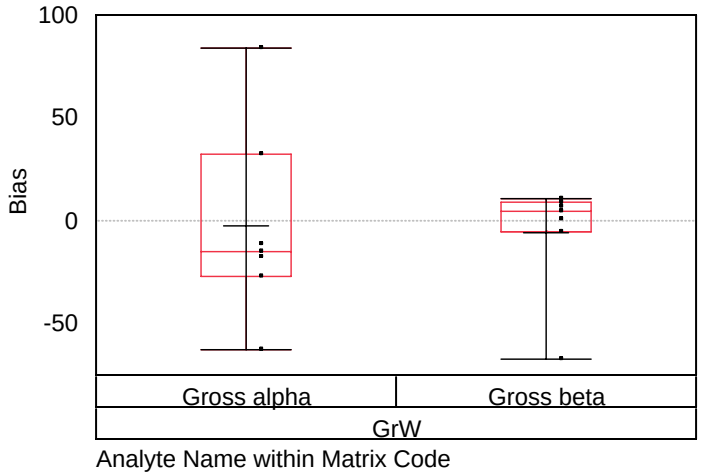


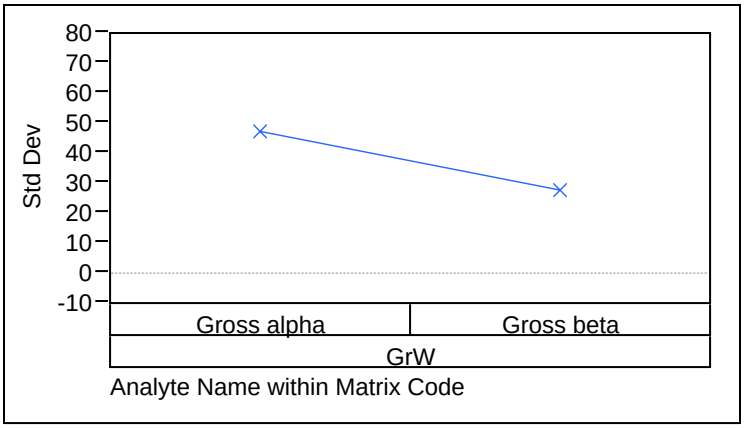
Variability Gauge Lab Code=TMAR01

Variability Chart for Bias

Variability Gauge Lab Code=TMAR01

Variability Chart for Bias



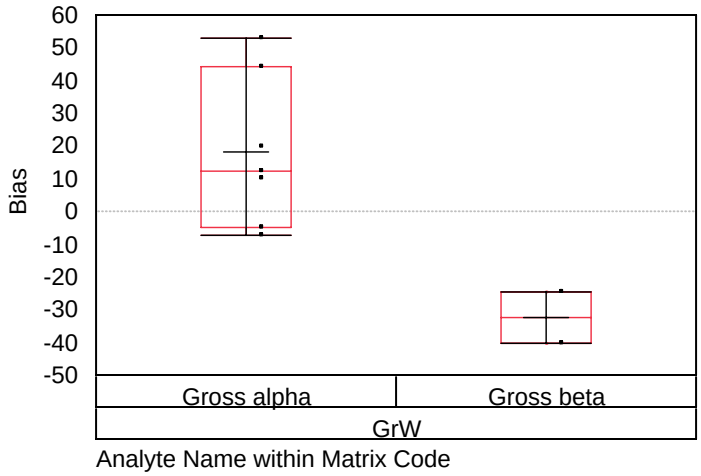


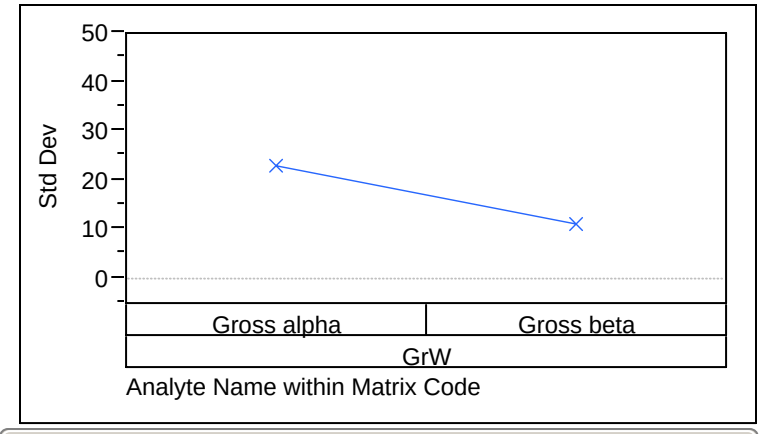
Variability Gauge Lab Code=TNUT01

Variability Chart for Bias

Variability Gauge Lab Code=TNUT01

Variability Chart for Bias



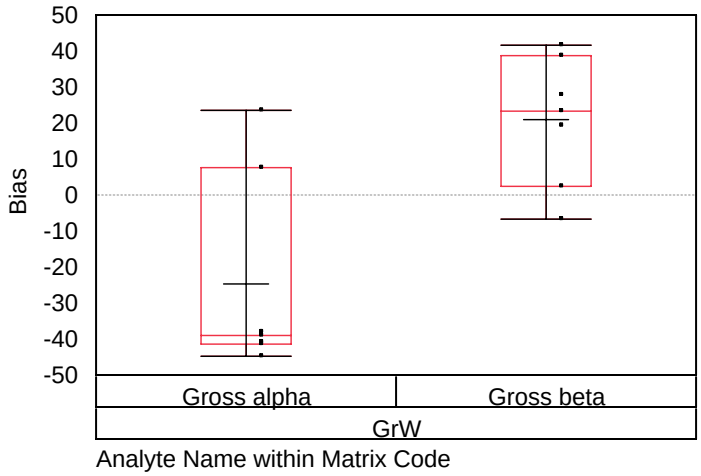


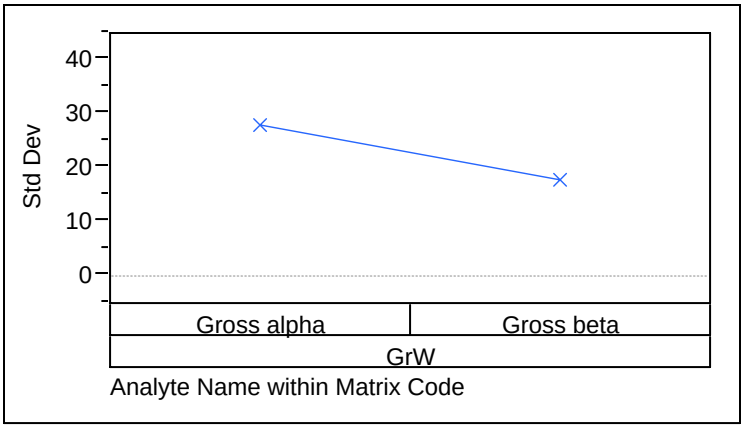
Variability Gauge Lab Code=WEST03

Variability Chart for Bias

Variability Gauge Lab Code=WEST03

Variability Chart for Bias



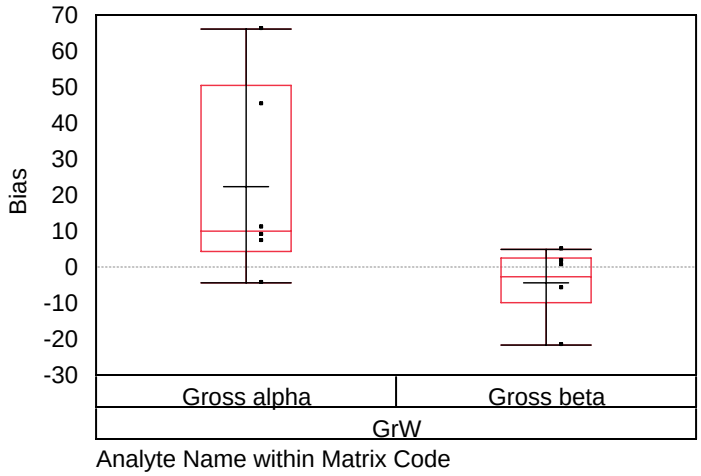


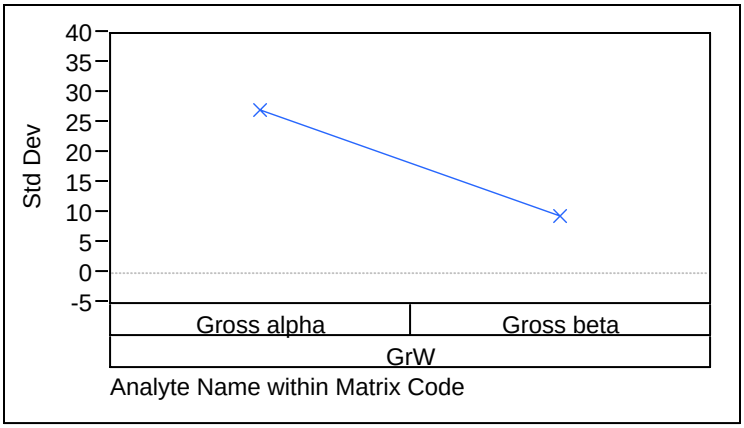
Variability Gauge Lab Code=WEST04

Variability Chart for Bias

Variability Gauge Lab Code=WEST04

Variability Chart for Bias



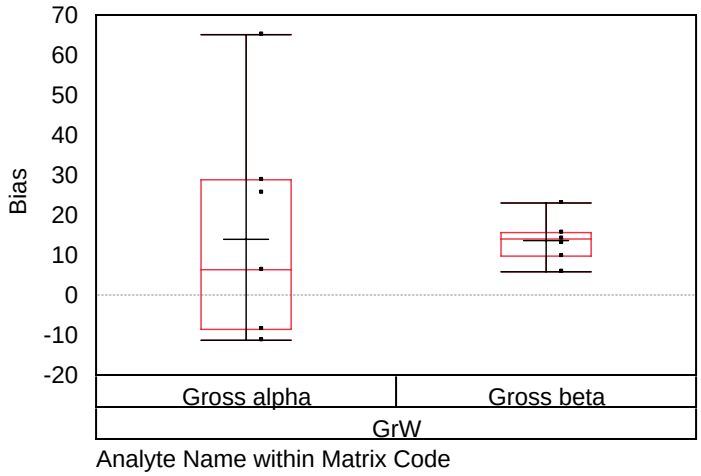


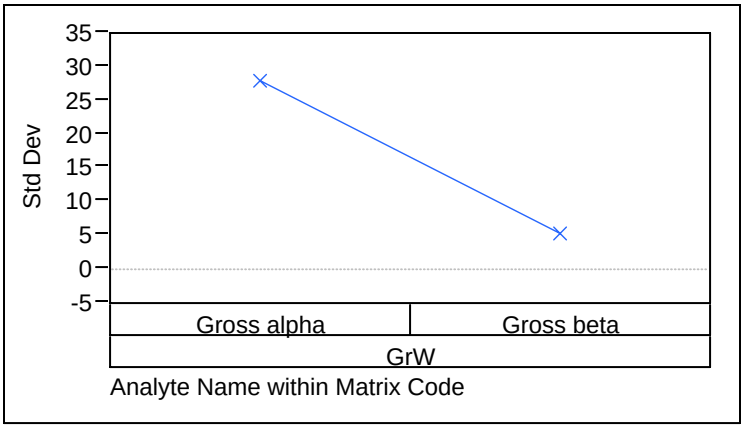
Variability Gauge Lab Code=WSHL01

Variability Chart for Bias

Variability Gauge Lab Code=WSHL01

Variability Chart for Bias



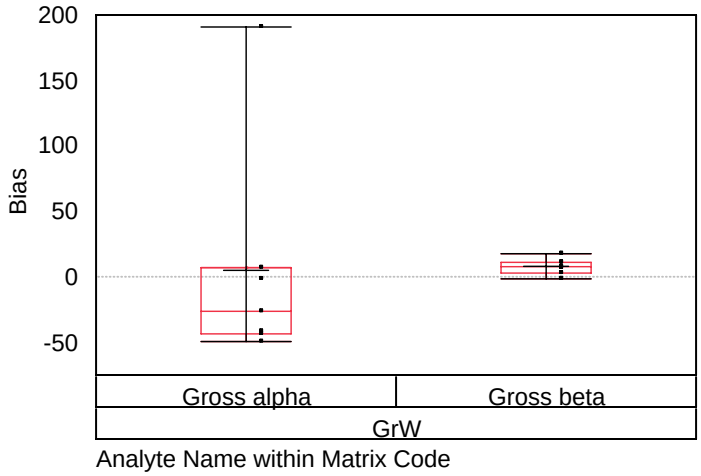


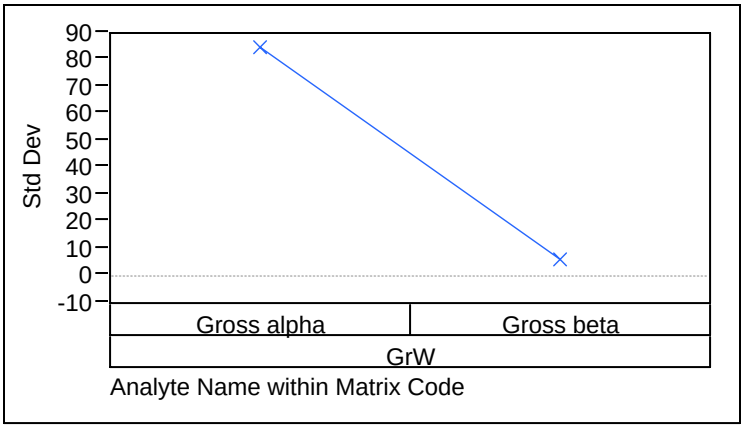
Variability Gauge Lab Code=WVDP01

Variability Chart for Bias

Variability Gauge Lab Code=WVDP01

Variability Chart for Bias





Variability Gauge Lab Code=WVNS01

Variability Chart for Bias

Variability Gauge Lab Code=WVNS01

Variability Chart for Bias