

RESL CUSTOMER EXPORT CONTROL AGREEMENT

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

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

GrF28 Laboratories Reporting Data

Lab Code	Lab Name
1 ADEM01	Alabama Department of Environmental Management
2 AFOH01	USAFSAM/OEA
3 ANTE01	ALS Environmental - Fort Collins, CO
4 ARGO01	Idaho National Laboratory
5 ARPL01	Analytical Support Operations - Radiochemical Processing Lab
6 ARSL01	American Radiation Services LLC
7 AY1201	B&W Y-12, Analytical Chemistry Organization Laboratory
8 CESL01	Lawrence Livermore National Laboratory - EMRL
9 CHMH01	222-S Laboratory
10 DEHS01	Department of Environmental Health & Safety
11 DPHE01	Colorado Dept. of Public Health & Env. / Laboratory Services Div.
12 DRMG01	B&W Pantex - D&RMG
13 ERCL01	Washington State Public Health Laboratories
14 ERLG01	Environmental Radiation Laboratory
15 ESGL99	Environmental Scientifics Group
16 EULC01	EnergySolutions, LLC
17 FDHE01	Florida Dept of Health Environmental Laboratory
18 FMEC99	Foods and Water Laboratories Center
19 GENE01	GEL Laboratories, LLC
20 HCAL01	Hazards Control Analytical Lab
21 HECR01	SC Dept. Health and Environmental Control Radiological Laboratory
22 HERR01	Washington Closure Hanford
23 ISUP01	ISU - Department of Physics/Health Physics/EAL
24 JAEC99	Radiation Measurements Laboratory
25 KDHE01	Kansas Dept. of Health & Environment
26 KSCF01	Kennedy Space Center, HP Laboratory
27 KUFS99	Center for Research in Environmental Radiation
28 LAEC99	Lebanese Atomic Energy Commission - Environmental Radiation
29 LDRA99	Laboratori de Radiologia Ambiental-Universitat de Barcelona
30 LOCK03	Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
31 MALA99	Asia Lab (M) Sdn. Bhd.
32 MART02	United States Enrichment Corporation
33 MART03	Radioactive Material Analysis Laboratory
34 MDPH01	MDPH-Radiation Control Program
35 NARL01	National Air and Radiation Environmental Laboratory
36 NARL02	USEPA - NAREL - MERL
37 NCNS99	National Center for Nuclear Sciences and Technologies
38 NESI01	B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory
39 NJDH01	New Jersey Dept. of Health, PHEL, ECLS
40 ODHL01	Ohio Department of Health Laboratory
41 ORIS01	ORISE/IEAV
42 OTLI01	Outreach Technologies, Inc.
43 QUAN01	TestAmerica St. Louis
44 QUAN03	TestAmerica Laboratories - Richland
45 RPSC01	Radiation Protection Service
46 RSAL01	RSA Laboratories, Inc.
47 SANC99	RadioAnalysis, South Africa Nuclear Energy Corp.
48 SEML01	SRS Environmental Monitoring Laboratory

49 SOUT01	Southwest Research Institute
50 SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagnostics
51 TDHL01	Texas Department of State Health Services Laboratory
52 TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
53 TELE02	Environmental, Inc., Midwest Lab
54 TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY
55 TNUT01	St. Louis USACE FUSRAP Laboratory
56 URSL01	UNLV Radioanalytical Services Laboratory
57 USED99	National Center for Nuclear Energy, Sciences and Techniques
58 WEST03	Waste Sampling and Characterization Facility, MSA
59 WEST04	PACE ANALYTICAL SERVICES, PITTSBURGH
60 WIPP01	WIPP Laboratories
61 WSHL01	Wisconsin State Laboratory of Hygiene
62 WVDP01	WVDP Environmental Laboratory
63 WVPL01	WVDP Radiation Protection Lab

GrF28 Laboratories Not Reporting Data

Lab Code	Lab Name
1 AREV01	AREVA - CMC
2 CEEA99	Laboratorio de Vigilancia Ambiental Radiactiva
3 FDOH01	Florida Dept. of Health, Mobile Environmental Radiological Lab
4 GPCL01	Georgia Power Company Environmental Laboratory
5 MSDH01	Mississippi State Dept of Health
6 RMCL99	Royal Scientific Society - Radiation Protection Lab
7 WSTP99	Babcock Environmental Laboratory

MAPEP-13-GrF28 Reference Values

Radiological Reference Date: 2/1/2013

Analyte Name	Reference		
	Value	Uncertainty	Units
Gross alpha	1.20	0.03	Bq/sample
Gross beta	0.85	0.03	Bq/sample

Sample Statistical Summary

MAPEP-13-GrF28

Analyte	T(1)	A(2)	Grand(3) Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological						Units: (Bq/sample)	
Gross alpha	63	53	0.80	0.36	1.20	0.03	0.36 - 2.04
Gross beta	63	57	0.90	0.10	0.85	0.03	0.43 - 1.28

Note: (1) T = Total number of laboratories reporting analyte.
 (2) A = Number of laboratories with 'Acceptable' performance.
 (3) Mean excludes values derived as total metals and values indicated as "Not Acceptable".

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Flag Summary Report

Generated July 10, 2013

MAPEP-13-GrF28

Radiological				
Analyte	A	W	RW	N
Gross alpha	53			10
Gross beta	57			6



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

Laboratory Results For MAPEP-13-GrF28
 (ADEM01) Alabama Department of Environmental Management
 Montgomery Laboratory
 Montgomery, AL 36110

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.491	1.20	A		-59.1	0.36 - 2.04	0.001	L
Gross beta	0.894	0.85	A		5.2	0.43 - 1.28	0.001	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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

Laboratory Results For MAPEP-13-GrF28

(AFOH01) USAFSAM/OEA

2510 Fifth Street, Area B

Wright-Patterson AFB, OH 45433-7913

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.322	1.20	N		-73.2	0.36 - 2.04	0.042	
Gross beta	0.830	0.85	A		-2.4	0.43 - 1.28	0.063	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (ANTE01) ALS Environmental - Fort Collins, CO
 225 Commerce Drive
 Fort Collins, CO 80524-1416

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.495	1.20	A		-58.8	0.36 - 2.04	0.040	
Gross beta	0.904	0.85	A		6.4	0.43 - 1.28	0.073	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (ARGO01) Idaho National Laboratory
 INL, Materials and Fuels Complex
 Idaho Falls, ID 83415

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	3.33E-01	1.20	N		-72.3	0.36 - 2.04	2.37E-02	
Gross beta	1.06E+00	0.85	A		24.7	0.43 - 1.28	7.48E-02	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(ARPL01) Analytical Support Operations - Radiochemical Processing Lab

PO Box 999

Richland, WA 99354

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.395	1.20	A		-67.1	0.36 - 2.04	0.015	
Gross beta	0.859	0.85	A		1.1	0.43 - 1.28	0.031	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (ARSL01) American Radiation Services LLC
 2609 North River Road
 Port Allen, LA 70767

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.620	1.20	A		-48.3	0.36 - 2.04	0.085	
Gross beta	0.886	0.85	A		4.2	0.43 - 1.28	0.113	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

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

Y12, NSC, Bldg. 9995, Rm 142

Oak Ridge, TN 37831-8189

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.39	1.20	A		15.8	0.36 - 2.04	0.10	
Gross beta	0.97	0.85	A		14.1	0.43 - 1.28	0.083	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (CESL01) Lawrence Livermore National Laboratory - EMRL
 7000 East Avenue
 Livermore, CA 94551

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	3.06E-01	1.20	N		-74.5	0.36 - 2.04	2.90E-03	L
Gross beta	9.54E-01	0.85	A		12.2	0.43 - 1.28	4.26E-03	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

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

Laboratory Results For MAPEP-13-GrF28

(CHMH01) 222-S Laboratory

P.O. Box 250, MS T6-10

Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.263	1.20	N		-78.1	0.36 - 2.04	0.025	
Gross beta	0.742	0.85	A		-12.7	0.43 - 1.28	0.0511	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% 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).

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Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (DEHS01) Department of Environmental Health & Safety
 North Carolina State Univ.
 Raleigh, NC 27695-8007

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.43	1.20	A		19.2	0.36 - 2.04	0.11	
Gross beta	0.98	0.85	A		15.3	0.43 - 1.28	0.04	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Laboratory Results For MAPEP-13-GrF28

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

8100 Lowry Blvd
Denver, CO 80230

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.22	1.20	A		1.7	0.36 - 2.04	0.08	
Gross beta	0.95	0.85	A		11.8	0.43 - 1.28	0.04	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

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N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (DRMG01) B&W Pantex - D&RMG
 Bldg 12-122
 Amarillo, TX 79120-0020

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.19E+00	1.20	A		-0.8	0.36 - 2.04	6.08E-03	L
Gross beta	9.17E-01	0.85	A		7.9	0.43 - 1.28	2.40E-02	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

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Gross Beta Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (ERCL01) Washington State Public Health Laboratories
 1610 N.E. 150th Street
 Shoreline, WA 98155-9701

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.585	1.20	A		-51.3	0.36 - 2.04	.045	
Gross beta	.940	0.85	A		10.6	0.43 - 1.28	.025	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty $>$ 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty \leq 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (ERLG01) Environmental Radiation Laboratory
 Georgia Institute of Tech.
 Atlanta, GA 30332

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.96	1.20	A		-20.0	0.36 - 2.04	0.01	L
Gross beta	.75	0.85	A		-11.8	0.43 - 1.28	.15	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (ESGL99) Environmental Scientifics Group
 Unit 12 Moorbrook
 Didcot, Oxfordshire OX11 8QT

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.52	1.20	A		-56.7	0.36 - 2.04	0.11	H
Gross beta	1.02	0.85	A		20.0	0.43 - 1.28	0.21	H

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (EULC01) EnergySolutions, LLC
 I-80, Exit 46
 Clive, UT 84029

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.5641	1.20	A		-53.0	0.36 - 2.04	.12	H
Gross beta	1.0508	0.85	A		23.6	0.43 - 1.28	.356	H

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (FDHE01) Florida Dept of Health Environmental Laboratory
 PO Box 680069
 Orlando, FL 32868-0069

Radiological					Units: (Bq/sample)			
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.34	1.20	N		-71.7	0.36 - 2.04	0.02	
Gross beta	1.53	0.85	N		80.0	0.43 - 1.28	0.03	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (FMEC99) Foods and Water Laboratories Center
 Ministry of Regional Municipalities and Water Resources
 Muscat, seeb 111

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.8475	1.20	A		-29.4	0.36 - 2.04	0.085	
Gross beta	0.8397	0.85	A		-1.2	0.43 - 1.28	0.084	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (GENE01) GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	6.56E-01	1.20	A		-45.3	0.36 - 2.04	3.54E-02	
Gross beta	9.54E-01	0.85	A		12.2	0.43 - 1.28	5.20E-02	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28
 (HCAL01) Hazards Control Analytical Lab
 Lawrence Livermore National
 Livermore, CA 94551

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.51	1.20	A		-57.5	0.36 - 2.04	.11	H
Gross beta	.99	0.85	A		16.5	0.43 - 1.28	.11	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28

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

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.481	1.20	A		-59.9	0.36 - 2.04	0.055	
Gross beta	0.891	0.85	A		4.8	0.43 - 1.28	0.057	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (HERR01) Washington Closure Hanford
 Radiological Counting Facility
 Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.43	1.20	A		-64.2	0.36 - 2.04	.04	
Gross beta	.97	0.85	A		14.1	0.43 - 1.28	.09	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (ISUP01) ISU - Department of Physics/Health Physics/EAL
 785 S. 8th Ave, Rm 120
 Pocatello, ID 83209-8106

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.47	1.20	A		-60.8	0.36 - 2.04	0.02	
Gross beta	0.70	0.85	A		-17.6	0.43 - 1.28	0.01	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (JAEC99) Radiation Measurements Laboratory
 Jordan Atomic Energy Commission
 Amman, Jordan 70 (11934)

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.915	1.20	A		-23.8	0.36 - 2.04	0.008	L
Gross beta	0.377	0.85	N		-55.6	0.43 - 1.28	0.007	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (KDHE01) Kansas Dept. of Health & Environment
 Forbes Bldg. 740
 Topeka, KS 66620

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.05	1.20	A		-12.5	0.36 - 2.04	0.06	
Gross beta	0.84	0.85	A		-1.2	0.43 - 1.28	0.03	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (KSCF01) Kennedy Space Center, HP Laboratory
 IHA-023
 Kennedy Space Center, FL 32899

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.50	1.20	A		-58.3	0.36 - 2.04	2.16	H
Gross beta	1.066	0.85	A		25.4	0.43 - 1.28	3.80	H

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias $\leq \pm 70\%$ with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $> \pm 70\%$ or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (KUFS99) Center for Research in Environmental Radiation
 Kuwait University - Faculty of Science
 Khaldia, Kuwait 13060

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.54	1.20	A		28.3	0.36 - 2.04	0.03	L
Gross beta	0.30	0.85	N		-64.7	0.43 - 1.28	0.001	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (LAEC99) Lebanese Atomic Energy Commission - Environmental Radiation
 National Council for Scientific Research
 Beirut, Beirut 1107 2260

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.01	1.20	A		-15.8	0.36 - 2.04	0.01	L
Gross beta	0.86	0.85	A		1.2	0.43 - 1.28	0.05	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28

(LDRA99) Laboratori de Radiologia Ambiental-Universitat de Barcelona

Facultat de Química

Barcelona, Catalunya 08028

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.103	1.20	A		-8.1	0.36 - 2.04	0.016	L
Gross beta	0.809	0.85	A		-4.8	0.43 - 1.28	0.015	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (LOCK03) Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
 INL/Battelle Energy Alliance, LLC
 Idaho Falls, ID 83415-7111

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.47	1.20	A		-60.8	0.36 - 2.04	0.03	
Gross beta	0.99	0.85	A		16.5	0.43 - 1.28	0.09	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28

(MALA99) Asia Lab (M) Sdn. Bhd.

No. 14, JLN USJ 1/1

Subang Jaya, Selangor 47600

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.47	1.20	A		-60.8	0.36 - 2.04	0.03	
Gross beta	0.99	0.85	A		16.5	0.43 - 1.28	0.02	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (MART02) United States Enrichment Corporation
 PO Box 1410
 Paducah, KY 42002

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.71	1.20	A		42.5	0.36 - 2.04	0.18	
Gross beta	0.90	0.85	A		5.9	0.43 - 1.28	0.03	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (MART03) Radioactive Material Analysis Laboratory
 ORNL
 Oak Ridge, TN 37831-6223

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.68	1.20	A		-43.3	0.36 - 2.04	0.04	
Gross beta	0.934	0.85	A		9.9	0.43 - 1.28	0.04	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (MDPH01) MDPH-Radiation Control Program
 MERL-Room 002
 Jamaica Plain, MA 02130-3597

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.52	1.20	A		-56.7	0.36 - 2.04	0.03	
Gross beta	0.92	0.85	A		8.2	0.43 - 1.28	0.03	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (NARL01) National Air and Radiation Environmental Laboratory
 540 S. Morris Ave.
 Montgomery, AL 36115-2601

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.568	1.20	A		-52.7	0.36 - 2.04	.0613	
Gross beta	0.822	0.85	A		-3.3	0.43 - 1.28	0.0475	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (NARL02) USEPA - NAREL - MERL
 540 S Morris Ave
 Montgomery, AL 36115

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.234	1.20	N		-80.5	0.36 - 2.04	0.011	
Gross beta	0.879	0.85	A		3.4	0.43 - 1.28	0.0180	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(NCNS99) National Center for Nuclear Sciences and Technologies

Technopole Sidi

Thabet Ariana, Ariana 2020

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.364	1.20	A		-69.7	0.36 - 2.04	0.006	L
Gross beta	1.043	0.85	A		22.7	0.43 - 1.28	0.03	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

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

Lynchburg Technology Center

Lynchburg, VA 24504-5447

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.05	1.20	N		-95.8	0.36 - 2.04	0.01	
Gross beta	0.38	0.85	N		-55.3	0.43 - 1.28	0.01	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (NJDH01) New Jersey Dept. of Health, PHEL, ECLS
 3 Schwarzkopf Drive
 West Trenton, NJ 08628

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.066	1.20	A		-11.2	0.36 - 2.04	0.023	L
Gross beta	0.925	0.85	A		8.8	0.43 - 1.28	0.046	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (ODHL01) Ohio Department of Health Laboratory
 8995 E Main Street
 Reynoldsburg, OH 43068

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.912	1.20	A		-24.0	0.36 - 2.04	0.031	
Gross beta	1.031	0.85	A		21.3	0.43 - 1.28	0.018	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(ORIS01) ORISE/IEAV

PO Box 117

Oak Ridge, TN 37831-0117

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.15	1.20	A		-4.2	0.36 - 2.04	0.03	L
Gross beta	0.937	0.85	A		10.2	0.43 - 1.28	0.014	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(OTLI01) Outreach Technologies, Inc.

311 N. Aspen

Broken Arrow, OK 74012-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.283	1.20	N		-76.4	0.36 - 2.04	0.001	L
Gross beta	0.866	0.85	A		1.9	0.43 - 1.28	0.039	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(QUAN01) TestAmerica St. Louis

13715 Rider Trail North

Earth City, MO 63045-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.437	1.20	A		-63.6	0.36 - 2.04	0.0658	
Gross beta	1.11	0.85	A		30.6	0.43 - 1.28	0.125	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (QUAN03) TestAmerica Laboratories - Richland
 2800 GEORGE WASHINGTON WAY
 RICHLAND, WA 99354-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.469	1.20	A		-60.9	0.36 - 2.04	0.0539	
Gross beta	1.01	0.85	A		18.8	0.43 - 1.28	0.0780	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

(RPSC01) Radiation Protection Service

Ontario Ministry of Labour

Weston, Ontario M9P 3T1

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	.43	1.20	A		-64.2	0.36 - 2.04	.09	H
Gross beta	1.12	0.85	A		31.8	0.43 - 1.28	.11	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28

(RSAL01) RSA Laboratories, Inc.

PO Box 61

Hebron, CT 06248

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.42	1.20	A		18.3	0.36 - 2.04	0.14	
Gross beta	2.42	0.85	N		184.7	0.43 - 1.28	0.21	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28
 (SANC99) RadioAnalysis, South Africa Nuclear Energy Corp.
 Sample Receipt Gate 1
 Pretoria, Gauteng 0001

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.716	1.20	A		-40.3	0.36 - 2.04	0.057	
Gross beta	0.893	0.85	A		5.1	0.43 - 1.28	0.053	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

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



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

Laboratory Results For MAPEP-13-GrF28
 (SEML01) SRS Environmental Monitoring Laboratory
 Bldg 735-B
 Aiken, SC 29808

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.17	1.20	A		-2.5	0.36 - 2.04	0.079	
Gross beta	0.86	0.85	A		1.2	0.43 - 1.28	0.044	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28
 (SOUT01) Southwest Research Institute
 6220 Culebra Rd.
 San Antonio, TX 78228-0510

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.630	1.20	A		-47.5	0.36 - 2.04	0.0396	
Gross beta	0.778	0.85	A		-8.5	0.43 - 1.28	0.0474	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28

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

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.325	1.20	A		10.4	0.36 - 2.04	0.058	
Gross beta	0.877	0.85	A		3.2	0.43 - 1.28	0.063	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (TDHL01) Texas Department of State Health Services Laboratory
 1100 W 49th Street
 Austin, TX 78756

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.24	1.20	A		3.3	0.36 - 2.04	0.03	L
Gross beta	0.840	0.85	A		-1.2	0.43 - 1.28	0.020	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28

(TELE01) TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES

2508 Quality Lane

Knoxville, TN 37931-6819

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.767	1.20	A		-36.1	0.36 - 2.04	0.0413	
Gross beta	0.871	0.85	A		2.5	0.43 - 1.28	0.0566	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (TELE02) Environmental, Inc., Midwest Lab
 700 Landwehr Road
 Northbrook, IL 60062-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.14	1.20	N		-88.3	0.36 - 2.04	0.03	H
Gross beta	0.93	0.85	A		9.4	0.43 - 1.28	0.06	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (TMAO01) EBERLINE SERVICES OAK RIDGE LABORATORY
 601 SCARBORO RD
 OAK RIDGE, TN 37830-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.8963	1.20	A		-25.3	0.36 - 2.04	0.0205	L
Gross beta	0.8620	0.85	A		1.4	0.43 - 1.28	0.0331	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (TNUT01) St. Louis USACE FUSRAP Laboratory
 8945 LATTY AVE
 BERKELEY, MO 63134-

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.4807	1.20	A		-59.9	0.36 - 2.04	0.0179	
Gross beta	0.9203	0.85	A		8.3	0.43 - 1.28	0.0191	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28
 (URSL01) UNLV Radioanalytical Services Laboratory
 Campus Mail Stop 453037
 Las Vegas, NV 89154-3037

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.06	1.20	A		-11.7	0.36 - 2.04	0.0406	
Gross beta	0.835	0.85	A		-1.8	0.43 - 1.28	0.0231	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

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

Laboratory Results For MAPEP-13-GrF28

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

CNESTEN BP 1382

RABAT, RABAT RP 10001

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.40	1.20	A		-66.7	0.36 - 2.04	0.02	
Gross beta	1.45	0.85	N		70.6	0.43 - 1.28	0.04	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (WEST03) Waste Sampling and Characterization Facility, MSA
 PO Box 650, S3-30
 Richland, WA 99352

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.855	1.20	A		-28.8	0.36 - 2.04	0.090	
Gross beta	0.744	0.85	A		-12.5	0.43 - 1.28	0.077	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (WEST04) PACE ANALYTICAL SERVICES, PITTSBURGH
 1638 Roseytown Road
 Greensburg, PA 15601

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.7419	1.20	A		-38.2	0.36 - 2.04	0.1344	
Gross beta	0.6577	0.85	A		-22.6	0.43 - 1.28	0.1187	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28

(WIPP01) WIPP Laboratories

1400 University Drive

Carlsbad, NM 88220

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	4.88E-01	1.20	A		-59.3	0.36 - 2.04	3.11E-02	
Gross beta	7.54E-01	0.85	A		-11.3	0.43 - 1.28	7.09E-02	

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (WSHL01) Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive
 Madison, WI 53718

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	1.35	1.20	A		12.5	0.36 - 2.04	0.025	L
Gross beta	0.8621	0.85	A		1.4	0.43 - 1.28	0.009	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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

Laboratory Results For MAPEP-13-GrF28
 (WVDP01) WVDP Environmental Laboratory
 10282 Rock Springs Road
 West Valley, NY 14171

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.307	1.20	N		-74.4	0.36 - 2.04	0.00806	L
Gross beta	0.905	0.85	A		6.5	0.43 - 1.28	0.0138	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias <= +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias > +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty <= 2, i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

Other Flags:

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



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

Laboratory Results For MAPEP-13-GrF28
 (WVPL01) WVDP Radiation Protection Lab
 10282 Rock Springs Rd
 West Valley, NY 14171

Radiological						Units: (Bq/sample)		
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.4220	1.20	A		-64.8	0.36 - 2.04	0.0210	
Gross beta	0.8725	0.85	A		2.6	0.43 - 1.28	0.0255	L

Radiological Reference Date: February 1, 2013

Gross Alpha Flags:

A = Result acceptable, Bias \leq +/- 70% with a statistically positive result at two standard deviations (Result/Uncertainty > 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, does not include zero).

N = Result not acceptable, Bias $>$ +/- 70% or the reported result is not statistically positive at two standard deviations (Result/Uncertainty ≤ 2 , i.e., the range encompassing the result, plus or minus the total uncertainty at two standard deviations, includes zero).

Gross Beta Flags:

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

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

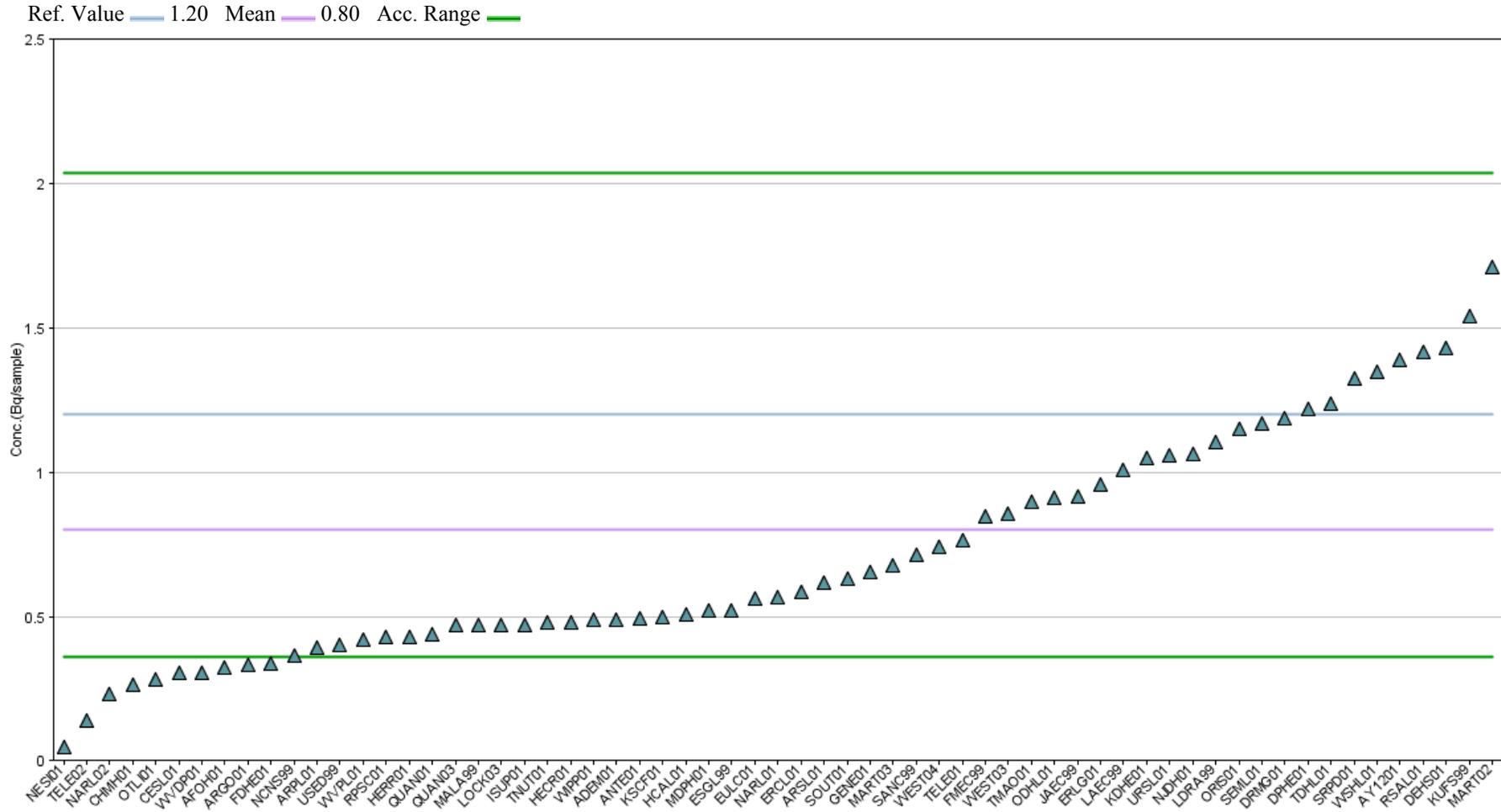
Other Flags:

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

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

Gross alpha

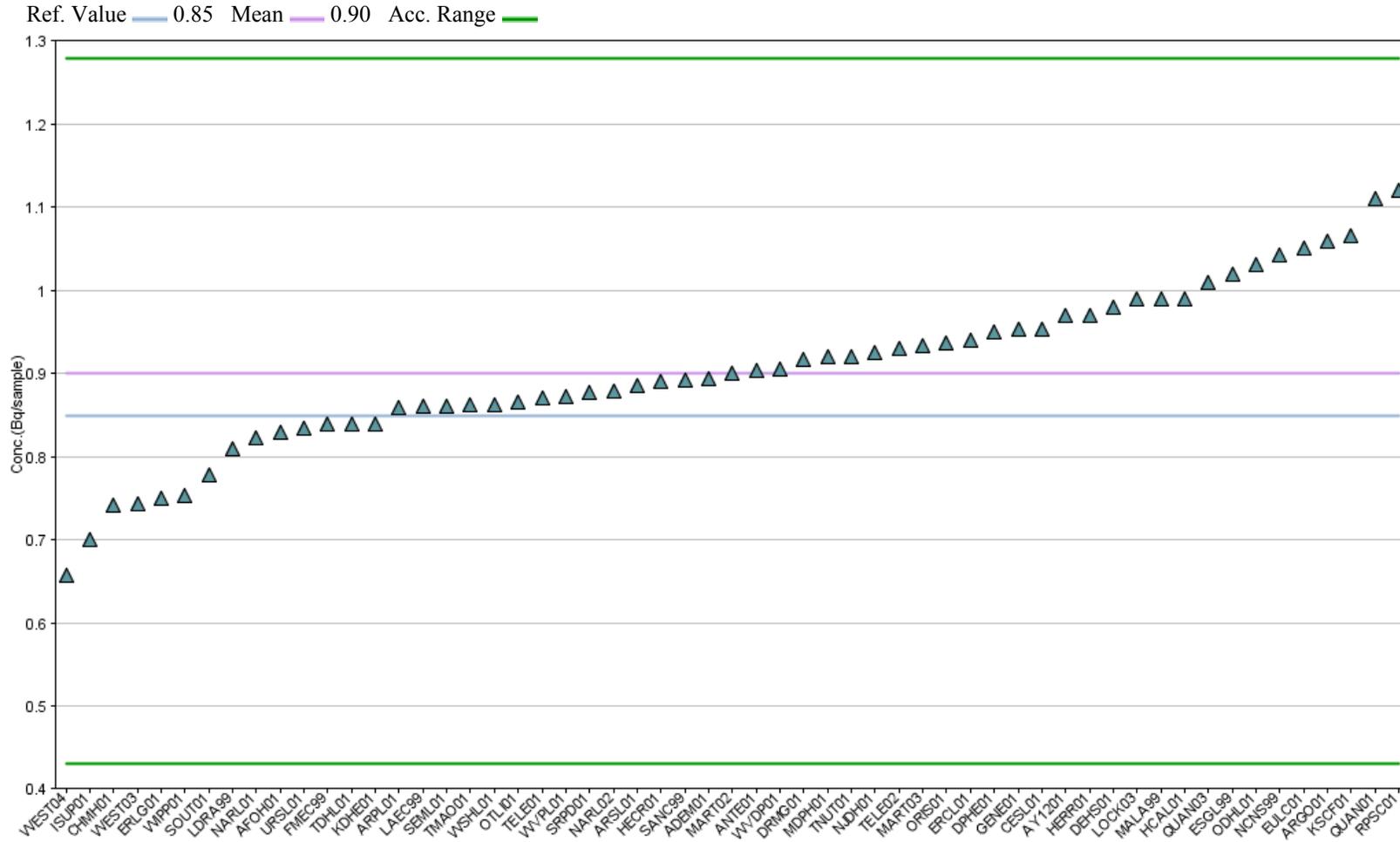
MAPEP-13-GrF28



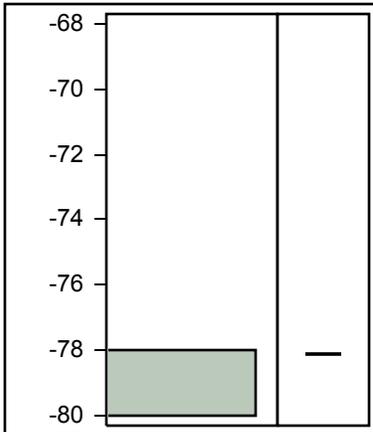
Note: This chart shows only data points with values between 0.00 and 2.60 (± 5 Standard Deviations)

Gross beta

MAPEP-13-GrF28



Note: This chart shows only data points with values between 0.40 and 1.40 (± 5 Standard Deviations)

GrF Distribution by Detection Method**Distributions Analyte_Detection=Gross
alpha Alpha Spectrometry****Bias****Quantiles**

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

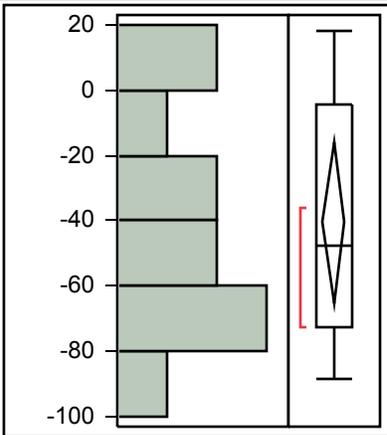
Summary Statistics

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

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross alpha
Beta Counting - 2 pi gas flow proportional counter**

Bias



Quantiles

100.0%	maximum	18.3
99.5%		18.3
97.5%		18.3
90.0%		17.8
75.0%	quartile	-4.2
50.0%	median	-47.5
25.0%	quartile	-72.3
10.0%		-85.52
2.5%		-88.3
0.5%		-88.3
0.0%	minimum	-88.3

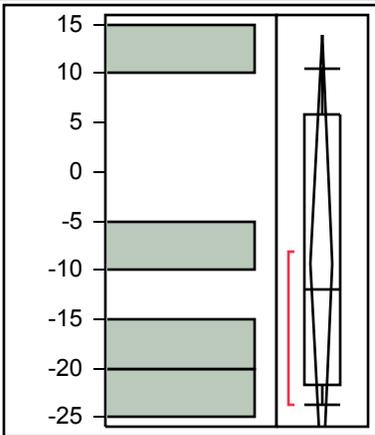
Summary Statistics

Mean	-40.54545
Std Dev	36.321712
Std Err Mean	10.951408
Upper 95% Mean	-16.1442
Lower 95% Mean	-64.94671
N	11

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross alpha
Beta Counting - liquid scintillation counter**

Bias



Quantiles

100.0%	maximum	10.4
99.5%		10.4
97.5%		10.4
90.0%		10.4
75.0%	quartile	5.775
50.0%	median	-11.95
25.0%	quartile	-21.8
10.0%		-23.8
2.5%		-23.8
0.5%		-23.8
0.0%	minimum	-23.8

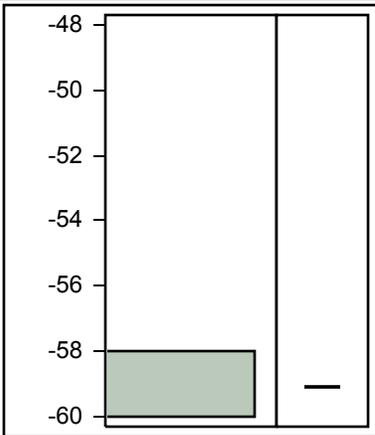
Summary Statistics

Mean	-9.325
Std Dev	14.629052
Std Err Mean	7.3145261
Upper 95% Mean	13.953086
Lower 95% Mean	-32.60309
N	4

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross
alpha Gamma Spectrometry**

Bias



Quantiles

100.0%	maximum	-59.1
99.5%		-59.1
97.5%		-59.1
90.0%		-59.1
75.0%	quartile	-59.1
50.0%	median	-59.1
25.0%	quartile	-59.1
10.0%		-59.1
2.5%		-59.1
0.5%		-59.1
0.0%	minimum	-59.1

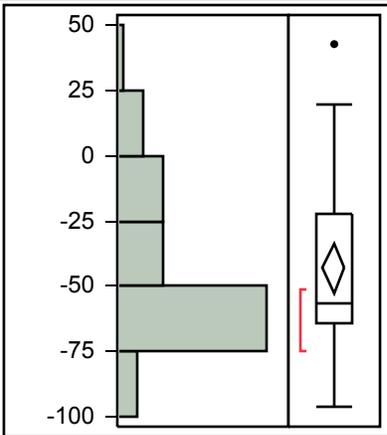
Summary Statistics

Mean	-59.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Detection Method

Distributions Analyte_Detection=Gross alpha Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	42.5
99.5%		42.5
97.5%		39.005
90.0%		2.34
75.0%	quartile	-22
50.0%	median	-56.7
25.0%	quartile	-64.2
10.0%		-73.72
2.5%		-93.505
0.5%		-95.8
0.0%	minimum	-95.8

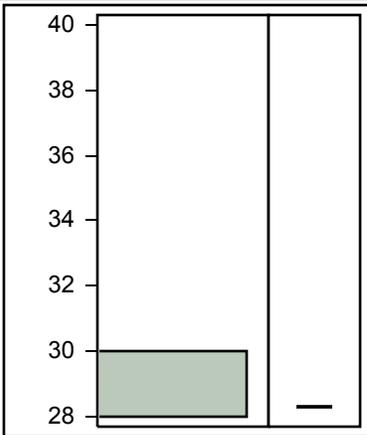
Summary Statistics

Mean	-43.22
Std Dev	30.508051
Std Err Mean	4.5478717
Upper 95% Mean	-34.05437
Lower 95% Mean	-52.38563
N	45

GrF Distribution by Detection Method

Distributions
 Analyte_Detection=Gross alpha Other

Bias



Quantiles

100.0%	maximum	28.3
99.5%		28.3
97.5%		28.3
90.0%		28.3
75.0%	quartile	28.3
50.0%	median	28.3
25.0%	quartile	28.3
10.0%		28.3
2.5%		28.3
0.5%		28.3
0.0%	minimum	28.3

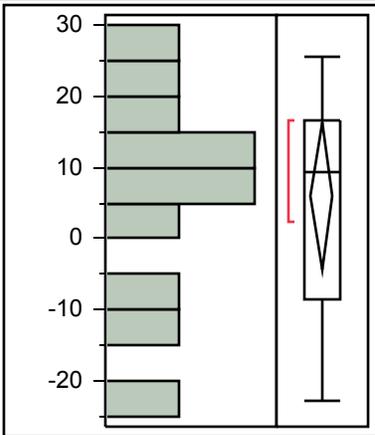
Summary Statistics

Mean	28.3
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross beta Beta
Counting - 2 pi gas flow proportional counter**

Bias



Quantiles

100.0%	maximum	25.4
99.5%		25.4
97.5%		25.4
90.0%		25.26
75.0%	quartile	16.5
50.0%	median	9.4
25.0%	quartile	-8.5
10.0%		-20.62
2.5%		-22.6
0.5%		-22.6
0.0%	minimum	-22.6

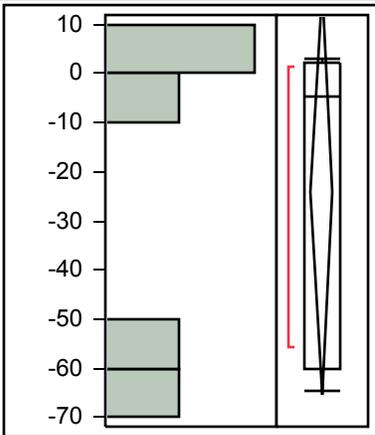
Summary Statistics

Mean	5.9545455
Std Dev	15.236428
Std Err Mean	4.5939558
Upper 95% Mean	16.190517
Lower 95% Mean	-4.281426
N	11

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross beta
Beta Counting - liquid scintillation counter**

Bias



Quantiles

100.0%	maximum	3.2
99.5%		3.2
97.5%		3.2
90.0%		3.2
75.0%	quartile	2.2
50.0%	median	-4.8
25.0%	quartile	-60.15
10.0%		-64.7
2.5%		-64.7
0.5%		-64.7
0.0%	minimum	-64.7

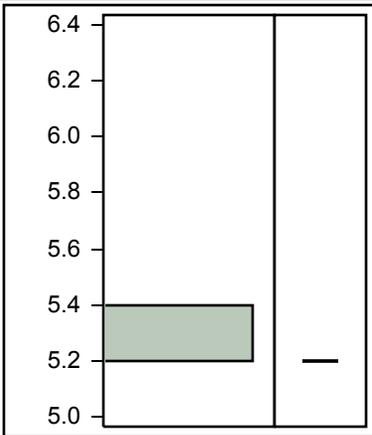
Summary Statistics

Mean	-24.14
Std Dev	33.160489
Std Err Mean	14.829821
Upper 95% Mean	17.034185
Lower 95% Mean	-65.31418
N	5

GrF Distribution by Detection Method

**Distributions Analyte_Detection=Gross
beta Gamma Spectrometry**

Bias



Quantiles

100.0%	maximum	5.2
99.5%		5.2
97.5%		5.2
90.0%		5.2
75.0%	quartile	5.2
50.0%	median	5.2
25.0%	quartile	5.2
10.0%		5.2
2.5%		5.2
0.5%		5.2
0.0%	minimum	5.2

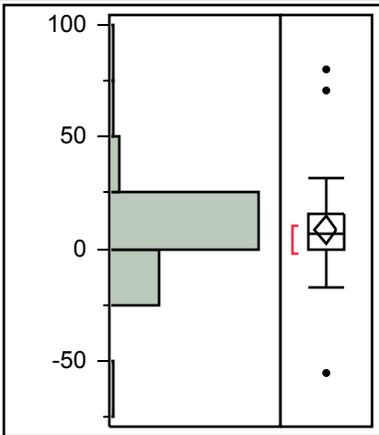
Summary Statistics

Mean	5.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Detection Method

Distributions Analyte_Detection=Gross beta Gross Alpha/Beta - 2 pi gas flow proportional counter

Bias



Quantiles

100.0%	maximum	80
99.5%		80
97.5%		78.59
90.0%		26.4
75.0%	quartile	15.9
50.0%	median	6.4
25.0%	quartile	-0.05
10.0%		-11.5
2.5%		-49.645
0.5%		-55.3
0.0%	minimum	-55.3

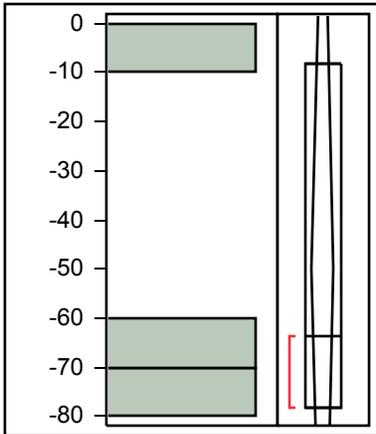
Summary Statistics

Mean	8.7
Std Dev	20.277708
Std Err Mean	3.0228223
Upper 95% Mean	14.792098
Lower 95% Mean	2.607902
N	45

GrF Distribution by Prep Method

**Distributions Analyte_Method=Gross alpha
Acid leaching without hydrofluoric acid**

Bias



Quantiles

100.0%	maximum	-8.1
99.5%		-8.1
97.5%		-8.1
90.0%		-8.1
75.0%	quartile	-8.1
50.0%	median	-63.6
25.0%	quartile	-78.1
10.0%		-78.1
2.5%		-78.1
0.5%		-78.1
0.0%	minimum	-78.1

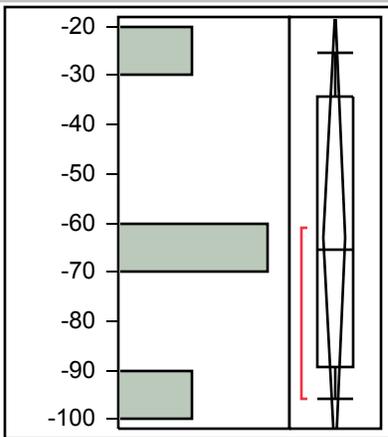
Summary Statistics

Mean	-49.93333
Std Dev	36.947034
Std Err Mean	21.33138
Upper 95% Mean	41.848188
Lower 95% Mean	-141.7149
N	3

GrF Distribution by Prep Method

Distributions Analyte_Method=Gross alpha EPA 900,
Radioactivity, Gross Alpha/Beta Screening, 600/4-80-032

Bias



Quantiles

100.0%	maximum	-25.3
99.5%		-25.3
97.5%		-25.3
90.0%		-25.3
75.0%	quartile	-34.2
50.0%	median	-65.3
25.0%	quartile	-89.275
10.0%		-95.8
2.5%		-95.8
0.5%		-95.8
0.0%	minimum	-95.8

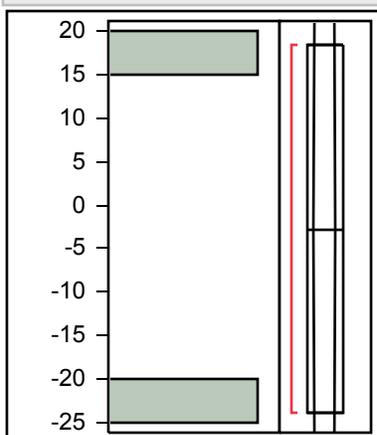
Summary Statistics

Mean	-62.925
Std Dev	29.134215
Std Err Mean	14.567108
Upper 95% Mean	-16.56596
Lower 95% Mean	-109.284
N	4

GrF Distribution by Prep Method

Distributions Analyte_Method=Gross
alpha Evaporation, acidified

Bias

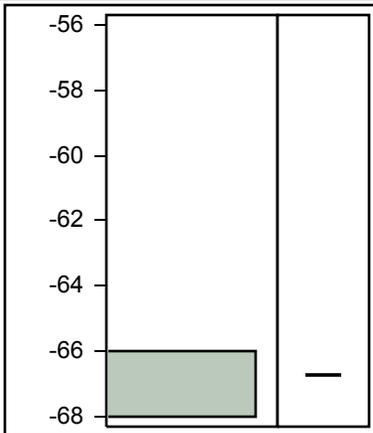


Quantiles

100.0%	maximum	18.3
99.5%		18.3
97.5%		18.3
90.0%		18.3
75.0%	quartile	18.3
50.0%	median	-2.75
25.0%	quartile	-23.8
10.0%		-23.8
2.5%		-23.8
0.5%		-23.8
0.0%	minimum	-23.8

Summary Statistics

Mean	-2.75
Std Dev	29.769195
Std Err Mean	21.05
Upper 95% Mean	264.71561
Lower 95% Mean	-270.2156
N	2

GrF Distribution by Prep Method**Distributions Analyte_Method=Gross
alpha Evaporation, straight****Bias****Quantiles**

100.0%	maximum	-66.7
99.5%		-66.7
97.5%		-66.7
90.0%		-66.7
75.0%	quartile	-66.7
50.0%	median	-66.7
25.0%	quartile	-66.7
10.0%		-66.7
2.5%		-66.7
0.5%		-66.7
0.0%	minimum	-66.7

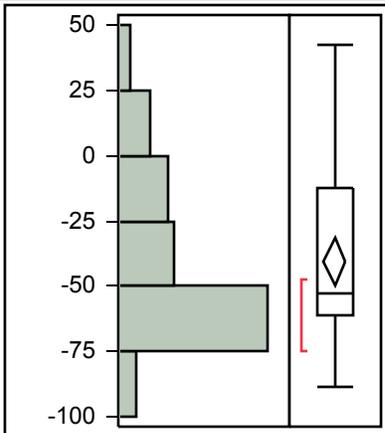
Summary Statistics

Mean	-66.7
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method

Distributions Analyte_Method=Gross alpha
No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	42.5
99.5%		42.5
97.5%		38.24
90.0%		8.98
75.0%	quartile	-12.5
50.0%	median	-52.7
25.0%	quartile	-60.8
10.0%		-74.16
2.5%		-85.96
0.5%		-88.3
0.0%	minimum	-88.3

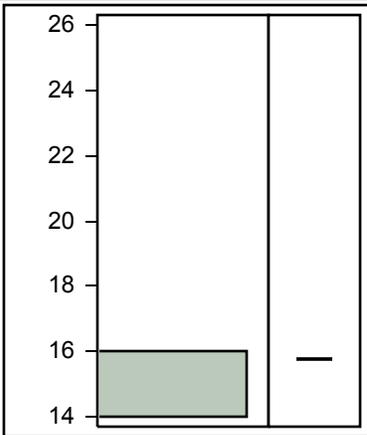
Summary Statistics

Mean	-40.45882
Std Dev	31.541479
Std Err Mean	4.4166904
Upper 95% Mean	-31.58764
Lower 95% Mean	-49.33001
N	51

GrF Distribution by Prep Method

Distributions
 Analyte_Method=Gross alpha Other

Bias



Quantiles

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

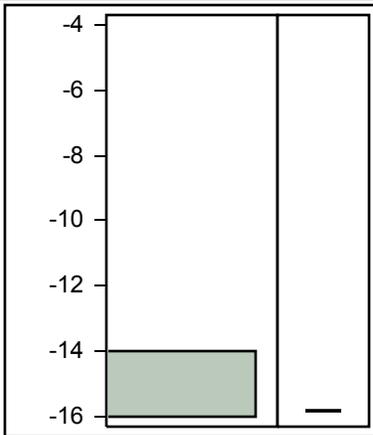
Summary Statistics

Mean	15.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method

**Distributions Analyte_Method=Gross alpha Wet ash -
Acid digestion - the use of oxidizers to destroy organics**

Bias



Quantiles

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

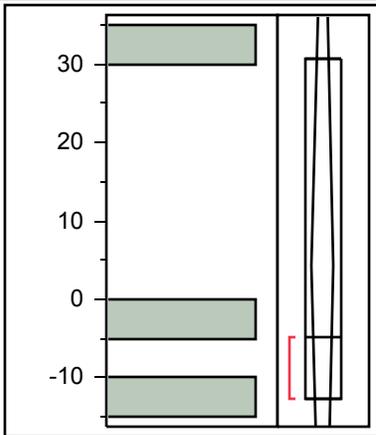
Summary Statistics

Mean	-15.8
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method

**Distributions Analyte_Method=Gross beta
Acid leaching without hydrofluoric acid**

Bias



Quantiles

100.0%	maximum	30.6
99.5%		30.6
97.5%		30.6
90.0%		30.6
75.0%	quartile	30.6
50.0%	median	-4.8
25.0%	quartile	-12.7
10.0%		-12.7
2.5%		-12.7
0.5%		-12.7
0.0%	minimum	-12.7

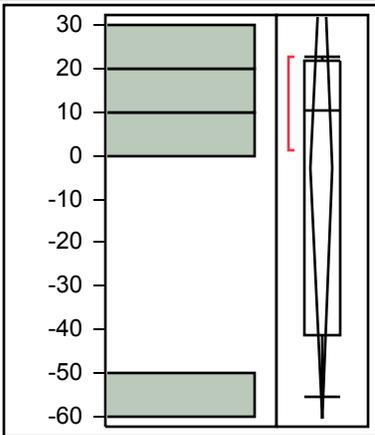
Summary Statistics

Mean	4.366667
Std Dev	23.059561
Std Err Mean	13.313443
Upper 95% Mean	61.649791
Lower 95% Mean	-52.91646
N	3

GrF Distribution by Prep Method

**Distributions Analyte_Method=Gross beta EPA 900,
Radioactivity, Gross Alpha/Beta Screening, 600/4-80-032**

Bias



Quantiles

100.0%	maximum	22.7
99.5%		22.7
97.5%		22.7
90.0%		22.7
75.0%	quartile	21.725
50.0%	median	10.1
25.0%	quartile	-41.125
10.0%		-55.3
2.5%		-55.3
0.5%		-55.3
0.0%	minimum	-55.3

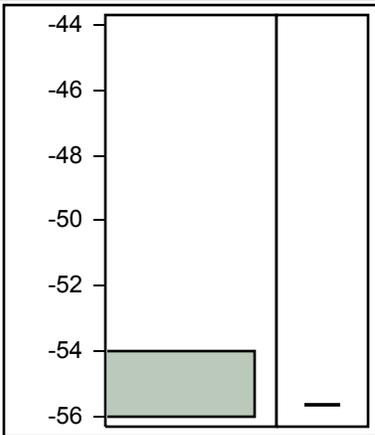
Summary Statistics

Mean	-3.1
Std Dev	36.010832
Std Err Mean	18.005416
Upper 95% Mean	54.201269
Lower 95% Mean	-60.40127
N	4

GrF Distribution by Prep Method

**Distributions Analyte_Method=Gross
beta Evaporation, acidified**

Bias



Quantiles

100.0%	maximum	-55.6
99.5%		-55.6
97.5%		-55.6
90.0%		-55.6
75.0%	quartile	-55.6
50.0%	median	-55.6
25.0%	quartile	-55.6
10.0%		-55.6
2.5%		-55.6
0.5%		-55.6
0.0%	minimum	-55.6

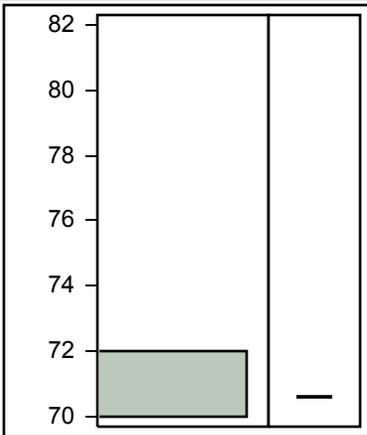
Summary Statistics

Mean	-55.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method

Distributions Analyte_Method=Gross
beta Evaporation, straight

Bias



Quantiles

100.0%	maximum	70.6
99.5%		70.6
97.5%		70.6
90.0%		70.6
75.0%	quartile	70.6
50.0%	median	70.6
25.0%	quartile	70.6
10.0%		70.6
2.5%		70.6
0.5%		70.6
0.0%	minimum	70.6

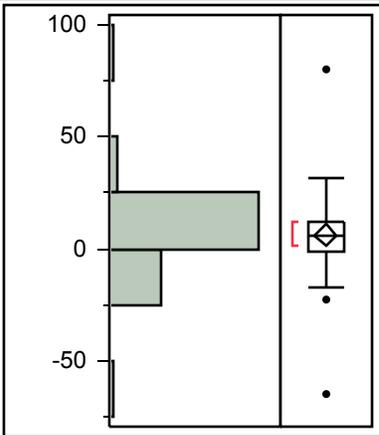
Summary Statistics

Mean	70.6
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method

Distributions Analyte_Method=Gross beta
 No preparation - analyzed as received

Bias



Quantiles

100.0%	maximum	80
99.5%		80
97.5%		65.54
90.0%		23.14
75.0%	quartile	12.2
50.0%	median	5.9
25.0%	quartile	-1.2
10.0%		-11.7
2.5%		-52.07
0.5%		-64.7
0.0%	minimum	-64.7

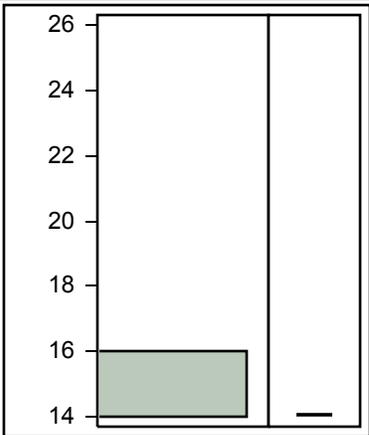
Summary Statistics

Mean	6.0882353
Std Dev	18.073789
Std Err Mean	2.5308367
Upper 95% Mean	11.17157
Lower 95% Mean	1.0049001
N	51

GrF Distribution by Prep Method

Distributions
 Analyte_Method=Gross beta Other

Bias

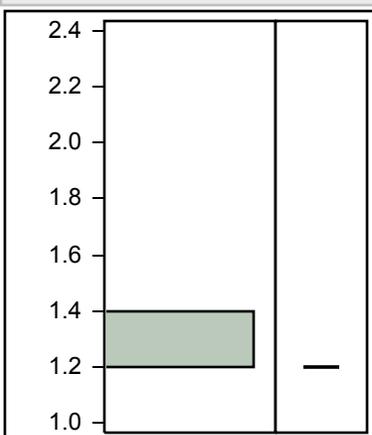


Quantiles

100.0%	maximum	14.1
99.5%		14.1
97.5%		14.1
90.0%		14.1
75.0%	quartile	14.1
50.0%	median	14.1
25.0%	quartile	14.1
10.0%		14.1
2.5%		14.1
0.5%		14.1
0.0%	minimum	14.1

Summary Statistics

Mean	14.1
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1

GrF Distribution by Prep Method**Distributions Analyte_Method=Gross beta Wet ash - Acid digestion - the use of oxidizers to destroy organics****Bias****Quantiles**

100.0%	maximum	1.2
99.5%		1.2
97.5%		1.2
90.0%		1.2
75.0%	quartile	1.2
50.0%	median	1.2
25.0%	quartile	1.2
10.0%		1.2
2.5%		1.2
0.5%		1.2
0.0%	minimum	1.2

Summary Statistics

Mean	1.2
Std Dev	.
Std Err Mean	.
Upper 95% Mean	.
Lower 95% Mean	.
N	1