

MAPEP-09-MaW20 Receiving Laboratories

Lab Code	Lab Name
1	AAI01 Xenco Laboratories-Atlanta
2	ADEM01 Alabama Department of Environmental Management
3	AFOH01 USAFSAM/OEHL
4	ANLA01 Argonne National Laboratory/Analytical Chemistry Lab.
5	ANLB01 Argonne National Laboratory
6	ANTE01 ALS Laboratory Group, Environmental Division
7	ARGO01 Idaho National Laboratory
8	ARSL01 American Radiation Services Inc.
9	ASHL01 CH2M Hill Applied Science Laboratory
10	AY1201 B&W Y-12, Analytical Chemistry Organization Laboratory
11	BNEL01 Northeast Laboratory Services, Inc.
12	CDHS01 California Department of Public Health
13	CESL01 Lawrence Livermore National Laboratory - EMRL
14	CHMH01 222-S Laboratory
15	CMRC01 Carlsbad Environmental Monitoring and Research Center
16	CORE02 TestAmerica Denver
17	DAFI01 Davis & Floyd, Inc.
18	DEHS01 Department of Environmental Health & Safety
19	DLEA01 DLE Associates
20	ENES01 Energy Northwest Environmental Services
21	EPAL01 U. S. EPA Office of Radiation and Indoor Air
22	ERAD01 Lawrence Livermore National Laboratory ERAD
23	ERCL01 Washington State Public Health Laboratories
24	ERHD99 Radiation Protection Bureau ERHD NMS
25	ERLG01 Environmental Radiation Laboratory
26	ERPD99 Ministry Of Health,Radiation Protection Department Lab
27	ESDE01 Region 5 EQC Tritium Lab
28	ETTP01 ETTP
29	EULC01 EnergySolutions, LLC
30	FDHE01 Florida Dept of Health Environmental Laboratory
31	FDOH01 Florida Dept. of Health, Mobile Environmental Radiological Lab
32	FERM01 Fernald Project
33	FMEC99 Foods and Water Laboratories Center
34	FNAL01 Fermi National Accelerator Laboratory (FermiLab)
35	FSCL01 Lawrence Livermore Laboratory
36	GENE01 GEL Laboratories, LLC
37	GPCL01 Georgia Power Company Environmental Laboratory
38	GPLP01 GPL Laboratories, LLLP
39	HCAL01 Hazards Control Analytical Lab
40	HECR01 SC Dept. Health and Environmental Control Radiological Laboratory
41	IAEA99 International Atomic Energy Agency
42	IDGR01 Oak Ridge National Laboratory-Internal Dosimetry Group
43	ISUP01 ISU - Department of Physics/Health Physics/EAL
44	JAEC99 Radiation Measurements Laboratory
45	JCAL99 Chemical Analysis Laboratory
46	JLNN01 Jefferson Laboratory
47	KDHE01 Kansas Dept. of Health & Environment
48	LANL01 Los Alamos National Laboratory
49	LAWR01 LAWRENCE BERKELEY NATIONAL LABORATORY
50	LAWR02 Lawrence Livermore National Laboratory
51	LDRA99 Laboratori de Radiologia Ambiental-Universitat de Barcelona
52	LECR99 Lancaster Environment Centre
53	LOCK01 ICP Analytical Services Laboratories
54	LOCK03 Advanced Test Reactor (ATR) Complex Radioanalytical Laboratory
55	MART01 USEC, Inc.
56	MART02 United States Enrichment Corporation
57	MART03 Radioactive Material Analysis Laboratory
58	MDPH01 MDPH-Radiation Control Program
59	NARL01 National Air and Radiation Environmental Laboratory
60	NESI01 B&W Technical Services-Radioisotope & Analytical Chemistry Laboratory

61	NJDH01	New Jersey Dept. of Health & Senior Services, PHEL, ECLS
62	NMLA01	Assaigai Analytical Laboratories, Inc.
63	NRLL99	National Radiation Laboratory
64	NTSI01	Nuclear Technology Services, Inc.
65	OBGL01	Life Science Laboratories, Inc.
66	ODHL01	Ohio Department of Health Laboratory
67	ORIS01	ORISE/IEAV
68	OTLI01	Outreach Technologies, Inc.
69	PBRF01	NASA Plum Brook Reactor Facility Lab
70	PESL01	Environmental Science Lab PNNL/ESL
71	QUAN01	TestAmerica St. Louis
72	QUAN02	TestAmerica Knoxville
73	QUAN03	TestAmerica
74	RMCL99	Royal Scientific Society - Radiation Measurements Lab
75	RPSC01	Radiation Protection Service
76	RSAL01	RSA Laboratories, Inc.
77	RSIR99	Instituto de Radioprotecao e Dosimetria - IRD/CNEN
78	SAVA01	SAVANNAH RIVER NATIONAL LABORATORY/SRNS
79	SCAL01	GPL Laboratories Alabama, LLC
80	SEML01	SRS Environmental Monitoring Laboratory
81	SLAC01	SLAC DOE National Accelerator Laboratory
82	SLDL01	Scientific Laboratory Division
83	SNRC99	Soreq NRC
84	SOUT01	Southwest Research Institute
85	SRPD01	Sandia National Laboratories, Radiation Protection Sample Diagnostics
86	TDHL01	Texas Department of State Health Services Laboratory
87	TELE01	TELEDYNE BROWN ENGINEERING - ENVIRONMENTAL SERVICES
88	TELE02	Environmental, Inc., Midwest Lab
89	TMAO01	EBERLINE SERVICES OAK RIDGE LABORATORY
90	TMAR01	Eberline Analytical Corp. Richmond CA Lab
91	TNUT01	FUSRAP
92	UNTE01	UniTech-235
93	UQNP99	Qatar University- Nuclear Physics Lab
94	USED99	National Center for Energy, Science and Nuclear Techniques
95	UTSG01	UniTech Services Group
96	WEST01	Lionville Laboratory
97	WEST03	Waste Sampling and Characterization Facility
98	WEST04	PACE ANALYTICAL SERVICES, PITTSBURGH
99	WIPH01	WI, DPH, Radiation Protection Section
100	WIPP01	WIPP Laboratories
101	WSHL01	Wisconsin State Laboratory of Hygiene
102	WVDP01	WVDP Environmental Laboratory
103	YAEC01	AREVA NP Environmental Laboratory
104	YPGA01	US Army Yuma Proving Ground / Material Analysis Lab

9 laboratories did not report this matrix

Setup and Process Data

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Analyte	Ref. Value	Total Ref.	Uncertainty	F.P.	S.E.
Inorganic					
Uranium-235	0.00169		0.00003		
Uranium-238	0.232		0.006		
Uranium-Total	0.233		0.006		
Antimony	0.01			✓	
Arsenic	0.96		0.50		
Barium	0.2971		0.0016		
Beryllium	0.0530		0.0003		
Cadmium	0.01			✓	
Chromium	1.95		0.01		
Cobalt	0.025			✓	
Copper	7.31		0.04		
Lead	1.239		0.006		
Mercury	0.00559		0.00003		
Nickel	3.62		0.02		
Selenium	0.01			✓	
Thallium	4.19		0.02		
Vanadium	0.886		0.004		
Zinc	0.404		0.007		
Technetium-99	0.0000231		0.0000004		
Radiological					
Cobalt-57	18.9		0.4		
Nickel-63	53.50		1.29		
Uranium-234/233	2.77		0.07		
Uranium-238	2.88		0.07		
Americium-241	0.636		0.010		
Cesium-134	22.5		0.3		
Cesium-137				✓	
Cobalt-60	17.21		0.26		
Iron-55	48.2		1.4		
Manganese-54	14.66		0.29		
Plutonium-238	1.18		0.02		
Plutonium-239/240	0.853		0.013		
Strontium-90	7.21		0.08		
Hydrogen-3	330.9		10.7		
Technetium-99	14.46		0.27		
Zinc-65	13.6		0.3		

Sample Statistical Summary

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Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Inorganic							Units: (mg/L)
Aluminum	3						
Antimony	27	25			<0.01		False Positive Test
Arsenic	30	29	0.95	0.04	0.96	0.50	0.67 - 1.25
Barium	31	30	0.2919	0.0167	0.2971	0.0016	0.2080 - 0.3862
Beryllium	30	29	0.0517	0.0027	0.0530	0.0003	0.0371 - 0.0689
Cadmium	29	26			<0.01		False Positive Test
Calcium	4						
Chromium	32	31	1.91	0.10	1.95	0.01	1.37 - 2.54
Cobalt	26	24			<0.025		False Positive Test
Copper	31	30	7.15	0.35	7.31	0.04	5.12 - 9.50
Iron	3						
Lead	32	31	1.222	0.064	1.239	0.006	0.867 - 1.611
Magnesium	4						
Manganese	4						
Mercury	26	23	0.00537	0.00066	0.00559	0.00003	0.00391 - 0.00727
Molybdenum	2						
Nickel	31	30	3.52	0.20	3.62	0.02	2.53 - 4.71
Potassium	4						
Selenium	28	25			<0.01		False Positive Test
Silver	3						
Sodium	4						
Technetium-99	2	2			2.31E-5	4.00E-7	1.62E-5 - 3.00E-5
Thallium	30	29	4.08	0.25	4.19	0.02	2.93 - 5.45
Uranium-235	15	15	0.00166	0.00006	0.00169	0.00003	0.00118 - 0.00220
Uranium-238	16	16	0.231	0.014	0.232	0.006	0.162 - 0.302
Uranium-Total	22	21	0.233	0.013	0.233	0.006	0.163 - 0.303
Vanadium	30	29	0.883	0.035	0.886	0.004	0.620 - 1.152
Zinc	31	29	0.380	0.031	0.404	0.007	0.283 - 0.525

Analyte	T(1)	A(2)	Grand ⁽³⁾ Mean	Std Dev	Ref Value	Ref Unc	Acceptance Range
Radiological							Units: (Bq/L)
Americium-241	49	44	0.596	0.074	0.636	0.010	0.445 - 0.827
Cesium-134	78	73	20.9	1.6	22.5	0.3	15.8 - 29.3
Cesium-137	51	47					False Positive Test
Cobalt-57	79	74	19.1	1.6	18.9	0.4	13.2 - 24.6
Cobalt-58	1						
Cobalt-60	79	78	17.20	1.29	17.21	0.26	12.05 - 22.37
Hydrogen-3	53	52	331.0	32.3	330.9	10.7	231.6 - 430.2
Iron-55	11	10	50.6	4.4	48.2	1.4	33.7 - 62.7
Manganese-54	78	74	15.09	0.89	14.66	0.29	10.26 - 19.06
Nickel-63	19	18	49.88	4.42	53.50	1.29	37.45 - 69.55
Plutonium-238	39	37	1.15	0.08	1.18	0.02	0.83 - 1.53
Plutonium-239/240	39	36	0.798	0.056	0.853	0.013	0.597 - 1.109
Potassium-40	4						
Strontium-90	42	40	6.98	0.66	7.21	0.08	5.05 - 9.37
Technetium-99	26	25	13.86	1.50	14.46	0.27	10.12 - 18.80
Uranium-234/233	41	41	2.74	0.19	2.77	0.07	1.94 - 3.60
Uranium-235	9						
Uranium-238	47	43	2.78	0.20	2.88	0.07	2.02 - 3.74
Zinc-65	75	72	14.0	1.2	13.6	0.3	9.5 - 17.7

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".

Flag Summary Report

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Inorganic				
Analyte	A	W	RW	N
Antimony	25			2
Arsenic	29			1
Barium	30			1
Beryllium	29			1
Cadmium	26			3
Chromium	31			1
Cobalt	24			2
Copper	30			1
Lead	31			1
Mercury	20	3		3
Nickel	30			1
Selenium	25			3
Thallium	28	1		1
Uranium-Total	21			1
Uranium-235	15			
Uranium-238	16			
Vanadium	29			1
Zinc	27	2		2
Technetium-99	2			
Radiological				
Analyte	A	W	RW	N
Americium-241	37	7		5
Cesium-134	72	1		5
Cesium-137	47		27	4
Cobalt-57	71	3		5
Cobalt-60	74	4		1
Hydrogen-3	49	3		1
Iron-55	9	1		1
Manganese-54	73	1		4
Nickel-63	18			1
Plutonium-238	37			2
239/240	35	1		3
Strontium-90	39	1		2
Technetium-99	25			1
Uranium-234/233	41			
Uranium-238	42	1		4
Zinc-65	69	3		3