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Title: Los Alamos National Laboratory Sitewide Monitoring Program Drinking Water Results for the City of Santa Fe Buckman Water Supply Wells

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Intended for: NMED
NMED
Remediation
Reading Room
Consent Order



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Location Name	Start Date	Fld Prep Code	Fld Qc Type Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte Symbol	Std Result	Std Uncert	Std Mdl	Std Mda
Buckman 1	05/17/11	UF		CS	GENINORG	Alkalinity-CALK-CO3	<	1		0.73	
Buckman 1	05/17/11	UF		CS	GENINORG	Alkalinity-CALK-CO3+HCO3		201		0.73	
Buckman 1	05/17/11	UF		CS	GENINORG	Ammonia \pm NH3-N		0.058		0.016	
Buckman 1	05/17/11	UF		CS	GENINORG	Bromide Br(-1)	<	0.2		0.066	
Buckman 1	05/17/11	UF		CS	GENINORG	Calcium Ca		7		0.05	
Buckman 1	05/17/11	UF		CS	GENINORG	Chloride Cl(-1)		2.63		0.066	
Buckman 1	05/17/11	UF		CS	GENINORG	Cyanide (Total) CN(TOTAL)	<	0.005		0.002	
Buckman 1	05/17/11	UF		CS	GENINORG	Dissolved CDO		6.6			
Buckman 1	05/17/11	UF		CS	GENINORG	Fluoride F(-1)		0.751		0.033	
Buckman 1	05/17/11	UF		CS	GENINORG	Hardness HARDNESS		19.2		0.45	
Buckman 1	05/17/11	UF		CS	GENINORG	Magnesium Mg		0.431		0.11	
Buckman 1	05/17/11	UF		CS	GENINORG	Nitrate-Nitrite NO3+NO2-N		0.98		0.05	
Buckman 1	05/17/11	UF		CS	GENINORG	Oxidation FORP		208.6			
Buckman 1	05/17/11	UF		CS	GENINORG	Perchlorate ClO4		0.285		0.05	
Buckman 1	05/17/11	UF		CS	GENINORG	Potassium K		2.08		0.05	
Buckman 1	05/17/11	UF		CS	GENINORG	Sodium Na		88.1		0.1	
Buckman 1	05/17/11	UF		CS	GENINORG	Specific Conductivity SPEC_CONDC		435			
Buckman 1	05/17/11	UF		CS	GENINORG	Specific Conductivity SPEC_CONDC		432		1	
Buckman 1	05/17/11	UF		CS	GENINORG	Sulfate SO4(-2)		11.9		0.1	
Buckman 1	05/17/11	UF		CS	GENINORG	Temperature TEMP		22.13			
Buckman 1	05/17/11	UF		CS	GENINORG	Total Disso TDS		284		2.4	
Buckman 1	05/17/11	UF		CS	GENINORG	Total Kjeldahl TKN	<	0.5		0.18	
Buckman 1	05/17/11	UF		CS	GENINORG	Total Organic Carbon TOC		0.432		0.33	
Buckman 1	05/17/11	UF		CS	GENINORG	Total Phosphate PO4-P	<	0.034		0.015	
Buckman 1	05/17/11	UF		CS	GENINORG	Turbidity TURB		1.34			
Buckman 1	05/17/11	UF		CS	GENINORG	pH pH		8.33		0.01	
Buckman 1	05/17/11	UF		CS	GENINORG	pH pH		8.27			
Buckman 1	05/17/11	UF		CS	HEXP	2,4-Diamin 6629-29-4	<	1.3		0.39	
Buckman 1	05/17/11	UF		CS	HEXP	2,6-Diamin 59229-75-3	<	1.3		0.39	
Buckman 1	05/17/11	UF		CS	HEXP	3,5-Dinitro 618-87-1	<	1.3		0.39	

Buckman 1	05/17/11 UF	CS	HEXP	Amino-2,6-19406-51-C	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Amino-4,6-35572-78-Z	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Dinitroben:99-65-0	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Dinitrotolu 121-14-2	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Dinitrotolu 606-20-2	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	HMX 2691-41-0	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Nitrobenze 98-95-3	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Nitrotoluer 88-72-2	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Nitrotoluer 99-08-1	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Nitrotoluer 99-99-0	<	0.649	0.1
Buckman 1	05/17/11 UF	CS	HEXP	PETN 78-11-5	<	1.3	0.13
Buckman 1	05/17/11 UF	CS	HEXP	RDX 121-82-4	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	TATB 3058-38-6	<	1.3	0.39
Buckman 1	05/17/11 UF	CS	HEXP	Tetryl 479-45-8	<	0.649	0.13
Buckman 1	05/17/11 UF	CS	HEXP	Trinitroben99-35-4	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Trinitrotolu 118-96-7	<	0.325	0.1
Buckman 1	05/17/11 UF	CS	HEXP	Tris (o-cres 78-30-8	<	1.3	0.39
Buckman 1	05/17/11 F	CS	METALS	Chromium Cr		8.33	2
Buckman 1	05/17/11 UF	CS	METALS	Aluminum Al	<	200	68
Buckman 1	05/17/11 UF	CS	METALS	Antimony Sb	<	3	1
Buckman 1	05/17/11 UF	CS	METALS	Arsenic As		11	1.7
Buckman 1	05/17/11 UF	CS	METALS	Barium Ba		19.3	1
Buckman 1	05/17/11 UF	CS	METALS	Beryllium Be	<	5	1
Buckman 1	05/17/11 UF	CS	METALS	Boron B		101	15
Buckman 1	05/17/11 UF	CS	METALS	Cadmium Cd	<	1	0.11
Buckman 1	05/17/11 UF	CS	METALS	Chromium Cr		8.81	2
Buckman 1	05/17/11 UF	CS	METALS	Cobalt Co	<	5	1
Buckman 1	05/17/11 UF	CS	METALS	Copper Cu		5.93	3
Buckman 1	05/17/11 UF	CS	METALS	Iron Fe	<	100	30
Buckman 1	05/17/11 UF	CS	METALS	Lead Pb		0.506	0.5
Buckman 1	05/17/11 UF	CS	METALS	Manganese Mn	<	10	2
Buckman 1	05/17/11 UF	CS	METALS	Mercury Hg	<	0.2	0.066
Buckman 1	05/17/11 UF	CS	METALS	Molybdenu Mo		3.29	0.17
Buckman 1	05/17/11 UF	CS	METALS	Nickel Ni	<	2	0.5

Buckman 1	05/17/11 UF	CS	METALS	Selenium Se	<	5		1.5
Buckman 1	05/17/11 UF	CS	METALS	Silicon Dio>SiO2		36.2		0.053
Buckman 1	05/17/11 UF	CS	METALS	Silver Ag	<	1		0.2
Buckman 1	05/17/11 UF	CS	METALS	Strontium Sr		128		1
Buckman 1	05/17/11 UF	CS	METALS	Thallium Tl	<	2		0.45
Buckman 1	05/17/11 UF	CS	METALS	Tin Sn	<	10		2.5
Buckman 1	05/17/11 UF	CS	METALS	Uranium U		16.6		0.067
Buckman 1	05/17/11 UF	CS	METALS	Vanadium V		33.9		1
Buckman 1	05/17/11 UF	CS	METALS	Zinc Zn		3.57		3.3
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-10:12674-11-2	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:11104-28-2	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:11141-16-5	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:53469-21-5	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:12672-29-6	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:11097-69-1	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:11096-82-5	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	PEST/PCB	Aroclor-12:37324-23-5	<	0.106		0.035
Buckman 1	05/17/11 UF	CS	RAD	Actinium-2 Ac-228	<	-2.7	5.4	17
Buckman 1	05/17/11 UF	CS	RAD	Americium Am-241	<	0.004	0.003	0.042
Buckman 1	05/17/11 UF	CS	RAD	Americium Am-241	<	-1.92	6.8	21
Buckman 1	05/17/11 UF	CS	RAD	Bismuth-21Bi-212	<	11.8	17	59
Buckman 1	05/17/11 UF	CS	RAD	Bismuth-21Bi-214		13.8	3.9	6.4
Buckman 1	05/17/11 UF	CS	RAD	Cesium-13:Cs-134	<	-0.241	1.2	4
Buckman 1	05/17/11 UF	CS	RAD	Cesium-13:Cs-137	<	1.7	1.4	4.8
Buckman 1	05/17/11 UF	CS	RAD	Cobalt-60 Co-60	<	-2.01	1.3	3.4
Buckman 1	05/17/11 UF	CS	RAD	Gross alpha GROSSA		11.2	2.2	2.1
Buckman 1	05/17/11 UF	CS	RAD	Gross beta GROSSB		4.26	1.1	3
Buckman 1	05/17/11 UF	CS	RAD	Lead-212 Pb-212	<	-2.11	3.2	9.1
Buckman 1	05/17/11 UF	CS	RAD	Lead-214 Pb-214	<	1.84	3.1	10
Buckman 1	05/17/11 UF	CS	RAD	Neptunium Np-237	<	-0.006	0.013	0.091
Buckman 1	05/17/11 UF	CS	RAD	Plutonium- Pu-238	<	-0.004	0.004	0.023
Buckman 1	05/17/11 UF	CS	RAD	Plutonium- Pu-239/240	<	0.004	0.004	0.035
Buckman 1	05/17/11 UF	CS	RAD	Potassium- K-40	<	-15.7	17	55
Buckman 1	05/17/11 UF	CS	RAD	Protactiniu Pa-234m	<	-24	180	600

Buckman 1	05/17/11 UF		CS	RAD	Radium-22 Ra-226	<	0.233	0.11	0.31
Buckman 1	05/17/11 UF		CS	RAD	Radium-22 Ra-228	<	0.538	0.2	0.55
Buckman 1	05/17/11 UF		CS	RAD	Sodium-22 Na-22	<	-0.382	1.1	3.3
Buckman 1	05/17/11 UF		CS	RAD	Strontium-90 Sr-90	<	-0.201	0.14	0.51
Buckman 1	05/17/11 UF		CS	RAD	Thallium-208 Tl-208	<	1.6	2	3.7
Buckman 1	05/17/11 UF		CS	RAD	Thorium-228 Th-228	<	0.002	0.008	0.066
Buckman 1	05/17/11 UF		CS	RAD	Thorium-230 Th-230	<	-0.006	0.003	0.032
Buckman 1	05/17/11 UF		CS	RAD	Thorium-232 Th-232	<	0	0.003	0.018
Buckman 1	05/17/11 UF		CS	RAD	Thorium-234 Th-234	<	-33.1	73	210
Buckman 1	05/17/11 UF		CS	RAD	Tritium H-3	<	0.447	0.607	2.044
Buckman 1	05/17/11 UF		CS	RAD	Uranium-234 U-234		8.18	0.6	0.071
Buckman 1	05/17/11 UF		CS	RAD	Uranium-235 U-235	<	-6.75	9.4	29
Buckman 1	05/17/11 UF		CS	RAD	Uranium-235/236 U-235/236		0.287	0.037	0.055
Buckman 1	05/17/11 UF		CS	RAD	Uranium-238 U-238		5.83	0.44	0.037
Buckman 1	05/17/11 UF	FTB	CS	VOA	Acetone 67-64-1	<	10		3.5
Buckman 1	05/17/11 UF	FTB	CS	VOA	Acetonitrile 75-05-8	<	25		6.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Acrolein 107-02-8	<	5		1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Acrylonitril 107-13-1	<	5		1
Buckman 1	05/17/11 UF	FTB	CS	VOA	Benzene 71-43-2	<	1		0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Bromobenzene 108-86-1	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Bromochloro 74-97-5	<	1		0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Bromodichloro 75-27-4	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Bromoforn 75-25-2	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Bromometane 74-83-9	<	1		0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Butanol[1-] 71-36-3	<	50		15
Buckman 1	05/17/11 UF	FTB	CS	VOA	Butanone[2-] 78-93-3	<	5		1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Butylbenzene 104-51-8	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Butylbenzene 135-98-8	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Butylbenzene 98-06-6	<	1		0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Carbon Disulfide 75-15-0	<	5		1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Carbon Tetrachloride 56-23-5	<	1		0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chloro-1,3-dioxane 126-99-8	<	1		0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chloro-1-propanol 107-05-1	<	5		1.5
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chlorobenzene 108-90-7	<	1		0.25

Buckman 1	05/17/11 UF	FTB	CS	VOA	Chlorodibrom	124-48-1	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chloroetha	75-00-3	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chloroform	67-66-3	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chlorometl	74-87-3	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chlorotolu	95-49-8	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Chlorotolu	106-43-4	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dibromo-3	96-12-8	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dibromoet	106-93-4	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dibromom	74-95-3	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichlorobe	95-50-1	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichlorobe	541-73-1	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichlorobe	106-46-7	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichlorodif	75-71-8	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloroetl	75-34-3	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloroetl	107-06-2	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloroetl	75-35-4	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloroetl	156-59-2	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloroetl	156-60-5	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	78-87-5	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	142-28-9	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	594-20-7	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	563-58-6	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-01-5	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-02-6	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Diethyl Eth	60-29-7	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Ethyl Meth	97-63-2	<	5	1
Buckman 1	05/17/11 UF	FTB	CS	VOA	Ethylbenze	100-41-4	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Hexachlor	87-68-3	<	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Hexanone[591-78-6	<	5	1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Iodometha	74-88-4	<	5	1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Isobutyl alc	78-83-1	<	50	13
Buckman 1	05/17/11 UF	FTB	CS	VOA	Isopropylb	98-82-8	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Isopropyltc	99-87-6	<	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Methacrylc	126-98-7	<	5	1

Buckman 1	05/17/11 UF	FTB	CS	VOA	Methyl Me 80-62-6 <	5	1
Buckman 1	05/17/11 UF	FTB	CS	VOA	Methyl ter1634-04-4 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Methyl-2-p 108-10-1 <	5	1.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Methylene 75-09-2 <	10	3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Naphthaler 91-20-3 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Propionitril 107-12-0 <	5	1.5
Buckman 1	05/17/11 UF	FTB	CS	VOA	Propylbenz 103-65-1 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Styrene 100-42-5 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 630-20-6 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 79-34-5 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 127-18-4 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Toluene 108-88-3 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloro-1 76-13-1 <	5	1
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichlorobε 87-61-6 <	1	0.33
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichlorobε 120-82-1 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloroet 71-55-6 <	1	0.33
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloroet 79-00-5 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloroet 79-01-6 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloroflu 75-69-4 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trichloropr 96-18-4 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trimethylb 95-63-6 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Trimethylb 108-67-8 <	1	0.25
Buckman 1	05/17/11 UF	FTB	CS	VOA	Vinyl Chlori 75-01-4 <	1	0.5
Buckman 1	05/17/11 UF	FTB	CS	VOA	Vinyl aceta 108-05-4 <	5	1.5
Buckman 1	05/17/11 UF	FTB	CS	VOA	Xylene[1,2- 95-47-6 <	1	0.3
Buckman 1	05/17/11 UF	FTB	CS	VOA	Xylene[1,3- Xylene[1,3 <	2	0.5
Buckman 1	05/17/11 UF		CS	VOA	Acetone 67-64-1 <	10	3.5
Buckman 1	05/17/11 UF		CS	VOA	Acetonitrilε 75-05-8 <	25	6.3
Buckman 1	05/17/11 UF		CS	VOA	Acrolein 107-02-8 <	5	1.3
Buckman 1	05/17/11 UF		CS	VOA	Acrylonitril 107-13-1 <	5	1
Buckman 1	05/17/11 UF		CS	VOA	Benzene 71-43-2 <	1	0.3
Buckman 1	05/17/11 UF		CS	VOA	Bromoben; 108-86-1 <	1	0.25
Buckman 1	05/17/11 UF		CS	VOA	Bromochlo 74-97-5 <	1	0.3
Buckman 1	05/17/11 UF		CS	VOA	Bromodich 75-27-4 <	1	0.25

Buckman 1	05/17/11 UF	CS	VOA	Bromoforn 75-25-2	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Bromomet 74-83-9	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Butanol[1-] 71-36-3	<	50	15
Buckman 1	05/17/11 UF	CS	VOA	Butanone[; 78-93-3	<	5	1.3
Buckman 1	05/17/11 UF	CS	VOA	Butylbenze 104-51-8	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Butylbenze 135-98-8	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Butylbenze 98-06-6	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Carbon Dis 75-15-0	<	5	1.3
Buckman 1	05/17/11 UF	CS	VOA	Carbon Tet 56-23-5	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Chloro-1,3- 126-99-8	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Chloro-1-pi 107-05-1	<	5	1.5
Buckman 1	05/17/11 UF	CS	VOA	Chlorobenz 108-90-7	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Chlorodibr 124-48-1	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Chloroetha 75-00-3	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Chloroforn 67-66-3	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Chlorometl 74-87-3	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Chlorotolu 95-49-8	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Chlorotolu 106-43-4	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dibromo-3- 96-12-8	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dibromoet 106-93-4	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dibromom 74-95-3	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichlorobe 95-50-1	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichlorobe 541-73-1	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichlorobe 106-46-7	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichlorodif 75-71-8	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloroetl 75-34-3	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloroetl 107-06-2	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichloroetl 75-35-4	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloroetl 156-59-2	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloroetl 156-60-5	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 78-87-5	<	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 142-28-9	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 594-20-7	<	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 563-58-6	<	1	0.25

Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 10061-01-5 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Dichloropr 10061-02-6 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Diethyl Eth 60-29-7 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Ethyl Meth 97-63-2 <	5	1
Buckman 1	05/17/11 UF	CS	VOA	Ethylbenze 100-41-4 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Hexachlorc 87-68-3 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Hexanone[591-78-6 <	5	1.3
Buckman 1	05/17/11 UF	CS	VOA	Iodometha 74-88-4 <	5	1.3
Buckman 1	05/17/11 UF	CS	VOA	Isobutyl alc 78-83-1 <	50	13
Buckman 1	05/17/11 UF	CS	VOA	Isopropylb 98-82-8 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Isopropyltc 99-87-6 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Methacrylc 126-98-7 <	5	1
Buckman 1	05/17/11 UF	CS	VOA	Methyl Me 80-62-6 <	5	1
Buckman 1	05/17/11 UF	CS	VOA	Methyl terl 1634-04-4 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Methyl-2-p 108-10-1 <	5	1.3
Buckman 1	05/17/11 UF	CS	VOA	Methylene 75-09-2 <	10	3
Buckman 1	05/17/11 UF	CS	VOA	Naphthaler 91-20-3 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Propionitril 107-12-0 <	5	1.5
Buckman 1	05/17/11 UF	CS	VOA	Propylbenz 103-65-1 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Styrene 100-42-5 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Tetrachlorc 630-20-6 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Tetrachlorc 79-34-5 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Tetrachlorc 127-18-4 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Toluene 108-88-3 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Trichloro-1 76-13-1 <	5	1
Buckman 1	05/17/11 UF	CS	VOA	Trichlorob 87-61-6 <	1	0.33
Buckman 1	05/17/11 UF	CS	VOA	Trichlorob 120-82-1 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Trichloroet 71-55-6 <	1	0.33
Buckman 1	05/17/11 UF	CS	VOA	Trichloroet 79-00-5 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Trichloroet 79-01-6 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Trichloroflu 75-69-4 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Trichloropr 96-18-4 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA	Trimethylb 95-63-6 <	1	0.25
Buckman 1	05/17/11 UF	CS	VOA	Trimethylb 108-67-8 <	1	0.25

Buckman 1	05/17/11 UF	CS	VOA Vinyl Chlori	75-01-4 <	1	0.5
Buckman 1	05/17/11 UF	CS	VOA Vinyl aceta	108-05-4 <	5	1.5
Buckman 1	05/17/11 UF	CS	VOA Xylene[1,2-	95-47-6 <	1	0.3
Buckman 1	05/17/11 UF	CS	VOA Xylene[1,3-	Xylene[1,3 <	2	0.5
Buckman 6	05/17/11 UF	CS	GENINORG Alkalinity-C	ALK-CO3 <	1	0.73
Buckman 6	05/17/11 UF	CS	GENINORG Alkalinity-C	ALK-CO3+HCO3	282	0.73
Buckman 6	05/17/11 UF	CS	GENINORG Ammonia	± NH3-N	0.06	0.016
Buckman 6	05/17/11 UF	CS	GENINORG Bromide	Br(-1)	0.076	0.066
Buckman 6	05/17/11 UF	CS	GENINORG Calcium	Ca	59.1	0.05
Buckman 6	05/17/11 UF	CS	GENINORG Chloride	Cl(-1)	3.87	0.066
Buckman 6	05/17/11 UF	CS	GENINORG Cyanide (Tc	CN(TOTAL) <	0.005	0.002
Buckman 6	05/17/11 UF	CS	GENINORG Dissolved C	DO	6.07	
Buckman 6	05/17/11 UF	CS	GENINORG Fluoride	F(-1)	0.425	0.033
Buckman 6	05/17/11 UF	CS	GENINORG Hardness	HARDNESS	180	0.45
Buckman 6	05/17/11 UF	CS	GENINORG Magnesium	Mg	7.79	0.11
Buckman 6	05/17/11 UF	CS	GENINORG Nitrate-Nit	NO3+NO2-N	1.62	0.05
Buckman 6	05/17/11 UF	CS	GENINORG Oxidation F	ORP	255.2	
Buckman 6	05/17/11 UF	CS	GENINORG Perchlorate	ClO4	0.401	0.05
Buckman 6	05/17/11 UF	CS	GENINORG Potassium	K	4.29	0.05
Buckman 6	05/17/11 UF	CS	GENINORG Sodium	Na	62.6	0.1
Buckman 6	05/17/11 UF	CS	GENINORG Specific Co	SPEC_CONDC	609	
Buckman 6	05/17/11 UF	CS	GENINORG Specific Co	SPEC_CONDC	602	1
Buckman 6	05/17/11 UF	CS	GENINORG Sulfate	SO4(-2)	18.8	0.1
Buckman 6	05/17/11 UF	CS	GENINORG Temperatu	TEMP	24.1	
Buckman 6	05/17/11 UF	CS	GENINORG Total Disso	TDS	362	2.4
Buckman 6	05/17/11 UF	CS	GENINORG Total Kjeld	TKN <	0.5	0.18
Buckman 6	05/17/11 UF	CS	GENINORG Total Orgar	TOC	0.604	0.33
Buckman 6	05/17/11 UF	CS	GENINORG Total Phos	PO4-P <	0.026	0.015
Buckman 6	05/17/11 UF	CS	GENINORG Turbidity	TURB	1.59	
Buckman 6	05/17/11 UF	CS	GENINORG pH	pH	7.33	0.01
Buckman 6	05/17/11 UF	CS	GENINORG pH	pH	6.72	
Buckman 6	05/17/11 UF	CS	HEXP 2,4-Diamin	6629-29-4 <	1.3	0.39
Buckman 6	05/17/11 UF	CS	HEXP 2,6-Diamin	59229-75-3 <	1.3	0.39
Buckman 6	05/17/11 UF	CS	HEXP 3,5-Dinitro	618-87-1 <	1.3	0.39

Buckman 6	05/17/11 UF	CS	HEXP	Amino-2,6-19406-51-C <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Amino-4,6-35572-78-Z <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Dinitroben:99-65-0 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Dinitrotolu 121-14-2 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Dinitrotolu 606-20-2 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	HMX 2691-41-0 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Nitrobenze 98-95-3 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Nitrotoluer 88-72-2 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Nitrotoluer 99-08-1 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Nitrotoluer 99-99-0 <	0.649	0.1
Buckman 6	05/17/11 UF	CS	HEXP	PETN 78-11-5 <	1.3	0.13
Buckman 6	05/17/11 UF	CS	HEXP	RDX 121-82-4 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	TATB 3058-38-6 <	1.3	0.39
Buckman 6	05/17/11 UF	CS	HEXP	Tetryl 479-45-8 <	0.649	0.13
Buckman 6	05/17/11 UF	CS	HEXP	Trinitroben99-35-4 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Trinitrotolu 118-96-7 <	0.325	0.1
Buckman 6	05/17/11 UF	CS	HEXP	Tris (o-cres 78-30-8 <	1.3	0.39
Buckman 6	05/17/11 F	CS	METALS	Chromium Cr	2.66	2
Buckman 6	05/17/11 UF	CS	METALS	Aluminum Al <	200	68
Buckman 6	05/17/11 UF	CS	METALS	Antimony Sb <	3	1
Buckman 6	05/17/11 UF	CS	METALS	Arsenic As	3.5	1.7
Buckman 6	05/17/11 UF	CS	METALS	Barium Ba	191	1
Buckman 6	05/17/11 UF	CS	METALS	Beryllium Be <	5	1
Buckman 6	05/17/11 UF	CS	METALS	Boron B	72.1	15
Buckman 6	05/17/11 UF	CS	METALS	Cadmium Cd <	1	0.11
Buckman 6	05/17/11 UF	CS	METALS	Chromium Cr	3.21	2
Buckman 6	05/17/11 UF	CS	METALS	Cobalt Co <	5	1
Buckman 6	05/17/11 UF	CS	METALS	Copper Cu	23.3	3
Buckman 6	05/17/11 UF	CS	METALS	Iron Fe <	100	30
Buckman 6	05/17/11 UF	CS	METALS	Lead Pb	0.97	0.5
Buckman 6	05/17/11 UF	CS	METALS	Manganese Mn <	10	2
Buckman 6	05/17/11 UF	CS	METALS	Mercury Hg <	0.2	0.066
Buckman 6	05/17/11 UF	CS	METALS	Molybdenu Mo	3.31	0.17
Buckman 6	05/17/11 UF	CS	METALS	Nickel Ni	1.44	0.5

Buckman 6	05/17/11 UF	CS	METALS	Selenium Se	<	5		1.5
Buckman 6	05/17/11 UF	CS	METALS	Silicon Dioxide SiO2		34.6		0.053
Buckman 6	05/17/11 UF	CS	METALS	Silver Ag	<	1		0.2
Buckman 6	05/17/11 UF	CS	METALS	Strontium Sr		1,220.00		1
Buckman 6	05/17/11 UF	CS	METALS	Thallium Tl	<	2		0.45
Buckman 6	05/17/11 UF	CS	METALS	Tin Sn	<	50		13
Buckman 6	05/17/11 UF	CS	METALS	Uranium U		5.22		0.067
Buckman 6	05/17/11 UF	CS	METALS	Vanadium V		10.5		1
Buckman 6	05/17/11 UF	CS	METALS	Zinc Zn		9.74		3.3
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1012 12674-11-2	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1212 11104-28-2	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1215 11141-16-5	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1221 53469-21-5	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1224 12672-29-6	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1228 11097-69-1	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1231 11096-82-5	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	PEST/PCB	Aroclor-1232 37324-23-5	<	0.109		0.036
Buckman 6	05/17/11 UF	CS	RAD	Actinium-227 Ac-227	<	3.95	6.8	23
Buckman 6	05/17/11 UF	CS	RAD	Americium Am-241	<	-0.016	0.01	0.041
Buckman 6	05/17/11 UF	CS	RAD	Americium Am-241	<	-1.52	8.9	30
Buckman 6	05/17/11 UF	CS	RAD	Bismuth-212 Bi-212	<	8.48	21	71
Buckman 6	05/17/11 UF	CS	RAD	Bismuth-214 Bi-214	<	5.06	5.9	14
Buckman 6	05/17/11 UF	CS	RAD	Cesium-134 Cs-134	<	0.869	1.4	4.8
Buckman 6	05/17/11 UF	CS	RAD	Cesium-137 Cs-137	<	1.06	1.3	4.8
Buckman 6	05/17/11 UF	CS	RAD	Cobalt-60 Co-60	<	-0.844	1.7	5.5
Buckman 6	05/17/11 UF	CS	RAD	Gross alpha GROSSA		6.44	1.7	2.3
Buckman 6	05/17/11 UF	CS	RAD	Gross beta GROSSB		4.38	1.1	2.9
Buckman 6	05/17/11 UF	CS	RAD	Lead-212 Pb-212	<	8.33	4.6	12
Buckman 6	05/17/11 UF	CS	RAD	Lead-214 Pb-214	<	-3.48	4.2	13
Buckman 6	05/17/11 UF	CS	RAD	Neptunium Np-237	<	0	0.013	0.087
Buckman 6	05/17/11 UF	CS	RAD	Plutonium-238 Pu-238	<	-0.015	0.006	0.023
Buckman 6	05/17/11 UF	CS	RAD	Plutonium-239/240 Pu-239/240	<	0	0.005	0.035
Buckman 6	05/17/11 UF	CS	RAD	Potassium-40 K-40	<	-50.1	20	60
Buckman 6	05/17/11 UF	CS	RAD	Protactinium-234m Pa-234m	<	202	220	770

Buckman 6	05/17/11 UF		CS	RAD	Radium-22 Ra-226	<	0.208	0.11	0.34
Buckman 6	05/17/11 UF		CS	RAD	Radium-22 Ra-228		0.854	0.25	0.63
Buckman 6	05/17/11 UF		CS	RAD	Sodium-22 Na-22	<	1.33	1.5	5.4
Buckman 6	05/17/11 UF		CS	RAD	Strontium-90 Sr-90	<	0.237	0.15	0.48
Buckman 6	05/17/11 UF		CS	RAD	Thallium-208 Tl-208	<	2.38	2.4	4
Buckman 6	05/17/11 UF		CS	RAD	Thorium-228 Th-228	<	0.018	0.008	0.066
Buckman 6	05/17/11 UF		CS	RAD	Thorium-230 Th-230	<	0.003	0.004	0.032
Buckman 6	05/17/11 UF		CS	RAD	Thorium-232 Th-232	<	0.004	0.004	0.018
Buckman 6	05/17/11 UF		CS	RAD	Thorium-234 Th-234	<	90.2	87	300
Buckman 6	05/17/11 UF		CS	RAD	Tritium H-3	<	0.032	0.575	1.98
Buckman 6	05/17/11 UF		CS	RAD	Uranium-234 U-234		7.96	0.6	0.086
Buckman 6	05/17/11 UF		CS	RAD	Uranium-235 U-235	<	-7.14	11	35
Buckman 6	05/17/11 UF		CS	RAD	Uranium-235/236 U-235/236		0.135	0.025	0.066
Buckman 6	05/17/11 UF		CS	RAD	Uranium-238 U-238		2.06	0.17	0.045
Buckman 6	05/17/11 UF	FTB	CS	VOA	Acetone 67-64-1	<	10		3.5
Buckman 6	05/17/11 UF	FTB	CS	VOA	Acetonitrile 75-05-8	<	25		6.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Acrolein 107-02-8	<	5		1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Acrylonitril 107-13-1	<	5		1
Buckman 6	05/17/11 UF	FTB	CS	VOA	Benzene 71-43-2	<	1		0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Bromobenzene 108-86-1	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Bromochloro 74-97-5	<	1		0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Bromodichloro 75-27-4	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Bromoforn 75-25-2	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Bromometane 74-83-9	<	1		0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Butanol[1-] 71-36-3	<	50		15
Buckman 6	05/17/11 UF	FTB	CS	VOA	Butanone[2-] 78-93-3	<	5		1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Butylbenzene 104-51-8	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Butylbenzene 135-98-8	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Butylbenzene 98-06-6	<	1		0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Carbon Disulfide 75-15-0	<	5		1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Carbon Tetrachloride 56-23-5	<	1		0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chloro-1,3-dioxane 126-99-8	<	1		0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chloro-1-propanol 107-05-1	<	5		1.5
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chlorobenzene 108-90-7	<	1		0.25

Buckman 6	05/17/11 UF	FTB	CS	VOA	Chlorodibrom	124-48-1	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chloroetha	75-00-3	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chloroform	67-66-3	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chlorometl	74-87-3	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chlorotolu	95-49-8	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Chlorotolu	106-43-4	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dibromo-3	96-12-8	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dibromoet	106-93-4	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dibromom	74-95-3	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichlorobe	95-50-1	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichlorobe	541-73-1	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichlorobe	106-46-7	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichlorodif	75-71-8	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloroetl	75-34-3	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloroetl	107-06-2	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloroetl	75-35-4	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloroetl	156-59-2	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloroetl	156-60-5	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	78-87-5	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	142-28-9	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	594-20-7	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	563-58-6	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-01-5	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-02-6	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Diethyl Eth	60-29-7	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Ethyl Meth	97-63-2	<	5	1
Buckman 6	05/17/11 UF	FTB	CS	VOA	Ethylbenze	100-41-4	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Hexachlor	87-68-3	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Hexanone[591-78-6	<	5	1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Iodometha	74-88-4	<	5	1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Isobutyl alc	78-83-1	<	50	13
Buckman 6	05/17/11 UF	FTB	CS	VOA	Isopropylb	98-82-8	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Isopropyltc	99-87-6	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Methacrylc	126-98-7	<	5	1

Buckman 6	05/17/11 UF	FTB	CS	VOA	Methyl Me 80-62-6	<	5	1
Buckman 6	05/17/11 UF	FTB	CS	VOA	Methyl ter1634-04-4	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Methyl-2-p 108-10-1	<	5	1.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Methylene 75-09-2	<	10	3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Naphthaler 91-20-3	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Propionitril 107-12-0	<	5	1.5
Buckman 6	05/17/11 UF	FTB	CS	VOA	Propylbenz 103-65-1	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Styrene 100-42-5	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 630-20-6	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 79-34-5	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Tetrachlorc 127-18-4	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Toluene 108-88-3	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloro-1 76-13-1	<	5	1
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichlorobε 87-61-6	<	1	0.33
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichlorobε 120-82-1	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloroet 71-55-6	<	1	0.33
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloroet 79-00-5	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloroet 79-01-6	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloroflu 75-69-4	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trichloropr 96-18-4	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trimethylb 95-63-6	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Trimethylb 108-67-8	<	1	0.25
Buckman 6	05/17/11 UF	FTB	CS	VOA	Vinyl Chlori 75-01-4	<	1	0.5
Buckman 6	05/17/11 UF	FTB	CS	VOA	Vinyl aceta 108-05-4	<	5	1.5
Buckman 6	05/17/11 UF	FTB	CS	VOA	Xylene[1,2- 95-47-6	<	1	0.3
Buckman 6	05/17/11 UF	FTB	CS	VOA	Xylene[1,3- Xylene[1,3	<	2	0.5
Buckman 6	05/17/11 UF		CS	VOA	Acetone 67-64-1	<	10	3.5
Buckman 6	05/17/11 UF		CS	VOA	Acetonitrilε 75-05-8	<	25	6.3
Buckman 6	05/17/11 UF		CS	VOA	Acrolein 107-02-8	<	5	1.3
Buckman 6	05/17/11 UF		CS	VOA	Acrylonitril 107-13-1	<	5	1
Buckman 6	05/17/11 UF		CS	VOA	Benzene 71-43-2	<	1	0.3
Buckman 6	05/17/11 UF		CS	VOA	Bromoben; 108-86-1	<	1	0.25
Buckman 6	05/17/11 UF		CS	VOA	Bromochlo 74-97-5	<	1	0.3
Buckman 6	05/17/11 UF		CS	VOA	Bromodich 75-27-4	<	1	0.25

Buckman 6	05/17/11 UF	CS	VOA	Bromoforn 75-25-2	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Bromomet 74-83-9	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Butanol[1-] 71-36-3	<	50	15
Buckman 6	05/17/11 UF	CS	VOA	Butanone[; 78-93-3	<	5	1.3
Buckman 6	05/17/11 UF	CS	VOA	Butylbenze 104-51-8	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Butylbenze 135-98-8	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Butylbenze 98-06-6	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Carbon Dis 75-15-0	<	5	1.3
Buckman 6	05/17/11 UF	CS	VOA	Carbon Tet 56-23-5	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Chloro-1,3- 126-99-8	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Chloro-1-pi 107-05-1	<	5	1.5
Buckman 6	05/17/11 UF	CS	VOA	Chlorobenz 108-90-7	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Chlorodibr 124-48-1	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Chloroetha 75-00-3	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Chloroforn 67-66-3	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Chlorometl 74-87-3	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Chlorotolu 95-49-8	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Chlorotolu 106-43-4	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dibromo-3- 96-12-8	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dibromoet 106-93-4	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dibromom 74-95-3	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichlorobe 95-50-1	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichlorobe 541-73-1	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichlorobe 106-46-7	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichlorodif 75-71-8	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloroetl 75-34-3	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloroetl 107-06-2	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichloroetl 75-35-4	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloroetl 156-59-2	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloroetl 156-60-5	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 78-87-5	<	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 142-28-9	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 594-20-7	<	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 563-58-6	<	1	0.25

Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 10061-01-5 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Dichloropr 10061-02-6 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Diethyl Eth 60-29-7 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Ethyl Meth 97-63-2 <	5	1
Buckman 6	05/17/11 UF	CS	VOA	Ethylbenze 100-41-4 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Hexachlorc 87-68-3 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Hexanone[591-78-6 <	5	1.3
Buckman 6	05/17/11 UF	CS	VOA	Iodometha 74-88-4 <	5	1.3
Buckman 6	05/17/11 UF	CS	VOA	Isobutyl alc 78-83-1 <	50	13
Buckman 6	05/17/11 UF	CS	VOA	Isopropylb 98-82-8 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Isopropyltc 99-87-6 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Methacrylc 126-98-7 <	5	1
Buckman 6	05/17/11 UF	CS	VOA	Methyl Me 80-62-6 <	5	1
Buckman 6	05/17/11 UF	CS	VOA	Methyl terl 1634-04-4 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Methyl-2-p 108-10-1 <	5	1.3
Buckman 6	05/17/11 UF	CS	VOA	Methylene 75-09-2 <	10	3
Buckman 6	05/17/11 UF	CS	VOA	Naphthaler 91-20-3 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Propionitril 107-12-0 <	5	1.5
Buckman 6	05/17/11 UF	CS	VOA	Propylbenz 103-65-1 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Styrene 100-42-5 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Tetrachlorc 630-20-6 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Tetrachlorc 79-34-5 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Tetrachlorc 127-18-4 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Toluene 108-88-3 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Trichloro-1 76-13-1 <	5	1
Buckman 6	05/17/11 UF	CS	VOA	Trichlorob 87-61-6 <	1	0.33
Buckman 6	05/17/11 UF	CS	VOA	Trichlorob 120-82-1 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Trichloroet 71-55-6 <	1	0.33
Buckman 6	05/17/11 UF	CS	VOA	Trichloroet 79-00-5 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Trichloroet 79-01-6 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Trichloroflu 75-69-4 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Trichloropr 96-18-4 <	1	0.3
Buckman 6	05/17/11 UF	CS	VOA	Trimethylb 95-63-6 <	1	0.25
Buckman 6	05/17/11 UF	CS	VOA	Trimethylb 108-67-8 <	1	0.25

Buckman 6	05/17/11 UF		CS	VOA Vinyl Chlori	75-01-4 <	1	0.5
Buckman 6	05/17/11 UF		CS	VOA Vinyl aceta	108-05-4 <	5	1.5
Buckman 6	05/17/11 UF		CS	VOA Xylene[1,2-	95-47-6 <	1	0.3
Buckman 6	05/17/11 UF		CS	VOA Xylene[1,3-	Xylene[1,3 <	2	0.5
Buckman 8	05/17/11 UF	FD	CS	GENINORG Alkalinity-C	ALK-CO3 <	1	0.73
Buckman 8	05/17/11 UF	FD	CS	GENINORG Alkalinity-C	ALK-CO3+HCO3	269	0.73
Buckman 8	05/17/11 UF	FD	CS	GENINORG Ammonia a	NH3-N <	0.05	0.016
Buckman 8	05/17/11 UF	FD	CS	GENINORG Bromide	Br(-1)	0.07	0.066
Buckman 8	05/17/11 UF	FD	CS	GENINORG Calcium	Ca	22.5	0.05
Buckman 8	05/17/11 UF	FD	CS	GENINORG Chloride	Cl(-1)	2.64	0.066
Buckman 8	05/17/11 UF	FD	CS	GENINORG Cyanide (Tc	CN(TOTAL) <	0.005	0.002
Buckman 8	05/17/11 UF	FD	CS	GENINORG Fluoride	F(-1)	0.495	0.033
Buckman 8	05/17/11 UF	FD	CS	GENINORG Hardness	HARDNESS	71.7	0.45
Buckman 8	05/17/11 UF	FD	CS	GENINORG Magnesium	Mg	3.78	0.11
Buckman 8	05/17/11 UF	FD	CS	GENINORG Nitrate-Nit	NO3+NO2-N	0.645	0.05
Buckman 8	05/17/11 UF	FD	CS	GENINORG Perchlorate	ClO4	0.268	0.05
Buckman 8	05/17/11 UF	FD	CS	GENINORG Potassium	K	3.48	0.05
Buckman 8	05/17/11 UF	FD	CS	GENINORG Sodium	Na	102	0.1
Buckman 8	05/17/11 UF	FD	CS	GENINORG Specific Co	SPEC_CONDC	564	1
Buckman 8	05/17/11 UF	FD	CS	GENINORG Sulfate	SO4(-2)	14.1	0.1
Buckman 8	05/17/11 UF	FD	CS	GENINORG Total Disso	TDS	343	2.4
Buckman 8	05/17/11 UF	FD	CS	GENINORG Total Kjeld	TKN <	0.1	0.035
Buckman 8	05/17/11 UF	FD	CS	GENINORG Total Orgar	TOC	0.545	0.33
Buckman 8	05/17/11 UF	FD	CS	GENINORG Total Phos	PO4-P <	0.032	0.015
Buckman 8	05/17/11 UF	FD	CS	GENINORG pH	pH	8.04	0.01
Buckman 8	05/17/11 UF		CS	GENINORG Alkalinity-C	ALK-CO3 <	1	0.73
Buckman 8	05/17/11 UF		CS	GENINORG Alkalinity-C	ALK-CO3+HCO3	373	0.73
Buckman 8	05/17/11 UF		CS	GENINORG Ammonia a	NH3-N <	0.05	0.016
Buckman 8	05/17/11 UF		CS	GENINORG Bromide	Br(-1)	0.072	0.066
Buckman 8	05/17/11 UF		CS	GENINORG Calcium	Ca	20.9	0.05
Buckman 8	05/17/11 UF		CS	GENINORG Chloride	Cl(-1)	2.63	0.066
Buckman 8	05/17/11 UF		CS	GENINORG Cyanide (Tc	CN(TOTAL)	0.006	0.002
Buckman 8	05/17/11 UF		CS	GENINORG Dissolved C	DO	5.1	
Buckman 8	05/17/11 UF		CS	GENINORG Fluoride	F(-1)	0.493	0.033

Buckman 8	05/17/11 UF		CS	GENINORG Hardness	HARDNESS	66.7	0.45
Buckman 8	05/17/11 UF		CS	GENINORG Magnesium	Mg	3.54	0.11
Buckman 8	05/17/11 UF		CS	GENINORG Nitrate-Nitri	NO3+NO2-N	0.645	0.05
Buckman 8	05/17/11 UF		CS	GENINORG Oxidation F	ORP	209.7	
Buckman 8	05/17/11 UF		CS	GENINORG Perchlorate	ClO4	0.26	0.05
Buckman 8	05/17/11 UF		CS	GENINORG Potassium	K	3.2	0.05
Buckman 8	05/17/11 UF		CS	GENINORG Sodium	Na	95.1	0.1
Buckman 8	05/17/11 UF		CS	GENINORG Specific Con	SPEC_CONDC	571	1
Buckman 8	05/17/11 UF		CS	GENINORG Specific Con	SPEC_CONDC	564	
Buckman 8	05/17/11 UF		CS	GENINORG Sulfate	SO4(-2)	14.1	0.1
Buckman 8	05/17/11 UF		CS	GENINORG Temperatu	TEMP	25.68	
Buckman 8	05/17/11 UF		CS	GENINORG Total Disso	TDS	350	2.4
Buckman 8	05/17/11 UF		CS	GENINORG Total Kjeld	TKN	< 0.1	0.035
Buckman 8	05/17/11 UF		CS	GENINORG Total Orgar	TOC	0.577	0.33
Buckman 8	05/17/11 UF		CS	GENINORG Total Phos	PO4-P	< 0.029	0.015
Buckman 8	05/17/11 UF		CS	GENINORG Turbidity	TURB	1.69	
Buckman 8	05/17/11 UF		CS	GENINORG pH	pH	7.41	
Buckman 8	05/17/11 UF		CS	GENINORG pH	pH	7.39	0.01
Buckman 8	05/17/11 UF	FD	CS	HEXP	2,4-Diamin 6629-29-4	< 1.3	0.39
Buckman 8	05/17/11 UF	FD	CS	HEXP	2,6-Diamin 59229-75-3	< 1.3	0.39
Buckman 8	05/17/11 UF	FD	CS	HEXP	3,5-Dinitro: 618-87-1	< 1.3	0.39
Buckman 8	05/17/11 UF	FD	CS	HEXP	Amino-2,6- 19406-51-1	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Amino-4,6- 35572-78-2	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Dinitroben: 99-65-0	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Dinitrotolu 121-14-2	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Dinitrotolu 606-20-2	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	HMX 2691-41-0	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Nitrobenze 98-95-3	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Nitrotoluer 88-72-2	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Nitrotoluer 99-08-1	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Nitrotoluer 99-99-0	< 0.649	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	PETN 78-11-5	< 1.3	0.13
Buckman 8	05/17/11 UF	FD	CS	HEXP	RDX 121-82-4	< 0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	TATB 3058-38-6	< 1.3	0.39

Buckman 8	05/17/11 UF	FD	CS	HEXP	Tetryl 479-45-8	<	0.649	0.13
Buckman 8	05/17/11 UF	FD	CS	HEXP	Trinitroben99-35-4	<	0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Trinitrotolu 118-96-7	<	0.325	0.1
Buckman 8	05/17/11 UF	FD	CS	HEXP	Tris (o-cres 78-30-8	<	1.3	0.39
Buckman 8	05/17/11 UF		CS	HEXP	2,4-Diamin 6629-29-4	<	1.3	0.39
Buckman 8	05/17/11 UF		CS	HEXP	2,6-Diamin 59229-75-3	<	1.3	0.39
Buckman 8	05/17/11 UF		CS	HEXP	3,5-Dinitro: 618-87-1	<	1.3	0.39
Buckman 8	05/17/11 UF		CS	HEXP	Amino-2,6- 19406-51-0	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Amino-4,6- 35572-78-2	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Dinitroben: 99-65-0	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Dinitrotolu 121-14-2	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Dinitrotolu 606-20-2	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	HMX 2691-41-0	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Nitrobenze 98-95-3	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Nitrotoluer 88-72-2	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Nitrotoluer 99-08-1	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Nitrotoluer 99-99-0	<	0.649	0.1
Buckman 8	05/17/11 UF		CS	HEXP	PETN 78-11-5	<	1.3	0.13
Buckman 8	05/17/11 UF		CS	HEXP	RDX 121-82-4	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	TATB 3058-38-6	<	1.3	0.39
Buckman 8	05/17/11 UF		CS	HEXP	Tetryl 479-45-8	<	0.649	0.13
Buckman 8	05/17/11 UF		CS	HEXP	Trinitroben99-35-4	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Trinitrotolu 118-96-7	<	0.325	0.1
Buckman 8	05/17/11 UF		CS	HEXP	Tris (o-cres 78-30-8	<	1.3	0.39
Buckman 8	05/17/11 F	FD	CS	METALS	Chromium Cr		5.31	2
Buckman 8	05/17/11 F		CS	METALS	Chromium Cr		4.88	2
Buckman 8	05/17/11 UF	FD	CS	METALS	Aluminum Al	<	200	68
Buckman 8	05/17/11 UF	FD	CS	METALS	Antimony Sb	<	3	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Arsenic As		7.15	1.7
Buckman 8	05/17/11 UF	FD	CS	METALS	Barium Ba		71	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Beryllium Be	<	5	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Boron B		102	15
Buckman 8	05/17/11 UF	FD	CS	METALS	Cadmium Cd	<	1	0.11
Buckman 8	05/17/11 UF	FD	CS	METALS	Chromium Cr		4.98	2

Buckman 8	05/17/11 UF	FD	CS	METALS	Cobalt	Co	<	5	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Copper	Cu		31.9	3
Buckman 8	05/17/11 UF	FD	CS	METALS	Iron	Fe	<	100	30
Buckman 8	05/17/11 UF	FD	CS	METALS	Lead	Pb		1.71	0.5
Buckman 8	05/17/11 UF	FD	CS	METALS	Manganese	Mn	<	10	2
Buckman 8	05/17/11 UF	FD	CS	METALS	Mercury	Hg	<	0.2	0.066
Buckman 8	05/17/11 UF	FD	CS	METALS	Molybdenum	Mo		1.92	0.17
Buckman 8	05/17/11 UF	FD	CS	METALS	Nickel	Ni		0.706	0.5
Buckman 8	05/17/11 UF	FD	CS	METALS	Selenium	Se	<	5	1.5
Buckman 8	05/17/11 UF	FD	CS	METALS	Silicon Dioxide	SiO2		38.5	0.053
Buckman 8	05/17/11 UF	FD	CS	METALS	Silver	Ag	<	1	0.2
Buckman 8	05/17/11 UF	FD	CS	METALS	Strontium	Sr		543	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Thallium	Tl	<	2	0.45
Buckman 8	05/17/11 UF	FD	CS	METALS	Tin	Sn	<	50	13
Buckman 8	05/17/11 UF	FD	CS	METALS	Uranium	U		20.6	0.067
Buckman 8	05/17/11 UF	FD	CS	METALS	Vanadium	V		35.1	1
Buckman 8	05/17/11 UF	FD	CS	METALS	Zinc	Zn		7.65	3.3
Buckman 8	05/17/11 UF		CS	METALS	Aluminum	Al	<	200	68
Buckman 8	05/17/11 UF		CS	METALS	Antimony	Sb	<	3	1
Buckman 8	05/17/11 UF		CS	METALS	Arsenic	As		7.49	1.7
Buckman 8	05/17/11 UF		CS	METALS	Barium	Ba		65.8	1
Buckman 8	05/17/11 UF		CS	METALS	Beryllium	Be	<	5	1
Buckman 8	05/17/11 UF		CS	METALS	Boron	B		94	15
Buckman 8	05/17/11 UF		CS	METALS	Cadmium	Cd	<	1	0.11
Buckman 8	05/17/11 UF		CS	METALS	Chromium	Cr		5.16	2
Buckman 8	05/17/11 UF		CS	METALS	Cobalt	Co	<	5	1
Buckman 8	05/17/11 UF		CS	METALS	Copper	Cu		26.3	3
Buckman 8	05/17/11 UF		CS	METALS	Iron	Fe	<	100	30
Buckman 8	05/17/11 UF		CS	METALS	Lead	Pb		1.57	0.5
Buckman 8	05/17/11 UF		CS	METALS	Manganese	Mn	<	10	2
Buckman 8	05/17/11 UF		CS	METALS	Mercury	Hg	<	0.2	0.066
Buckman 8	05/17/11 UF		CS	METALS	Molybdenum	Mo		1.9	0.17
Buckman 8	05/17/11 UF		CS	METALS	Nickel	Ni		0.728	0.5
Buckman 8	05/17/11 UF		CS	METALS	Selenium	Se	<	5	1.5

Buckman 8	05/17/11 UF		CS	METALS	Silicon Dio>SiO2		35.3		0.053
Buckman 8	05/17/11 UF		CS	METALS	Silver Ag <		1		0.2
Buckman 8	05/17/11 UF		CS	METALS	Strontium Sr		505		1
Buckman 8	05/17/11 UF		CS	METALS	Thallium Tl <		2		0.45
Buckman 8	05/17/11 UF		CS	METALS	Tin Sn <		10		2.5
Buckman 8	05/17/11 UF		CS	METALS	Uranium U		20.3		0.067
Buckman 8	05/17/11 UF		CS	METALS	Vanadium V		31.7		1
Buckman 8	05/17/11 UF		CS	METALS	Zinc Zn		7.32		3.3
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-10:12674-11-2 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:11104-28-2 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:11141-16-5 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:53469-21-5 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:12672-29-6 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:11097-69-1 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:11096-82-5 <		0.108		0.036
Buckman 8	05/17/11 UF	FD	CS	PEST/PCB	Aroclor-12:37324-23-5 <		0.108		0.036
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-10:12674-11-2 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:11104-28-2 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:11141-16-5 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:53469-21-5 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:12672-29-6 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:11097-69-1 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:11096-82-5 <		0.11		0.037
Buckman 8	05/17/11 UF		CS	PEST/PCB	Aroclor-12:37324-23-5 <		0.11		0.037
Buckman 8	05/17/11 UF	FD	CS	RAD	Actinium-2 Ac-228 <		1.21	5.8	19
Buckman 8	05/17/11 UF	FD	CS	RAD	Americium Am-241 <		2.51	8	24
Buckman 8	05/17/11 UF	FD	CS	RAD	Americium Am-241 <		0	0.006	0.046
Buckman 8	05/17/11 UF	FD	CS	RAD	Bismuth-21Bi-212 <		-3.35	19	60
Buckman 8	05/17/11 UF	FD	CS	RAD	Bismuth-21Bi-214 <		4.97	3.5	12
Buckman 8	05/17/11 UF	FD	CS	RAD	Cesium-13Cs-134 <		2.71	1.4	5.2
Buckman 8	05/17/11 UF	FD	CS	RAD	Cesium-13Cs-137 <		-0.91	1.3	4.2
Buckman 8	05/17/11 UF	FD	CS	RAD	Cobalt-60 Co-60 <		-1.34	1.3	3.8
Buckman 8	05/17/11 UF	FD	CS	RAD	Gross alpha GROSSA		14.4	2.7	2.6
Buckman 8	05/17/11 UF	FD	CS	RAD	Gross beta GROSSB		6.21	1.2	2.8

Buckman 8	05/17/11 UF	FD	CS	RAD	Lead-212 Pb-212	<	-4.97	3	8.6
Buckman 8	05/17/11 UF	FD	CS	RAD	Lead-214 Pb-214	<	-0.25	3.9	12
Buckman 8	05/17/11 UF	FD	CS	RAD	Neptunium Np-237	<	-0.03	0.017	0.11
Buckman 8	05/17/11 UF	FD	CS	RAD	Plutonium- Pu-238	<	0.006	0.004	0.024
Buckman 8	05/17/11 UF	FD	CS	RAD	Plutonium- Pu-239/240	<	-0.006	0.005	0.037
Buckman 8	05/17/11 UF	FD	CS	RAD	Potassium- K-40	<	8.3	19	71
Buckman 8	05/17/11 UF	FD	CS	RAD	Protactiniu Pa-234m	<	111	190	630
Buckman 8	05/17/11 UF	FD	CS	RAD	Radium-22 Ra-226	<	0.227	0.077	0.13
Buckman 8	05/17/11 UF	FD	CS	RAD	Radium-22 Ra-228	<	-0.04	0.17	0.65
Buckman 8	05/17/11 UF	FD	CS	RAD	Sodium-22 Na-22	<	-0.011	1.3	4.3
Buckman 8	05/17/11 UF	FD	CS	RAD	Strontium- Sr-90	<	0.431	0.16	0.5
Buckman 8	05/17/11 UF	FD	CS	RAD	Thallium-2(Tl-208	<	-0.332	1.5	4.9
Buckman 8	05/17/11 UF	FD	CS	RAD	Thorium-2(Th-228	<	0.025	0.013	0.1
Buckman 8	05/17/11 UF	FD	CS	RAD	Thorium-2(Th-230		0.091	0.019	0.049
Buckman 8	05/17/11 UF	FD	CS	RAD	Thorium-2(Th-232	<	0.024	0.009	0.027
Buckman 8	05/17/11 UF	FD	CS	RAD	Thorium-2(Th-234	<	345	120	200
Buckman 8	05/17/11 UF	FD	CS	RAD	Tritium H-3	<	0.671	0.575	1.884
Buckman 8	05/17/11 UF	FD	CS	RAD	Uranium-2(U-234		11.7	0.88	0.086
Buckman 8	05/17/11 UF	FD	CS	RAD	Uranium-2(U-235	<	0.082	9.4	31
Buckman 8	05/17/11 UF	FD	CS	RAD	Uranium-2(U-235/236		0.357	0.047	0.066
Buckman 8	05/17/11 UF	FD	CS	RAD	Uranium-2(U-238		6.94	0.53	0.045
Buckman 8	05/17/11 UF		CS	RAD	Actinium-2 Ac-228	<	3.68	6.3	21
Buckman 8	05/17/11 UF		CS	RAD	Americium Am-241	<	0.674	11	36
Buckman 8	05/17/11 UF		CS	RAD	Americium Am-241	<	0	0.004	0.04
Buckman 8	05/17/11 UF		CS	RAD	Bismuth-21Bi-212	<	5.14	19	65
Buckman 8	05/17/11 UF		CS	RAD	Bismuth-21Bi-214	<	9.68	4.2	13
Buckman 8	05/17/11 UF		CS	RAD	Cesium-13(Cs-134	<	2.61	1.5	5.6
Buckman 8	05/17/11 UF		CS	RAD	Cesium-13(Cs-137	<	0.977	1.2	4.3
Buckman 8	05/17/11 UF		CS	RAD	Cobalt-60 Co-60	<	0.612	1.4	4.7
Buckman 8	05/17/11 UF		CS	RAD	Gross alpha GROSSA		16.2	2.9	2.4
Buckman 8	05/17/11 UF		CS	RAD	Gross beta GROSSB		6.03	1.2	2.9
Buckman 8	05/17/11 UF		CS	RAD	Lead-212 Pb-212	<	-2.12	3.4	11
Buckman 8	05/17/11 UF		CS	RAD	Lead-214 Pb-214	<	5.36	3.7	13
Buckman 8	05/17/11 UF		CS	RAD	Neptunium Np-237	<	0.021	0.024	0.1

Buckman 8	05/17/11 UF		CS	RAD	Plutonium- Pu-238	<	0	0.003	0.027
Buckman 8	05/17/11 UF		CS	RAD	Plutonium- Pu-239/240	<	-0.007	0.006	0.04
Buckman 8	05/17/11 UF		CS	RAD	Potassium- K-40	<	32.9	19	72
Buckman 8	05/17/11 UF		CS	RAD	Protactiniu Pa-234m	<	72.7	200	670
Buckman 8	05/17/11 UF		CS	RAD	Radium-22 Ra-226	<	0.168	0.071	0.18
Buckman 8	05/17/11 UF		CS	RAD	Radium-22 Ra-228	<	0.347	0.18	0.55
Buckman 8	05/17/11 UF		CS	RAD	Sodium-22 Na-22	<	1.86	1.4	5.4
Buckman 8	05/17/11 UF		CS	RAD	Strontium- Sr-90	<	-0.076	0.12	0.48
Buckman 8	05/17/11 UF		CS	RAD	Thallium-2(Tl-208	<	0.039	1.7	5.4
Buckman 8	05/17/11 UF		CS	RAD	Thorium-2(Th-228	<	0.011	0.009	0.065
Buckman 8	05/17/11 UF		CS	RAD	Thorium-2(Th-230	<	0.005	0.003	0.031
Buckman 8	05/17/11 UF		CS	RAD	Thorium-2(Th-232	<	0.002	0.002	0.017
Buckman 8	05/17/11 UF		CS	RAD	Thorium-2(Th-234	<	-274	100	310
Buckman 8	05/17/11 UF		CS	RAD	Tritium H-3	<	0.511	0.639	2.171
Buckman 8	05/17/11 UF		CS	RAD	Uranium-2(U-234		11.6	0.88	0.097
Buckman 8	05/17/11 UF		CS	RAD	Uranium-2(U-235	<	-5.04	11	33
Buckman 8	05/17/11 UF		CS	RAD	Uranium-2(U-235/236		0.355	0.048	0.074
Buckman 8	05/17/11 UF		CS	RAD	Uranium-2(U-238		6.89	0.54	0.05
Buckman 8	05/17/11 UF	FD	CS	VOA	Acetone 67-64-1	<	10		3.5
Buckman 8	05/17/11 UF	FD	CS	VOA	Acetonitrile 75-05-8	<	25		6.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Acrolein 107-02-8	<	5		1.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Acrylonitril 107-13-1	<	5		1
Buckman 8	05/17/11 UF	FD	CS	VOA	Benzene 71-43-2	<	1		0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Bromobenzene 108-86-1	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Bromochloro 74-97-5	<	1		0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Bromodichloro 75-27-4	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Bromoforn 75-25-2	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Bromometane 74-83-9	<	1		0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Butanol[1-] 71-36-3	<	50		15
Buckman 8	05/17/11 UF	FD	CS	VOA	Butanone[2-] 78-93-3	<	5		1.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Butylbenzene 104-51-8	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Butylbenzene 135-98-8	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Butylbenzene 98-06-6	<	1		0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Carbon Disulfide 75-15-0	<	5		1.3

Buckman 8	05/17/11 UF	FD	CS	VOA	Carbon Tet 56-23-5	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Chloro-1,3-126-99-8	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Chloro-1-pi 107-05-1	<	5	1.5
Buckman 8	05/17/11 UF	FD	CS	VOA	Chlorobenz 108-90-7	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Chlorodibr 124-48-1	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Chloroetha 75-00-3	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Chloroform 67-66-3	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Chlorometl 74-87-3	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Chlorotolu 95-49-8	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Chlorotolu 106-43-4	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dibromo-3-96-12-8	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dibromoet 106-93-4	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dibromom 74-95-3	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichlorobe 95-50-1	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichlorobe 541-73-1	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichlorobe 106-46-7	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichlorodif 75-71-8	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloroetl 75-34-3	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloroetl 107-06-2	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloroetl 75-35-4	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloroetl 156-59-2	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloroetl 156-60-5	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 78-87-5	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 142-28-9	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 594-20-7	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 563-58-6	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 10061-01-5	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Dichloropr 10061-02-6	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Diethyl Eth 60-29-7	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Ethyl Meth 97-63-2	<	5	1
Buckman 8	05/17/11 UF	FD	CS	VOA	Ethylbenze 100-41-4	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Hexachlor 87-68-3	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Hexanone[591-78-6	<	5	1.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Iodometha 74-88-4	<	5	1.3

Buckman 8	05/17/11 UF	FD	CS	VOA	Isobutyl alc 78-83-1	<	50	13
Buckman 8	05/17/11 UF	FD	CS	VOA	Isopropylb 98-82-8	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Isopropyltc 99-87-6	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Methacrylc 126-98-7	<	5	1
Buckman 8	05/17/11 UF	FD	CS	VOA	Methyl Me 80-62-6	<	5	1
Buckman 8	05/17/11 UF	FD	CS	VOA	Methyl ter 1634-04-4	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Methyl-2-p 108-10-1	<	5	1.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Methylene 75-09-2	<	10	3
Buckman 8	05/17/11 UF	FD	CS	VOA	Naphthaler 91-20-3	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Propionitril 107-12-0	<	5	1.5
Buckman 8	05/17/11 UF	FD	CS	VOA	Propylbenz 103-65-1	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Styrene 100-42-5	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Tetrachlorc 630-20-6	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Tetrachlorc 79-34-5	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Tetrachlorc 127-18-4	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Toluene 108-88-3	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichloro-1 76-13-1	<	5	1
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichlorob 87-61-6	<	1	0.33
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichlorob 120-82-1	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichloroet 71-55-6	<	1	0.33
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichloroet 79-00-5	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichloroet 79-01-6	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichlorofl 75-69-4	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Trichloropr 96-18-4	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Trimethylb 95-63-6	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Trimethylb 108-67-8	<	1	0.25
Buckman 8	05/17/11 UF	FD	CS	VOA	Vinyl Chlori 75-01-4	<	1	0.5
Buckman 8	05/17/11 UF	FD	CS	VOA	Vinyl aceta 108-05-4	<	5	1.5
Buckman 8	05/17/11 UF	FD	CS	VOA	Xylene[1,2- 95-47-6	<	1	0.3
Buckman 8	05/17/11 UF	FD	CS	VOA	Xylene[1,3- Xylene[1,3	<	2	0.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Acetone 67-64-1	<	10	3.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Acetonitril 75-05-8	<	25	6.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Acrolein 107-02-8	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Acrylonitril 107-13-1	<	5	1

Buckman 8	05/17/11 UF	FTB	CS	VOA	Benzene 71-43-2	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Bromoben; 108-86-1	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Bromochlo 74-97-5	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Bromodich 75-27-4	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Bromoforn 75-25-2	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Bromomet 74-83-9	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Butanol[1-] 71-36-3	<	50	15
Buckman 8	05/17/11 UF	FTB	CS	VOA	Butanone[; 78-93-3	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Butylbenze 104-51-8	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Butylbenze 135-98-8	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Butylbenze 98-06-6	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Carbon Dis 75-15-0	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Carbon Tet 56-23-5	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chloro-1,3- 126-99-8	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chloro-1-pi 107-05-1	<	5	1.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chlorobenz 108-90-7	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chlorodibr; 124-48-1	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chloroetha 75-00-3	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chloroforn 67-66-3	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chlorometl 74-87-3	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chlorotolu; 95-49-8	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Chlorotolu; 106-43-4	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dibromo-3 96-12-8	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dibromoet 106-93-4	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dibromom; 74-95-3	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichlorobe 95-50-1	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichlorobe 541-73-1	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichlorobe 106-46-7	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichlorodif 75-71-8	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloroetl 75-34-3	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloroetl 107-06-2	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloroetl 75-35-4	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloroetl 156-59-2	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloroetl 156-60-5	<	1	0.3

Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	78-87-5	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	142-28-9	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	594-20-7	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	563-58-6	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-01-5	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Dichloropr	10061-02-6	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Diethyl Eth	60-29-7	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Ethyl Meth	97-63-2	<	5	1
Buckman 8	05/17/11 UF	FTB	CS	VOA	Ethylbenze	100-41-4	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Hexachlorc	87-68-3	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Hexanone[591-78-6	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Iodometha	74-88-4	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Isobutyl alc	78-83-1	<	50	13
Buckman 8	05/17/11 UF	FTB	CS	VOA	Isopropylb	98-82-8	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Isopropyltc	99-87-6	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Methacrylc	126-98-7	<	5	1
Buckman 8	05/17/11 UF	FTB	CS	VOA	Methyl Me	80-62-6	<	5	1
Buckman 8	05/17/11 UF	FTB	CS	VOA	Methyl ter	1634-04-4	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Methyl-2-p	108-10-1	<	5	1.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Methylene	75-09-2	<	10	3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Naphthaler	91-20-3	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Propionitri	107-12-0	<	5	1.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Propylbenz	103-65-1	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Styrene	100-42-5	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Tetrachlorc	630-20-6	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Tetrachlorc	79-34-5	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Tetrachlorc	127-18-4	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Toluene	108-88-3	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloro-1	76-13-1	<	5	1
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichlorob	87-61-6	<	1	0.33
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichlorob	120-82-1	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloroet	71-55-6	<	1	0.33
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloroet	79-00-5	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloroet	79-01-6	<	1	0.25

Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloroflu 75-69-4	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trichloropr 96-18-4	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trimethylb 95-63-6	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Trimethylb 108-67-8	<	1	0.25
Buckman 8	05/17/11 UF	FTB	CS	VOA	Vinyl Chlori 75-01-4	<	1	0.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Vinyl aceta 108-05-4	<	5	1.5
Buckman 8	05/17/11 UF	FTB	CS	VOA	Xylene[1,2- 95-47-6	<	1	0.3
Buckman 8	05/17/11 UF	FTB	CS	VOA	Xylene[1,3- Xylene[1,3	<	2	0.5
Buckman 8	05/17/11 UF		CS	VOA	Acetone 67-64-1	<	10	3.5
Buckman 8	05/17/11 UF		CS	VOA	Acetonitril 75-05-8	<	25	6.3
Buckman 8	05/17/11 UF		CS	VOA	Acrolein 107-02-8	<	5	1.3
Buckman 8	05/17/11 UF		CS	VOA	Acrylonitril 107-13-1	<	5	1
Buckman 8	05/17/11 UF		CS	VOA	Benzene 71-43-2	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Bromoben; 108-86-1	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Bromochlo 74-97-5	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Bromodich 75-27-4	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Bromoforn 75-25-2	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Bromomet 74-83-9	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Butanol[1-] 71-36-3	<	50	15
Buckman 8	05/17/11 UF		CS	VOA	Butanone[; 78-93-3	<	5	1.3
Buckman 8	05/17/11 UF		CS	VOA	Butylbenze 104-51-8	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Butylbenze 135-98-8	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Butylbenze 98-06-6	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Carbon Dis 75-15-0	<	5	1.3
Buckman 8	05/17/11 UF		CS	VOA	Carbon Tet 56-23-5	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Chloro-1,3- 126-99-8	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Chloro-1-pi 107-05-1	<	5	1.5
Buckman 8	05/17/11 UF		CS	VOA	Chlorobenz 108-90-7	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Chlorodibr 124-48-1	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Chloroetha 75-00-3	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Chloroforn 67-66-3	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Chlorometl 74-87-3	<	1	0.3
Buckman 8	05/17/11 UF		CS	VOA	Chlorotolu 95-49-8	<	1	0.25
Buckman 8	05/17/11 UF		CS	VOA	Chlorotolu 106-43-4	<	1	0.25

Buckman 8	05/17/11 UF	CS	VOA	Dibromo-3 96-12-8	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dibromoet 106-93-4	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dibromom 74-95-3	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichlorobe 95-50-1	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichlorobe 541-73-1	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichlorobe 106-46-7	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichlorodif 75-71-8	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloroetl 75-34-3	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloroetl 107-06-2	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichloroetl 75-35-4	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloroetl 156-59-2	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloroetl 156-60-5	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 78-87-5	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 142-28-9	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 594-20-7	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 563-58-6	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 10061-01-5	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Dichloropr 10061-02-6	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Diethyl Eth 60-29-7	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Ethyl Meth 97-63-2	<	5	1
Buckman 8	05/17/11 UF	CS	VOA	Ethylbenze 100-41-4	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Hexachlorc 87-68-3	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Hexanone[591-78-6	<	5	1.3
Buckman 8	05/17/11 UF	CS	VOA	Iodometha 74-88-4	<	5	1.3
Buckman 8	05/17/11 UF	CS	VOA	Isobutyl alc 78-83-1	<	50	13
Buckman 8	05/17/11 UF	CS	VOA	Isopropylb 98-82-8	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Isopropyltc 99-87-6	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Methacrylc 126-98-7	<	5	1
Buckman 8	05/17/11 UF	CS	VOA	Methyl Me 80-62-6	<	5	1
Buckman 8	05/17/11 UF	CS	VOA	Methyl terl 1634-04-4	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Methyl-2-p 108-10-1	<	5	1.3
Buckman 8	05/17/11 UF	CS	VOA	Methylene 75-09-2	<	10	3
Buckman 8	05/17/11 UF	CS	VOA	Naphthaler 91-20-3	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Propionitri 107-12-0	<	5	1.5

Buckman 8	05/17/11 UF	CS	VOA	Propylbenz 103-65-1	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Styrene 100-42-5	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Tetrachloro 630-20-6	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Tetrachloro 79-34-5	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Tetrachloro 127-18-4	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Toluene 108-88-3	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Trichloro-1 76-13-1	<	5	1
Buckman 8	05/17/11 UF	CS	VOA	Trichlorobenzene 87-61-6	<	1	0.33
Buckman 8	05/17/11 UF	CS	VOA	Trichlorobenzene 120-82-1	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Trichloroethane 71-55-6	<	1	0.33
Buckman 8	05/17/11 UF	CS	VOA	Trichloroethane 79-00-5	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Trichloroethane 79-01-6	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Trichlorofluoromethane 75-69-4	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Trichloropropane 96-18-4	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Trimethylbenzene 95-63-6	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Trimethylbenzene 108-67-8	<	1	0.25
Buckman 8	05/17/11 UF	CS	VOA	Vinyl Chloride 75-01-4	<	1	0.5
Buckman 8	05/17/11 UF	CS	VOA	Vinyl acetate 108-05-4	<	5	1.5
Buckman 8	05/17/11 UF	CS	VOA	Xylene[1,2-] 95-47-6	<	1	0.3
Buckman 8	05/17/11 UF	CS	VOA	Xylene[1,3-] Xylene[1,3-]	<	2	0.5

Std Uom	Dilution Factor	Anyl Meth Code	Lab Code	Lab Qual Code	Concat Flag Code	Concat Reason Code	Sample Id
mg/L	1	EPA:310.1	GELC	U	U	U_LAB	Buckman1-11-12475
mg/L	1	EPA:310.1	GELC				Buckman1-11-12475
mg/L	1	EPA:350.1	GELC				Buckman1-11-12475
mg/L	1	EPA:300.0	GELC	U	U	U_LAB	Buckman1-11-12475
mg/L	1	SW-846:60	GELC				Buckman1-11-12475
mg/L	1	EPA:300.0	GELC		J+	I6b	Buckman1-11-12475
mg/L	1	EPA:335.4	GELC	U	U	U_LAB	Buckman1-11-12475
mg/L		Generic Fie	FLD				Buckman1-11-12475
mg/L	1	EPA:300.0	GELC				Buckman1-11-12475
mg/L	1	SM:A2340E	GELC				Buckman1-11-12475
mg/L	1	SW-846:60	GELC				Buckman1-11-12475
mg/L	5	EPA:353.2	GELC				Buckman1-11-12475
mV		Generic Fie	FLD				Buckman1-11-12475
ug/L	1	SW-846:68	GELC				Buckman1-11-12475
mg/L	1	SW-846:60	GELC				Buckman1-11-12475
mg/L	1	SW-846:60	GELC				Buckman1-11-12475
uS/cm		GENERIC FI	FLD				Buckman1-11-12475
uS/cm	1	EPA:120.1	GELC				Buckman1-11-12475
mg/L	1	EPA:300.0	GELC		J+	I6b	Buckman1-11-12475
deg C		GENERIC FI	FLD				Buckman1-11-12475
mg/L	1	EPA:160.1	GELC				Buckman1-11-12475
mg/L	5	EPA:351.2	GELC	U	UJ	I6a	Buckman1-11-12475
mg/L	1	SW-846:90	GELC	J	J	J_LAB	Buckman1-11-12475
mg/L	1	EPA:365.4	GELC	J	U	I4	Buckman1-11-12475
NTU		GENERIC FI	FLD				Buckman1-11-12475
SU	1	EPA:150.1	GELC	H	J-	I9a	Buckman1-11-12475
SU		GENERIC FI	FLD				Buckman1-11-12475
ug/L	2	SW-846:83	GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2	SW-846:83	GELC	U	UJ	HE12g	Buckman1-11-12475
ug/L	2	SW-846:83	GELC	U	U	U_LAB	Buckman1-11-12475

ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman1-11-12476
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 EPA:245.2 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC		J	I4a	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475

ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
mg/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC				Buckman1-11-12475
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:/ GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC				Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:900 GELC				Buckman1-11-12475
pCi/L	1 EPA:900 GELC				Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:† GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman1-11-12475

pCi/L	1 EPA:903.1	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:904	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:905.0	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 Generic:Lo'	ARSL	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC				Buckman1-11-12475
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC				Buckman1-11-12475
pCi/L	1 HASL-300:I	GELC				Buckman1-11-12475
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	UJ	V7c	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	UJ	V7c	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	UJ	V7c	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477
ug/L	1 SW-846:82	GELC	U	U	U_LAB	Buckman1-11-12477

ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman1-11-12475
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman1-11-12475
mg/L	1 EPA:310.1 GELC	U	U	U_LAB	Buckman06-11-12478
mg/L	1 EPA:310.1 GELC				Buckman06-11-12478
mg/L	1 EPA:350.1 GELC				Buckman06-11-12478
mg/L	1 EPA:300.0 GELC	J	J	J_LAB	Buckman06-11-12478
mg/L	1 SW-846:60 GELC				Buckman06-11-12478
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman06-11-12478
mg/L	1 EPA:335.4 GELC	U	U	U_LAB	Buckman06-11-12478
mg/L	Generic Fie FLD				Buckman06-11-12478
mg/L	1 EPA:300.0 GELC				Buckman06-11-12478
mg/L	1 SM:A2340E GELC				Buckman06-11-12478
mg/L	1 SW-846:60 GELC				Buckman06-11-12478
mg/L	5 EPA:353.2 GELC				Buckman06-11-12478
mV	Generic Fie FLD				Buckman06-11-12478
ug/L	1 SW-846:68 GELC				Buckman06-11-12478
mg/L	1 SW-846:60 GELC				Buckman06-11-12478
mg/L	1 SW-846:60 GELC				Buckman06-11-12478
uS/cm	GENERIC FI FLD				Buckman06-11-12478
uS/cm	1 EPA:120.1 GELC				Buckman06-11-12478
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman06-11-12478
deg C	GENERIC FI FLD				Buckman06-11-12478
mg/L	1 EPA:160.1 GELC				Buckman06-11-12478
mg/L	5 EPA:351.2 GELC	U	UJ	I6a	Buckman06-11-12478
mg/L	1 SW-846:90 GELC	J	J	J_LAB	Buckman06-11-12478
mg/L	1 EPA:365.4 GELC	J	U	I4	Buckman06-11-12478
NTU	GENERIC FI FLD				Buckman06-11-12478
SU	1 EPA:150.1 GELC	H	J-	I9a	Buckman06-11-12478
SU	GENERIC FI FLD				Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	UJ	HE12g	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478

ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12479
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 EPA:245.2 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC		J	I4a	Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12478

ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
mg/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	5 SW-846:60 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC				Buckman06-11-12478
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:80 GELC	U	U	U_LAB	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:/ GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:900 GELC				Buckman06-11-12478
pCi/L	1 EPA:900 GELC				Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:† GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478

pCi/L	1 EPA:903.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:904 GELC				Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:905.0 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 Generic:Lo' ARSL	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC				Buckman06-11-12478
pCi/L	1 EPA:901.1 GELC	U	U	R5	Buckman06-11-12478
pCi/L	1 HASL-300:I GELC				Buckman06-11-12478
pCi/L	1 HASL-300:I GELC				Buckman06-11-12478
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	UJ	V7c	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	UJ	V7b	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	UJ	V7c	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	UJ	V7c	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12480

ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12478
ug/L	1 SW-846:82 GELC	U	U	U_LAB	Buckman06-11-12478
mg/L	1 EPA:310.1 GELC	U	U	U_LAB	Buckman08-11-12485
mg/L	1 EPA:310.1 GELC				Buckman08-11-12485
mg/L	1 EPA:350.1 GELC	U	U	U_LAB	Buckman08-11-12485
mg/L	1 EPA:300.0 GELC	J	J	J_LAB	Buckman08-11-12485
mg/L	1 SW-846:60 GELC				Buckman08-11-12485
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman08-11-12485
mg/L	1 EPA:335.4 GELC	U	U	U_LAB	Buckman08-11-12485
mg/L	1 EPA:300.0 GELC				Buckman08-11-12485
mg/L	1 SM:A2340E GELC				Buckman08-11-12485
mg/L	1 SW-846:60 GELC				Buckman08-11-12485
mg/L	5 EPA:353.2 GELC				Buckman08-11-12485
ug/L	1 SW-846:68 GELC				Buckman08-11-12485
mg/L	1 SW-846:60 GELC				Buckman08-11-12485
mg/L	1 SW-846:60 GELC				Buckman08-11-12485
uS/cm	1 EPA:120.1 GELC				Buckman08-11-12485
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman08-11-12485
mg/L	1 EPA:160.1 GELC				Buckman08-11-12485
mg/L	1 EPA:351.2 GELC	U	UJ	I6a	Buckman08-11-12485
mg/L	1 SW-846:90 GELC	J	J	J_LAB	Buckman08-11-12485
mg/L	1 EPA:365.4 GELC	J	U	I4	Buckman08-11-12485
SU	1 EPA:150.1 GELC	H	J-	I9a	Buckman08-11-12485
mg/L	1 EPA:310.1 GELC	U	U	U_LAB	Buckman08-11-12481
mg/L	1 EPA:310.1 GELC				Buckman08-11-12481
mg/L	1 EPA:350.1 GELC	U	U	U_LAB	Buckman08-11-12481
mg/L	1 EPA:300.0 GELC	J	J	J_LAB	Buckman08-11-12481
mg/L	1 SW-846:60 GELC				Buckman08-11-12481
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman08-11-12481
mg/L	1 EPA:335.4 GELC				Buckman08-11-12481
mg/L	Generic Fie FLD				Buckman08-11-12481
mg/L	1 EPA:300.0 GELC				Buckman08-11-12481

mg/L	1 SM:A2340E GELC				Buckman08-11-12481
mg/L	1 SW-846:60 GELC				Buckman08-11-12481
mg/L	5 EPA:353.2 GELC				Buckman08-11-12481
mV	Generic Fie FLD				Buckman08-11-12481
ug/L	1 SW-846:68 GELC				Buckman08-11-12481
mg/L	1 SW-846:60 GELC				Buckman08-11-12481
mg/L	1 SW-846:60 GELC				Buckman08-11-12481
uS/cm	1 EPA:120.1 GELC				Buckman08-11-12481
uS/cm	GENERIC FI FLD				Buckman08-11-12481
mg/L	1 EPA:300.0 GELC		J+	I6b	Buckman08-11-12481
deg C	GENERIC FI FLD				Buckman08-11-12481
mg/L	1 EPA:160.1 GELC				Buckman08-11-12481
mg/L	1 EPA:351.2 GELC	U	UJ	I6a	Buckman08-11-12481
mg/L	1 SW-846:90 GELC	J	J	J_LAB	Buckman08-11-12481
mg/L	1 EPA:365.4 GELC	J	U	I4	Buckman08-11-12481
NTU	GENERIC FI FLD				Buckman08-11-12481
SU	GENERIC FI FLD				Buckman08-11-12481
SU	1 EPA:150.1 GELC	H	J-	I9a	Buckman08-11-12481
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	UJ	HE12g	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	UJ	HE7b	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	2 SW-846:83 GELC	U	U	U_LAB	Buckman08-11-12485

ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC				Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 EPA:245.2 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC		J	I4a	Buckman08-11-12485
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
mg/L	1 SW-846:60 GELC				Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC				Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	5 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC				Buckman08-11-12485
ug/L	1 SW-846:60 GELC				Buckman08-11-12485
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12485
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC				Buckman08-11-12481
ug/L	1 SW-846:60 GELC				Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC				Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC				Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 EPA:245.2 GELC	U	U	U_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC		J	I4a	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	J	J	J_LAB	Buckman08-11-12481
ug/L	1 SW-846:60 GELC	U	U	U_LAB	Buckman08-11-12481

pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:903.1	GELC		U	R11	Buckman08-11-12485
pCi/L	1 EPA:904	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:905.0	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC				Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	UI	R	R5a	Buckman08-11-12485
pCi/L	1 Generic:Lo	ARSL	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC				Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC				Buckman08-11-12485
pCi/L	1 HASL-300:†	GELC				Buckman08-11-12485
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:900	GELC				Buckman08-11-12481
pCi/L	1 EPA:900	GELC				Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 EPA:901.1	GELC	U	U	R5	Buckman08-11-12481
pCi/L	1 HASL-300:†	GELC	U	U	R5	Buckman08-11-12481

Definitions for Other Codes

Fld Qc Type

Code	Fld Qc Type Desc
EQB	Equipment Rinsate Blank
FB	Field Blank
FD	Field Duplicate
FR	Field Rinsate
FS	Field Split
FTB	Field Trip Blank
FTR	Field Triplicate
INB	Equipment blank taken during installation and not assoc with a sampling event
ITB	Trip blank taken during installation and not assoc with a sampling event
NA	Not Applicable
PEB	Performance Evaluation Blank
PEK	Performance Evaluation Known
RES	Resample
SS	Special sampling event, data unique
SS-EQB	Equipment Blank of special sampling event, data unique
SS-FB	Field Blank of special sampling event, data unique
SS-FD	Field Duplicate of special sampling event, data unique
SS-FTB	Field Trip Blank of special sampling event, data unique

Fld Prep Code

Fld Prep Code	Fld Prep Desc
F	Filtered
UF	Unfiltered

Anyl Suite Code

Anyl Suite Code	Anyl Suite Desc
ANION	ANION
DIOX/FUR	Dioxin and Furans
DRO	Diesel Range Organics
GAMMA	Gamma Spectroscopy
GAMMA_SPEC	GAMMA_SPEC
GENINORG	General Inorganics
GRO	Gasoline Range Organics
GROSSAB	GROSSAB
HERB	Herbicides
HEXP	High Explosives
INORGANIC	Inorganics

ISOTOPE	Isotopes Ratios
METALS	Metals
PCB	PCB
PCB_CONG	PCB Congeners
PEST	PEST
PEST/PCB	Pesticide and PCBs
PESTPCB	Pesticides/PCBs
RAD	Radiochemistry (Not Gamma)
SVOA	Semivolatiles Organics
SVOC	SVOC
VOA	Volatile Organics
VOC	Volatile Organic Compounds

Lab Sample Type

Code	Lab Sample Type Desc
CS	Client Sample
DL	Dilution
DUP	Duplicate
RE	Reanalysis
REDL	Reanalysis Dilution
REDP	Reanalysis Duplicate
RI	Reissue
TRP	Triplicate

Fld Matrix Code	Fld Matrix Desc
WG	Ground Water
WM	Snowmelt
WP	Persistent Flow
WS	Base Flow
WT	Storm Runoff

Lab Code	Lab Desc
ALTC	Alta Analytical Lab Incorporated
ARSL	American Radiation Services - Primary Los Alamos National Laboratory-Isotope and Nuclear chemistry divison
C-INC	Coastal Science Lab
COAST	LANL Chemical Sciences & Technology
CST	Environmental Sciences Division
EES6	Environmental Sciences & Engineering, Inc., Gainesville,
ESE	FL
FLD	Measurement taken in Field
GEL	General Engineering Laboratories, Inc.
GELC	General Engineering Laboratories, Inc., Charleston, SC.
GEO	Geochron Lab

HENV	JCNNM
HUFFMAN	Huffman
KA	KEMRON
LVL I	LVL I
PARA	Paragon Analytics, Inc.
PEC	Pacific EcoRisk Laboratories
QESL	Quanterra Environmental Services, St. Louis, MO
QST	QST Environmental, Newberry, FL
RECRAP	RECRA Labnet, Lionville, PA
RFWC	Roy F. Weston, West Chester, PA
SGSW	Paradigm
SILENS	Stable Isotopes Laboratory
STL2	Severn Trent Laboratories - Richland, Historical
STLA	Severn Trent - Los Angeles
STR	Severn Trent Laboratories - Richland
STSL	Severn Trent Laboratories, Inc., St. Louis
SwRI	Southwest Research Institute
UAZ	University of Arizona
UIL	University of Illinois
UMTL	University of Miami Tritium Lab

Analytical Laboratory Qualifier Codes.

Lab Qual

Code Lab Qual Desc

*	(Inorganic) - Duplicate Analysis (relative percent difference) not within control limits. (Organic) - Analyte present in the blank and the sample. (Inorganic) - reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).
B	See B code and see J code
BJ	See B code and see J code
BJP	See B code, see J code and see P code
	(B) (Organic) - This analyte was detected in the associated Laboratory Method Blank and the sample. (B) (Inorganic) - The result for this analyte was greater than the Instrument Detection Limit but less than the Contract Required Detection Limit. (P) (Pesticides/PCBs) - The quantitative results for this analyte between the primary and secondary GC columns were greater than 25% difference. (P) (SW-846 EPA Method 8310 High Pressure Liquid Chromatography, HPLC results) - The quantitative results for this analyte between the primary and secondary HPLC columns or primary and secondary HPLC detectors were greater than 40% difference. (X) (Organic/Inorganic) - The result for this analyte should be regarded as not detected.
BPX	The result for this analyte was reported from a dilution.
D	See D code and see J code
DJ	did not analyze due to broken equipment.
DNA	Analyte exceeded the concentration range (Organics). The serial dilution was exceeded
E	(Inorganics)
E*	See E code and see * code.
EJ	See E code and see J code
EJ*	See E code, See J code and see * code
	(E) (Organic) - The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (ICP-AES) - The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (GFAA) - The result for this analyte failed one or more CLP acceptance criteria as explained in the case narrative. (J) (Organic/General Inorganics) - The result for this analyte was greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL). (N) (Organic) - The reported analyte is a tentatively identified compound (TIC). (N) (Inorganic) - The result for this analyte in the matrix spike sample was outside acceptance criteria.
EJN	See E code and see N code
EN	See E code and see N code

(E) (Organic) - The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (ICP-AES) - The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (GFAA) - The result for this analyte failed one or more CLP acceptance criteria as explained in the case narrative. (N) (Organic) - The reported analyte is a tentatively identified compound (TIC). (N) (Inorganic) - The result for this analyte in the matrix spike sample was outside acceptance criteria. * (Inorganic) - The result for this analyte in the Laboratory Replicate analysis was outside acceptance criteria.

EN* (H) (Organic/Inorganic) - The required extraction or analysis holding time for this result was exceeded.

H (H) (Organic/Inorganic) - The required extraction or analysis holding time for this result was exceeded. * (Organic) and (Inorganic) - The result for this analyte in the Laboratory Control Sample analysis was outside acceptance criteria.

H* See H code and see J code

HJ (H) (Organic/Inorganic) - The required extraction or analysis holding time for this result was exceeded. (J) (Organic/General Inorganics) - The result for this analyte was greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL). * (Inorganic) - The result for this analyte in the Laboratory Replicate analysis was outside acceptance criteria.

HJ* (d15N) - The d15N of nitrate is a signature of the nitrate present in a sample. Therefore, nitrate has to be present to have a signature. A d15N value can not be given to a blank, since the blank does not have nitrate. This is different than most analytical methods where you would run a blank and use the designator: "non detect" or detected, but below detection limit.

INS (Inorganic) -The associated numerical value is an estimated quantity. (Organic) - The associated numerical value is an estimated quantity.

J See J code and see * code.

J* See J code and see B code

JB See J code and see N code

JN See J code, see N code and see * code

JN* See J code and see P code

JP (Inorganic) - Spiked sample recovery not within control limits.

N See N code and see * code.

N* See N code, see * code and see E code

N*E See N code and see E code

NE Percent difference between the results on the two columns during the analysis differed by more than 40%.

P See P code and see J code

PJ The material was analyzed for, but was not detected above the level of the associated numeric value.

U See U code and see * code

U* See U code and see D code.

UD See U code and see E code

UE See U code, see E code and see * code

UE* See U code, see E code and see N code

UEN See U code and see H code.

UH

(U) (Organic/Inorganic) - The result for this analyte was not detected at the specified reporting limit. (H) (Organic/Inorganic) - The required extraction or analysis holding time for this result was exceeded. * (Inorganic) - The result for this analyte in the Laboratory Replicate analysis was outside acceptance criteria.

UH*

UI

This code is no longer used.

EPA Flag (Inorganic) Compound was analyzed for, but not detected and spiked sample

UN

recovery not within control limits.

UN*

EPA Flag (Inorganic) -see U code, see N code, and see * code.

X

Lab suspects result is a nondetect despite positive quantification results.

Secondary '

Valid Flag
Code

A

I

J

J-

J+

JN-

JN+

N

NJ

NQ

PM

R

U

UJ

Validation Flag Codes.

Valid Flag Desc

The contractually-required supporting documentation for this datum is absent.

The calculated sums are considered incomplete due to lack of one or more congener results.

The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual.

The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.

The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.

Presumptive evidence of the presence of the material at an an estimated quantity with a suspected negative bias.

Presumptive evidence of the presence of the material at an an estimated quantity with a suspected positive bias.

Presumptive evidence of the presence of the material.

(Organic) -Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.

No validation qualifier flag is associated with this result, and the analyte is classified as detected.

Manual review of raw data is recommended to determine if the observed non-compliances with quality acceptance criteria adversely impacts data use.

The reported sample result is classified as rejected due to serious noncompliances regarding quality control acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone

The analyte is classified as not detected.

The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

Secondary Validatio

Valid Reason Code

12a

CB0

CB0b

CB12

CB12a

CB12b

CB12c

CB12d

CB15

CB16

CB16c

CB19

CB3

CB3a

CB3b

CB3d

CB4

CB4a

CB4d

CB4e

CB7

CB7a

CB7b

CB7c

CB7d

CB7f

CB8

CB88

CB8a

CB9

CB9a

DF0

DF0b

DF12

DF12a

DF12b

DF12c

DF12d

DF12e

DF12f

DF12g

DF12h

DF12i

DF12j

DF12k

DF15

DF15a

DF16

DF16c

DF19

DF1d

DF4

DF4a

DF4d

DF4e

DF7

DF7a

DF7b

DF7c

DF7d

DF7f

DF8

DF8
DF88

DF8b

DF8c

DF9
DF9a
DR0 or GR0

DR0b or GR0b
DR12 or GR12

DR12a or GR12a
DR12b or GR12b

DR12c or GR12c
DR12d or GR12d
DR12e or GR12e

DR12f or GR12f
DR12g or GR12g

DR15 or GR15

DR19 or GR19

DR3 or GR3

DR3a or GR3a

DR3b or GR3b

DR3d or GR3d

DR4 or GR4

DR4a or GR4a

DR4d or GR4d

DR4e or GR4e
DR7 or GR7

DR7a or GR7a

DR7c or GR7c

DR7d or GR7d

DR7f or GR7f

DR88 or GR88

DR9 or GR9

DR9a or GR9a

H0

H0a

H0b

H12

H12a

H12b

H12c

H15

H19

H3

H3a

H3b

H3c

H3d

H4

H4a

H4d

H4e

H7

H7a

H7c

H7d

H7f

H8

H88

H8a

H9

H9a

H9b

HE0

HE0b

HE12

HE12a

HE12b

HE12c

HE12d

HE12e

HE12f

HE12g

HE15

HE15a

HE16c

HE19

HE1a

HE1b

HE1c

HE1d

HE3

HE3a

HE3b

HE3c

He3d

HE4

HE4a

HE4d

HE4e

HE4f

HE7

HE7a

HE7b

HE7c

HE7d

HE7f

HE8a

HE9

HE99

HE9a

l1

l10a

l10a

l10d

l10d

l12

l12

l12a

l12a

l12b

l12b

l12c

l12c

l16

l16a

l16b

l16c

l18

l18a

l19

l19

l1a

l1b

l1c

l1d

l2

l2

l2a

12b

12b

12c

12c

14

14

14a

14a

14b

14b

14c

14c

14d

14d

14e

14e

16

16

16a

16a

16b

16b

16c

16c

17

17

17a

17a

I7c

I7c

I7d

I7d

I7f

I7f

I88

I88

I9

I9

I9a

I9a

I9b

P0

P0b

P12

P12a

P12b

P12c

P13

P13a

P13b

P15

P19

P3

P3a

P3b

P3c

P3d

P4

P4a

P4b

P4d

P4e

P7

P7a

P7c

P7d

P7e

P7f

P8

P88

P8a

P9

P9a

P9b

PE0

PE0b

PE12

PE12a

PE12b

PE12c

PE12d
PE12e
PE12f

PE12g

PE15

PE15a

PE16

PE16a
PE16c

PE19

PE1a

PE1b

PE1c

PE1d

PE4

PE4a

PE4d

PE4e

PE7

PE7a

PE7c

PE7d

PE7f

PE8

PE88

PE8a

PE9

PE9a

R10

R10d

R11

R12

R12a

R12b

R12c

R19

R3

R3a

R3b

R3d

R4

R4a

R4d

R4e

R5

R5a

R5b

R6

R6a

R6b

R6c

R88

R9

R9a

SV0

SV0a

SV0b

SV12

SV12a

SV12b

SV12c

SV15

SV16

SV16b

SV16c

SV19

SV1a

SV1b

SV1c

SV1d

SV3

SV3a

SV3b

SV3c

SV3d

SV4

SV4a

SV4d

SV4e

SV7

SV7a

SV7b

SV7c

SV7d

SV7f

SV8

SV88

SV8a
SV9
SV9a
SV9b

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

U_LAB, J_LAB, NQ

V0

V0a

V0b

V12

V12a

V12b

V12c

V15

V16

V16b

V16c

V19

V1a

V1b

V1c

V1d

V3

V3a

V3b

V3c

V3d

V4

V4a

V4d

V4e

V7

V7a

V7b

V7c

V7d

V7f

V8

V88

V8a

V9

V9a

in Reason Codes.

Valid Reason Description

Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$.

The absolute RT of CB 209 must be ≥ 55 minutes if the SPB-octyl column is used. If a GC column or column system alternate to the SPB-octyl column is used, the absolute Retention Time (RT) of CB 209 must be \geq the laboratory-established minimum RT for CB 209. If the laboratory has not established a minimum RT value for CB 209, the RT for CB 209 must be ≥ 55 minutes. If an SPB-octyl column was used and the absolute RT of CB 209 is < 55 minutes, qualify all associated results as R. If a GC column on column systems alternate to the SPB-octyl column was used and the absolute RT is $<$ the laboratory established minimum RT for CB 209, or < 55 minutes if the laboratory has not established a minimum RT, qualify all associated results as R. The absolute retention times of the Labeled Toxics/LOC/window defining standard congeners in the verification test must be within ± 15 seconds of the respective retention times in the calibration or, if an alternate column or column system is employed, within ± 15 seconds of the respective retention times in the calibration for the alternate column or Required RT documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The Ongoing Precision Recovery (OPR) percent recovery was less than 10%. OPR is a method blank spiked with known quantities of analytes. The OPR is analyzed exactly like a sample. Its purpose is to assure that the results produced by the laboratory remain within the limits specified in this EPA Method for precision and recovery. OPR must be established for every batch of samples extracted and analyzed and must meet the recovery and %RSD limits listed in Attachment 5. If the OPR criteria are not met and reanalysis was not performed, the laboratory performance and method accuracy are in question: 1. If the OPR recovery is $< 10\%$ qualify all detects as J- and all associated non-detects as R. 2. If recoveries of more than half of the compounds in the OPR analysis are below 10%, qualify all associated defects as J- and all associated non-detects as R. [NOTE: If recoveries for more than half of the compounds in the OPR analysis are below the acceptance range, the laboratory has not shown that it can actually meet program required detection limits.]

The OPR sample percent recovery was $<$ the Lower Acceptance Limit (LAL) but $> 10\%$. If the OPR recovery is $<$ the LAL, qualify all associated detects as J- and all associated non-detects as "UJ" if the recovery is $\geq 10\%$.

The OPR sample percent recovery was $>$ the Upper Acceptance Limit. If the OPR recover is $>$ the UAL, qualify all associated detects as J+. If recoveries of more than half of the compounds in the OPR analysis are above the acceptance range, qualify all associated detects as J+.

The OPR sample documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

If recoveries of more than half of the compounds in the OPR analysis exceed the acceptance range, both above and below, qualify all associated detects as J and all associated non-detects as UJ.

The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)

Gas chromatograph/mass spectrometer (GC/MS) instrument performance checks are performed to ensure mass resolution, identification, and to some degree, sensitivity. These criteria are not sample specific. Conformance is determined using standard materials; therefore, these criteria should be met in all circumstances. Failure to meet either the resolution or the retention window criteria invalidates all calibration or sample data collected during the 12-hour time window. If mass spectrometer performance was not evaluated at the required frequency or if method criteria were not met, qualify all associated detects and non-detects as R.

The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.

The project chemist identified quality deficiencies in the reported data that require further qualification. This code can only be used under advisement by the project chemist.

To assess method performance on the sample matrix, the laboratory must spike all samples with the labeled toxics/LOC/window defining standard spiking solution and all sample extracts with the labeled cleanup standard spiking solution. The recovery of each labeled compound must be within the limits listed in Table 6 of the method. If the recovery of any labeled toxics/LOC/window defining standard compound is < 10%, qualify all not detected results as R and all detected results as J-.

The labeled compound is < the Lower Acceptance Limit but $\geq 10\%$ R. The recovery of each labeled compound must be within the limits in Table 6 of the method. If the recovery of any labeled toxics/LOC/window defining standard compound is below acceptance limits, qualify all detects for that sample fraction as J and all nondetects for that sample fraction as UJ if the recovery is $\geq 10\%$.

The labeled compound is > the Upper Acceptance Limit. The recovery of each labeled compound must be within the limits listed in Table 6 of the method. If the recovery of any labeled toxics/LOC/window defining standard compound is above acceptance limits, qualify all detects for that sample fraction as J and all nondetects for that sample fraction as UJ.

Required labeled compound information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is ≤ 5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5x$.

The sample result is $\leq 5x$ the concentration of the related analyte in the trip blank, rinsate blank, and equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting Isotope dilution shall be used for calibration of the toxics and beginning and ending level of chlorination (LOC) chlorinated biphenyls (CBs). A 5- or 6-point calibration is prepared for each native congener. The RRF %RSD for all native toxins/LOC CBs must be <20%. If a linear curve is used for initial calibration, the r^2 of the curve must be > 0.99 . 1. If the %RSD for any target compound is $> 20\%$ but $\leq 40\%$, qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. 2. If the %RSD for any target compound is $> 40\%$ but $\leq 60\%$, qualify all associated detects as J and all associated non-detects as UJ. 3. If the %RSD for any target compound is $> 60\%$, qualify all associated detects as J and all associated non-detects as R. 4. If the r^2 for any target compound is < 0.99 but ≥ 0.90 , qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. 5. If the r^2 for any target compound is < 0.90 but ≥ 0.80 , qualify all associated detects as J and all associated non-detects as R. The affected analytes did not meet the ion abundance ratios criteria in the initial calibration and/or CCV.

Calibration using internal standards is used for determination of native CBs for which a labeled compound is not available. For these CBs, calibration is performed at a single point. Compounds should be quantitated using the appropriate reference internal standard listed in Table 2 of the method. Ion abundance ratios must meet the criteria in Attachment 4, Theoretical Ion Abundance Ratios and QC Limits for EPA Method 1668A, of this procedure, or must be within 15% of the theoretical ratio of the ion monitored. If the ion abundance criteria are not met, qualify all detected results for that analyte as R.

The ICV and/or CCV were recovered outside the method limits (see CB7a for ICAL specifications). At the beginning of each 12-hour period during which analysis is performed, calibration is verified for all native CBs and labeled compounds. The ion abundance ratios for all CBs must be within the limits in Attachment 4, and all compounds must meet the calibration verification recovery limits listed in Attachment 5, QA Acceptance Criteria for CBs in Calibration Verification, Initial Precision and Recovery, OPR, and Samples for EPA Method 1668A. RRTs of native CBs and labeled compounds in the calibration verification must be within $\pm 0.5\%$ of the mean RRT determined from the initial calibration or most recent calibration verification standard. The diluted combined 209 congener solution must be analyzed as a final step in the calibration verification and must meet the minimum analysis and resolution specifications of the method. If the ion abundance ratio for any calibration verification compound is outside of the method limits, qualify all associated detects as J and all associated non-detects as UJ. If the verification limits are not met for any calibration verification compound and the recovery is The ICV and/or CCV were not analyzed at the appropriate method frequency. At the beginning of each 12-hour period during which analysis is performed, calibration is verified for all native CBs and labeled compounds. Use professional judgment based on when ICVs and CCVs were analyzed (also, see CB7f).

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The affected analyte is considered rejected because ion abundance ratios did not meet specifications. For identification of any CB or labeled compound, the ion abundance ratios must be within the limits specified in Attachment 4, or $\pm 15\%$ of the calibration verification standard. If ion abundance ratio criteria were not met for any compound, qualify all associated results as R.

Duplicate, dilution, or reanalysis.

The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time is exceeded by less than 2x the published method for holding times. There are no demonstrated maximum holding times associated with the CBs in EPA Method 1668, aqueous, solid, semi-solid, tissues, or other sample matrices. If stored in the dark at 0-4°C and preserved as given above (if required), aqueous samples may be stored for up to one year. Similarly, if stored in the dark at $< -10^{\circ}\text{C}$, solid semi-solid, multi-phase, and tissue samples may be stored for up to one year. Store sample extracts in the dark at $< -10^{\circ}\text{C}$ until analyzed. If stored in the dark at $< -10^{\circ}\text{C}$, sample extracts may be stored for up to one year.

The extraction/analytical holding time was exceeded by more than 2x the published method for holding times. There are no demonstrated maximum holding times associated with the CBs in EPA Method 1668, aqueous, solid, semi-solid, tissues, or other sample matrices. If stored in the dark at 0-4°C and preserved as given above (if required), aqueous samples may be stored for up to one year. Similarly, if stored in the dark at $< -10^{\circ}\text{C}$, solid, semi-solid, multi-phase, and tissue samples may be stored for up to one year. Store sample extracts in the dark at $< -10^{\circ}\text{C}$ until analyzed. If stored in the dark at $< -10^{\circ}\text{C}$, sample extracts may be stored for up to one year.

The IS retention time and qualitative criteria for target compound identification were not met. For 2,3,7,8-substituted compounds that have an isotopically-labeled internal standard or recovery standard present in the sample extract, the Retention Time (RT) must be -1 to +3 seconds of the isotopically-labeled standard. For 2,3,7,8-substituted compounds that do not have an isotopically-labeled internal standard or recovery standard present in the sample extract, the RT must fall within 0.005 RRT units of the Required Retention Time (RRT) measured in the continuing calibration. For non-2,3,7,8-substituted compounds, the RT must be within the corresponding homologous RT windows established by analyzing the column performance check solution. If the RT of any compound is outside of the RT window, qualify all associated results as R.

RRT documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was $< 10\%$.

The LCS percent recovery was $<$ the Lower Acceptance Limit but $> 10\%$. Follow the external laboratory limits.

The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The MS/MSD percent recovery was <10%.

The MS/MSD percent recovery was >10% but <70%.

The MS/MSD percent recovery was >130%.

The MS/MSD relative percent difference was >30%.

The laboratory must spike all samples with the sample fortification solution and all sample extracts with recovery standard solution. The recovery acceptance criteria for each compound is 40% to 135%. The fortification sample percent recovery was <10%.

The laboratory must spike all samples with the sample fortification solution and all sample extracts with recovery standard solution. The recovery acceptance criteria for each compound is 40% to 135%. The fortification sample percent recovery was <40% but >10%.

The laboratory must spike all samples with the sample fortification solution and all sample extracts with recovery standard solution. The recovery acceptance criteria for each compound is 40% to 135%. The fortification sample percent recovery was >135%.

The fortification sample documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify non-detected results as rejected if the analytical laboratory cannot provide proof for matrix interference.)

Sample clean-up was not performed. If run log notations, spectral data and/or internal standard or labeled compound recoveries indicate interferences and extract clean-up was not performed, qualify all associated detects as J and all non-detects as UJ.

The instrument performance sample did not pass method acceptance criteria.

The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.

The project chemist identified quality deficiencies in the reported data that require further qualification. This code can only be used under advisement by the project chemist.

Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is ≤ 5 times the concentration of the related analyte in the method blank. The criteria for the frequency of extraction and analysis of method blanks as stated in Section 9.5 of Method 1613B shall be followed and demonstrated in the documented data. The maximum amount of PCDD and PCDF isomer contamination in method blanks is stated in Table 2 of Method 1613B. The method blank must be measured on each GC/MS system which is used to measure a group of samples. This requirement includes measuring method blanks on a second GC column if confirmatory analysis of sample extracts on a second column is required by the method or by the laboratory statement of work. Any PCDD or PCDF measurement in a sample that is also measured in any associated blank, is qualified with a U flag if the sample concentration is <5 times the blank

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5x. The criteria for the frequency of extraction and analysis of method blanks as stated in Section 9.5 of Method 1613B shall be followed and demonstrated in the documented data. The maximum amount of PCDD and PCDF isomer contamination in method blanks is stated in Table 2 of Method 1613B. The method blank must be measured on each GC/MS system which is used to measure a group of samples. This requirement includes measuring method blanks on a second GC column if confirmatory analysis of sample extracts on a second column is required by the method or by the laboratory statement of work. If the maximum contamination requirements of specific TCDD and TCDF isomers stated in Table 2 of Method 1613B are not met, then all isomers in all samples associated with a method blank shall be qualified with a J flag.

The sample result is ≤ 5 times the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank. Any PCDD or PCDF measurement in a sample that is also measured in any associated blank is qualified with a U flag if the sample concentration is less than 5 times the blank concentration.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the frequency of measuring method blanks is not met by the laboratory in the data submitted, then the results of all samples which do not meet the frequency of extraction and measurement of method blanks shall be qualified with an R flag.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit. There shall be an initial calibration curve consisting of five points for each analyte. The initial calibration curve shall be determined < 30 days from the time the first samples of a Sample Delivery Group (SDG) are measured by the laboratory. The laboratory shall use the same calibration standards with the same lot number, for all internal standards, and labeled standards used in measuring the initial calibration curve, verification standards, field samples, and method blanks on both the primary GC column and on the secondary confirmation column. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria. A 5-point calibration is prepared for each labeled and unlabeled compound. The RRF %RSD for the unlabeled standards must be $\leq 30\%$. Ion abundance ratios must meet the criteria listed in Attachment 4. If the %RSD is $>20\%$ for any unlabeled calibration standard, or $>30\%$ for any labeled calibration standard, but $\leq 40\%$, qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. If the %RSD is $>40\%$ but $\leq 60\%$ for either a labeled or unlabeled calibration standard, qualify all associated detects as J and all associated non-detects as UJ. If the %RSD is $>60\%$ for either a labeled or unlabeled calibration standard, qualify all associated detects as J and all associated non-detects as R. If the ion abundance criteria were not met for any calibration compound, qualify all associated detects as J and all associated non-detects as UJ. If the affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit, qualify all associated detects as J and all associated non-detects as UJ. The affected analytes were analyzed with an out-of-range ion abundance in the initial calibration and/or CCV. Ion abundance must meet the criteria in Attachment 4. If the ion abundance criteria are not met, qualify results for that analyte R.

The ICV and/or CCV were recovered outside the method specific limits. See DF7a for ICAL specifications. The ion abundance must be within the limits in Attachment 4. For the calibration verification analyzed at the beginning of a 12-hour period, the effect on data quality of a standard that does not meet criteria must be assessed using professional judgment. Guidance is provided in Section 7.7.4.4 of the EPA method 8290. For the calibration verification analyzed at the end of a 12-hour period, a %D of 25% for unlabeled compounds and 35% for labeled compounds is acceptable; however, in this instance, the mean RFs obtained from the beginning and ending daily calibration runs are used to calculate analyte concentrations instead of the RFs obtained from the initial calibration. If the %D of the ending calibration is $>25\%$ for any unlabeled compound and/or $>35\%$ for any labeled compound, then successful performance of another initial calibration must be analyzed within two hours of sample analysis for the data to be acceptable. In this case, the mean RFs from the beginning and ending daily

The ICV and/or CCV were not analyzed at the appropriate method frequency. It should be noted that CLP protocol DFLM01.1 requires that the GC/MS system must be calibrated based upon a daily Calibration Check Standard, whereas, EPA Methods 1613B and 8290 require that the GC/MS system criteria of a daily calibration verification standard must be met with each 12-hour batch of samples measured, and that response factors for native target compounds are derived from the 5-point initial calibration.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The affected analyte is considered rejected because the ion abundances did not meet specifications. For identification of any compound, the ion abundance ratios must be within the limits specified in Attachment 4. If ion abundance ratio criteria were not met for any compound, qualify all associated results as R. If the RT of any compound is outside of the RT window, qualify all associated results as R.

The ion abundance documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

Duplicate, dilution, or reanalysis.

The GC column performance solution is used for defining the homologous GC RT windows and to document the chromatographic resolution. Column performance must be evaluated at the beginning of each analytical period and must meet method acceptance criteria (see Section 8.2 of the 8290) before sample analysis may begin. If GC column performance was not evaluated at the required frequency or if method criteria were not met, qualify all associated detects as J and all associated non-detects as UJ.

The DB-5 GC column generally used for PCDD and PCDF analyses does not adequately separate 2,3,7,8-TCDF from its closest eluting isomer. If 2,3,7,8-TCDF is detected in a sample, the result must be confirmed on a second column capable of separating 2,3,7,8-TCDF from all other TCDF homologues (as proven by successful analysis of the GC column performance column mix with <25% valley between 2,3,7,8-TCDF and its closest eluting isomer). If 2,3,7,8-TCDF was detected in a sample and the result was not confirmed on a second column with successful analysis of the GC column performance mix, qualify all associated detects as U.

The extraction/analytical holding time are exceeded by <2 times the published method for holding times.

Regulations require water samples be preserved by neutralizing any chlorine residual with 0.008% sodium thiosulfate, and cooling to 4°C using a holding time of 7 days from day of collection to day of extraction of the sample. In addition, the maximum holding time of extracts is 40 days from day of extraction to day of injection of the extract. The holding time and preservation requirements of 2,3,7,8-TCDD and of other measured PCDD and PCDF isomers in non-water matrixes have not been promulgated by EPA. Therefore, the data validator should use the holding time specified in EPA Method 8290, which specifies that all samples, except fish and adipose tissue samples, must be stored at 4°C in the dark, extracted within 30 days, and completely analyzed within 45 days of extraction. Fish and adipose samples must be stored at -20°C in the dark, extracted within 30 days, and completely analyzed within 45 days of collection (see Section 6.4 of EPA Method 8290). EPA Method

The extraction/analytical holding time was exceeded by >2 times the published method for holding times.

The retention time criteria were not met.

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was less than 10%. Follow the external laboratory limits.

The LCS percent recovery was less than the Lower Acceptance Limit but greater than or equal to 10%. Follow the external laboratory limits.

The LCS percent recovery was greater than the Upper Acceptance Limit. Follow the external laboratory limits.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The MS/MSD percent recovery was less than 10%.

The MS/MSD percent recovery was greater than or equal to 10% but less than 70%.

The MS/MSD percent recovery was greater than 130%.

The MS/MSD relative percent difference was greater than 30%.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)

The project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used under advisement by the project chemist.

The surrogate is less than 10%R, which indicates the potential for a severely low bias in the results. Follow the external laboratory limits.

The surrogate is less than the Lower Acceptance Limit, but greater than or equal to 10%R, which indicates the potential for a low bias in the results. Follow the external laboratory limits.

The surrogate %R value is greater than the Upper Acceptance Limit, which indicates a potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits.

Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is less than or equal to 5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5x.

The sample result is less than or equal to 5 times the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting
The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less than 0.995.

The ICV and/or CCV were recovered outside the method specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

Duplicate, dilution, or reanalysis.

The extraction/analytical holding time is greater than 1x and less than or equal to 2 times the applicable holding time requirement.

The extraction/analytical holding times were exceeded by more than 2x the published method for holding times.

The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration. Reject nondetects for HPLC.

Analyte is positively confirmed but outside the retention time window; however, spectral matches must be provided (hexp – diode array detector).

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was <10%. Follow external laboratory limits located within the associated data

The LCS percent recovery was < the Lower Acceptance Limit (LAL) but >10%. Follow external laboratory limits located within the associated data package.

The LCS percent recovery was > than the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for cleanup or matrix interference.

The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can ONLY be used and/or under advisement by the project chemist.

The surrogate is $<10\%R$, which indicates the potential for a severely low bias in the results. Follow external laboratory limits located within the associated data package.

The surrogate is $<$ the LAL but $\geq 10\%R$, which indicates the potential for a low bias in the results. Follow the external laboratory limits located within the associated data package.

The surrogate $\%R$ value is $>$ the UAL, which indicates a potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits located within the associated data package.

At least one surrogate is $>$ the UAL and one surrogate is $<$ the LAL, which indicates a greater than normal degree of uncertainty in the result. Follow external laboratory limits located within the associated data package.

Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is $\leq 5X$ the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting
The affected analytes were analyzed with an initial calibration curve that exceeded the $\%RSD$ criteria and/or the associated multipoint calibration correlation coefficient is <0.995 .

The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

Required calibration information is missing or Samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The analyte was not confirmed on a second dissimilar column or diode array spectrums do not match library. Duplicate, dilution, or reanalysis.

The required second dissimilar column or diode array documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time was exceeded by $<2X$ the published method for holding times.

The extraction/analytical holding time was exceeded by $>2X$ the published method for holding times.

The affected analytes are regarded as rejected because the analytical holding time was exceeded.

The IS retention time has shifted by >30 seconds.

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO and external laboratory for information.

An LCS should be analyzed at a frequency of once per data package, once per matrix, An LCS should be analyzed at a frequency of once per data package, once per matrix, or once per 20 analytical samples, whichever is most frequent. The LCS must meet all sample acceptance criteria and all method-specific LCS requirements. The LCS for high explosives must meet laboratory-derived acceptance criteria. If surrogate and IS recovery acceptance criteria are not met for the LCS analysis, the LCS must be reanalyzed. If the recovery acceptance criteria are not reported in the analytical data package recovery limits of 70% to 130% should be used as the criteria. If, based on professional judgment, the laboratory's internal acceptance criteria are excessively wide or acceptable recoveries are significantly biased, notify the program manager. The LCS percent recovery was <10%. Qualify detected results as J- and not detected results as R.

The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits. Qualify detected results as J- and not detected results as UJ.

The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits. Qualify detected results as J+.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or the external laboratory for information.

The MS/MSD percent recovery was <10%. The MS/MSD data shall not be used to evaluate associated field sample results unless the MS/MSD sample was from the same client and of similar matrix. If the acceptance criteria are not reported, recovery limits are 70% to 130%. The MS and MSD %R must be within the limits unless the sample concentration is >4X the spike concentration. The MS and MSD results may be used in conjunction with other QC results to determine the need for qualification of the data. An effort to determine to what extent the results of the MS/MSD affect the associated data should determine to what extent the results of the MS/MSD affect the associated data should first be made. This determination should be made considering the MS/MSD sample matrix, the surrogate and internal standard recoveries, and the LCS results. Professional judgment should be used to determine if MS/MSD failure warrants qualification of only the results for the failed compounds or if the compounds associated with the failed MS compound are affected. Generally, unless evidence exists to warrant qualification of other compounds, only the compounds in the MS spiking mixture shall be qualified. If the MS/MSD percent recovery was >10%, but <70%, qualify all detects as J and all non-detects as UJ.

If the MS/MSD percent recovery was >130%, qualify all associated detects as J+.

If the MS/MSD relative percent difference was >30%, and the acceptance criteria are not reported, recovery limits of 70% to 130% and an RPD of $\leq 30\%$ should be used as the criteria. For solid and waste samples, it may be appropriate to accept an RPD of up to 40% based on professional judgment.

If the affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference, qualify as Reject if the analytical laboratory cannot provide proof for The Practical Quantitation Limits must be adjusted to reflect all sample dilutions, concentrations, splits, clean-up activities, and dry weight factors that are not accounted for by the method. Samples must be diluted and reanalyzed when any analyte exceeds the calibration range. Data from the original sample analysis should be included when any sample requires dilution due to one or more analytes exceeding the calibration range. The original undiluted results document the actual MDLs for non-detects. If the PQLs have not been properly adjusted, request an amended report from the laboratory. If an initial dilution was required because of expected high concentrations of non-target analytes or because one or more target analytes were expected to greatly exceed the instrument working range and the laboratory was not able to analyze the undiluted sample, note the dilution and elevated MDLs in the data validation report. If any target analyte exceeded the calibration range and the original undiluted sample result was reported, qualify all detects from the undiluted analysis that

The required CRI sample information is missing. Contact the SMO or the external laboratory for information.

The project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the project chemist.

The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method specific windows. Qualify data as R if the IS area count is <25%.

If the internal standard was used for quantification and its area count is <70% but >25% of the average of that obtained from the calibration standards, qualify all associated detects as J+ and all associated non-detects as UJ. The internal standard area counts must not vary by >70% to 130% from the average of those obtained from the calibration standards or from the mid-level calibration standard. If the internal standard was used for quantification and its area count is >130% of the average of that obtained from the calibration standards, qualify all associated detects as J- and all associated non-detects as UJ.

Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The surrogate is <10% recovery, which indicates the potential for a severely low bias in the results. Follow the external laboratory limits. Qualify non-detected results as R and detected results as J-. Also, if an initial dilution was performed on any sample and surrogate recovery is <10% recovery and all results are non-detect, qualify all

The surrogate is < the Lower Acceptance Limit but \geq 10% recovery, which indicates the potential for a low bias in the results. Follow the external laboratory limits. Qualify non-detected results as UJ and detected results as J-.

Also, if an initial dilution was performed on any sample and at least one surrogate recover is < the Lower Acceptance Limit, but \geq 10%, or all surrogate recoveries are <10% and the results for one or more compounds are > the PQL, qualify non-detected results as UJ and detected results as J-.

The surrogate % recovery value is > the Upper Acceptance Limit, which indicates the potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits.

At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit, which indicates a > normal degree of uncertainty in the result. Follow the external laboratory limits.

Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Sample and blank surrogate recoveries must be within limits specified by the laboratory. Surrogate compound recoveries shall be calculated using the procedure described in SW-846 EPA Method 8000B. Reported recoveries shall be accompanied by the applicable acceptance limits. Results from spiked or replicate QC samples that have surrogate recoveries <10% cannot be used to evaluate associated
The sample result is \leq 5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimates and biased high because this analyte was identified in the method blank but was >5x.

The sample result is \leq 5 times the concentration of the related analyte in the trip blank, rinsate blank, and equipment blank, which indicates the reported detection is considered indistinguishable from contamination in
Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The absence of sample carry-over must be determined and verified. If examination of the run logs indicates that any samples in the analytical run of interest required dilution and there is no documentation of a rinse or blank analysis immediately following the original undiluted analysis, then sample carry-over may be suspected in the subsequent sample. If any target analyte found in the sample requiring dilution exceeded the high calibration standard and was also found in the following sample at a concentration <5x the PQL, qualify the result for that analyte in the second sample as R. If no data are available for the sample that required dilution, the laboratory has not documented that carry-over was evaluated, and any analyte was also found in the following sample as a concentration <5x the PQL, qualify the result for that analyte in the second sample as N.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit. LC/MS/MS instrument calibration shall be performed using a minimum of five (5) calibration standards. The lowest point of the curve must be at or below the reporting limit. If calibration curves are used, five (5) standards are required for a linear (first order) calibration model, six (6) standards are required for a quadratic (second order) model, and seven (7) standards are required for a third order polynomial. Higher order curves should not normally be used. If the laboratory uses a higher order equation to and all associated non-detects as UJ. establish a calibration curve, it should be evaluated for the appropriate application. If an insufficient number of calibration standards was used, the PQLs were incorrect, or all points were not analyzed within a 24-hour period, qualify all associated detects as J.

The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD or r^2 . If the %RSD for any target analyte is $>20\%$ but $\leq 40\%$, qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. If the %RSD for any target analyte is $>40\%$ but $\leq 60\%$, qualify all associated detects as J and all associated non-detects as UJ. If the %RSD for any target analyte is $>60\%$, qualify all associated detects as J and all associated non-detects as R. If the r^2 for any target analyte is <0.99 but ≥ 0.90 , qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. If the r^2 for any target analyte is >0.90 but ≤ 0.80 , qualify all associated detects as J and all associated non-detects as UJ. If the r^2 for any target analyte is <0.80 , qualify all associated detects as J and all associated non-detects if the intercept for any target analyte is >0.05 in the initial calibration and/or CCV. If the average RF for any target analyte is $<$ the specified minimum RF, or <0.05 if no minimum is specified, qualify all associated detects as J and all associated non-detects as UJ if the RF is ≥ 0.01 and as R if the RF is <0.01 .

The ICV and/or CCV were recovered outside the method limits. The %D between the ICV and CCV standard concentrations and their true values shall be calculated according to the formula in Attachment 4, and must be $\leq 20\%$. The evaluation of CCV data applies to all CCVs that bracket samples of interest. If the %D was reported with the wrong sign (e.g., +%D for negative bias), document the occurrence in the data validation report and assess any infractions using the correct sign. 1. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>20\%$, qualify all associated detects as J+. 2. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>20\%$ but $\leq 40\%$ and negative (low bias), qualify all associated detects as J- and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. 3. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>40\%$ but $\leq 60\%$ and negative, qualify all associated detects as J and all associated non-detects as UJ. The ICV and/or CCV were not analyzed at the appropriate method frequency. An ICV standard is analyzed immediately following an initial calibration. For high explosive analysis, the ICV standard analysis results are not required to be reported in the data package unless the samples in the SDG were analyzed after the initial calibration but before a CCV standard analysis was performed. In this case, the ICV %D is assessed according to the calibration verification criteria described below for the associated samples. If a CCV is analyzed prior to samples and ICV data are also reported in the package, both the ICV %D and the appropriate CCV %D are to be assessed as described below. If both ICV %D and CCV %D infractions occur, the worst infraction should be evaluated for result qualification. A CCV must be analyzed in the following instances: • at the beginning of each analytical run; • at least once every 10 samples; and • at the end of each analytical run. If multiple CCVs were analyzed to obtain a passing CCV, the calibration is not verified and the calibration frequency is not met. If the Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time is exceeded by $<2x$ the published method for holding times.

Duplicate, dilution, or reanalysis.

The extraction/analytical holding time was exceeded by more than 2x the published method for holding times.

The sample result was reported as detected between the IDL and the EDL.

The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.

The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.

The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for

The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for

The LCS percent recovery was $<10\%$. Follow the external laboratory limits located within the associated data

The LCS percent recovery was $<10\%$. Follow external laboratory limits located within the associated data

The LCS percent recovery was $<$ the Lower Acceptance Limit (LAL) but $>10\%$. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was $<$ the Lower Acceptance Limit (LAL) but $>10\%$. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was $>$ Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was $>$ Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.

The instrument performance sample did not pass the method acceptance criteria.

The mass calibration is not within 0.1 amu or %RSD exceeds 5% for any isotope (Be, Mg, Co, In, Pb).

Samples were analyzed outside specific method tune time criteria.

The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.

Serial dilution sample RPD was $>10\%$ and the sample results was $>50X$ the MDL ($>100X$ the MDL for ICPMS).

Qualify ONLY the sample used for the serial dilution.

Serial dilution sample was not analyzed with the samples.

The project chemist identified quality deficiencies in the reported data that requires further qualification. This code can ONLY be used and/or under the advisement by the project chemist.

The project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the project chemist.

The quantitating IS area could is $<10\%$ for metals window in relation to the initial calibration blank. Follow method-specific windows.

The IS area count for the quantitating IS is $<60\%$ but $>10\%$ for metals window in relation to the initial calibration blank. Follow method-specific windows.

The IS area count for the quantitating IS is $>125\%$ in relation to the metals initial calibration blank. Follow method-specific windows.

Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

Metals interference check sample percent recovery value is $<50\%$.

Metals interference check sample percent recovery value is $<50\%$.

Metals interference check sample percent recovery value is $\geq 50\%$ and $<80\%$.

Metals interference check sample percent recovery value is >120%.

Metals interference check sample percent recovery value is >120%.

Metals interference check sample was not analyzed with the samples.

Metals interference check sample was not analyzed with the samples.

The sample result is $\leq 5X$ the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The sample result is $\leq 5X$ the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.

The sample result is $\leq 5X$ the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank, which indicates the reported detection is considered indistinguishable from contamination in Continuing calibration blanks were not analyzed at the appropriate method frequency.

Continuing calibration blanks were not analyzed at the appropriate method frequency.

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, equipment blank, or rinsate, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

Required method blank information is missing. Data may not be acceptable for use.

The associated matrix spike recovery was $<10\%$. Follow the external laboratory limits located within the associated data package.

The associated matrix spike recovery was $<10\%$. Follow the external laboratory limits located within the associated data package.

The associated matrix spike recovery was $<$ the LAL but $>10\%$. Follow the external laboratory limits located within the associated data package.

The associated matrix spike recovery was $<$ the LAL but $> 10\%$. Follow the external laboratory limits located within the associated data package.

The associated matrix spike recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.

The associated matrix spike recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.

Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting

The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995 .

The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995 .

The ICV and/or CCV were recovered outside the method-specific limits.

The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

Duplicate, dilution, or reanalysis.

Duplicate, dilution, or reanalysis.

The extraction/analytical holding time are exceeded by <2X the published method for holding times.

The extraction holding time was exceeded by <2X the published method for holding times.

The extraction/analytical holding time are exceeded by >2X the published method for holding times.

The extraction holding time was exceeded by >2X the published method for holding times.

The affected analytes are regarded as rejected because the analytical holding time was exceeded.

The analyte RT shifted by >0.05 minutes from the mid-level standard of the initial calibration.

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data

The LCS percent recovery was < the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information located within the associated data package.

The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compounds not present, but breakdown products are present, qualify R. If compounds and no breakdown products are present, qualify UJ (4,4' DDT and Endrin).

The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.

The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for cleanup or matrix interference.

The project chemist identified quality deficiencies in the reported data that requires further qualification. This code can ONLY be used and/or under advisement by the project chemist.

The surrogate is <10%R, which indicates the potential for a severely low bias in the results. Follow the external laboratory limits located within the associated data package.

The surrogate is < the LAL but \geq 10%R, which indicates the potential for a low bias in the results. Follow the external laboratory limits.

The surrogate %R value is > the UAL, which indicates a potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits located within the associated data package.

At least one surrogate is > the UAL and one surrogate is < the LAL, which indicates a > normal degree of uncertainty in the result. Follow the external laboratory limits located within the associated data package.

Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is $\leq 5X$ the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$.

The sample result is $\leq 5X$ the concentration of the related analyte in the instrument and CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting
The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is < 0.995 .

The ICV and/or CCV were recovered outside the method-specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

The multicomponent standard was not analyzed within 72 hours of the initial analysis.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The analyte was not confirmed on a second dissimilar column.

Duplicate, dilution, or reanalysis.

The required dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time is exceeded by $< 2X$ the published method for holding times.

The extraction/analytical holding time was exceeded by $> 2X$ the published method for holding times.

The affected analytes are regarded as Rejected because the analytical holding time was exceeded.

The perchlorate RRT is outside the acceptance range of 0.98 to 1.02 seconds.

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

An LCS should be analyzed at a frequency of once per data package, once per matrix, or once per 20 analytical samples, whichever is most frequent. The LCS must meet all sample acceptance criteria and all method-specific LCS requirements. The LCS for perchlorate must meet laboratory-derived acceptance criteria. If IS recovery acceptance criteria are not met for the LCS analysis, the LCS must be reanalyzed. If the recovery acceptance criteria are not reported in the analytical data package recovery limits of 85% to 115% (perchlorate limits) should be used as the criteria. The LCS percent recovery was $< 10\%$. Qualify detected results as J- and not detected
The LCS percent recovery was $<$ the Lower Acceptance Limit but $> 10\%$. Follow the external laboratory limits. Qualify detected results as J- and not detected results as UJ.

The LCS percent recovery was $>$ the Upper Acceptance Limit. Follow the external laboratory limits. Qualify detected results as J+.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The MS/MSD percent recovery was <10%. The MS/MSD data shall not be used to evaluate associated field sample results unless the MS/MSD sample was from the same client and of similar matrix. For perchlorate, the MS/MSD recovery acceptance criteria are 75% to 125% with an RPD of $\leq 20\%$. For solid and waste samples, it may be appropriate to accept an RPD of up to 30% based on professional judgment. The MS and MSD %R must be within the limits unless the sample concentration is >4X the spike concentration. The MS and MSD results may be used in conjunction with other QC results to determine the need for qualification of the data. An effort to determine to what extent the results of the MS/MSD affect the associated data should first be made. This determination should be made considering the MS/MSD sample matrix, the surrogate and internal standard recoveries, and the LCS results. Professional judgment should be used to determine if MS/MSD failure warrants qualification of only the results for the failed compounds or if results for all compounds associated with the failed MS compound are affected. Generally, unless evidence exists to warrant qualification of other compounds, only the compounds in

The MS/MSD percent recovery was >10% but <75%. Qualify all detects as J and all non-detects as UJ.

The MS/MSD percent recovery was >125%. Qualify all associated detects as J+.

The MS/MSD relative percent difference was >20%. If the acceptance criteria are not reported, recovery limits of 75% to 125% and an RPD of 20% should be used as the criteria. For solid and waste samples, it may be appropriate to accept an RPD of up to 30% based on professional judgment.

The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for

The sample was diluted because target analytes were > the initial verification calibration. The Practical Quantitation Limits must be adjusted to reflect all sample dilutions, concentrations, splits, clean-up activities, and dry weight factors that are not accounted for by the method. Samples must be diluted and reanalyzed when any analyte exceeds the calibration range. Data from the original sample analysis should be included when any sample requires dilution due to one or more analytes exceeding the calibration range. The original undiluted results document the actual MDLs for non-detects. If the PQLs have not been properly adjusted, request an amended report from the laboratory. If an initial dilution was required because of expected high concentrations of non-target analytes or because one or more target analytes were expected to greatly exceed the instrument working range and the laboratory was not able to analyze the undiluted sample, note the dilution and elevated MDLs in the data validation report. If any target analyte exceeded the calibration range and the original

The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance criteria. CRI analysis recoveries for perchlorate analysis must be within limits specified by the Laboratory. If acceptance criteria are not reported, the recovery acceptance range shall be 70% to 130%. 1. If frequency criteria were not met, qualify all detects <5X the PQL as J and all non-detects as UJ. 2. If the recovery is > the upper acceptance limit, qualify all associated detects <5X the PQL as J+. 3. If the recovery is < the lower acceptance limit but $\geq 30\%$, qualify all associated detects <5X the PQL as J- and all associated non-detects as UJ. If the recovery is <30%, qualify all associated detects <5X the PQL as J- and all associated non-detects as R.

The Interference Check Sample recovery was not within $\pm 20\%$ of the known value. The laboratory shall analyze an Interference Check Sample from a matrix containing 500 ppm each of chloride, sulfate, carbonate, and bicarbonate in every batch. The concentration of this standard will be at the PQL. To determine that perchlorate is adequately isolated and recovered under the specific conditions used, this standard should recover within $\pm 20\%$ of the known value. If frequency criteria were not met, note the deficiency in the data validation report. If the recovery is not within $\pm 20\%$ of the known value, note the deficiency in the data validation report. Qualify not detected results as UJ and detected results as J.

The required CRI sample information is missing. Contact the SMO or external laboratory for information.

The project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the project chemist.

This IS area count is <25% of the expected value. If the internal standard is used only as a Retention Time (RT) check (perchlorate analysis), the Relative Retention Time (RRT) of the internal standard must fall within the acceptance range of 0.98 to 1.02, and the internal standard recovery should be evaluated using the surrogate criteria. If recovery acceptance limits are not reported in the data package, recovery should be evaluated based on reported Matrix Spike acceptance limits.

The internal standard area could be <70% but >25% of the average of that obtained from the calibration standards, qualify all associated detects as J and all associated non-detects as UJ. If the internal standard is used only as a RT check (perchlorate analysis), the RRT of the internal standard must fall within the acceptance range of 0.98 to 1.02, and the internal standard recovery should be evaluated using the surrogate criteria. If recovery acceptance limits are not reported in the data package, recovery should be evaluated based on reported Matrix Spike acceptance limits. If the internal standard is >130% of the average of that obtained from the calibration standards, qualify all associated detects as J and all associated non-detects as UJ. If the internal standard is used only as a RT check (perchlorate analysis), the RRT of the internal standard must fall within the acceptance range of 0.98 to 1.02, and the internal standard recovery should be evaluated using the surrogate criteria. If recovery acceptance limits are not reported in the data package, recovery should be evaluated based on reported Matrix Spike acceptance limits. Required Internal Standard information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is ≤5X the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.

The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit. LC/MS/MS instrument calibration shall be performed using a minimum of five (5) calibration standards. The lowest point of the curve must be at or below the reporting limit. If calibration curves are used, five (5) standards are required for a linear (first-order) calibration model, six (6) standards are required for a quadratic (second-order) model, and seven (7) standards are required for a third-order polynomial. Higher-order curve should not normally be used. If the laboratory uses a higher-order equation to establish a calibration curve, it should be evaluated for the appropriate application. If an insufficient number of calibration standards was used, the PQLs were incorrect, or all points were not analyzed within a 24-hour period, qualify all associated detects as J and all associated non-detects as UJ. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD or r^2 . If the %RSD for any target analyte is >15% but ≤40%, qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. If the %RSD for any target analyte is >40% but ≤60%, qualify all associated detects as J and all associated non-detects as UJ. If the %RSD for any target analyte is >60%, qualify all associated detects as J and all associated non-detects as R. If the r^2 for any target analyte is <0.99 but ≥0.90, qualify all associated detects as J and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. If the r^2 for any target analyte is <0.90 but ≥0.80, qualify all associated detects as J and all associated non-detects as UJ. If the r^2 for any target analyte is <0.80, qualify all associated detects as J and all associated non-detects as UJ. If the intercept for any target analyte is positive and >3X the MDL, qualify all associated detects <3X the intercept as J+ as R.

The ICV and/or CCV were recovered outside the method limits. The %D between the ICV and CCV standard concentrations and their true values must be $\leq 15\%$. The evaluation of CCV data applies to all CCVs that bracket samples of interest. If the %D was reported with the wrong sign (e.g., +%D for negative bias), document the occurrence in the data validation report and assess any infractions using the correct sign. 1. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>15\%$, qualify all associated detects as J+. 2. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>15\%$ but $\leq 40\%$ and negative (low bias), qualify all associated detects as J- and, if any other calibration criteria have been exceeded for that compound, qualify all associated non-detects as UJ. 3. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>40\%$ but $\leq 60\%$ and negative, qualify all associated detects as J- and all associated non-detects as UJ. 4. If the %D between a measured ICV and/or CCV concentration and its true value for any analyte is $>60\%$ and is negative, qualify all associated detects as J- and all associated non-detects as UJ. The ICV and/or CCV were not analyzed at the appropriate method frequency. An ICV standard is analyzed immediately following an initial calibration. The ICV standard analysis results are not required to be reported in the data package unless the samples in the SDG were analyzed after the initial calibration but before a CCV standard analysis was performed. In this case, the ICV %D is assessed according to the calibration verification criteria described below for the associated samples. If a CCV is analyzed prior to samples and ICV data are also reported in the package, both the ICV %D and the appropriate CCV %D are to be assessed as described below. If both %D and CCV %D infractions occur, the worst infraction should be evaluated for result qualification. A CCV must be analyzed in the following instances: • at the beginning of each analytical run; • at least once every 10 samples; and • at the end of each analytical run. If multiple CCVs were analyzed to obtain a passing CCV, the calibration is not verified and the calibration frequency is not met. If the ICV and CCV standards were not analyzed, Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The affected analyte is considered not detected because ion abundance ratios did not meet specifications. The natural isotopic abundances for the chlorine isotopes give a $^{35}\text{Cl}/^{37}\text{Cl}$ ratio of approximately 3.08. Laboratories must statistically derive isotope ratio acceptance criteria to be used as an additional confirmation of analyte identity. When the laboratory does not specify acceptance criteria, the mean of the ration population shall not deviate by more than 10% from the 3.08 theoretical value and the standard deviation shall not significantly exceed 0.2. Between the MDL and the PQL, the individual sample isotope acceptance limits shall be near the population mean $\pm 20\%$ (approximately 3 sigma). Above the PQL, the individual sample isotope ratio acceptance limits shall be near the population mean $\pm 15\%$ (approximately 2 sigma). When isotope ratio acceptance criteria are not met, the laboratory must provide supporting data and explanatory case narrative comments in the data package. If the isotope ratios were not reported, calculate the ratio if the raw data were supplied or request an Duplicate, dilution, or reanalysis.

The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time is exceeded by less than 2X the published method for holding times. The extraction/analytical holding time is exceeded by less than 2X the published method for holding times. Associated duplicate sample has DER or RER $>$ the analytical laboratory's acceptance limits.

The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.

The LCS percent recovery was $<10\%$. Follow the external laboratory limits located within the associated data package. The LCS percent recovery was $<$ the LAL but $>10\%$. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LANL project chemist identified quality deficiencies in the reported data that require further qualification.

This code can ONLY be used and/or under advisement by the LANL project chemist.

The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.

The tracer is < the Lower Acceptance Level (LAL) but \geq 10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.

The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.

Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.

The sample result is \leq 5X the concentration of the related analyte in the method blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.

The sample result is \leq 5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.

The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.

The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.

The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.

The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.

Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information.

MS/MSD is not applicable to Gamma Spectroscopy.

Duplicate, dilution, or reanalysis.

The holding time was >1 and \leq 2 times the applicable holding time requirement.

The holding time was >2 times the applicable holding time requirement.

The IS retention time has shifted by >30 seconds.

Analyte is positively confirmed but outside the IS retention window; however, spectral matches must be

Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data

The LCS percent recovery was < the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information located within the associated data package.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.

The instrument performance sample did not pass the method acceptance criteria.

Samples were analyzed outside specific method tune time criteria.

The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.

The project chemist identified quality deficiencies in the reported data that requires further qualification. This code can ONLY be used and/or under advisement by the project chemist.

The quantitating IS area count is <10% of the expected value. Follow the method-specific windows.

The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.

The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.

Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The surrogate is <10%R, which indicates the potential for a severely low bias in the results. Follow the external laboratory limits located within the associated data package.

The surrogate is < the LAL but $\geq 10\%R$, which indicates the potential for a low bias in the results. Follow the external laboratory limits.

The surrogate %R value is > the UAL, which indicates a potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits located within the associated data package.

At least one surrogate is > the UAL and one surrogate is < the LAL, which indicates a > normal degree of uncertainty in the result. Follow the external laboratory limits located within the associated data package.

Required surrogate/tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting
The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.

The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.

The ICV and/or CCV were recovered outside the method-specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The affected analyte is considered not detected because mass spectrum did not meet specifications.

Duplicate, dilution, or reanalysis.

The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction holding time is exceeded by <2X the published method for holding times.

The extraction holding time was exceeded by >2X the published method for holding times.

The affected analytes are regarded as rejected because the analytical holding time was exceeded.

Qualification of data via data validation did not occur based on Quality Control requirements in this procedure.

Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.

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Adhere to the external laboratory qualifiers found with the Form 1 analytical data summary sheets generated by the external laboratory.

Qualification of the data via data validation did not occur because of Quality Control requirements in this procedure. Adhere to external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.

Quantification of data via data validation did not occur based on Quality Control requirements in this procedure.

Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.

Quantification of data via data validation did not occur based on Quality Control requirements in this procedure.

Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.

The IS retention time has shifted by >30 seconds.

Analyte is positively confirmed but outside the IS retention window; however, spectral matches must be Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data

The LCS percent recovery was < the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.

The LCS percent recovery was > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.

The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information located within the associated data package.

The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.

The instrument performance sample did not pass the method acceptance criteria.

Samples were analyzed outside specific method tune time criteria.

The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.

The project chemist identified quality deficiencies in the reported data that requires further qualification. This code can ONLY be used under advisement by the project chemist.

The quantitating IS area count is <10% of the expected value. Follow the method-specific windows.

The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. Follow the method-specific windows.

The IS area count for the quantitating IS is >200% of the area count for the previous organic continuing calibration. Follow the method-specific windows.

Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The surrogate is <10%R, which indicates the potential for a severely low bias in the results. Follow the external laboratory limits located within the associated data package.

The surrogate is < the LAL but $\geq 10\%R$, which indicates the potential for a low bias in the results. Follow the external laboratory limits.

The surrogate %R value is > the UAL, which indicates a potential for a high bias in the results and a potential for false positive results. Follow the external laboratory limits located within the associated data package.

At least one surrogate is > the UAL and one surrogate is < the LAL, which indicates a > normal degree of uncertainty in the result. Follow the external laboratory limits located within the associated data package.

Required surrogate/tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X (10X for common laboratory contaminants).

The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting
The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.

The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.

The ICV and/or CCV were recovered outside the method-specific limits.

The ICV and/or CCV were not analyzed at the appropriate method frequency.

Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.

The affected analyte is considered not detected because mass spectrum did not meet specifications.

Duplicate, dilution, or reanalysis.

The mass spectrum column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.

The extraction/analytical holding time is exceeded by <2X the published method for holding times.

The extraction/analytical holding time was exceeded by >2X the published method for holding times.

The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance criteria. CRI analysis recoveries for high explosives analysis must be within limits specified by the Laboratory. If acceptance criteria are not reported, the recovery acceptance range shall be 70% to 130%. 1. If frequency criteria were not met, qualify all detects <5X the PQL as J and all nondetects as UJ. 2. If the recovery is > the upper acceptance limit, qualify all associated detects <5X the PQL as J+. 3. If the recovery is < the lower acceptance limit but $\geq 30\%$, qualify all associated detects <5X the PQL as J- and all associated non-detects as UJ. 4. If the recovery is <30%, qualify all associated detects <5X the PQL as J- and all associated non-detects as R.