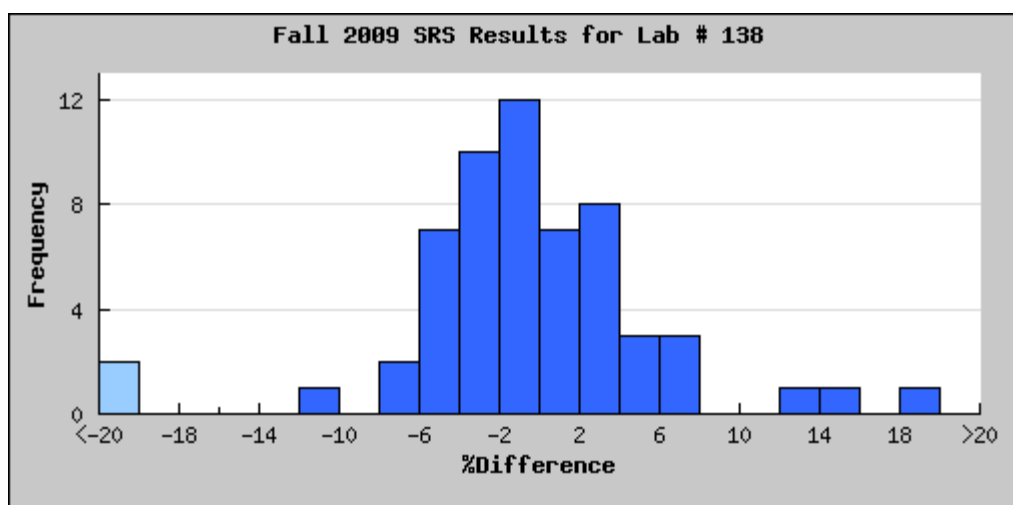
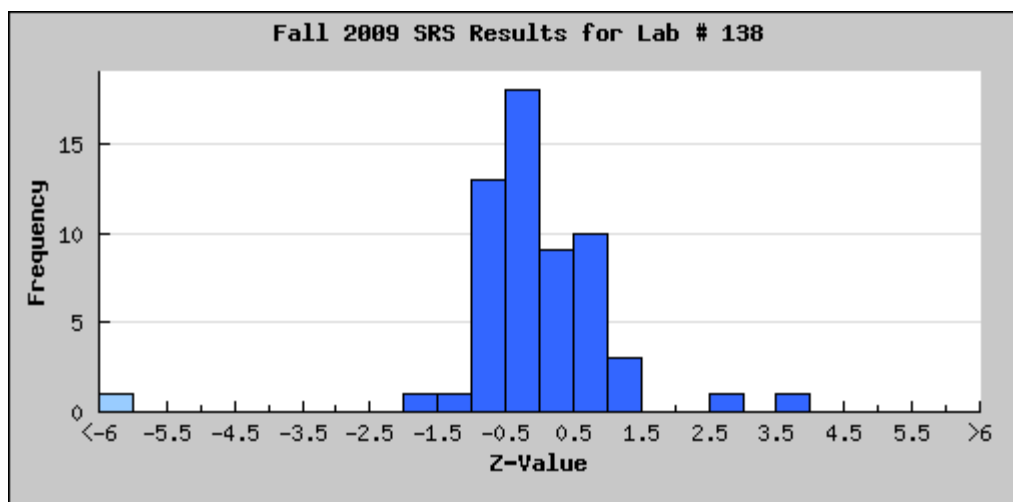


Office of Water Quality
Branch of Quality Systems

Standard Reference Sample Project

Fall 2009 SRS Results for Lab # 138



Number of data points per sample	NUTRIENT (LOW)	NUTRIENT (HIGH)	MAJOR	TRACE	MERCURY	PRECIPITATION
	6	6	16	26	1	10

SRS	Analyte	Method	RV	MPV	Fps	Z-value	% difference
N-103	Ammonia + Organic Nitrogen as N	22 Colorimetric	0.340 mg/L	0.354	0.067	-0.21	-3.95
N-103	Ammonia as N	22 Colorimetric	0.317 mg/L	0.320	0.016	-0.19	-0.94
N-103	Nitrate as N	07 Ion chromatography	0.264 mg/L	0.270	0.013	-0.46	-2.22
	Nitrite + Nitrate as						

N-103	N	22 Colorimetric	0.270 mg/L	0.272	0.010	-0.20	-0.74
N-103	Orthophosphate as P	22 Colorimetric	0.280 mg/L	0.277	0.009	0.33	1.08
N-103	Total Phosphorus as P	22 Colorimetric	0.293 mg/L	0.293	0.013	0.00	0.00
N-104	Ammonia + Organic Nitrogen as N	22 Colorimetric	0.788 mg/L	0.738	0.089	0.56	6.78
N-104	Ammonia as N	22 Colorimetric	0.688 mg/L	0.705	0.032	-0.53	-2.41
N-104	Nitrate as N	07 Ion chromatography	0.791 mg/L	0.815	0.030	-0.80	-2.94
N-104	Nitrite + Nitrate as N	22 Colorimetric	0.842 mg/L	0.829	0.034	0.38	1.57
N-104	Orthophosphate as P	22 Colorimetric	0.655 mg/L	0.670	0.026	-0.58	-2.24
N-104	Total Phosphorus as P	22 Colorimetric	0.654 mg/L	0.670	0.028	-0.57	-2.39
M-192	Alkalinity as CaCO3	21 Titration: electrometric	22.7 mg/L	24.0	1.11	-1.17	-5.42
M-192	Boron	04 Inductively coupled plasma	69.6 µg/L	68.5	6.00	0.18	1.61
M-192	Calcium	04 Inductively coupled plasma	5.04 mg/L	4.92	0.230	0.52	2.44
M-192	Chloride	07 Ion chromatography	12.8 mg/L	12.9	0.519	-0.19	-0.78
M-192	Fluoride	40 Ion selective electrode	0.126 mg/L	0.128	0.023	-0.09	-1.56
M-192	Magnesium	04 Inductively coupled plasma	2.87 mg/L	2.71	0.111	1.44	5.90
M-192	pH	41 Electrometric	7.60	7.60	0.252	0.00	0.00
M-192	Potassium	04 Inductively coupled plasma	1.02 mg/L	1.00	0.049	0.41	2.00
M-192	Residue on Evaporation	50 Gravimetric	58.5 mg/L	58.0	8.90	0.06	0.86
M-192	Silica	04 Inductively coupled plasma	7.34 mg/L	7.72	0.382	-0.99	-4.92
M-192	Sodium	04 Inductively coupled plasma	10.2 mg/L	9.88	0.374	0.86	3.24
M-192	Specific Conductance	41 Electrometric	102 µS/cm	102	2.97	0.00	0.00
M-192	Strontium	04 Inductively coupled plasma	160 µg/L	155	6.08	0.82	3.23
M-192	Sulfate	07 Ion chromatography	4.39 mg/L	4.54	0.278	-0.54	-3.30
M-192	Total Phosphorus as P	22 Colorimetric	0.0670 mg/L	0.072	0.007	-0.71	-6.94
M-192	Vanadium	04 Inductively coupled plasma	<2.00 µg/L	0.321	0.373	--	--
T-199	Aluminum	06 Inductively coupled plasma/mass spectrometry	87.6 µg/L	91.6	5.56	-0.72	-4.37
		06 Inductively coupled					

T-199	Antimony	plasma/mass spectrometry	<0.100 µg/L	0.058	0.033	--	--
T-199	Arsenic	06 Inductively coupled plasma/mass spectrometry	<0.200 µg/L	0.203	0.064	F-	--
T-199	Barium	06 Inductively coupled plasma/mass spectrometry	6.67 µg/L	6.78	0.341	-0.32	-1.62
T-199	Beryllium	06 Inductively coupled plasma/mass spectrometry	0.0841 µg/L	0.086	0.051	-0.04	-2.21
T-199	Boron	04 Inductively coupled plasma	17.1 µg/L	16.7	2.15	0.19	2.40
T-199	Cadmium	06 Inductively coupled plasma/mass spectrometry	1.47 µg/L	1.50	0.111	-0.27	-2.00
T-199	Calcium	04 Inductively coupled plasma	3.92 mg/L	3.80	0.200	0.60	3.16
T-199	Chromium	06 Inductively coupled plasma/mass spectrometry	0.471 µg/L	1.28	0.130	-6.22	-63.20
T-199	Cobalt	06 Inductively coupled plasma/mass spectrometry	0.105 µg/L	0.091	0.017	0.82	15.38
T-199	Copper	06 Inductively coupled plasma/mass spectrometry	2.13 µg/L	1.98	0.219	0.68	7.58
T-199	Iron	04 Inductively coupled plasma	175 µg/L	171	9.49	0.42	2.34
T-199	Lead	06 Inductively coupled plasma/mass spectrometry	1.70 µg/L	1.44	0.070	3.71	18.06
T-199	Magnesium	04 Inductively coupled plasma	6.58 mg/L	6.20	0.315	1.21	6.13
T-199	Manganese	06 Inductively coupled plasma/mass spectrometry	13.4 µg/L	14.1	0.741	-0.94	-4.96
T-199	Molybdenum	06 Inductively coupled plasma/mass spectrometry	0.313 µg/L	0.330	0.032	-0.53	-5.15
T-199	Nickel	06 Inductively coupled plasma/mass spectrometry	0.381 µg/L	0.411	0.079	-0.38	-7.30
T-199	Potassium	04 Inductively coupled plasma	1.94 mg/L	1.87	0.111	0.63	3.74
T-199	Selenium	06 Inductively coupled plasma/mass spectrometry	<0.200 µg/L	0.250	0.557	F-	--
T-199	Silica	04 Inductively coupled plasma	6.14 mg/L	5.46	0.267	2.55	12.45
T-199	Silver	06 Inductively coupled plasma/mass spectrometry	0.597 µg/L	0.852	0.274	-0.93	-29.93
T-199	Sodium	04 Inductively coupled plasma	8.08 mg/L	7.72	0.285	1.26	4.66
T-199	Strontium	04 Inductively coupled plasma	21.3 µg/L	20.7	0.964	0.62	2.90
T-199	Thallium	06 Inductively coupled plasma/mass spectrometry	2.26 µg/L	2.22	0.136	0.29	1.80
T-199	Vanadium	04 Inductively coupled plasma	<2.00 µg/L	0.547	0.139	--	--
T-199	Zinc	06 Inductively coupled plasma/mass spectrometry	6.25 µg/L	6.23	0.749	0.03	0.32

Hg-49	Mercury	09 Atomic fluorescence	0.0144 µg/L	0.016	0.001	-1.60	-10.00
P-53	Calcium	04 Inductively coupled plasma	0.731 mg/L	0.741	0.059	-0.17	-1.35
P-53	Chloride	07 Ion chromatography	1.04 mg/L	1.05	0.037	-0.27	-0.95
P-53	Fluoride	40 Ion selective electrode	0.0394 mg/L	0.040	0.012	-0.05	-1.50
P-53	Magnesium	04 Inductively coupled plasma	0.357 mg/L	0.340	0.028	0.61	5.00
P-53	Orthophosphate as P	22 Colorimetric	0.0248 mg/L	0.026	0.003	-0.40	-4.62
P-53	pH	41 Electrometric	6.47	6.70	0.241	-0.95	-3.43
P-53	Potassium	04 Inductively coupled plasma	<0.300 mg/L	0.080	0.022	--	--
P-53	Sodium	04 Inductively coupled plasma	<0.500 mg/L	0.321	0.033	--	--
P-53	Specific Conductance	41 Electrometric	9.47 µS/cm	10.0	0.593	-0.89	-5.30
P-53	Sulfate	07 Ion chromatography	0.418 mg/L	0.418	0.041	0.00	0.00