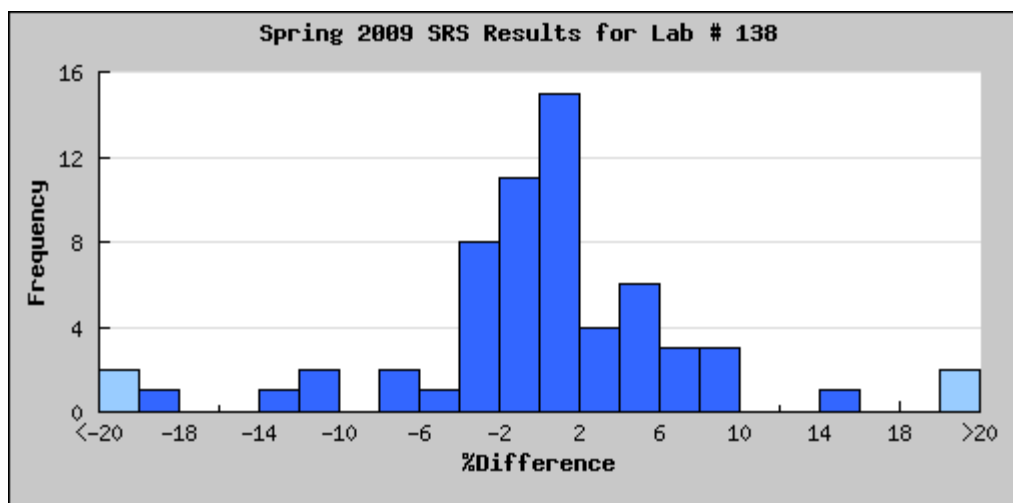
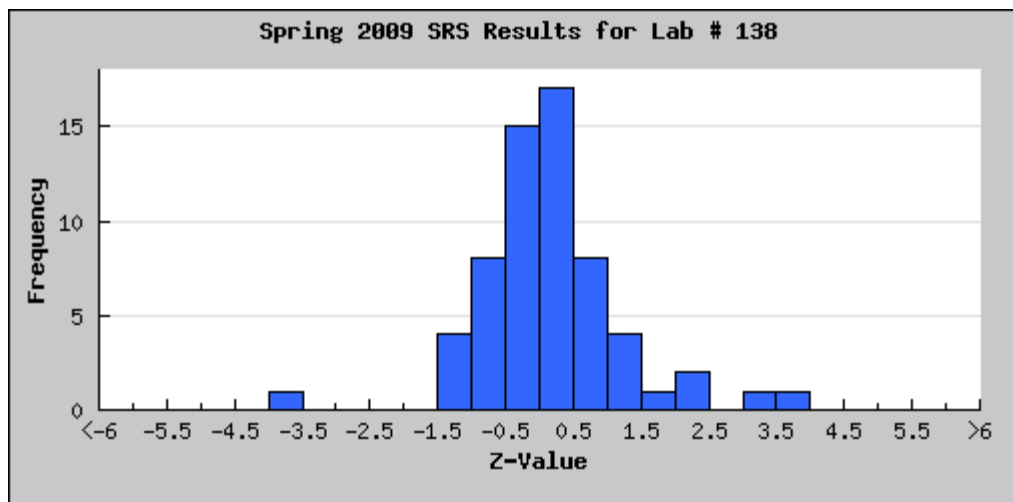


Office of Water Quality
Branch of Quality Systems

Standard Reference Sample Project

Spring 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-101	Ammonia + Organic Nitrogen as N	22 Colorimetric	0.360 mg/L	0.414	0.095	-0.57	-13.04
N-101	Ammonia as N	22 Colorimetric	0.364 mg/L	0.360	0.017	0.24	1.11
N-101	Nitrate as N	07 Ion chromatography	0.356 mg/L	0.353	0.013	0.23	0.85
	Nitrite + Nitrate as						

N-101	N	22 Colorimetric	0.342 mg/L	0.356	0.014	-1.00	-3.93
N-101	Orthophosphate as P	22 Colorimetric	0.305 mg/L	0.315	0.010	-1.00	-3.17
N-101	Total Phosphorus as P	22 Colorimetric	0.349 mg/L	0.349	0.019	0.00	0.00
N-102	Ammonia + Organic Nitrogen as N	22 Colorimetric	0.893 mg/L	0.953	0.133	-0.45	-6.30
N-102	Ammonia as N	22 Colorimetric	0.818 mg/L	0.769	0.066	0.74	6.37
N-102	Nitrate as N	07 Ion chromatography	0.812 mg/L	0.784	0.048	0.58	3.57
N-102	Nitrite + Nitrate as N	22 Colorimetric	0.988 mg/L	0.980	0.043	0.19	0.82
N-102	Orthophosphate as P	22 Colorimetric	1.19 mg/L	1.18	0.122	0.08	0.85
N-102	Total Phosphorus as P	22 Colorimetric	1.32 mg/L	1.21	0.052	2.12	9.09
M-190	Alkalinity as CaCO3	21 Titration: electrometric	47.5 mg/L	47.6	1.56	-0.06	-0.21
M-190	Boron	04 Inductively coupled plasma	18.2 µg/L	18.6	2.52	-0.16	-2.15
M-190	Calcium	04 Inductively coupled plasma	14.6 mg/L	14.6	0.526	0.00	0.00
M-190	Chloride	07 Ion chromatography	29.1 mg/L	29.1	0.923	0.00	0.00
M-190	Fluoride	40 Ion selective electrode	0.496 mg/L	0.490	0.037	0.16	1.22
M-190	Magnesium	04 Inductively coupled plasma	3.86 mg/L	3.80	0.155	0.39	1.58
M-190	pH	41 Electrometric	7.97	7.80	0.208	0.82	2.18
M-190	Potassium	04 Inductively coupled plasma	1.62 mg/L	1.66	0.089	-0.45	-2.41
M-190	Residue on Evaporation	50 Gravimetric	118 mg/L	120	8.15	-0.25	-1.67
M-190	Silica	04 Inductively coupled plasma	12.3 mg/L	11.5	0.593	1.35	6.96
M-190	Sodium	04 Inductively coupled plasma	20.7 mg/L	20.7	0.808	0.00	0.00
M-190	Specific Conductance	41 Electrometric	220 µS/cm	214	5.04	1.19	2.80
M-190	Strontium	04 Inductively coupled plasma	90.1 µg/L	89.2	2.89	0.31	1.01
M-190	Sulfate	07 Ion chromatography	7.45 mg/L	7.42	0.371	0.08	0.40
M-190	Total Phosphorus as P	22 Colorimetric	0.129 mg/L	0.130	0.006	-0.17	-0.77
M-190	Vanadium	04 Inductively coupled plasma	<2.00 µg/L	0.192	0.367	--	--
T-197	Aluminum	04 Inductively coupled plasma	126 µg/L	110	7.56	2.12	14.55
		06 Inductively coupled					

T-197	Antimony	plasma/mass spectrometry	0.561 µg/L	0.338	0.056	3.98	65.98
T-197	Arsenic	06 Inductively coupled plasma/mass spectrometry	1.34 µg/L	1.45	0.156	-0.71	-7.59
T-197	Barium	06 Inductively coupled plasma/mass spectrometry	36.0 µg/L	35.7	1.30	0.23	0.84
T-197	Beryllium	06 Inductively coupled plasma/mass spectrometry	0.108 µg/L	0.120	0.022	-0.55	-10.00
T-197	Boron	04 Inductively coupled plasma	41.2 µg/L	38.6	3.48	0.75	6.74
T-197	Cadmium	06 Inductively coupled plasma/mass spectrometry	3.08 µg/L	3.11	0.111	-0.27	-0.96
T-197	Calcium	04 Inductively coupled plasma	55.9 mg/L	55.0	2.71	0.33	1.64
T-197	Chromium	06 Inductively coupled plasma/mass spectrometry	0.736 µg/L	1.30	0.145	-3.89	-43.38
T-197	Cobalt	06 Inductively coupled plasma/mass spectrometry	5.79 µg/L	5.55	0.252	0.95	4.32
T-197	Copper	06 Inductively coupled plasma/mass spectrometry	28.3 µg/L	28.3	2.67	0.00	0.00
T-197	Iron	04 Inductively coupled plasma	2010 µg/L	1900	107	1.03	5.79
T-197	Lead	06 Inductively coupled plasma/mass spectrometry	1.69 µg/L	1.76	0.170	-0.41	-3.98
T-197	Magnesium	04 Inductively coupled plasma	25.4 mg/L	24.0	1.04	1.35	5.83
T-197	Manganese	06 Inductively coupled plasma/mass spectrometry	1620 µg/L	1590	76.4	0.39	1.89
T-197	Molybdenum	06 Inductively coupled plasma/mass spectrometry	0.620 µg/L	0.767	0.133	-1.11	-19.17
T-197	Nickel	06 Inductively coupled plasma/mass spectrometry	19.1 µg/L	18.9	1.11	0.18	1.06
T-197	Potassium	04 Inductively coupled plasma	5.16 mg/L	5.37	0.274	-0.77	-3.91
T-197	Selenium	06 Inductively coupled plasma/mass spectrometry	0.661 µg/L	0.865	0.341	-0.60	-23.58
T-197	Silica	04 Inductively coupled plasma	15.6 mg/L	14.2	0.445	3.15	9.86
T-197	Silver	06 Inductively coupled plasma/mass spectrometry	1.07 µg/L	1.06	0.078	0.13	0.94
T-197	Sodium	04 Inductively coupled plasma	37.8 mg/L	37.8	1.45	0.00	0.00
T-197	Strontium	04 Inductively coupled plasma	410 µg/L	407	25.6	0.12	0.74
T-197	Thallium	06 Inductively coupled plasma/mass spectrometry	0.958 µg/L	1.01	0.096	-0.54	-5.15
T-197	Vanadium	04 Inductively coupled plasma	<2.00 µg/L	1.29	0.182	--	--
T-197	Zinc	06 Inductively coupled plasma/mass spectrometry	1150 µg/L	1100	69.7	0.72	4.55

Hg-48	Mercury	09 Atomic fluorescence	0.048 µg/L	0.046	0.007	0.29	4.35
P-52	Calcium	04 Inductively coupled plasma	0.413 mg/L	0.415	0.019	-0.11	-0.48
P-52	Chloride	07 Ion chromatography	1.74 mg/L	1.78	0.030	-1.33	-2.25
P-52	Fluoride	40 Ion selective electrode	0.102 mg/L	0.100	0.009	0.22	2.00
P-52	Magnesium	04 Inductively coupled plasma	0.0620 mg/L	0.057	0.008	0.62	8.77
P-52	Orthophosphate as P	22 Colorimetric	0.0153 mg/L	0.017	0.002	-0.85	-10.00
P-52	pH	41 Electrometric	4.77	4.88	0.126	-0.87	-2.25
P-52	Potassium	04 Inductively coupled plasma	0.683 mg/L	0.650	0.046	0.72	5.08
P-52	Sodium	04 Inductively coupled plasma	<0.500 mg/L	0.230	0.033	--	--
P-52	Specific Conductance	41 Electrometric	14.5 µS/cm	14.0	1.21	0.41	3.57
P-52	Sulfate	07 Ion chromatography	0.283 mg/L	0.210	0.048	1.52	34.76