Table 5
Grand Forks Ambient Network
Summary Statistics
(uncensored data)

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11] = [6] / [3]	[12] = [9] / [3]	[13] = [10] / [3]	[14]	[15]	[16]	[17] = ([6]-[5]) / [15]	[18]	
Labatory Parameter	unit	Label	GCDWQ	Background	N	Min	Max	Mode	Median	Arith. Mean	Geo. Mean	Max / Backgrd	Arith. Mean / Backgrd	Geo. Mean / Backgrd	Skewness (for Normal distrib Skew = 0)	Kurtosis (for Normal distrib Kurt = 0)	StDev (sd)	Studentized Range Test	Normal Distr.	
Alkalinity Total 4.5 (mg/L)	mg/L	**Alkalinity**	n.a.	70	419	65.8	358.0	150.0	160.0	167.4	158.8	511%	239%	227%	0.42	-0.10	56.94	5.13	yes	**Alkalinity**
Ammonia - Dissolved (mg/L)	mg/L	**NH4**	n.a.	0.01	440	0.005	0.330	0.005	0.005	0.010	0.000	0%	0%	0%	11.47	153.89	0.02	15.19	no	**NH4**
Arsenic - Total (mg/L)	mg/L	**As**	0.01	0.005	398	0.000	**0.278**	**0.060**	0.004	**0.014**	0.000	0%	0%	0%	4.86	36.67	0.03	10.48	no	**As**
Bicarbonate (mg/L)	mg/L	**HCO3**	n.a.	150	52	100.0	380.0	200.0	200.0	220.0	208.0	543%	314%	297%	0.41	-0.61	73.14	3.83	no	**HCO3**
Calcium - Total (mg/L)	mg/L	**Ca**	n.a.	45.0	398	18.9	223.0	69.4	65.2	63.5	59.0	319%	91%	84%	1.08	5.57	23.75	8.59	no	**Ca**
Chloride - Dissolved (mg/L)	mg/L	**Cl**	250	1.0	443	0.5	50.0	1.3	4.7	7.2	4.4	71%	10%	6%	1.92	4.59	7.36	6.72	no	**Cl**
Iron - Total (mg/L)	mg/L	**Fe**	0.3	0.05	398	0.001	**340.000**	0.005	0.017	**3.618**	0.000	486%	5%	0%	9.31	90.83	28.01	12.14	no	**Fe**
Fluoride - Dissolved (mg/L)	mg/L	**Fl**	1.5	0.3	375	0.10	0.76	0.40	0.41	0.42	0.40	1%	1%	1%	0.09	-0.28	0.13	5.23	yes	**Fl**
Hardness - Total (mg/L)	mg/L	**Hardness**	n.a.	170.0	290	70.5	431.0	229.0	231.0	219.7	200.2	616%	314%	286%	-0.07	-0.58	77.46	4.65	no	**Hardness**
Potassium - Total (mg/L)	mg/L	**K**	n.a.	1.8	305	1.00	5.66	2.00	2.16	2.55	2.37	8%	4%	3%	0.43	-0.41	0.95	4.89	no	**K**
Magnesium - Total (mg/L)	mg/L	**Mg**	n.a.	6.0	398	2.94	119.00	16.10	15.50	15.18	12.93	170%	22%	18%	4.95	41.03	10.13	11.46	no	**Mg**
Manganese - Total (mg/L)	mg/L	**Mn**	0.05	0.003	398	0.0000	**11.5000**	0.0010	0.0024	**0.1492**	0.0000	16%	0%	0%	9.47	95.98	0.92	12.53	no	**Mn**
Sodium - Total (mg/L)	mg/L	**Na**	200	7	305	2.9	43.7	7.8	9.0	10.9	9.4	62%	16%	13%	1.69	4.46	6.38	6.39	no	**Na**
Nitrite Nitrogen - Dissolved (mg/L)	mg/L	**NO2**	n.a.	0.002	428	0.002	1.490	0.005	0.005	0.011	0.000	2%	0%	0%	19.02	380.02	0.07	20.16	no	**NO2**
Nitrogen - Total (mg/L)	mg/L	**NO3**	10	0.1	294	0.02	**20.00**	0.07	2.53	4.62	1.34	29%	7%	2%	0.95	-0.15	5.04	3.97	no	**NO3**
Total Dissolved Solids (mg/L)	mg/L	**TDS**	500	130	442	86.0	**650.0**	350.0	300.0	285.5	264.1	929%	408%	377%	-0.10	-0.63	104.36	5.40	yes	**TDS**
Conductivity (uS/cm)	uS/cm	**Conductance**	n.a.	190	443	55.7	940.0	467.0	468.0	440.7	407.5	1343%	630%	582%	-0.19	-0.65	157.81	5.60	yes	**Conductance**
Sulfate - Dissolved (mg/L)	mg/L	**SO4**	500	9	430	1.8	146.0	39.0	41.0	42.8	33.4	209%	61%	48%	1.07	0.74	28.73	5.02	yes	**SO4**
Uranium - Total (mg/L)	mg/L	**U**	0.02	0.002	183	0.0006	**0.0185**	0.0112	0.0045	0.0054	0.0000	0%	0%	0%	0.95	0.33	0.00	4.69	no	**U**
pH (pH units)	pH units	**pH**	6.5 to 8.5	7.6	441	**3.30**	8.40	8.20	8.10	8.04	8.03	12%	11%	11%	-8.80	129.04	0.31	16.63	no	**pH**
Dissolved : Chloride / Fluoride		**Cl/Fl**	n.a.	n.a.	443	0.8	178.8	10.0	12.3	17.4	11.0	255%	25%	16%	3.08	12.13	25.49	6.98	no	**Cl/Fl**

NOTES:

(1) **8.420** Yellow Box with Red Value - value is greater than or equal to GCDWQ

(2) **8.420** Yellow Box with Blue Value - value is greater than or equal to 85% GCDWQ

(3) Min, Max, Mode, Median, Arithmetic Mean, Geometric Mean values (see Cols [5] - [10]) are standard parametric statistical methods.

(4) Geometric Mean formula has limitations. A workaround was found for some calculations that errored out. All values are for interest purposes ONLY.

(5) Ratios in Cols [11] to [13] are cursory indications of potential extreme outliers

(6) Skewness, Kurtosis, Standard Deviation, Studentized Range Test (see Cols [14] to [18]) are indicators of normal tendencies