

New York State Department of Environmental Conservation

Bureau of Air Quality Surveillance

2007 Acid Deposition Annual Report

Station: Elmira
 County: Chemung
 Town: Elmira
 Location: WaterTreatment Plant
 Sullivan Street

Site #: 070105
 AIRS #: 360150003
 Locality: Urban, City
 Zoning: Commercial

Total Precipitation (Inches of Rain): 30.86
 Valid Sample Precipitation: 28.14
 Number of Visits: 51
 Number of Valid Visits: 51
 Number of Samples: 34
 Number of Valid Samples: 34
 Number of Visits With Precipitation Events: 47
 Number of Valid Visits With Precipitation Events: 47
 Number of Anion Analyses: 31
 Number of Cation Analyses: 32

Official Sampler

Elevation: 262 meters

	Precipitation <i>(Inches of Rain)</i>	Lab pH	SO4 IPPM	NO3 IPPM	CL IPPM	F IPPM	NO2 IPPM	Br IPPM	HPO4 IPPM	Na IPPM	NH4 IPPM	K IPPM	Ca IPPM	Mg IPPM	Lab Conductivity Micro s/cm
Maximum	5.240	6.447	3.451	0.808	0.000	0.014	0.000	0.000	0.000	0.375	1.085	0.136	0.524	0.089	55.90
Minimum	4.010	0.375	0.252	0.033	0.000	0.000	0.000	0.000	0.004	0.021	0.000	0.013	0.001	4.48	

Precipitation Weighted Mean

1st Quarter	6.58	4.64	1.338	1.170	0.204	0.000	0.000	0.000	0.000	0.128	0.226	0.004	0.114	0.014	14.22
2nd Quarter	5.54	4.46	2.604	1.462	0.132	0.000	0.000	0.000	0.000	0.049	0.475	0.016	0.183	0.027	21.86
3rd Quarter	9.61	4.44	2.746	1.190	0.163	0.000	0.001	0.000	0.000	0.063	0.453	0.022	0.157	0.013	22.94
4th Quarter	9.13	4.55	1.538	1.266	0.102	0.000	0.003	0.000	0.000	0.042	0.272	0.007	0.070	0.011	15.96
Annual	30.86	4.51	2.070	1.259	0.145	0.000	0.001	0.000	0.000	0.065	0.355	0.012	0.125	0.015	18.84

Total Deposition

	H+ mg/m2	SO4 mg/m2	NO3 mg/m2	CL mg/m2	F mg/m2	NO2 mg/m2	Br mg/m2	HPO4 mg/m2	Na mg/m2	NH4 mg/m2	K mg/m2	Ca mg/m2	Mg mg/m2
1st Quarter	3.840	223.602	195.481	34.060	0.000	0.000	0.000	0.000	21.408	37.690	0.591	19.042	2.374
2nd Quarter	4.957	366.366	205.723	18.634	0.000	0.000	0.000	0.000	6.877	66.781	2.282	25.700	3.747
3rd Quarter	9.009	670.323	290.464	39.700	0.000	0.146	0.000	0.000	15.260	110.612	5.315	38.303	3.083
4th Quarter	6.538	356.706	293.516	23.709	0.000	0.605	0.000	0.000	9.677	63.153	1.586	16.248	2.478
Annual	24.345	1616.998	985.184	116.103	0.000	0.750	0.000	0.000	53.222	278.237	9.774	99.293	11.683