

# New York State Department of Environmental Conservation

## Bureau of Air Quality Surveillance

### 2005 Acid Deposition Annual Report

Station: Buffalo CAM  
 County: Erie  
 Town: Buffalo  
 Location: NYS Thruway  
 Bridge Maintenance Fac.  
 185 Dingens St (near weiss)  
 Elevation: 185 meters

Site #: 140118  
 AIRS #: 360290005  
 Locality: Urban, City Center  
 Zoning: Commercial, Indust

**Official Sampler**

Total Precipitation (Inches of Rain): 38.90  
 Valid Sample Precipitation: 37.59  
 Number of Visits: 51  
 Number of Valid Visits: 51  
 Number of Samples: 38  
 Number of Valid Samples: 38  
 Number of Visits With Precipitation Events: 49  
 Number of Valid Visits With Precipitation Events: 49  
 Number of Anion Analyses: 36  
 Number of Cation Analyses: 38  
 Number of Conductivity Analyses: 38  
 Number of pH Analyses: 37

	Precipitation (Inches of Rain)	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
<b>Maximum</b>	6.83	4.56	5.698	7.088	16.903	0.934	2.382	0.220	0.024	11.158	1.757	0.078	5.421	0.214	77.90
<b>Minimum</b>	4.10	4.62	0.448	0.160	0.013	0.000	0.000	0.000	0.000	0.006	0.091	0.000	0.057	0.006	2.96

**Precipitation Weighted Mean**

<b>1st Quarter</b>	7.58	4.56	1.433	2.251	2.755	0.048	0.145	0.009	0.003	1.610	0.405	0.008	0.480	0.055	23.74
<b>2nd Quarter</b>	8.93	4.43	3.068	1.376	0.170	0.004	0.004	0.000	0.000	0.067	0.472	0.014	0.366	0.044	26.29
<b>3rd Quarter</b>	12.59	4.82	1.986	1.719	0.076	0.002	0.006	0.000	0.000	0.023	0.462	0.017	0.380	0.059	20.56
<b>4th Quarter</b>	9.80	4.62	1.933	1.811	1.995	0.000	0.004	0.019	0.000	1.235	0.463	0.033	0.349	0.059	22.93
<b>Annual</b>	38.90	4.58	2.150	1.757	1.171	0.011	0.032	0.007	0.001	0.669	0.453	0.019	0.389	0.055	23.18

**Total Deposition**

	H+	SO4	NO3	CL	F	NO2	Br	HPO4	Na	NH4	K	Ca	Mg
	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2	mg/m2
<b>1st Quarter</b>	5.383	275.905	433.299	530.455	9.263	27.916	1.816	0.657	309.905	78.039	1.588	92.480	10.543
<b>2nd Quarter</b>	8.586	695.986	312.206	38.516	0.862	0.826	0.000	0.000	15.100	107.042	3.242	82.928	10.056
<b>3rd Quarter</b>									7.369	147.630	5.441	121.597	18.956
<b>4th Quarter</b>	6.051	481.154	450.859	496.543	0.000	1.112	4.707	0.000	307.465	115.369	8.305	86.886	14.615
<b>Annual</b>	24.872	2,088.117	1,746.234	1,089.778	10.682	31.704	6.524	0.657	639.839	448.080	18.576	383.891	54.171

NOTE: DEPOSITION SHOWN MEETS 1) FOR QUARTERS, A MINIMUM OF 75% DATA CAPTURE AND  
 2) FOR ANNUAL, A MINIMUM OF 75% DATA CAPTURE WITH EACH QUARTER >50% DATA CAPTURE  
 DATA CAPTURE = VALID SAMPLES WITH VALID PRECIPITATION FOR THE PERIOD / TOTAL PRECIPITATION FOR PERIOD