

# New York State Department of Environmental Conservation

## Bureau of Air Quality Surveillance

### 2006 Acid Deposition Annual Report

Station: Westfield  
 County: Chautauqua  
 Town: Westfield  
 Location: David Northrup's Farm  
 Hardscrabble Road  
 (between Munson & Jilson)  
 Elevation: 322 meters

Site #: 067501  
 AIRS #: 360130011  
 Locality: Rural  
 Zoning: Agriculture

**Official Sampler**

Total Precipitation (Inches of Rain): 50.10  
 Valid Sample Precipitation: 50.10  
 Number of Visits: 52  
 Number of Valid Visits: 52  
 Number of Samples: 44  
 Number of Valid Samples: 44  
 Number of Visits With Precipitation Events: 51  
 Number of Valid Visits With Precipitation Events: 51  
 Number of Anion Analyses: 38  
 Number of Cation Analyses: 40  
 Number of Conductivity Analyses: 40  
 Number of pH Analyses: 42

	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>		5.93	4.429	5.860	1.508	0.000	0.000	0.042	0.000	0.459	1.921	0.279	1.616	0.285	50.10
<b>Minimum</b>		4.06	0.310	0.288	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	2.82

**Precipitation Weighted Mean**

<b>1st Quarter</b>	8.22	4.61	2.346	2.440	0.280	0.000	0.000	0.000	0.000	0.132	0.607	0.019	0.218	0.038	25.09
<b>2nd Quarter</b>	7.77	4.50	2.126	1.512	0.070	0.000	0.000	0.000	0.000	0.011	0.439	0.022	0.101	0.021	17.02
<b>3rd Quarter</b>	16.87	4.34	2.024	1.204	0.049	0.000	0.000	0.000	0.000	0.004	0.292	0.002	0.115	0.011	21.90
<b>4th Quarter</b>	17.24	4.48	1.782	1.536	0.108	0.000	0.000	0.008	0.000	0.024	0.309	0.041	0.201	0.037	17.46
<b>Annual</b>	50.10	4.44	2.012	1.585	0.114	0.000	0.000	0.003	0.000	0.034	0.372	0.020	0.160	0.026	20.31

**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>	5.194	489.886	509.527	58.409	0.000	0.000	0.000	0.000	27.568	126.668	4.021	45.466	7.894
<b>2nd Quarter</b>	6.352	419.542	298.420	13.842	0.000	0.000	0.000	0.000					
<b>3rd Quarter</b>	19.863	867.226	515.972	21.094	0.000	0.000	0.000	0.000	1.867	125.038	0.827	49.211	4.873
<b>4th Quarter</b>	14.578	780.453	672.760	47.495	0.000	0.000	3.386	0.000	10.380	135.386	17.755	87.884	16.365
<b>Annual</b>	45.987	2,557.106	1,996.679	140.840	0.000	0.000	3.386	0.000	42.019	473.707	26.888	202.423	33.219

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