

MERCURY DEPOSITION IN THE ADIRONDACK REGION OF NEW YORK

PREPARED FOR:

**THE NEW YORK STATE
ENERGY RESEARCH AND DEVELOPMENT AUTHORITY**
Albany, NY
www.nyserda.org

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Background

Elevated inputs of mercury (Hg) from atmospheric deposition have contributed to the widespread contamination of mercury in fish tissue and other wildlife, a critical environmental problem in the Adirondack region of New York, as well as other remote regions in eastern North America (Driscoll et al. 1994; 2007). In this study, measurements of wet mercury deposition were made at the Huntington Forest, in the central Adirondack region of New York, as part of the National Atmospheric Deposition Program (NADP) Mercury Deposition Network (MDN). Wet mercury deposition at Huntington Forest was analyzed and compared with values from other nearby sites of northeastern North America. The MDN site was established at Huntington Forest in 2000. Although the MDN site at the Huntington Forest has only been in existence for a short period, the data collected have been invaluable in the interpretation of Hg deposition for the region. Moreover, if there are additional controls on atmospheric emissions of mercury, such as those proposed for electric utilities, data from this site will provide a reference from which it will be possible to detect changes in wet deposition of mercury if and when they occur.

Mercury is an environmental pollutant. As a potent neurotoxin, Hg is linked to adverse health impacts in humans, fish and wildlife (Driscoll et al. 2007). The largest sources of Hg pollution in the U.S. are atmospheric emissions and deposition associated with coal-fired power plants, electric arc furnaces, waste incinerators, and chlorine production facilities. Electric utilities are the largest unregulated source of Hg emissions in the U.S. (Driscoll et al. 2007). Mercury contamination is widespread in the U.S. Exposure to Hg largely occurs through consumption of fish. Consumption advisories are issued to limit exposure when Hg concentrations are elevated in fish (<http://www.epa.gov/waterscience/fish/advisories/tech2008.html>). All 50 states, the District of Columbia, the U.S. territories of American Samoa and Guam, and five Native American tribes have fish consumption advisories to protect their residents from the potential health risks of eating contaminated fish caught in local waters. The states have developed their own fish advisory programs, and there is variability among states in the scope and extent of monitoring and in the specific advice that is provided when contaminated fish are found. In New York State there are currently 93 water bodies that have fish consumption advisories for mercury. These waters are mostly located in the Adirondack and Catskill regions, which has led to regional advisories for consumption of fish from Adirondack and Catskill waters. (<http://www.health.state.ny.us/environmental/outdoors/fish/docs/fish.pdf>) Eight percent of women of childbearing age in the U.S. consume sufficient amounts of fish for their fetuses to be at risk from methyl Hg exposure (Mahaffey 2005).

In 2005 the U.S. Environmental Protection Agency (EPA) issued the Clear Air Mercury Rule (CAMR) to limit emissions of Hg from electric utilities. This rule was innovative and controversial, calling for two phases of controls on Hg emissions and allowing for a cap and trade approach to emission controls. In 2008 the Washington D.C. U.S. Circuit Court vacated the EPA's rule removing power plants from the Clean Air Act list of sources of hazardous air pollutants. At the same time, the Court vacated the CAMR. The EPA is currently developing air toxics emission standards for power plants under the Clean Air Act (Section 112) consistent with the D.C. Circuit opinion. The EPA intends to propose air toxics standards for coal and oil-fired electric generating units by March 2011. The measurement of Hg in precipitation will be an important tool to assess the effectiveness of new emission controls on Hg when they are implemented.

Research Objectives

The objectives of this study were to:

- Continue to participate in the MDN program at the Huntington Forest;
- Provide summaries of mercury concentration in precipitation and mercury deposition for the Huntington Forest site; and
- Compare wet deposition of mercury at the Huntington Forest with data collected for Biscuit Brook in the Catskills and other regional sites.

Site Description

In 1932, the 6,000 ha (hectare) Huntington Forest (HF) ($44^{\circ} 00' N$, $74^{\circ} 13' W$) was established as a research and education center in the Adirondacks. The topography of the HF is mountainous, with elevations ranging from 457 m to 823 m. Vegetation consists of northern hardwoods (72%), mixed hardwood-conifer (18%), and conifer (10%). Dominant northern hardwood species include American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), and yellow birch (*Betula alleghaniensis*). Common conifers are red spruce (*Picea rubens*), balsam fir (*Abies balsamea*), hemlock (*Tsuga canadensis*), white cedar (*Thuja occidentalis*), and white pine (*Pinus strobus*). The HF has a mean annual temperature of $4.4^{\circ}C$ and mean annual precipitation is 1010 mm (Shepard et al. 1989). Upland watershed soils are generally <1 m in depth and include Becket-Mundell series sandy loams (coarse-loamy, mixed, frigid typic Haplorthods), while Greenwood Mucky peats are found in valley bottom wetlands. Groundwater occurs predominantly in deep near-stream peats (1-3 m depth), pockets of glacial till in valley-bottoms (0-2 m) and limited zones of glacial outwash deposits. The HF is located in the central Adirondacks and has the biological and watershed characteristics that are representative of the Adirondack region.

Methods

Weekly precipitation samples are collected for analysis of total mercury in a modified Aerochem Metrics model 301 collector at the Huntington Forest. The “wet-side” sampling glassware is removed from the collector every Tuesday and mailed to the Hg Analytical Laboratory (HAL) at Frontier Geosciences in Seattle, WA for analysis of total mercury by cold vapor atomic fluorescence.

As part of this analysis, we compare wet Hg deposition at Huntington Forest with other MDN sites in New York State and regionally, including sites at Biscuit Brook (NY68), West Point (NY99), in New York and Underhill, VT (VT99), Ontario, CA (ON07), Milford, PA (PA72) and Hills Creek State Park, PA (PA 90).

Results and Discussion

Seasonal patterns

Average monthly precipitation quantity at HF was relatively constant over the study period (2000-2007; Figure 1a). The average monthly precipitation was 21 mm (± 4 mm). Values of monthly average total Hg concentration in precipitation varied over the course of the year (Figure 1b). The lowest values occurred in the fall and winter months, with the lowest monthly average occurring in December (3 ng L⁻¹ (± 1)). Higher total Hg concentrations occurred during the summer months, with the highest average occurring in July (12 ng L⁻¹ (± 10)). Average monthly total Hg deposition (ng m⁻²) followed a similar pattern as total Hg concentration, due to the relatively uniform distribution of precipitation quantity (Figure 1c). Lower values of wet Hg deposition occurred in the fall and winter, with the lowest average occurring in December (3.3 ng m⁻²). Higher values of monthly wet Hg deposition occurred in the summer, with the highest in July (12.1 ng m⁻²).

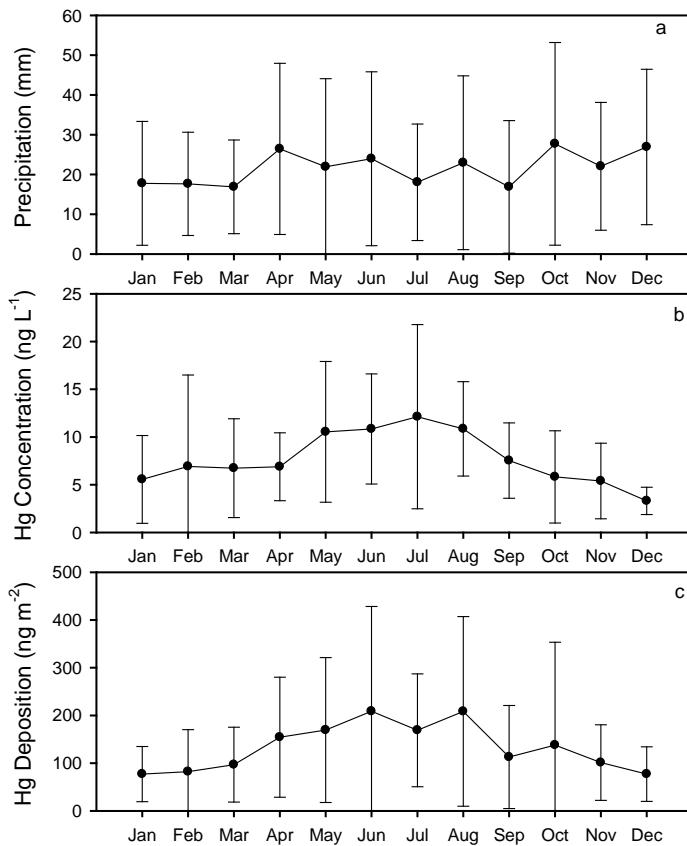


Figure 1. Monthly mean precipitation quantity (a), mercury concentration (b) and mercury deposition (c) at the Huntington Forest in the Adirondack Park, NY (NY20) from 2000 to 2007. The error bars represent values on standard deviation.

Long-Term Patterns

Weekly precipitation amount varied from a minimum of 0 mm to a maximum of 106 mm from January 2000 through December 2007 (Figure 2a). Average weekly precipitation quantity was 22 mm ($\pm 19\text{mm}$) throughout the study period. Ninety percent of the weekly precipitation measurements were below 50 mm. Total annual average precipitation was 1130.6 mm ($\pm 114.9\text{ mm}$) over the length of the study. The greatest total annual precipitation (1291mm) occurred in 2006. The lowest total annual precipitation (961 mm) occurred in 2001. There were no long-term trends in the quantity of precipitation over the study period.

The time series of weekly Hg concentrations in ng L^{-1} in precipitation exhibited the seasonal pattern, discussed above, with low concentrations occurring in the beginning of each January, increasing through July and decreasing in winter (Figure 2b). Over the course of the study, 90 percent of the measured total mercury concentrations in weekly precipitation samples were less than 14.5 ng L^{-1} . As observed at other sites precipitation at the Huntington Forest exhibited an inverse relationship between weekly Hg concentration and precipitation volume (Figure 3). Under relatively dry conditions with low weekly precipitation quantity, Hg concentrations in precipitation tend to be high. Under relative wet conditions, the quantity of precipitation dilutes Hg inputs resulting in lower concentrations.

Wet mercury deposition (ng m^{-2}) exhibited a similar seasonal pattern over through the time series of observations, as wet Hg was generally lower in the beginning of January, increasing through July and finally decreasing again at the beginning of January (Figure 2c).

Average annual wet Hg deposition for the study period was $6754\text{ ng m}^{-2}\text{ yr}^{-1}$ 2000-2007; Figure 4) at the Huntington Forest. Annual wet Hg deposition for the Huntington Forest site was $7,754\text{ ng m}^{-2}\text{ yr}^{-1}$ in 2000. Wet Hg deposition then decreased in 2001 ($6,889\text{ ng m}^{-2}\text{ yr}^{-1}$) and 2002 ($6090\text{ ng m}^{-2}\text{ yr}^{-1}$). The annual Hg deposition increased to a high of $9235\text{ ng m}^{-2}\text{ yr}^{-1}$ in 2003 and has decreased in subsequent years to a low value of $5552\text{ ng m}^{-2}\text{ yr}^{-1}$ in 2007 (Figure 4). To date there is no significant long-term trend in annual wet Hg deposition at the HF, indeed year-to-year variation in annual wet Hg deposition is strongly controlled by the quantity of precipitation that occurs for that year (Figure 5).

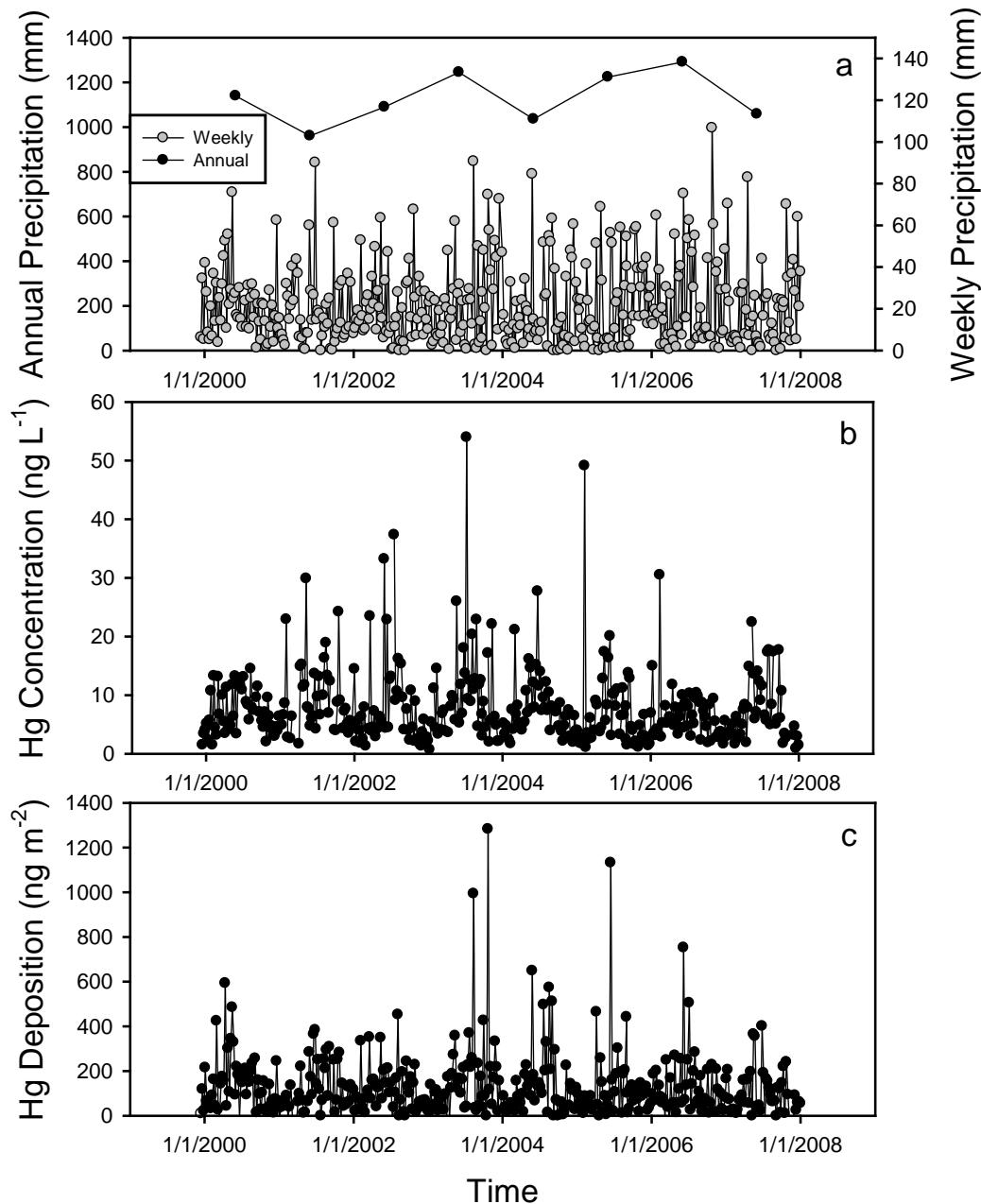


Figure 2. Average annual and weekly precipitation (a), weekly Hg concentration in precipitation (b), and weekly Hg wet deposition (c) at the Huntington Forest site in the Adirondack Park, NY (NY20).

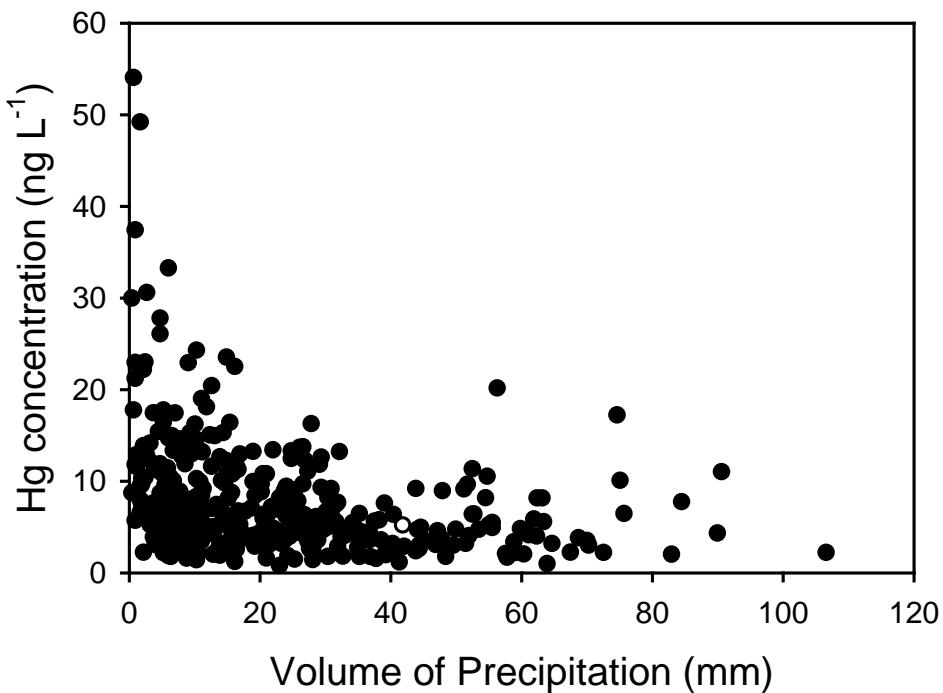


Figure 3. Relationship between the concentration of total Hg in weekly precipitation samples collected at Huntington Forest and weekly precipitation volume.

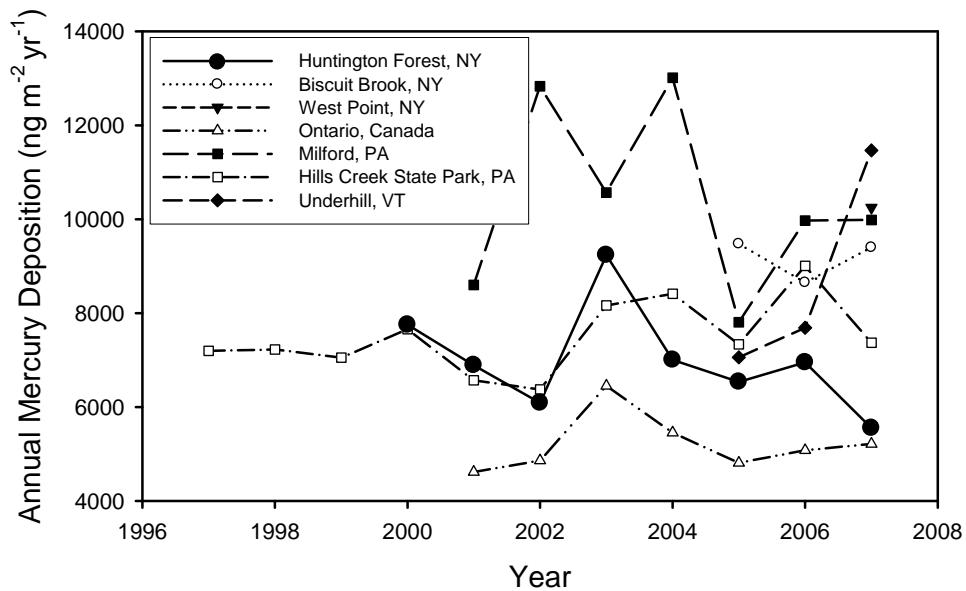


Figure 4. Time series of annual wet mercury deposition for mercury deposition network sites located near the Huntington Forest (NY20) in northeastern North America.

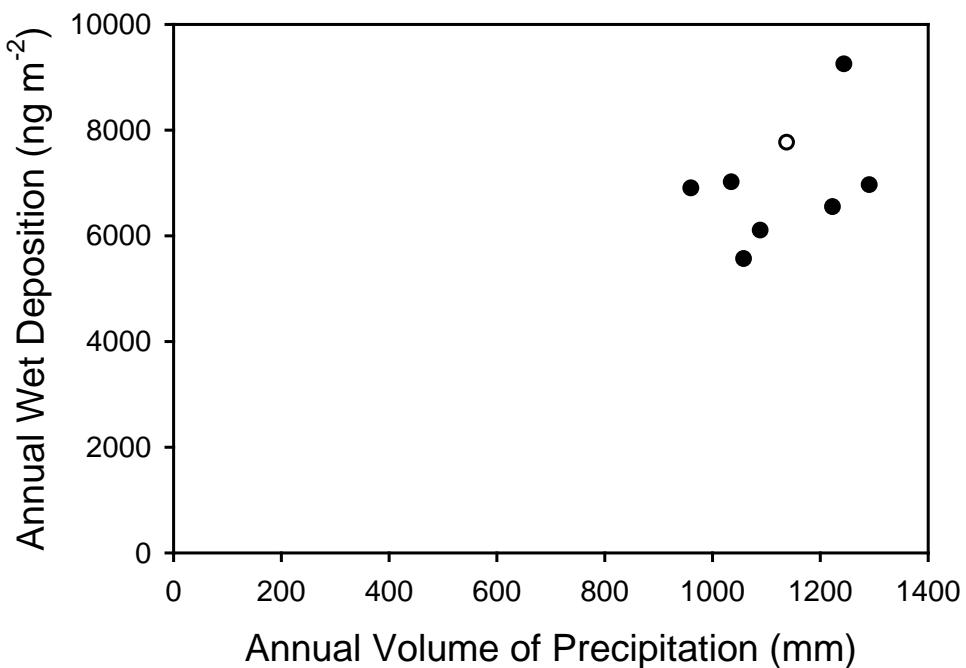


Figure 5. The relationship between annual wet Hg deposition ($\text{ng m}^{-2} \text{ yr}^{-1}$) in precipitation samples collected at Huntington Forest and the annual precipitation volume.

Comparison of wet mercury deposition with other regional sites

Average annual wet Hg deposition is generally lower (in 2005-2007) for the Huntington Forest ($6345 \text{ ng m}^{-2} \text{ yr}^{-1}$) than for the other MDN sites in New York State (Biscuit Brook (NY68) $9,174 \text{ ng m}^{-2} \text{ yr}^{-1}$ and West Point (NY99), 2007 only $10,248 \text{ ng m}^{-2} \text{ yr}^{-1}$), and regionally (Figure 6). Ontario, Canada (ON07) is the only regional site with consistently lower average annual wet Hg deposition (average = $5,034 \text{ ng m}^{-2} \text{ yr}^{-1}$) than Huntington Forest. Average annual wet Hg deposition for Milford, PA (PA72) was much greater than Huntington Forest. The largest difference in annual wet Hg deposition between these sites occurred in 2002 (Huntington Forest $6,090 \text{ ng m}^{-2} \text{ yr}^{-1}$ vs. Milford $12,830 \text{ ng m}^{-2} \text{ yr}^{-1}$). The regional site with the longest ongoing record of wet Hg deposition (11 years) is the Hill Creek State Park Site (PA90). Average annual wet Hg deposition for Hill Creek was similar to Huntington Forest for 2000 through 2002. Although the records are similar in pattern, beginning in 2005 through 2007 the Hill Creek Park Site has received greater annual wet Hg deposition (Figure 6). Values of annual Hg deposition for Underhill, VT (VT99) were similar to values at Huntington Forest site for the first two years of monitoring (2005 and 2006 at that site),

but wet Hg deposition for 2007 was considerably higher ($11,463 \text{ ng m}^{-2} \text{ yr}^{-1}$). The spatial patterns in annual volume-weighted Hg concentrations and annual wet Hg deposition for these regional sites can be observed in the context of the North American MDN program on maps (Figure 7a and 7b). In the Northeast there is a general pattern of decreasing Hg concentrations in precipitation and decreasing wet Hg deposition with increasing latitude (Figure 6). Concentrations of Hg in precipitation and wet Hg deposition are generally higher in locations south of the Huntington Forest. Also note that none of the region MDN sites have significant long-term trends in annual volume-weighted concentrations of Hg in precipitation or in wet Hg deposition (Figure 4).

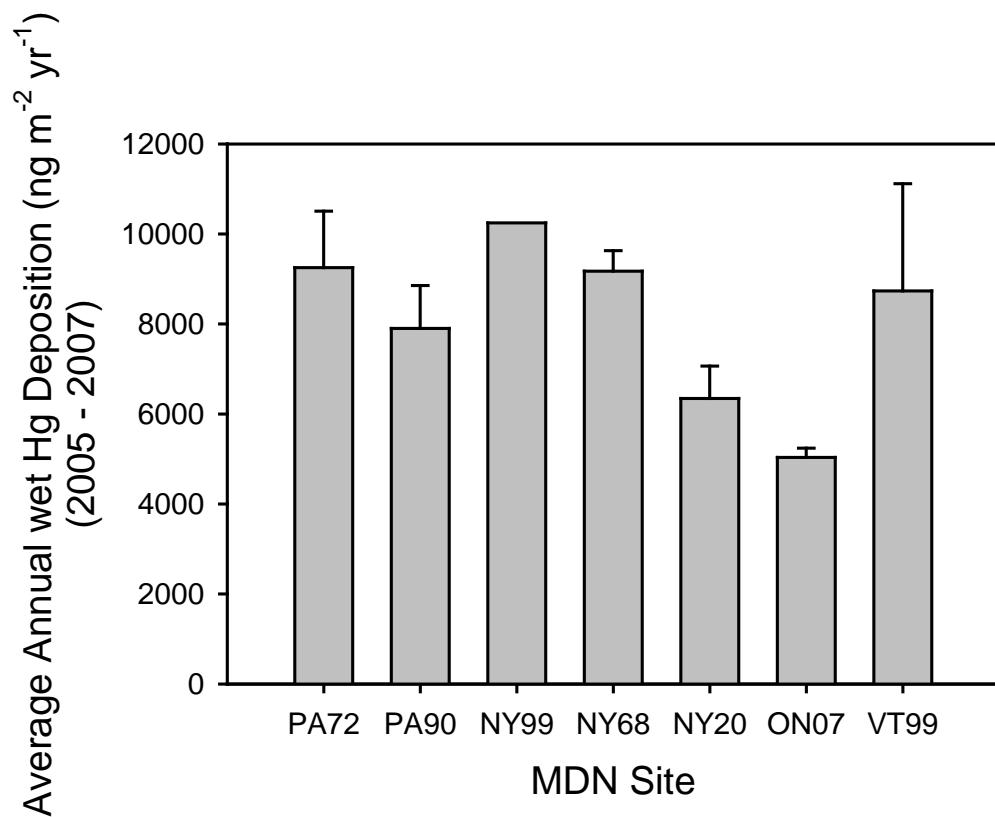


Figure 6. Mean annual wet mercury deposition for mercury deposition network (MDN) sites in near the Huntington Forest (NY20). The values shown are mean values for 2005-2007, except for NY99 (West Point); which is for 2007 only. The errors represent standard deviations. Note that the sites are ordered by increasing latitude.

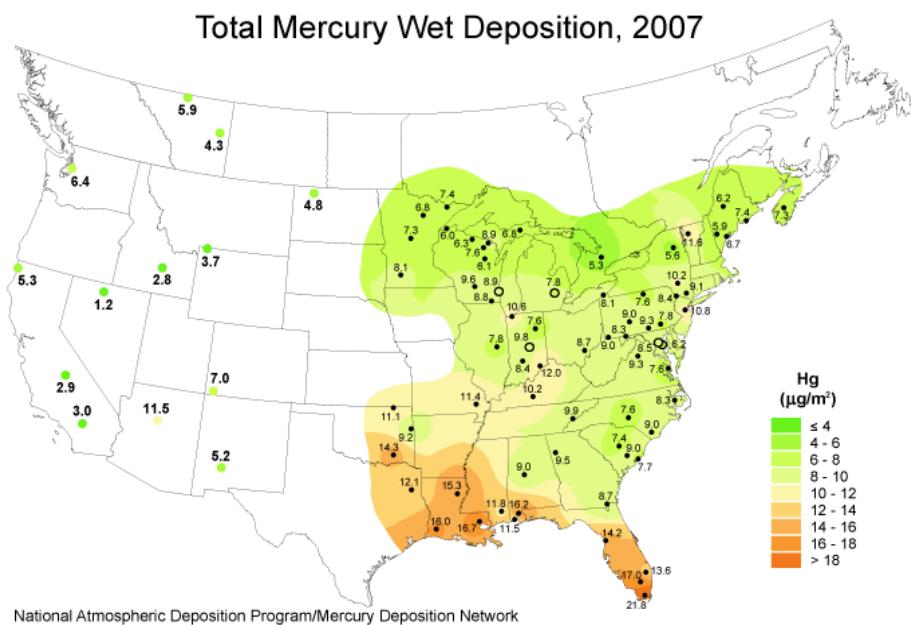
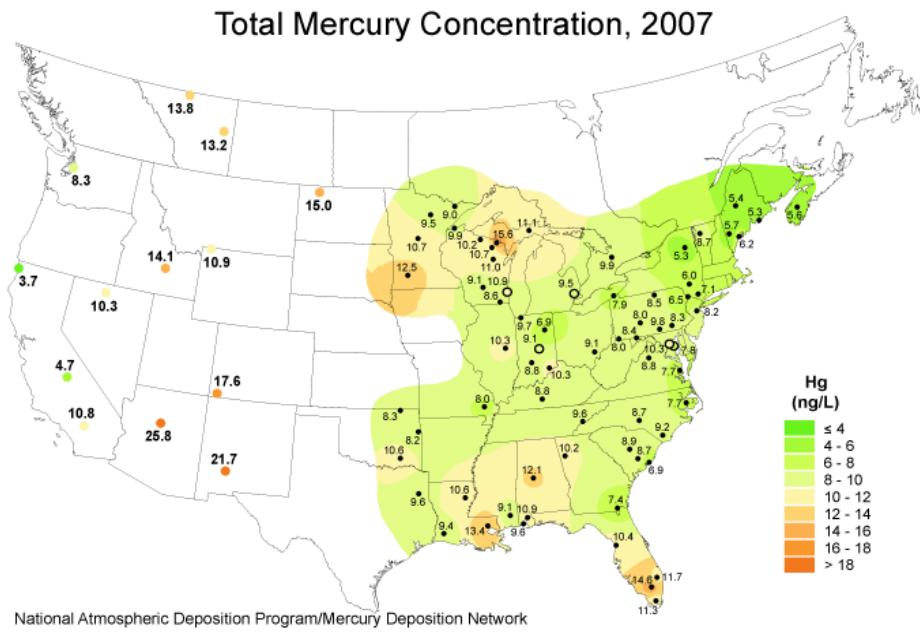


Figure 7. National Atmospheric Deposition Program/Mercury Deposition Network (NADP/MDN) maps of annual volume weighted total mercury concentration in precipitation (a) and annual wet Hg deposition (b) for 2007.

Wet mercury deposition in the context of mercury biogeochemistry at Huntington Forest

Because effects of elevated Hg deposition largely occur through exposure of humans and wildlife to Hg in aquatic and terrestrial environments, it is important to put measurements of wet Hg deposition in the context of pools and fluxes of Hg in ecosystems. In this regard, we have past and ongoing studies of Hg dynamics at Huntington Forest. Our measurements at a hardwood plot show a slight enrichment of Hg in throughfall ($5.9 \mu\text{g m}^{-2}\text{yr}^{-1}$) compared to wet deposition ($5.79 \mu\text{g m}^{-2}\text{yr}^{-1}$; Choi et al. 2008; Figure 8). Atmospheric deposition of methyl mercury (MeHg) is low (Figure 9). Large increases in concentrations of Hg are evident in foliage of the dominant hardwoods over the growing season, with accumulation of Hg in American beech significantly higher than in sugar maple or yellow birch (Bushey et al. 2008a). This accumulation occurs during uptake of elemental Hg through stomata of foliage. Concentrations of Hg in understory foliage are significantly greater than overstory foliage, which may be due to elevated evasive losses of Hg from the overstory canopy in comparison to the understory canopy due to decreases in the penetration of solar radiation through the canopy, or elevated uptake of elemental mercury in understory foliage due to the proximity to sources from soil evasion. Concentrations of Hg in hardwood litter were consistent with values observed in foliage. Litter Hg flux ($14.8 \mu\text{g m}^{-2}\text{yr}^{-1}$) greatly exceeded throughfall and was the major pathway of Hg deposited to the forest floor ($20.7 \mu\text{g m}^{-2}\text{yr}^{-1}$). Soil evasion of Hg was highly variable across diurnal cycles and the annual cycle, and was highly dependent on environmental conditions (e.g., temperature, radiation). Our best estimate of Hg evasion from upland soil under hardwoods ($5.4 \mu\text{g m}^{-2}\text{yr}^{-1}$) suggests that this flux was about equal to throughfall, but less than total Hg deposition (Choi and Holsen 2009). Stream fluxes of Hg ($1.4 \mu\text{g m}^{-2}\text{yr}^{-1}$) indicate that most of the Hg deposited to the watershed is evaded back to the atmosphere or retained in soil. Still, stream losses are a critical pathway of Hg supply to aquatic ecosystems and ultimately human and wildlife exposure. Wetlands in the lower Archer Creek watershed exhibit net production of total Hg and are a critical site of net production of methyl Hg (MeHg; Selvendiran et al. 2008; Figure 9). Stream Hg species flux increased greatly during storm events, driven by the increase in runoff (Bushey et al. 2008b; Dittman et al. 2010). The form and source of Hg may have important implications for the bioavailability in downstream Arbutus Lake. Arbutus Lake is a net sink for total Hg and MeHg (Selvendiran et al. 2009). In addition to export from the lake outlet, total Hg inputs are evaded back to the atmosphere from the lake surface and deposited to sediments. While wet Hg deposition is not the most important pathway of Hg inputs to Adirondack watersheds (28% of total inputs), it is undoubtedly highly bioavailable and changes in these inputs should be an accurate and responsive indicator of the effects on atmospheric Hg emission control programs.

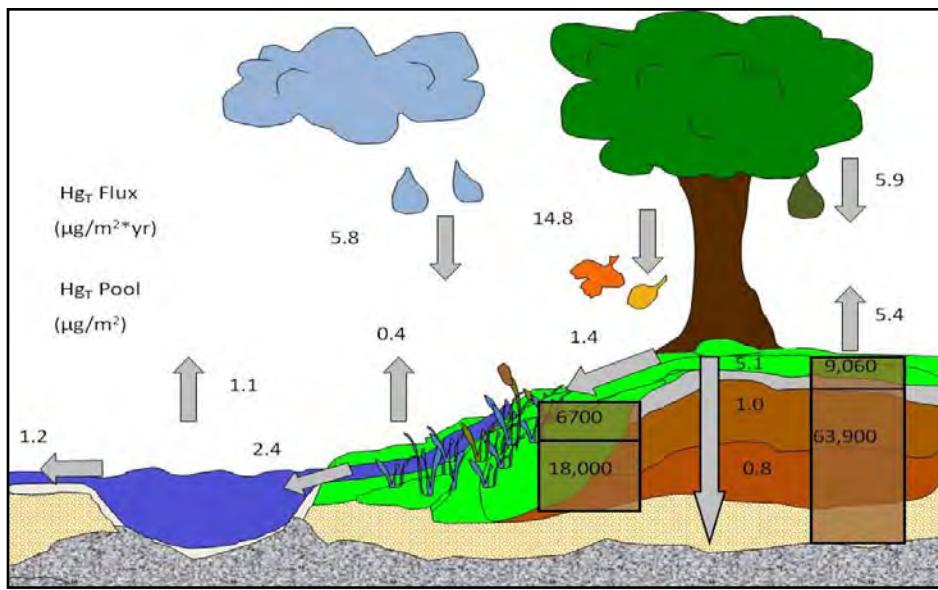


Figure 8. Fluxes and pools of total Hg measured from archer creek/arbutus lake watershed (in $\mu\text{g m}^{-2}\text{yr}^{-1}$ and $\mu\text{g m}^{-2}$).

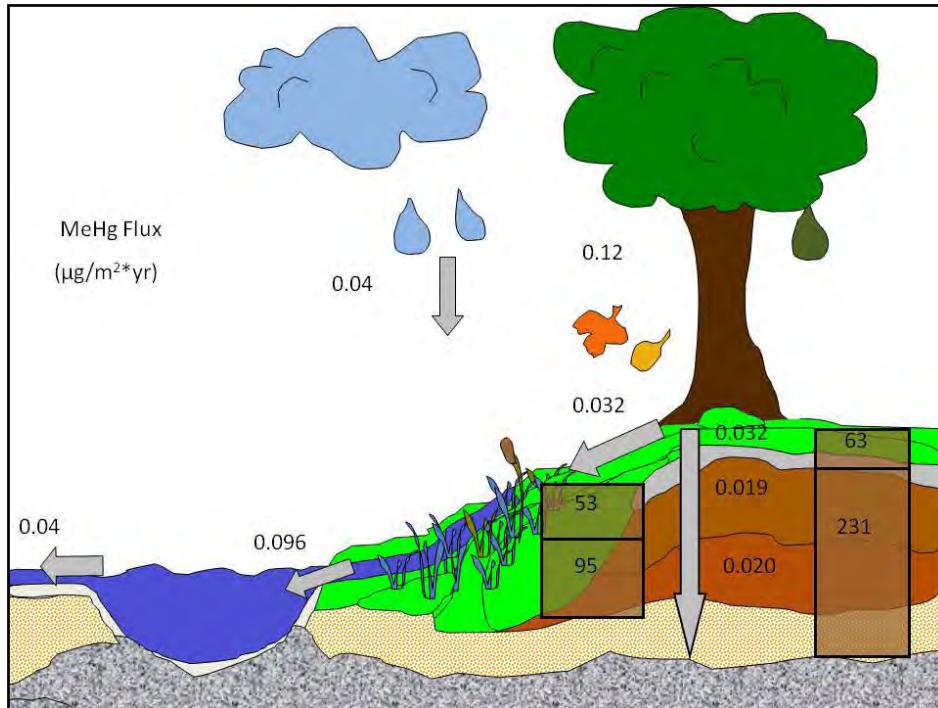


Figure 9. Fluxes and pools of methyl Hg (MeHg) measured from Archer Creek/Arbutus Lake watershed (in $\mu\text{g m}^{-2}\text{yr}^{-1}$ and $\mu\text{g m}^{-2}$).

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MDN Data Fields

SITE CODE: 2-letter state or province designator followed by a two digit number.

START DATE: (mm/dd/yyyy hh:mm), GMT

END DATE: (mm/dd/yyyy hh:mm), GMT

RGPPT: Precipitation amount as measured by the rain gage in millimeters. Trace amounts are indicated by -7.00 and missing amount by -9.00.

SVOL: Sample Volume, ml. Missing amounts are indicated by a -9.00.

SUBPPT: Rain gage precipitation amount, if available, in mm. If the rain gage value (RGPPT) is missing, the precipitation amount in mm is calculated from the net sample volume caught in the sample bottle. A value of 0.127 is inserted for Trace sample types. Missing amounts are indicated by a -9.00

HGCONC: Total mercury concentration reported by the lab in ng/L. Missing amounts are indicated by a -9.00

HGDEP: Total mercury deposition, ng/m². The product of SUBPPT and

HGCONC. Missing amounts are indicated by a -9.00

Quality rating (QR) CODE:

- A** fully qualified with no problems
- B** valid data with minor problems, used for summary statistics
- C** invalid data, not used for summary statistics
- no sample submitted for this time period

SAMPLE TYPE:

- W** wet sample, measurable precipitation (> 0.01 in.) on the rain gauge (RG) or net bottle catch (BC) > 1.5 mL if RG data are missing. Concentration and deposition data are reported unless the QR Code is C.
- D** dry sample The RG measured a 0 precipitation amount net, or if the RG is missing, the BC < 1.5 mL . No concentration data are reported and are indicated by a -9.00. RGPPT, SUBPPT, and HGDEP are set to zero.
- T** trace sample, used when the rain gage detects that an unmeasurable amount of precipitation occurred. No Hg concentration or depositions are shown. SUBPPT is set to 0.127 mm
- unknown sample type. Precipitation amount is unknown.

NOTE CODE:

Code	Description	Quality Rating (QR) code	Valid for Summary Statistics (Y/N)
e	Extended sample time (> 8days)	B	Y
d	debris present	B	Y
m	missing information	B	Y
z	site operations problems	B	Y
h	sample handling problems	B	Y
i	low volume sample (1.5 mL < sample volume < 10 mL) (Hg conc. data are reported but they are less certain than samples with a sample volume of at least 10 mL)	B	Y
b	bulk sample (sample exposed the whole time)	C	N
v	Rain gage indicates precipitation occurred but the sample volume was less than 1.5 mL, or the sample volume was less than 10% of indicated rain gage precipitation amount.	C	N
u	undefined sample (sample exposed for at least 6 hours without precipitation)	C	N
f	serious problems in field operations that compromise sample integrity	C	N
l	laboratory error	C	N
c	contamination of sample	C	N
p	no precipitation data from either the rain gage or the sample volume	C	N
n	no sample submitted	C	N

YRMONT (YYYYMM): Indicated the year and month at the midpoint of the sample. Used for determining which samples to use to compute annual and seasonal aggregates.

DATEMOD (DD/MM/YYYY): Date when the record was last modified

Appendix A - data from the Huntington Forest MDN collection site.

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	12/10/1999 21:58	12/14/1999 13:20	6.35	40.7	6.35	1.5	9.53	W	B	dz	199912	10/10/2004
NY20	12/14/1999 13:30	12/21/1999 13:30	34.54	375.5	34.54	3.43	118.52	W	B	dm	199912	10/10/2004
NY20	12/21/1999 14:35	12/28/1999 13:25	5.33	22.3	5.33	4.07	21.72	W	B	d	199912	10/10/2004
NY20	12/28/1999 13:25	1/4/2000 20:20	41.91	427.3	41.91	5.13	215.08	W	B	h	200001	10/10/2004
NY20	1/4/2000 20:30	1/11/2000 14:45	27.94	270.9	27.94	2.35	65.71	W	B	dz	200001	10/10/2004
NY20	1/11/2000 14:55	1/18/2000 15:00	8.64	50.9	8.64	5.69	49.17	W	B	dz	200001	10/10/2004
NY20	1/18/2000 15:05	1/25/2000 14:47	5.21	13.4	5.21	10.73	55.91	W	B	dz	200001	10/10/2004
NY20	1/25/2000 14:50	2/1/2000 14:30	21.08	143.7	21.08	1.52	32.21	W	B	dz	200001	10/10/2004
NY20	2/1/2000 14:40	2/8/2000 14:30	6.86	28.3	6.86	13.27	91.02	W	B	dzh	200002	10/10/2004
NY20	2/8/2000 14:35	2/15/2000 16:10	36.83	184.9	36.83	4.4	162.3	W	B	dz	200002	10/10/2004
NY20	2/15/2000 16:15	2/22/2000 14:50	13.97	158.1	13.97	3.17	44.39	W	B	dz	200002	10/10/2004
NY20	2/22/2000 14:52	2/29/2000 14:30	32.26	394.3	32.26	13.14	424.09	W	B	zh	200002	10/10/2004
NY20	2/29/2000 14:43	3/7/2000 15:10	3.94	39	3.94	6.72	26.48	W	B	dz	200003	10/10/2004
NY20	3/7/2000 15:15	3/14/2000 15:00	25.15	275.3	25.15	-9	-9	W	C	ml	200003	10/10/2004
NY20	3/14/2000 15:10	3/21/2000 14:55	14.22	156.4	14.22	9.99	142.19	W	B	d	200003	10/10/2004
NY20	3/21/2000 15:00	3/28/2000 18:00	31.75	380.4	31.75	5.48	174.27	W	B	d	200003	10/10/2004
NY20	3/28/2000 18:02	4/4/2000 14:50	45.21	564.2	45.21	3.47	157.29	W	B	dm	200004	10/10/2004
NY20	4/4/2000 14:55	4/11/2000 14:30	52.58	429.7	52.58	11.28	593.13	W	B	dm	200004	10/10/2004
NY20	4/11/2000 14:35	4/18/2000 18:25	10.67	117.6	10.67	4.03	43.08	W	B	dmz	200004	10/10/2004
NY20	4/18/2000 18:30	4/25/2000 14:45	55.63	609.3	55.63	5.41	301.27	W	B	dmz	200004	10/10/2004
NY20	4/25/2000 14:48	5/2/2000 14:18	22.1	269.9	22.1	4.8	106.07	W	B	dm	200004	10/10/2004
NY20	5/2/2000 14:24	5/9/2000 14:20	29.21	358	29.21	11.77	343.86	W	B	dm	200005	10/10/2004
NY20	5/9/2000 14:27	5/16/2000 14:35	-9	908	75.79	6.39	484.79	W	B	m	200005	10/10/2004
NY20	5/16/2000 14:41	5/23/2000 14:40	24.89	277.1	24.89	13.22	329.27	W	B	m	200005	10/10/2004
NY20	5/23/2000 14:44	5/30/2000 18:20	27.43	339.3	27.43	3.39	93.13	W	B	dm	200005	10/10/2004
NY20	5/30/2000 18:22	6/6/2000 19:30	17.02	233.1	17.02	12.89	219.41	W	B	m	200006	10/10/2004
NY20	6/6/2000 19:35	6/13/2000 15:06	15.75	182.9	15.75	11.62	183.03	W	B	dm	200006	10/10/2004
NY20	6/13/2000 15:06	6/20/2000 15:35	29.97	-9	29.97	-9	-9	W	B	dm	200006	10/10/2004
NY20	6/20/2000 15:35	6/27/2000 14:35	-9	181.4	15.14	10.9	165.04	W	B	dm	200007	10/10/2004
NY2-0	6/27/2000 14:38	7/4/2000 14:20	11.3	134.2	11.3	13.1	148.1	W	B	dm	200007	10/10/2004

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	7/11/2000 14:50	7/18/2000 14:20	mm	ml	mm	ng/l	ng/m ²					10/10/2004
NY20	7/18/2000 14:23	7/25/2000 14:09	-9	23.81	286.4	23.81	8.85	210.9	W	B	m	200007
NY20	7/25/2000 14:15	8/1/2000 14:20	-9	134.1	11.19	8.37	93.68	W	B	dm	200007	10/10/2004
NY20	8/1/2000 14:27	8/8/2000 12:38	-9	373.9	31.21	5.78	180.37	W	B	dm	200007	10/10/2004
NY20	8/8/2000 12:42	8/15/2000 14:10	25.15	123.9	10.34	14.49	149.85	W	B	m	200008	10/10/2004
NY20	8/15/2000 14:14	8/22/2000 14:15	31.75	314.7	25.15	7.91	199	W	B	dm	200008	10/10/2004
NY20	8/22/2000 14:18	8/29/2000 15:12	15.75	377.6	31.75	7.39	234.66	W	B	d	200008	10/10/2004
NY20	8/29/2000 16:28	9/5/2000 13:15	26.67	329.8	26.67	9.62	256.69	W	C	hvf	200008	10/10/2004
NY20	9/5/2000 13:19	9/12/2000 14:40	1.27	10.7	1.27	11.49	14.59	W	A		200009	10/10/2004
NY20	9/12/2000 14:43	9/19/2000 14:40	22.35	270.5	22.35	7.12	159.19	W	B	d	200009	10/10/2004
NY20	9/19/2000 14:45	9/26/2000 14:25	13.72	189.5	13.72	7.05	96.73	W	B	d	200009	10/10/2004
NY20	9/26/2000 14:30	10/3/2000 14:15	5.08	56.3	5.08	5.59	28.4	W	B	m	200009	10/10/2004
NY20	10/3/2000 14:18	10/10/2000 12:06	22.61	253.8	22.61	4.52	102.33	W	B	dm	200010	10/10/2004
NY20	10/10/2000 12:10	10/17/2000 14:44	21.84	280.1	21.84	7.1	155.13	W	B	m	200010	10/10/2004
NY20	10/17/2000 14:46	10/24/2000 14:42	13.97	167.8	13.97	2.05	28.68	W	B	d	200010	10/10/2004
NY20	10/24/2000 14:44	10/31/2000 14:10	2.03	9.2	2.03	9.58	19.47	W	B	i	200010	10/10/2004
NY20	10/31/2000 14:14	11/7/2000 14:40	3.05	20.7	3.05	6.41	19.54	W	A		200011	10/10/2004
NY20	11/7/2000 14:45	11/14/2000 20:35	28.83	393.7	28.83	4.83	139.27	W	B	zh	200011	10/10/2004
NY20	11/14/2000 20:40	11/21/2000 14:34	11.18	131.5	11.18	4.12	46.11	W	B	d	200011	10/10/2004
NY20	11/21/2000 14:40	11/28/2000 14:20	21.59	223.5	21.59	3.05	66.02	W	B	d	200011	10/10/2004
NY20	11/28/2000 14:25	12/5/2000 15:15	4.06	31	4.06	3.01	12.26	W	B	d	200012	10/10/2004
NY20	12/5/2000 15:18	12/12/2000 16:30	16.51	167.2	16.51	4.53	74.8	W	B	m	200012	10/10/2004
NY20	12/12/2000 16:37	12/19/2000 13:15	-9	747.6	62.4	3.91	244.22	W	B	dmzh	200012	10/10/2004
NY20	12/19/2000 13:20	12/26/2000 14:12	10.6	60.1	10.6	6.36	67.5	W	B	dmh	200012	10/10/2004
NY20	12/26/2000 14:16	1/2/2001 15:10	15.49	88.3	15.49	-9	-9	W	C	dmhf	200101	10/10/2004
NY20	1/2/2001 15:14	1/9/2001 13:07	7.37	24.9	7.37	4.9	36.14	W	B	mzh	200101	10/10/2004
NY20	1/9/2001 13:10	1/16/2001 14:29	7.62	40.7	7.62	6.61	50.43	W	B	m	200101	10/10/2004
NY20	1/16/2001 14:34	1/23/2001 14:31	4.83	23.2	4.83	8.61	41.58	W	B	m	200101	10/10/2004
NY20	1/23/2001 14:35	1/3/2001 14:22	2.54	10	2.54	22.93	58.24	W	B	m	200101	10/10/2004
NY20	1/30/2001 14:28	2/6/2001 14:45	32	312.8	32	2.8	89.89	W	B	dm	200102	10/10/2004

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	2/6/2001 14:50	2/13/2001 14:25	25.91	260.8	25.91	ng/l	ng/m ²	-9	W	C	mzf	200102 10/10/2004
NY20	2/13/2001 14:30	2/20/2001 14:20	14.99	154.6	14.99	2.58	38.78	W	B	dm	200102	10/10/2004
NY20	2/20/2001 14:25	2/27/2001 14:00	21.34	140.3	21.34	6.37	135.93	W	B	m	200102	10/10/2004
NY20	2/27/2001 14:05	3/6/2001 14:45	40.39	135.1	40.39	-9	-9	W	C	dmf	200103	10/10/2004
NY20	3/6/2001 14:55	3/13/2001 14:22	23.88	133.7	23.88	-9	-9	W	C	dmzuf	200103	10/10/2004
NY20	3/20/2001 13:12	3/27/2001 14:32	43.69	292.2	43.69	-9	-9	W	C	duf	200103	10/10/2004
NY20	3/27/2001 14:40	4/3/2001 14:41	36.96	347	36.96	1.69	62.45	W	B	dm	200103	10/10/2004
NY20	4/3/2001 14:45	4/10/2001 14:30	6.6	80.4	6.6	14.89	98.35	W	B	h	200104	10/10/2004
NY20	4/10/2001 14:35	4/17/2001 14:01	14.48	171.2	14.48	15.22	220.48	W	B	d	200104	10/10/2004
NY20	4/17/2001 14:08	4/24/2001 14:40	5.97	61.9	5.97	11.38	67.93	W	B	d	200104	10/10/2004
NY20	4/24/2001 14:45	5/1/2001 14:20	1.02	7.1	1.02	11.73	11.91	W	B	di	200104	10/10/2004
NY20	5/1/2001 14:28	5/8/2001 13:55	0.51	2.1	0.51	29.9	15.19	W	B	dmi	200105	10/10/2004
NY20	5/8/2001 14:00	5/15/2001 14:10	8.38	105.2	8.38	7.95	66.64	W	B	d	200105	10/10/2004
NY20	5/15/2001 14:14	5/22/2001 19:00	8.26	92.4	8.26	7.68	63.39	W	B	h	200105	10/10/2004
NY20	5/22/2001 19:05	5/29/2001 13:45	59.94	714.9	59.94	4.74	284.55	W	B	d	200105	10/10/2004
NY20	5/29/2001 13:50	6/5/2001 15:25	28.7	330.5	28.7	6.04	173.5	W	A		200106	10/10/2004
NY20	6/5/2001 15:32	6/11/2001 15:00	14.48	172.9	14.48	6.42	92.99	W	B	dh	200106	10/10/2004
NY20	6/12/2001 15:05	6/19/2001 14:20	26.67	338	26.67	13.67	364.65	W	B	d	200106	10/10/2004
NY20	6/19/2001 14:25	6/26/2001 12:40	-9	1079	90.06	4.26	383.82	W	B	dm	200106	10/10/2004
NY20	6/26/2001 12:44	7/3/2001 14:40	14.73	187.2	14.73	9.72	143.26	W	B	dm	200106	10/10/2004
NY20	7/3/2001 14:44	7/10/2001 13:45	19.05	239.5	19.05	13.16	250.77	W	B	dmh	200107	10/10/2004
NY20	7/10/2001 13:52	7/17/2001 14:08	17.78	244.4	17.78	6.62	117.81	W	B	d	200107	10/10/2004
NY20	7/17/2001 14:14	7/24/2001 14:08	0	0	0	-9	0	D	B	dm	200107	10/10/2004
NY20	7/24/2001 14:12	7/31/2001 13:35	6.86	76.8	6.86	9.97	68.42	W	B	m	200107	10/10/2004
NY20	7/31/2001 13:40	8/7/2001 14:15	15.49	192.3	15.49	16.33	253.12	W	B	dmh	200108	10/10/2004
NY20	8/7/2001 14:20	8/14/2001 14:15	11.18	143.2	11.18	18.93	211.56	W	A		200108	10/10/2004
NY20	8/14/2001 14:20	8/21/2001 12:35	22.1	280.4	22.1	13.34	294.94	W	B	dh	200108	10/10/2004
NY20	8/21/2001 12:40	8/28/2001 15:40	12.7	167.8	12.7	6.93	88.08	W	B	d	200108	10/10/2004
NY20	8/28/2001 15:55	9/4/2001 15:05	24.89	289.7	24.89	12.39	308.41	W	B	dmh	200109	10/10/2004
NY20	9/4/2001 15:09	9/11/2001 14:35	0.76	0.4	0.76	-9	-9	W	C	dmv	200109	10/10/2004

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	9/11/2001 14:40	9/18/2001 15:00	0.25	0	0.25	-9	-9	W	C	mv	200109	10/10/2004
NY20	9/18/2001 15:07	9/25/2001 20:03	61.21	754.9	61.21	4.07	249.5	W	B	dm	200109	10/10/2004
NY20	9/25/2001 20:07	10/2/2001 14:20	4.06	35.2	4.06	3.96	16.12	W	B	dm	200109	10/10/2004
NY20	10/2/2001 14:25	10/9/2001 17:20	7.87	89.2	7.87	8.81	69.41	W	B	m	200110	10/10/2004
NY20	10/9/2001 17:25	10/15/2001 16:25	10.41	39.8	10.41	24.21	252.21	W	B	dmh	200110	10/10/2004
NY20	10/15/2001 16:29	10/23/2001 14:05	30.99	375.3	30.99	9.11	282.57	W	B	dm	200110	10/10/2004
NY20	10/23/2001 14:08	10/30/2001 14:30	13.21	150.6	13.21	-9	-9	W	C	dml	200110	10/10/2004
NY20	10/30/2001 14:35	11/6/2001 14:27	33.27	377.8	33.27	4.33	144.37	W	B	dm	200111	10/10/2004
NY20	11/6/2001 14:30	11/13/2001 14:50	5.84	63.4	5.84	7.27	42.49	W	B	dmh	200111	10/10/2004
NY20	11/13/2001 14:54	11/20/2001 14:10	7.37	74.8	7.37	7.69	56.68	W	B	dm	200111	10/10/2004
NY20	11/20/2001 14:14	11/27/2001 14:40	9.91	107.3	9.91	5.03	49.91	W	B	dm	200111	10/10/2004
NY20	11/27/2001 14:45	12/4/2001 14:10	36.83	385.1	36.83	3.51	129.6	W	B	dm	200112	10/10/2004
NY20	12/4/2001 14:14	12/11/2001 14:45	11.18	100.6	11.18	5.62	62.83	W	B	dmh	200112	10/10/2004
NY20	12/11/2001 14:50	12/18/2001 14:30	32.64	335	32.64	4.21	137.67	W	B	dm	200112	10/10/2004
NY20	12/25/2001 14:15	1/1/2002 14:30	8.13	11.3	8.13	14.46	117.55	W	B	m	200112	10/10/2004
NY20	1/1/2002 14:35	1/8/2002 14:30	10.67	65	10.67	2.07	22.16	W	B	dm	200201	10/10/2004
NY20	1/8/2002 14:35	1/15/2002 14:15	14.99	100.7	14.99	5.54	83.11	W	B	dmz	200201	10/10/2004
NY20	1/15/2002 14:20	1/22/2002 14:35	19.18	109.6	19.18	4.02	77.24	W	B	m	200201	10/10/2004
NY20	1/22/2002 14:40	1/29/2002 14:15	13.97	134.4	13.97	1.83	25.67	W	B	dm	200201	10/10/2004
NY20	1/29/2002 14:20	2/5/2002 14:00	52.83	477.8	52.83	6.34	335	W	B	dm	200202	10/10/2004
NY20	2/5/2002 14:08	2/12/2002 14:00	16.51	182.9	16.51	2.5	41.34	W	B	dmz	200202	10/10/2004
NY20	2/12/2002 14:05	2/19/2002 14:10	9.4	65	9.4	7.93	74.55	W	B	dm	200202	10/10/2004
NY20	2/19/2002 14:14	2/26/2002 14:27	10.41	104.1	10.41	1.33	13.89	W	B	m	200202	10/10/2004
NY20	2/26/2002 14:27	3/5/2002 14:25	23.11	0	23.11	-9	-9	W	C	mv	200203	10/10/2004
NY20	3/5/2002 14:25	3/12/2002 13:55	26.42	239	26.42	4.26	112.63	W	B	dm	200203	10/10/2004
NY20	3/12/2002 14:00	3/19/2002 14:10	14.99	86.1	14.99	23.46	351.57	W	B	dm	200203	10/10/2004
NY20	3/19/2002 14:15	3/26/2002 14:30	19.81	139.4	19.81	3.88	76.96	W	B	dm	200203	10/10/2004
NY20	3/26/2002 14:40	4/2/2002 14:40	35.31	303.1	35.31	4.48	158.24	W	B	m	200203	10/10/2004
NY20	4/2/2002 14:45	4/9/2002 18:40	22.35	234.6	22.35	7.26	162.45	W	B	dm	200204	10/10/2004
NY20	4/9/2002 18:45	4/16/2002 14:29	49.66	608.7	49.66	2.92	145.34	W	B	dm	200204	10/10/2004

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	4/16/2002 14:35	4/23/2002 14:10	9.91	54.9	9.91	4.17	41.31	W	B	dm	200204	10/10/2004
NY20	4/23/2002 14:15	4/30/2002 14:16	28.45	283.6	28.45	4.39	125.02	W	B	dm	200204	10/10/2004
NY20	4/30/2002 14:19	5/7/2002 14:10	20.57	217.3	20.57	6.29	129.41	W	B	dm	200205	10/10/2004
NY20	5/7/2002 14:13	5/14/2002 14:07	63.5	725.7	63.5	5.49	348.61	W	B	dm	200205	10/10/2004
NY20	5/14/2002 14:12	5/21/2002 14:45	15.49	175.8	15.49	4.89	75.82	W	B	dm	200205	10/10/2004
NY20	5/21/2002 14:50	5/28/2002 15:08	6.1	80.3	6.1	33.2	202.42	W	B	dmh	200205	10/10/2004
NY20	5/28/2002 15:10	6/4/2002 15:30	33.53	409.9	33.53	4.36	146.38	W	B	dm	200206	10/10/2004
NY20	6/4/2002 15:35	6/11/2002 14:16	9.14	114.2	9.14	22.85	208.94	W	B	dmh	200206	10/10/2004
NY20	6/11/2002 14:20	6/18/2002 14:15	47.24	587.8	47.24	4.5	212.73	W	B	dm	200206	10/10/2004
NY20	6/18/2002 14:20	6/25/2002 14:00	8.13	81.5	8.13	12.67	102.98	W	B	dmh	200206	10/10/2004
NY20	6/25/2002 14:05	7/2/2002 14:20	11.18	111.3	11.18	13.15	147.05	W	B	dmh	200206	10/10/2004
NY20	7/2/2002 14:24	7/9/2002 14:10	0.51	3	0.51	-9	-9	W	B	mzi	200207	10/10/2004
NY20	7/9/2002 14:15	7/16/2002 14:00	1.02	5.7	1.02	37.35	37.94	W	B	mi	200207	10/10/2004
NY20	7/16/2002 14:05	7/23/2002 13:25	11.43	148.2	11.43	9.12	104.34	W	B	dm	200207	10/10/2004
NY20	7/23/2002 13:30	7/30/2002 12:40	15.75	192.8	15.75	10.68	168.22	W	B	dm	200207	10/10/2004
NY20	7/30/2002 12:44	8/6/2002 12:45	27.94	325.5	27.94	16.2	452.68	W	B	dmh	200208	10/10/2004
NY20	8/6/2002 12:50	8/13/2002 14:00	0	360.8	0	-9	0	D	B	mh	200208	10/10/2004
NY20	8/13/2002 14:10	8/20/2002 14:08	4.57	55.5	4.57	15.34	70.13	W	B	m	200208	10/10/2004
NY20	8/20/2002 14:10	8/27/2002 14:35	20.32	247.6	20.32	9.61	195.29	W	B	dm	200208	10/10/2004
NY20	8/27/2002 14:40	9/3/2002 14:03	4.06	50.2	4.06	4.11	16.72	W	B	m	200208	10/10/2004
NY20	9/3/2002 14:08	9/10/2002 14:30	0	0	0	-9	0	D	B	mz	200209	10/10/2004
NY20	9/10/2002 14:33	9/17/2002 14:20	32	382.1	32	7.6	243.35	W	B	mh	200209	10/10/2004
NY20	9/17/2002 14:25	9/24/2002 14:30	33.02	392.5	33.02	3.97	131.25	W	B	m	200209	10/10/2004
NY20	9/24/2002 14:34	10/1/2002 14:40	43.94	529	43.94	2.31	101.9	W	A	200209	10/10/2004	
NY20	10/1/2002 14:40	10/8/2002 14:25	16	183.6	16	10.8	172.83	W	A	200210	10/10/2004	
NY20	10/8/2002 14:30	10/15/2002 14:18	6.35	54.7	6.35	4.5	28.59	W	A	200210	10/10/2004	
NY20	10/15/2002 14:25	10/22/2002 14:45	67.56	811.9	67.56	2.17	146.68	W	B	h	200210	10/10/2004
NY20	10/22/2002 14:50	10/29/2002 14:25	-9	305	25.46	8.96	228.27	W	B	m	200211	10/10/2004
NY20	10/29/2002 14:31	11/5/2002 14:40	-9	86.9	7.25	2.44	17.73	W	B	zhf	200211	10/10/2004
NY20	11/5/2002 14:45	11/12/2002 14:25	14.99	112.8	14.99	-9	-9	W	C	zhf	200211	10/10/2004

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	11/12/2002 14:30	11/19/2002 14:30	mm	ml	mm	ng/l	ng/m ²					10/10/2004
NY20	11/19/2002 14:35	11/26/2002 15:35	28.19	288.5	28.19	1.35	38.11	W	B	z	200211	10/10/2004
NY20	11/26/2002 15:40	12/3/2002 14:25	18.03	100.6	18.03	3.69	66.7	W	B	h	200211	10/10/2004
NY20	12/3/2002 14:30	12/10/2002 14:20	7.37	34.4	7.37	5.85	43.12	W	A		200212	10/10/2004
NY20	12/10/2002 14:25	12/17/2002 14:40	28.19	274.8	28.19	2.48	69.92	W	A		200212	10/10/2004
NY20	12/17/2002 14:43	12/24/2002 14:25	14.73	112.4	14.73	2.81	41.47	W	A		200212	10/10/2004
NY20	12/24/2002 14:30	12/31/2002 14:15	10.16	81.7	10.16	2.23	22.68	W	A		200212	10/10/2004
NY20	12/31/2002 14:18	1/7/2003 14:38	23.11	220.9	23.11	0.71	16.59	W	A		200301	10/10/2004
NY20	1/7/2003 14:42	1/14/2003 14:25	25.65	152.7	25.65	5.4	138.58	W	A		200301	10/10/2004
NY20	1/14/2003 14:30	1/21/2003 14:30	2.54	1.9	2.54	-9	-9	W	C	hiv	200301	10/10/2004
NY20	1/21/2003 14:33	1/28/2003 14:32	4.32	9.2	4.32	11.15	48.15	W	B	i	200301	10/10/2004
NY20	1/28/2003 14:37	2/4/2003 20:15	23.88	235.3	23.88	4.44	106.22	W	A		200302	10/10/2004
NY20	2/4/2003 20:18	2/11/2003 14:38	7.87	17	7.87	14.52	114.35	W	A		200302	10/10/2004
NY20	2/11/2003 14:44	2/18/2003 14:35	6.86	28.2	6.86	3.35	23.02	W	A		200302	10/10/2004
NY20	2/18/2003 14:40	2/25/2003 14:28	19.05	153.2	19.05	3.95	75.3	W	A		200302	10/10/2004
NY20	2/25/2003 14:32	3/4/2003 14:30	7.87	50	7.87	4.09	32.2	W	A		200303	10/10/2004
NY20	3/4/2003 14:35	3/11/2003 14:12	11.68	82.2	11.68	6.86	80.19	W	A		200303	10/10/2004
NY20	3/11/2003 14:15	3/18/2003 14:20	3.56	22.1	3.56	7.39	26.29	W	B	z	200303	10/10/2004
NY20	3/18/2003 14:20	3/25/2003 15:12	24.64	261.3	24.64	3.88	95.79	W	B		200303	10/10/2004
NY20	3/25/2003 15:30	4/1/2003 15:28	20.57	180.7	20.57	-9	-9	W	C	mu	200303	10/10/2004
NY20	4/1/2003 15:34	4/8/2003 13:10	47.88	408.9	47.88	3.62	173.51	W	A		200304	10/10/2004
NY20	4/8/2003 13:14	4/15/2003 14:17	0.51	0	0.51	-9	-9	W	C	v	200304	10/10/2004
NY20	4/15/2003 14:22	4/22/2003 19:52	15.24	144	15.24	8.08	123.23	W	A		200304	10/10/2004
NY20	4/22/2003 19:57	4/29/2003 14:00	19.05	181.1	19.05	9.86	188	W	A		200304	10/10/2004
NY20	4/29/2003 14:06	5/6/2003 16:10	29.46	344	29.46	9.24	272.51	W	A		200305	10/10/2004
NY20	5/6/2003 16:10	5/13/2003 16:30	61.98	704.9	61.98	5.78	358.22	W	A		200305	10/10/2004
NY20	5/13/2003 16:35	5/20/2003 14:17	4.83	43.2	4.83	25.99	125.46	W	B	h	200305	10/10/2004
NY20	5/20/2003 14:23	5/27/2003 13:30	27.18	294.1	27.18	5.79	157.57	W	A		200305	10/10/2004
NY20	5/27/2003 13:35	6/3/2003 14:40	31.75	348.9	31.75	5.25	166.87	W	A		200305	10/10/2004
NY20	6/3/2003 14:45	6/10/2003 16:00	8.64	81.2	8.64	11.81	102.06	W	A		200306	10/10/2004

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	6/10/2003 16:05	6/17/2003 14:20	mm	ml	mm	ng/l	ng/m ²		A	200306	10/10/2004	
NY20	6/17/2003 14:25	6/24/2003 15:30	11.94	136.7	11.94	18.02	215.14	W	B	200306	10/10/2004	
NY20	6/24/2003 15:35	7/1/2003 12:10	2.54	25	2.54	13.72	34.86	W	A	200306	10/10/2004	
NY20	7/1/2003 12:14	7/8/2003 14:10	0.76	3.6	0.76	53.97	41.12	W	B	i	200307	
NY20	7/8/2003 14:14	7/15/2003 13:30	24.13	294	24.13	9.36	225.97	W	B	200307	10/10/2004	
NY20	7/15/2003 13:34	7/22/2003 14:53	29.46	365.7	29.46	12.54	369.47	W	B	dm	200307	
NY20	7/22/2003 14:59	7/29/2003 15:05	24.38	290.3	24.38	8.91	217.35	W	B	h	200307	
NY20	7/29/2003 15:08	8/5/2003 13:55	12.7	136.2	12.7	20.34	258.38	W	B	d	200308	
NY20	8/5/2003 14:00	8/12/2003 12:18	90.68	1149.9	90.68	10.95	993.55	W	B	d	200308	
NY20	8/12/2003 12:22	8/19/2003 14:20	2.79	33.8	2.79	12.73	35.58	W	B	h	200308	
NY20	8/19/2003 14:24	8/26/2003 13:25	1.02	3.9	1.02	22.88	23.25	W	B	i	200308	
NY20	8/26/2003 13:30	9/2/2003 14:45	50.04	605.6	50.04	4.68	234.17	W	B	h	200308	
NY20	9/2/2003 14:50	9/9/2003 14:15	3.81	31.6	3.81	11.82	45.04	W	A	200309	10/10/2004	
NY20	9/9/2003 14:30	9/16/2003 14:28	13.97	147.9	13.97	12.58	175.85	W	A	200309	10/10/2004	
NY20	9/16/2003 14:35	9/22/2003 14:50	5.84	67.7	5.84	6.75	39.47	W	A	200309	10/10/2004	
NY20	9/22/2003 14:55	9/23/2003 18:20	27.94	329.6	27.94	3.04	85.16	W	A	200309	10/10/2004	
NY20	9/23/2003 18:23	9/30/2003 14:25	48.01	586.6	48.01	8.87	426.24	W	B	h	200309	10/10/2004
NY20	9/30/2003 14:27	10/7/2003 15:00	20.32	214.1	20.32	4.44	90.26	W	A	200310	10/10/2004	
NY20	10/7/2003 15:04	10/14/2003 14:18	0	0	0	-9	0	D	A	200310	10/10/2004	
NY20	10/14/2003 14:22	10/21/2003 18:59	-9	895.1	74.71	17.16	1282.67	W	B	dm	200310	10/10/2004
NY20	10/21/2003 19:03	10/28/2003 12:48	57.66	662.2	57.66	2.01	116.18	W	B	z	200310	10/10/2004
NY20	10/28/2003 12:53	11/4/2003 14:45	38.35	414.6	38.35	5.7	218.65	W	B	z	200311	10/10/2004
NY20	11/4/2003 15:05	11/11/2003 14:40	2.29	10.1	2.29	22.11	50.56	W	B	z	200311	10/10/2004
NY20	11/11/2003 14:45	11/18/2003 14:10	29.21	226.8	29.21	5.88	171.78	W	B	z	200311	10/10/2004
NY20	11/18/2003 14:14	11/25/2003 14:40	52.58	617.2	52.58	6.32	332.39	W	A	200311	10/10/2004	
NY20	11/25/2003 14:45	12/2/2003 13:45	44.7	480.4	44.7	4.88	218.15	W	A	200311	10/10/2004	
NY20	12/2/2003 13:50	12/9/2003 14:08	9.91	60	9.91	2.12	21.01	W	A	200312	10/10/2004	
NY20	12/9/2003 14:12	12/16/2003 14:20	72.64	530.7	72.64	2.14	155.82	W	A	200312	10/10/2004	
NY20	12/16/2003 14:25	12/30/2003 13:10	46.99	528.1	46.99	-9	-9	W	C	emzu	200401	
NY20	12/30/2003 14:03	1/6/2004 14:35	17.02	152.1	17.02	5.2	88.51	W	A	200401	10/10/2004	

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	1/6/2004 14:40	1/13/2004 14:14	mm	ml	mm	ng/l	ng/m ²		A	200401	10/10/2004	
NY20	1/13/2004 14:16	1/20/2004 14:15	4.57	29.3	4.57	4.75	21.71	W	A	200401	10/10/2004	
NY20	1/20/2004 14:20	1/27/2004 14:20	2.79	0.8	2.79	-9	-9	W	C	ZV	200401	
NY20	1/27/2004 14:24	2/3/2004 14:22	9.65	62.9	9.65	2.34	22.66	W	A	200401	10/10/2004	
NY20	2/3/2004 14:28	2/10/2004 14:42	32.77	268.9	32.77	1.73	56.75	W	A	200402	10/10/2004	
NY20	2/10/2004 14:45	2/17/2004 14:20	3.81	12.9	3.81	7.54	28.74	W	A	200402	10/10/2004	
NY20	2/17/2004 14:25	2/24/2004 14:17	12.19	93.8	12.19	4.16	50.82	W	B	m	200402	10/10/2004
NY20	2/24/2004 14:23	3/2/2004 14:35	1.02	4.3	1.02	21.14	21.48	W	B	i	200402	10/10/2004
NY20	3/2/2004 14:40	3/9/2004 14:35	23.37	221.6	23.37	6.71	156.89	W	A	200403	10/10/2004	
NY20	3/9/2004 14:40	3/16/2004 14:15	10.41	40.1	10.41	8.23	85.8	W	A	200403	10/10/2004	
NY20	3/16/2004 14:17	3/23/2004 14:35	15.75	124.2	15.75	5.23	82.48	W	A	200403	10/10/2004	
NY20	3/23/2004 14:40	3/30/2004 13:25	11.94	125.9	11.94	4.8	57.31	W	A	200403	10/10/2004	
NY20	3/30/2004 13:30	4/6/2004 14:25	24.13	274.3	24.13	4.05	97.87	W	A	200404	2/15/2005	
NY20	4/6/2004 14:30	4/13/2004 14:20	3.3	21.5	3.3	5.18	17.13	W	A	200404	2/15/2005	
NY20	4/13/2004 14:25	4/20/2004 14:40	34.29	418.7	34.29	5.39	185.09	W	A	200404	2/15/2005	
NY20	4/20/2004 14:44	4/27/2004 14:12	21.08	231.4	21.08	10.73	226.37	W	A	200404	2/15/2005	
NY20	4/27/2004 14:15	5/4/2004 14:25	18.8	212.5	18.8	6.98	131.19	W	A	200405	2/15/2005	
NY20	5/4/2004 14:30	5/11/2004 13:55	10.16	126.2	10.16	16.14	164.01	W	A	200405	2/15/2005	
NY20	5/11/2004 14:00	5/18/2004 13:52	6.1	71.3	6.1	14.63	89.23	W	A	200405	2/15/2005	
NY20	5/18/2004 13:57	5/25/2004 13:45	84.58	1071.3	84.58	7.67	648.91	W	A	200405	2/15/2005	
NY20	5/25/2004 13:50	6/1/2004 15:15	14.99	166.8	14.99	12.17	182.48	W	A	200406	2/15/2005	
NY20	6/1/2004 15:18	6/8/2004 15:15	8.38	109.1	8.38	7.91	66.36	W	A	200406	2/15/2005	
NY20	6/8/2004 15:19	6/15/2004 15:45	9.4	100.7	9.4	15.19	142.82	W	A	200406	2/15/2005	
NY20	6/15/2004 15:48	6/22/2004 13:40	4.83	37.5	4.83	27.71	133.76	W	B	d	200406	2/15/2005
NY20	6/22/2004 13:45	6/29/2004 12:10	12.7	150.3	12.7	11.55	146.73	W	A	200406	2/15/2005	
NY20	6/29/2004 12:14	7/6/2004 15:13	9.14	105.9	9.14	14.02	128.23	W	A	200407	3/14/2005	
NY20	7/6/2004 15:16	7/13/2004 13:10	13.46	145.3	13.46	7.37	99.24	W	A	200407	3/14/2005	
NY20	7/13/2004 13:13	7/20/2004 13:20	51.82	662.1	51.82	9.58	496.7	W	B	d	200407	3/14/2005
NY20	7/20/2004 13:25	7/27/2004 19:35	25.91	323.1	25.91	7.78	201.74	W	A	200407	3/14/2005	
NY20	7/27/2004 19:38	8/3/2004 14:55	26.92	318.2	26.92	12.24	329.68	W	A	200408	3/14/2005	

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD	
NY20	8/3/2004 14:55	8/10/2004 13:25	mm	ml	mm	ng/l	ng/m ²					3/14/2005	
NY20	8/10/2004 13:30	8/17/2004 13:10	2.03	25.1	2.03	7.38	14.99	W	A	200408		3/14/2005	
NY20	8/17/2004 13:14	8/24/2004 14:10	54.86	663.1	54.86	10.45	573.6	W	B	d	200408		3/14/2005
NY20	8/24/2004 14:14	8/31/2004 14:20	52.07	616.5	52.07	3.97	207.08	W	A	200408		3/14/2005	
NY20	8/31/2004 14:25	9/7/2004 15:15	63.25	800.7	63.25	8.09	511.66	W	B	d	200408		3/14/2005
NY20	9/7/2004 15:17	9/14/2004 13:57	0	0	0	-9	0	D	A	200409		3/14/2005	
NY20	9/14/2004 14:05	9/21/2004 14:05	9.91	140.4	9.91	7.52	294.42	W	A	200409		3/14/2005	
NY20	9/21/2004 14:10	9/28/2004 14:08	0	0	0	-9	0	D	A	200409		3/14/2005	
NY20	9/28/2004 14:10	10/5/2004 13:35	13.21	136.8	13.21	4.69	62.03	W	A	200409		3/14/2005	
NY20	10/5/2004 13:38	10/12/2004 14:08	0.51	4.8	0.51	8.65	4.39	W	B	i	200410		7/22/2005
NY20	10/12/2004 14:11	10/19/2004 14:00	15.75	194.6	15.75	3.81	60.14	W	A	200410		7/22/2005	
NY20	10/19/2004 14:04	10/25/2004 16:05	2.29	17.4	2.29	2.16	4.95	W	A	200410		7/22/2005	
NY20	10/25/2004 16:15	11/2/2004 13:20	7.11	94.3	7.11	4.76	33.91	W	A	200410		7/22/2005	
NY20	11/2/2004 13:23	11/9/2004 14:12	35.31	385.4	35.31	6.38	225.53	W	A	200411		7/22/2005	
NY20	11/9/2004 14:12	11/16/2004 13:50	0.25	-9	0.25	-9	-9	W	C	zv	200411		8/22/2005
NY20	11/16/2004 13:50	11/23/2004 13:45	6.1	29	6.1	7.45	45.44	W	B	z	200411		7/22/2005
NY20	11/23/2004 13:49	11/30/2004 14:05	48.01	564.8	48.01	2.97	142.72	W	A	200411		7/22/2005	
NY20	11/30/2004 14:08	12/7/2004 14:20	44.45	433.3	44.45	2.56	114.19	W	A	200412		7/22/2005	
NY20	12/7/2004 14:25	12/14/2004 14:04	60.45	626.4	60.45	1.96	118.84	W	B	d	200412		7/22/2005
NY20	12/14/2004 14:10	12/21/2004 14:25	4.32	24.6	4.32	6.48	27.98	W	B	h	200412		7/22/2005
NY20	12/21/2004 14:30	12/28/2004 14:50	32.51	347.4	32.51	3.86	125.52	W	A	200412		7/22/2005	
NY20	12/28/2004 14:55	1/4/2005 14:35	24.64	228.8	24.64	3.98	98.06	W	B	zh	200501		8/31/2006
NY20	1/4/2005 14:40	1/11/2005 14:10	19.3	137.7	19.3	2.82	54.44	W	A	200501		8/31/2006	
NY20	1/11/2005 14:15	1/18/2005 14:10	24.38	253.6	24.38	1.78	43.4	W	B	z	200501		8/31/2006
NY20	1/18/2005 14:15	1/25/2005 14:30	10.41	36.7	10.41	1.74	18.12	W	A	200501		8/31/2006	
NY20	1/25/2005 14:35	2/1/2005 14:20	5.33	38.9	5.33	2.1	11.2	W	B	z	200501		8/31/2006
NY20	2/1/2005 14:25	2/8/2005 15:20	1.78	2.4	1.78	49.12	87.34	W	B	zi	200502		8/31/2006
NY20	2/8/2005 15:25	2/15/2005 14:32	41.4	371.1	41.4	1.09	45.13	W	A	200502		8/31/2006	
NY20	2/15/2005 14:40	2/22/2005 14:30	23.88	135.3	23.88	3.52	84.04	W	A	200502		8/31/2006	
NY20	2/22/2005 14:35	3/1/2005 15:50	13.72	46.3	13.72	2.48	34.02	W	B	h	200502		8/31/2006

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	3/1/2005 15:57	3/8/2005 14:35	mm	ml	mm	ng/l	ng/m ²					8/31/2006
NY20	3/8/2005 14:40	3/15/2005 14:22	9.91	46.3	9.91	2.68	26.55	W	B	h	200503	8/31/2006
NY20	3/15/2005 14:27	3/22/2005 14:15	0.25	0	0.25	-9	-9	W	B	h	200503	12/7/2005
NY20	3/22/2005 14:18	3/29/2005 13:50	11.43	106.8	11.43	4	45.72	W	A	C	v	200503
NY20	3/29/2005 13:55	4/5/2005 14:50	51.31	565.9	51.31	9.06	464.85	W	B	d	200504	8/31/2006
NY20	4/5/2005 14:55	4/11/2005 20:00	5.84	65.2	5.84	8.35	48.78	W	A		200504	4/23/2006
NY20	4/11/2005 20:05	4/19/2005 13:55	-9	0	0	-9	0	D	B	m	200504	4/23/2006
NY20	4/19/2005 14:00	4/26/2005 14:15	68.83	803	68.83	3.74	257.44	W	A		200504	8/31/2006
NY20	4/26/2005 14:18	5/3/2005 14:30	33.53	441.5	33.53	4.48	150.21	W	A		200504	8/31/2006
NY20	5/3/2005 14:35	5/10/2005 14:40	1.27	10	1.27	12.82	16.28	W	A		200505	4/23/2006
NY20	5/10/2005 14:45	5/17/2005 12:45	5.08	55.3	5.08	17.38	88.29	W	A		200505	8/31/2006
NY20	5/17/2005 12:50	5/24/2005 13:55	1.02	8	1.02	5.64	5.73	W	B	i	200505	4/23/2006
NY20	5/24/2005 14:00	5/31/2005 15:00	5.84	67.7	5.84	8.33	48.66	W	A		200505	8/31/2006
NY20	5/31/2005 15:04	6/7/2005 14:50	5.33	50.9	5.33	16.37	87.32	W	A		200506	8/31/2006
NY20	6/7/2005 14:55	6/14/2005 14:25	56.39	658.7	56.39	20.08	1132.27	W	B	d	200506	8/31/2006
NY20	6/14/2005 14:40	6/21/2005 15:12	51.56	682.6	51.56	3.11	160.36	W	B	d	200506	8/31/2006
NY20	6/21/2005 15:15	6/28/2005 14:30	2.03	21.1	2.03	10.23	20.79	W	A		200506	8/31/2006
NY20	6/28/2005 14:35	7/5/2005 14:32	10.41	132.1	10.41	10.2	106.22	W	A		200507	4/27/2006
NY20	7/5/2005 14:40	7/12/2005 15:30	23.11	284.2	23.11	8.1	187.22	W	B	d	200507	4/27/2006
NY20	7/12/2005 15:35	7/19/2005 13:25	27.43	358.2	27.43	11	301.75	W	A		200507	4/27/2006
NY20	7/19/2005 13:30	7/26/2005 14:00	1.27	0.2	1.27	-9	-9	W	A		200507	8/31/2006
NY20	7/26/2005 14:05	8/2/2005 14:00	58.93	727	58.93	3.3	194.46	W	A		200507	4/27/2006
NY20	8/2/2005 14:07	8/9/2005 14:25	1.78	18.3	1.78	6.5	11.56	W	A		200508	8/31/2006
NY20	8/9/2005 14:30	8/16/2005 14:30	16.76	198.9	16.76	11.2	187.76	W	A		200508	8/31/2006
NY20	8/16/2005 14:35	8/23/2005 14:25	30.99	384.8	30.99	6.6	204.52	W	B	d	200508	4/27/2006
NY20	8/23/2005 14:32	8/31/2005 12:25	54.61	683.2	54.61	8.1	442.34	W	B	m	200508	8/31/2006
NY20	8/31/2005 12:30	9/1/2005 12:25	40.4	551.5	40.4	2.5	101	W	A		200509	6/13/2006
NY20	9/1/2005 12:30	9/6/2005 15:00	8.89	119.4	8.89	1.5	13.34	W	A		200509	6/13/2006
NY20	9/6/2005 15:05	9/13/2005 13:55	2.29	18.3	2.29	13.8	31.55	W	A		200509	8/31/2006
NY20	9/13/2005 13:57	9/20/2005 14:00	9.65	111.9	9.65	12.9	124.51	W	A		200509	8/31/2006

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	9/20/2005 14:05	9/27/2005 15:50	29.72	349.1	29.72	4.6	136.7	W	B	200509	8/31/2006	
NY20	9/27/2005 15:52	10/4/2005 13:55	16.51	159.2	16.51	3.98	65.71	W	A	200510	8/31/2006	
NY20	10/4/2005 13:57	10/11/2005 14:50	57.91	722.3	57.91	1.6	92.66	W	A	200510	8/31/2006	
NY20	10/11/2005 14:55	10/18/2005 14:05	59.18	733.9	59.18	2.11	124.87	W	B	200510	8/31/2006	
NY20	10/18/2005 14:08	10/25/2005 13:40	39.37	494	39.37	1.9	74.8	W	A	200510	8/31/2006	
NY20	10/25/2005 13:45	11/1/2005 13:55	16.26	163.4	16.26	1.14	18.53	W	B	200511	8/31/2006	
NY20	11/1/2005 14:05	11/8/2005 14:08	30.23	357.5	30.23	4.83	145.99	W	B	200511	8/31/2006	
NY20	11/8/2005 14:13	11/15/2005 14:25	39.37	454	39.37	2.23	87.8	W	B	200511	8/31/2006	
NY20	11/15/2005 14:30	11/22/2005 14:05	40.39	485.1	40.39	3.12	126	W	B	200511	8/31/2006	
NY20	11/22/2005 14:10	11/29/2005 13:54	16.76	113.3	16.76	6.66	111.65	W	B	200511	8/31/2006	
NY20	11/29/2005 13:58	12/6/2005 14:40	44.45	511.2	44.45	2.94	130.68	W	A	200512	8/31/2006	
NY20	12/6/2005 14:43	12/13/2005 14:17	12.95	85.1	12.95	1.95	25.26	W	B	200512	8/31/2006	
NY20	12/13/2005 14:25	12/20/2005 14:15	25.4	176.1	25.4	1.4	35.56	W	B	200512	8/31/2006	
NY20	12/20/2005 14:18	12/27/2005 14:07	30.48	345.3	30.48	1.71	52.12	W	B	200512	5/22/2006	
NY20	12/27/2005 14:14	1/3/2006 14:40	13.97	150.6	13.97	6.94	96.99	W	B	200512	12/20/2006	
NY20	1/3/2006 14:45	1/10/2006 14:03	12.45	83.3	12.45	14.98	186.44	W	B	200601	12/20/2006	
NY20	1/10/2006 14:08	1/17/2006 14:08	19.56	182	19.56	3.5	68.45	W	B	200601	12/20/2006	
NY20	1/17/2006 14:11	1/24/2006 14:14	64.77	667.3	64.77	3.11	201.43	W	B	200601	12/20/2006	
NY20	1/24/2006 14:18	1/31/2006 14:12	17.53	110.3	17.53	4.16	72.91	W	A	200601	12/20/2006	
NY20	1/31/2006 14:18	2/7/2006 14:35	38.61	414.8	38.61	3.51	135.51	W	A	200602	12/20/2006	
NY20	2/7/2006 14:40	2/14/2006 14:55	2.79	3.6	2.79	30.51	85.24	W	B	200602	12/20/2006	
NY20	2/14/2006 14:57	2/21/2006 15:05	20.32	218.2	20.32	2.86	58.12	W	B	200602	12/20/2006	
NY20	2/21/2006 15:09	2/28/2006 14:18	14.48	71.5	14.48	5.25	76.01	W	B	200602	12/20/2006	
NY20	2/28/2006 14:22	3/7/2006 14:12	3.05	0	3.05	-9	-9	W	C	200603	12/20/2006	
NY20	3/7/2006 14:17	3/14/2006 13:50	30.48	318	30.48	8.16	248.72	W	A	200603	12/20/2006	
NY20	3/14/2006 13:55	3/21/2006 14:14	7.37	36.2	7.37	5.23	38.52	W	A	200603	12/20/2006	
NY20	3/21/2006 14:18	3/28/2006 14:11	0.51	0	0.51	-9	-9	W	C	200603	12/20/2006	
NY20	3/28/2006 14:12	4/4/2006 15:00	26.92	271.3	26.92	6.25	168.28	W	A	200604	6/27/2007	
NY20	4/4/2006 15:05	4/11/2006 14:10	7.87	82.1	7.87	6.15	48.43	W	A	200604	6/20/2007	
NY20	4/11/2006 14:14	4/18/2006 15:05	4.83	62.9	4.83	11.8	56.95	W	A	200604	6/20/2007	

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDDEPTH	SAMPLETYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	4/18/2006 15:08	4/25/2006 14:30	55.63	656.4	55.63	4.85	269.79	W	A	200604	6/20/2007	
NY20	4/25/2006 14:35	5/2/2006 14:30	1.78	8.7	1.78	7.9	14.05	W	B	i	200604	6/20/2007
NY20	5/2/2006 14:35	5/9/2006 14:07	11.43	121.5	11.43	4.98	56.92	W	A	200605	6/20/2007	
NY20	5/9/2006 14:09	5/16/2006 14:22	35.31	422.7	35.31	3.36	118.63	W	A	200605	6/20/2007	
NY20	5/16/2006 14:28	5/23/2006 14:15	-9	485.5	40.52	6.28	254.48	W	B	dm	200605	6/20/2007
NY20	5/23/2006 14:18	5/30/2006 15:13	7.37	90.1	7.37	7.79	57.38	W	B	d	200605	6/20/2007
NY20	5/30/2006 15:14	6/6/2006 14:14	75.18	909.8	75.18	10.01	752.59	W	B	d	200606	6/20/2007
NY20	6/6/2006 15:15	6/13/2006 15:20	16	155.8	16	4.44	71.05	W	A	200606	6/20/2007	
NY20	6/13/2006 15:25	6/20/2006 14:27	15.75	194.4	15.75	8.68	136.69	W	A	200606	6/20/2007	
NY20	6/20/2006 14:35	6/27/2006 18:08	53.59	630	53.59	4.66	249.75	W	B	d	200606	6/20/2007
NY20	6/27/2006 18:12	7/4/2006 13:40	62.48	763.1	62.48	8.08	504.87	W	A	200607	6/20/2007	
NY20	7/4/2006 13:45	7/11/2006 14:50	2.54	30.1	2.54	10.31	26.19	W	A	200607	6/20/2007	
NY20	7/11/2006 14:55	7/18/2006 14:35	46.99	568.8	46.99	3.01	141.44	W	A	200607	6/20/2007	
NY20	7/18/2006 14:59	7/25/2006 14:23	30.23	373.9	30.23	6.59	199.19	W	A	200607	6/20/2007	
NY20	7/25/2006 14:28	8/1/2006 14:35	55.12	720.6	55.12	5.15	283.86	W	B	d	200607	6/20/2007
NY20	8/1/2006 14:40	8/8/2006 15:30	5.59	65.3	5.59	9.49	53.03	W	A	200608	6/20/2007	
NY20	8/8/2006 15:35	8/15/2006 14:20	6.35	70	6.35	10.38	65.91	W	A	200608	6/20/2007	
NY20	8/15/2006 14:25	8/22/2006 15:00	10.92	127.9	10.92	9.85	107.58	W	A	200608	6/20/2007	
NY20	8/22/2006 15:05	8/29/2006 15:25	20.32	249.3	20.32	8.75	177.8	W	A	200608	6/20/2007	
NY20	8/29/2006 15:28	9/5/2006 14:15	8.13	87.1	8.13	2.34	19.02	W	A	200609	6/20/2007	
NY20	9/5/2006 14:20	9/12/2006 14:50	5.59	70	5.59	8.71	48.67	W	B	d	200609	6/20/2007
NY20	9/12/2006 14:55	9/19/2006 13:40	10.41	107.7	10.41	7.3	76.02	W	A	200609	6/20/2007	
NY20	9/19/2006 13:42	9/26/2006 14:52	10.92	135.5	10.92	6.28	68.59	W	A	200609	6/20/2007	
NY20	9/26/2006 14:55	10/3/2006 14:36	44.2	547	44.2	4.66	205.95	W	A	200609	6/20/2007	
NY20	10/3/2006 14:40	10/10/2006 15:20	6.6	78.7	6.6	1.91	12.61	W	A	200610	6/20/2007	
NY20	10/10/2006 15:20	10/17/2006 14:25	6.86	88.8	6.86	8.37	57.4	W	A	200610	6/20/2007	
NY20	10/17/2006 14:33	10/24/2006 14:15	106.68	1291.5	106.68	2.14	228.3	W	B	mh	200610	6/20/2007
NY20	10/24/2006 14:22	10/31/2006 14:55	60.45	687.5	60.45	-9	-9	W	C	mzu	200610	6/20/2007
NY20	10/31/2006 15:05	11/7/2006 14:25	1.78	11.6	1.78	9.41	16.73	W	A	200611	6/20/2007	
NY20	11/7/2006 14:32	11/14/2006 14:22	37.59	474.6	37.59	5.54	208.26	W	B	d	200611	6/20/2007

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	11/14/2006 14:27	11/21/2006 14:50	42.16	489.7	42.16	2.8	118.06	W	A	200611	6/20/2007	
NY20	11/21/2006 14:56	11/28/2006 14:20	1.02	4.9	1.02	-9	-9	W	C	200611	6/20/2007	
NY20	11/28/2006 14:25	12/5/2006 13:27	28.96	340.8	28.96	3.52	101.93	W	B	200612	6/20/2007	
NY20	12/5/2006 13:44	12/12/2006 14:28	8.13	66.8	8.13	3.74	30.4	W	A	200612	6/20/2007	
NY20	12/12/2006 14:35	12/19/2006 14:03	9.4	104.1	9.4	2.53	23.78	W	B	200612	6/20/2007	
NY20	12/19/2006 14:10	12/26/2006 14:00	48.51	500.4	48.51	1.71	82.96	W	B	200612	6/20/2007	
NY20	12/26/2006 14:08	1/2/2007 14:54	29.46	290.1	29.46	5.64	166.18	W	B	200612	6/20/2007	
NY20	1/2/2007 15:00	1/9/2007 14:12	70.36	823.3	70.36	2.92	205.72	W	A	200701	6/20/2007	
NY20	1/9/2007 14:16	1/16/2007 14:40	23.37	177.1	23.37	3.11	72.81	W	B	200701	6/20/2007	
NY20	1/16/2007 14:45	1/23/2007 14:35	6.1	28.9	6.1	3.5	21.35	W	B	200701	6/20/2007	
NY20	1/23/2007 14:40	1/30/2007 13:50	3.81	25.3	3.81	3.82	14.55	W	A	200701	6/20/2007	
NY20	1/30/2007 13:55	2/6/2007 14:30	5.59	29.5	5.59	5	27.97	W	A	200702	8/3/2007	
NY20	2/6/2007 14:35	2/13/2007 14:36	7.11	28	7.11	3.06	21.82	W	A	200702	8/3/2007	
NY20	2/13/2007 14:40	2/20/2007 14:43	-9	77.9	6.5	1.7	11.09	W	B	200702	8/3/2007	
NY20	2/20/2007 14:48	2/27/2007 14:55	4.06	23.2	4.06	6.31	25.68	W	B	200702	8/3/2007	
NY20	2/27/2007 15:00	3/6/2007 15:00	27.69	193.9	27.69	2.58	71.43	W	A	200703	8/3/2007	
NY20	3/6/2007 15:05	3/13/2007 14:35	1.27	15.1	1.27	-9	-9	W	C	200703	8/3/2007	
NY20	3/13/2007 14:40	3/20/2007 14:40	27.69	160.9	27.69	3.29	91.19	W	A	200703	8/3/2007	
NY20	3/20/2007 14:45	3/27/2007 14:40	31.75	327.2	31.75	5	158.94	W	B	200703	8/3/2007	
NY20	3/27/2007 14:44	4/3/2007 15:04	7.87	89	7.87	7.55	59.48	W	A	200703	8/3/2007	
NY20	4/3/2007 15:09	4/10/2007 14:10	-9	232	19.36	8.36	161.96	W	B	200704	8/3/2007	
NY20	4/10/2007 14:16	4/17/2007 14:45	83.06	714.2	83.06	1.94	161.88	W	B	200704	8/3/2007	
NY20	4/17/2007 14:50	4/24/2007 15:00	7.11	71.6	7.11	7.85	55.85	W	A	200704	4/17/2008	
NY20	4/24/2007 15:03	5/1/2007 14:48	13.21	142.3	13.21	14.87	196.45	W	A	200704	4/17/2008	
NY20	5/1/2007 14:52	5/8/2007 14:55	0	0	0	-9	0	D	A	200705	4/17/2008	
NY20	5/8/2007 15:00	5/15/2007 15:35	16.26	196.1	16.26	22.44	364.86	W	B	200705	4/17/2008	
NY20	5/15/2007 15:39	5/22/2007 14:25	26.16	327.1	26.16	13.61	356.14	W	B	200705	4/17/2008	
NY20	5/22/2007 14:30	5/29/2007 16:05	6.86	95.8	6.86	5.96	40.92	W	A	200705	4/17/2008	
NY20	5/29/2007 16:10	6/5/2007 14:34	3.81	48.1	3.81	7.14	27.21	W	B	200706	4/17/2008	
NY20	6/5/2007 14:38	6/12/2007 14:06	3.3	41	3.3	14.06	46.43	W	A	200706	4/17/2008	

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
			mm	ml	mm	ng/l	ng/m ²					
NY20	6/12/2007 14:10	6/19/2007 14:05	1.78	25.8	1.78	12.41	22.07	W	B	h	200706	4/17/2008
NY20	6/19/2007 14:10	6/26/2007 14:10	43.94	558.7	43.94	9.12	400.97	W	B	d	200706	4/17/2008
NY20	6/26/2007 14:15	7/3/2007 14:43	16.51	136.2	16.51	11.6	191.59	W	B	z	200706	4/17/2008
NY20	7/3/2007 14:48	7/10/2007 15:25	25.15	205.1	25.15	-9	-9	W	C	dzu	200707	4/17/2008
NY20	7/10/2007 15:30	7/17/2007 14:48	25.15	317.6	25.15	6.56	165.03	W	B	d	200707	4/17/2008
NY20	7/17/2007 14:55	7/24/2007 14:37	26.92	343	26.92	5.75	154.94	W	B	dh	200707	4/17/2008
NY20	7/24/2007 15:04	7/31/2007 13:58	7.11	102.4	7.11	17.36	123.48	W	A		200707	4/17/2008
NY20	7/31/2007 14:04	8/7/2007 16:14	5.33	65.2	5.33	17.69	94.39	W	A		200708	4/17/2008
NY20	8/7/2007 16:15	8/14/2007 16:08	12.95	142.8	12.95	4.95	64.16	W	A		200708	4/17/2008
NY20	8/14/2007 16:08	8/21/2007 14:35	7.62	66.2	7.62	8.39	63.96	W	A		200708	4/17/2008
NY20	8/21/2007 14:40	8/28/2007 14:45	3.81	39.5	3.81	17.38	66.24	W	A		200708	4/17/2008
NY20	8/28/2007 14:47	9/4/2007 15:45	0	0	0	-9	0	D	A		200709	4/17/2008
NY20	9/4/2007 15:50	9/11/2007 14:35	24.64	273.6	24.64	5.06	124.66	W	A		200709	4/17/2008
NY20	9/11/2007 14:39	9/18/2007 12:20	20.57	262.2	20.57	5.88	120.97	W	B		200709	4/17/2008
NY20	9/18/2007 12:20	9/25/2007 14:23	0.76	3.8	0.76	17.69	13.48	W	B	i	200709	4/17/2008
NY20	9/25/2007 14:25	10/2/2007 14:40	24.13	309.8	24.13	6.07	146.51	W	A		200709	4/17/2008
NY20	10/2/2007 14:47	10/9/2007 15:06	20.57	202.7	20.57	10.72	220.63	W	B	z	200710	4/17/2008
NY20	10/9/2007 15:06	10/12/2007 20:00	-9	-9	23.11	-9	-9	W	C	n	200710	9/12/2008
NY20	10/12/2007 20:00	10/16/2007 16:06	6.1	80.3	6.1	1.77	10.79	W	B	mz	200710	4/17/2008
NY20	10/16/2007 16:10	10/23/2007 20:18	70.1	843.1	70.1	3.43	240.59	W	A		200710	4/17/2008
NY20	10/23/2007 20:22	10/30/2007 15:51	35.05	445.2	35.05	2.69	94.39	W	A		200710	4/17/2008
NY20	10/30/2007 15:55	11/6/2007 16:02	13.21	161.4	13.21	-9	-9	W	C	u	200711	4/17/2008
NY20	11/6/2007 16:06	11/13/2007 15:32	-9	56.1	4.68	-9	-9	W	C	mzu	200711	4/17/2008
NY20	11/13/2007 15:36	11/20/2007 15:11	36.83	321.8	36.83	-9	-9	W	C	np	200711	9/11/2008
NY20	11/20/2007 15:11	11/27/2007 15:15	-9	-9	43.43	-9	-9	W	C	d	200712	4/17/2008
NY20	11/27/2007 15:15	12/4/2007 15:17	28.45	128.7	28.45	3.2	91.26	W	B		200712	4/17/2008
NY20	12/4/2007 15:22	12/11/2007 17:00	5.33	28.1	5.33	4.67	24.95	W	A		200712	4/17/2008
NY20	12/11/2007 17:05	12/18/2007 15:05	64.01	217.7	64.01	0.92	59.07	W	B	dz	200712	4/17/2008
NY20	12/18/2007 15:09	12/25/2007 14:50	21.08	219	21.08	2.95	62.25	W	B	z	200712	4/17/2008
NY20	12/25/2007 14:55	1/1/2008 16:10	37.85	323.4	37.85	1.46	55.4	W	A		200712	9/11/2008

SITEID	DATEON	DATEOFF	RGPPT	SVOL	SUBPPT	HGCNC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
NY20	11/14/2006 14:27	11/21/2006 14:50	42.16	489.7	42.16	2.8	118.06	W	A	200611	6/20/2007	
NY20	11/21/2006 14:56	11/28/2006 14:20	1.02	4.9	1.02	-9	-9	W	C	200611	6/20/2007	
NY20	11/28/2006 14:25	12/5/2006 13:27	28.96	340.8	28.96	3.52	101.93	W	B	200612	6/20/2007	
NY20	12/5/2006 13:44	12/12/2006 14:28	8.13	66.8	8.13	3.74	30.4	W	A	200612	6/20/2007	
NY20	12/12/2006 14:35	12/19/2006 14:03	9.4	104.1	9.4	2.53	23.78	W	B	200612	6/20/2007	
NY20	12/19/2006 14:10	12/26/2006 14:00	48.51	500.4	48.51	1.71	82.96	W	B	200612	6/20/2007	
NY20	12/26/2006 14:08	1/2/2007 14:54	29.46	290.1	29.46	5.64	166.18	W	B	200612	6/20/2007	
NY20	1/2/2007 15:00	1/9/2007 14:12	70.36	823.3	70.36	2.92	205.72	W	A	200701	6/20/2007	
NY20	1/9/2007 14:16	1/16/2007 14:40	23.37	177.1	23.37	3.11	72.81	W	B	200701	6/20/2007	
NY20	1/16/2007 14:45	1/23/2007 14:35	6.1	28.9	6.1	3.5	21.35	W	B	200701	6/20/2007	
NY20	1/23/2007 14:40	1/30/2007 13:50	3.81	25.3	3.81	3.82	14.55	W	A	200701	6/20/2007	
NY20	1/30/2007 13:55	2/6/2007 14:30	5.59	29.5	5.59	5	27.97	W	A	200702	8/3/2007	
NY20	2/6/2007 14:35	2/13/2007 14:36	7.11	28	7.11	3.06	21.82	W	A	200702	8/3/2007	
NY20	2/13/2007 14:40	2/20/2007 14:43	-9	77.9	6.5	1.7	11.09	W	B	200702	8/3/2007	
NY20	2/20/2007 14:48	2/27/2007 14:55	4.06	23.2	4.06	6.31	25.68	W	B	200702	8/3/2007	
NY20	2/27/2007 15:00	3/6/2007 15:00	27.69	193.9	27.69	2.58	71.43	W	A	200703	8/3/2007	
NY20	3/6/2007 15:05	3/13/2007 14:35	1.27	15.1	1.27	-9	-9	W	C	200703	8/3/2007	
NY20	3/13/2007 14:40	3/20/2007 14:40	27.69	160.9	27.69	3.29	91.19	W	A	200703	8/3/2007	
NY20	3/20/2007 14:45	3/27/2007 14:40	31.75	327.2	31.75	5	158.94	W	B	200703	8/3/2007	
NY20	3/27/2007 14:44	4/3/2007 15:04	7.87	89	7.87	7.55	59.48	W	A	200703	8/3/2007	
NY20	4/3/2007 15:09	4/10/2007 14:10	-9	232	19.36	8.36	161.96	W	B	200704	8/3/2007	
NY20	4/10/2007 14:16	4/17/2007 14:45	83.06	714.2	83.06	1.94	161.88	W	B	200704	8/3/2007	
NY20	4/17/2007 14:50	4/24/2007 15:00	7.11	71.6	7.11	7.85	55.85	W	A	200704	4/17/2008	
NY20	4/24/2007 15:03	5/1/2007 14:48	13.21	142.3	13.21	14.87	196.45	W	A	200704	4/17/2008	
NY20	5/1/2007 14:52	5/8/2007 14:55	0	0	0	-9	0	D	A	200705	4/17/2008	
NY20	5/8/2007 15:00	5/15/2007 15:35	16.26	196.1	16.26	22.44	364.86	W	B	200705	4/17/2008	
NY20	5/15/2007 15:39	5/22/2007 14:25	26.16	327.1	26.16	13.61	356.14	W	B	200705	4/17/2008	
NY20	5/22/2007 14:30	5/29/2007 16:05	6.86	95.8	6.86	5.96	40.92	W	A	200705	4/17/2008	
NY20	5/29/2007 16:10	6/5/2007 14:34	3.81	48.1	3.81	7.14	27.21	W	B	200706	4/17/2008	
NY20	6/5/2007 14:38	6/12/2007 14:06	3.3	41	3.3	14.06	46.43	W	A	200706	4/17/2008	

SITEID	DATEON	DATEOFF	RGPPPT	SVOL	SUBPPT	HGCCONC	HGDEP	SAMPLE TYPE	QR	NOTES	YR-MONTH	DATEMOD
			mm	ml	mm	ng/l	ng/m ²					
NY20	6/12/2007 14:10	6/19/2007 14:05	1.78	25.8	1.78	12.41	22.07	W	B	h	200706	4/17/2008
NY20	6/19/2007 14:10	6/26/2007 14:10	43.94	558.7	43.94	9.12	400.97	W	B	d	200706	4/17/2008
NY20	6/26/2007 14:15	7/3/2007 14:43	16.51	136.2	16.51	11.6	191.59	W	B	z	200706	4/17/2008
NY20	7/3/2007 14:48	7/10/2007 15:25	25.15	205.1	25.15	-9	-9	W	C	dzu	200707	4/17/2008
NY20	7/10/2007 15:30	7/17/2007 14:48	25.15	317.6	25.15	6.56	165.03	W	B	d	200707	4/17/2008
NY20	7/17/2007 14:55	7/24/2007 14:37	26.92	343	26.92	5.75	154.94	W	B	dh	200707	4/17/2008
NY20	7/24/2007 15:04	7/31/2007 13:58	7.11	102.4	7.11	17.36	123.48	W	A		200707	4/17/2008
NY20	7/31/2007 14:04	8/7/2007 16:14	5.33	65.2	5.33	17.69	94.39	W	A		200708	4/17/2008
NY20	8/7/2007 16:15	8/14/2007 16:08	12.95	142.8	12.95	4.95	64.16	W	A		200708	4/17/2008
NY20	8/14/2007 16:08	8/21/2007 14:35	7.62	66.2	7.62	8.39	63.96	W	A		200708	4/17/2008
NY20	8/21/2007 14:40	8/28/2007 14:45	3.81	39.5	3.81	17.38	66.24	W	A		200708	4/17/2008
NY20	8/28/2007 14:47	9/4/2007 15:45	0	0	0	-9	0	D	A		200709	4/17/2008
NY20	9/4/2007 15:50	9/11/2007 14:35	24.64	273.6	24.64	5.06	124.66	W	A		200709	4/17/2008
NY20	9/11/2007 14:39	9/18/2007 12:20	20.57	262.2	20.57	5.88	120.97	W	B		200709	4/17/2008
NY20	9/18/2007 12:20	9/25/2007 14:23	0.76	3.8	0.76	17.69	13.48	W	B	i	200709	4/17/2008
NY20	9/25/2007 14:25	10/2/2007 14:40	24.13	309.8	24.13	6.07	146.51	W	A		200709	4/17/2008
NY20	10/2/2007 14:47	10/9/2007 15:06	20.57	202.7	20.57	10.72	220.63	W	B	z	200710	4/17/2008
NY20	10/9/2007 15:06	10/12/2007 20:00	-9	-9	23.11	-9	-9	W	C	n	200710	9/12/2008
NY20	10/12/2007 20:00	10/16/2007 16:06	6.1	80.3	6.1	1.77	10.79	W	B	mz	200710	4/17/2008
NY20	10/16/2007 16:10	10/23/2007 20:18	70.1	843.1	70.1	3.43	240.59	W	A		200710	4/17/2008
NY20	10/23/2007 20:22	10/30/2007 15:51	35.05	445.2	35.05	2.69	94.39	W	A		200710	4/17/2008
NY20	10/30/2007 15:55	11/6/2007 16:02	13.21	161.4	13.21	-9	-9	W	C	u	200711	4/17/2008
NY20	11/6/2007 16:06	11/13/2007 15:32	-9	56.1	4.68	-9	-9	W	C	mzu	200711	4/17/2008
NY20	11/13/2007 15:36	11/20/2007 15:11	36.83	321.8	36.83	-9	-9	W	C	np	200711	9/11/2008
NY20	11/20/2007 15:11	11/27/2007 15:15	-9	-9	43.43	-9	-9	W	C	d	200712	4/17/2008
NY20	11/27/2007 15:15	12/4/2007 15:17	28.45	128.7	28.45	3.2	91.26	W	B		200712	4/17/2008
NY20	12/4/2007 15:22	12/11/2007 17:00	5.33	28.1	5.33	4.67	24.95	W	A		200712	4/17/2008
NY20	12/11/2007 17:05	12/18/2007 15:05	64.01	217.7	64.01	0.92	59.07	W	B	dz	200712	4/17/2008
NY20	12/18/2007 15:09	12/25/2007 14:50	21.08	219	21.08	2.95	62.25	W	B	z	200712	4/17/2008
NY20	12/25/2007 14:55	1/1/2008 16:10	37.85	323.4	37.85	1.46	55.4	W	A		200712	9/11/2008

**MERCURY DEPOSITION IN THE
ADIRONDACK REGION OF NEW YORK**

FINAL REPORT

**STATE OF NEW YORK
DAVID A. PATERSON, GOVERNOR**

**NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
VINCENT A. DEIORIO, Esq., CHAIRMAN
FRANCIS J. MURRAY, Jr., PRESIDENT AND CHIEF EXECUTIVE OFFICER**

