

**New York City Department of Environmental Protection
Bureau of Water Supply**

**WWTP Water Quality Sampling Monitoring Semiannual Report
(January 1 – June 30, 2018)**

September 2018

*Prepared in accordance with Section 6.2 of the NYSDOH
2017 Filtration Avoidance Determination*



Prepared by: DEP, Bureau of Water Supply

Introduction

The attached computer output was prepared in accordance with DEP's 2017 Long-term Watershed Protection Program and NYSDOH's 2017 Filtration Avoidance Determination. It reports the results of DEP's monitoring of all New York City-owned wastewater treatment plants (WWTPs) and all non-City-owned WWTPs discharging in the Catskill and Delaware (CAT/DEL) watersheds from January 1, 2018 through June 30, 2018.

The City's WWTP Compliance and Inspection Program is described in Section 2.5.2 of the *New York City Department of Environmental Protection Long-Term Watershed Protection Plan* (December 2016).

The computer output is divided into four tables. The first table, a subset of the second table, lists all of the DEP samples that contravened State Pollutant Discharge Elimination System (SPDES) limits. The second table shows the results by sample date of a comparison between effluent concentrations in DEP's samples with the limits for the corresponding parameters in the SPDES permits that are currently on file with DEP. The third table has the data qualifiers. The fourth table is a listing of the raw data for all samples collected in this half year period. Note that DEP's samples are surveillance, not regulatory samples, and single samples that exceed limits may not constitute a true SPDES violation.

The fourth table of this report is simply an output of the raw data and, as such, includes coding conventions where applicable. Parameters not detected in the effluent are indicated with a "<" sign and the detection limit. For example, <0.20 in the NH3 column means that the total ammonia concentration in the effluent was less than the detection limit of 0.20 mgL⁻¹. Errors occurring in the field or in the lab are noted by "Error". Fcoli code E means estimated.

This report mainly tabulates effluent data; however, influent data are included as the first entry in Table 3 for the five plants that require percent removal calculations (Grand Gorge, Pine Hill, Tannersville, Grahamsville, and Margaretville).

Table 1. DEP samples that contravened SPDES limits January - June 2018.

Catskill System:

Facility	Date	Parameter	Daily Measurement	SPDES Limit
Grand Gorge	05JUN18	Ammonia	32.2*	1.3 mgL ⁻¹
Grand Gorge	05JUN18	Ammonia	31.6*	1.3 mgL ⁻¹
Grand Gorge	05JUN18	Susp. Solids	111*	10 mgL ⁻¹
Trailside at Hunter LLC	15MAR18	CBOD	5.5	5 mgL ⁻¹
Mountain View Estates	22FEB18	Phosphorus	1.48	1.0 mgL ⁻¹
Mountain View Estates	27JUN18	pH	6.37	6.5 - 8.5
Pine Hill	02JAN18	Ammonia	2.50	2.20 mgL ⁻¹
Tannersville	02JAN18	Ammonia	2.83	2.20 mgL ⁻¹

Delaware System:

Facility	Date	Parameter	Daily Measurement	SPDES Limit
Denver Sewer Corp.	10JAN18	Ammonia	1.37	1.30 mgL ⁻¹

* Please see attached letter

Table 2. Results of the comparison of effluent concentrations in DEP's samples with the limits of SPDES permits January - June 2018.

Catskill System:

Ashland WTP

date	Parameter	SPDES Violation	SPDES Limit
11JAN18		no violations	
14FEB18		no violations	
08MAR18		no violations	
05APR18		no violations	
03MAY18		no violations	
07JUN18		no violations	

Boiceville WWTP

date	Parameter	SPDES Violation	SPDES Limit
11JAN18		no violations	
15FEB18		no violations	
14MAR18		no violations	
12APR18		no violations	
10MAY18		no violations	
14JUN18		no violations	

Camp Machne Tashbar - seasonal facility

date	Parameter	SPDES Violation	SPDES Limit
27JUN18		no violations	

Elka Park Association (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
08FEB18		no violations	
15MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	

Elka Park Association (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
06JUN18		no violations	

Grand Gorge (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		no violations	
03JAN18		no violations	
16JAN18		no violations	
17JAN18		no violations	
06FEB18		no violations	
07FEB18		no violations	
20FEB18		no violations	
21FEB18		no violations	
07MAR18		no violations	
08MAR18		no violations	
20MAR18		no violations	
21MAR18		no violations	
03APR18		no violations	
04APR18		no violations	
17APR18		no violations	
18APR18		no violations	
01MAY18		no violations	
02MAY18		no violations	
15MAY18		no violations	
16MAY18		no violations	

Grand Gorge (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
05JUN18	Ammonia	32.2*	1.3 mgL ⁻¹
05JUN18	Ammonia	31.6*	1.3 mgL ⁻¹
05JUN18	Susp.Solids	111*	10 mgL ⁻¹
06JUN18		no violations	
07JUN18		no violations	
19JUN18		no violations	
20JUN18		no violations	

Grand Gorge--% removals

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		% removals okay	
16JAN18		% removals okay	
06FEB18		% removals okay	
20FEB18		% removals okay	
07MAR18		% removals okay	
20MAR18		% removals okay	
03APR18		% removals okay	
17APR18		% removals okay	
01MAY18		% removals okay	
15MAY18		% removals okay	
05JUN18		% removals okay	

Grand Gorge--% removals - continued

date	Parameter	SPDES Violation	SPDES Limit
07JUN18		% removals okay	
19JUN18		% removals okay	

Trailside at Hunter LLC (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
27FEB18		no violations	
28FEB18		no violations	
15MAR18	CBOD	5.5	5 mgL ⁻¹
11APR18		no violations	
16MAY18		no violations	
23MAY18		no violations	
30MAY18		no violations	

Trailside at Hunter LLC (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
06JUN18		no violations	

Hunter (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
23JAN18		no violations	
08FEB18		no violations	
11APR18		no violations	
16APR18		no violations	
16MAY18		no violations	

Hunter (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
06JUN18		no violations	

Mountain View Estates

date	Parameter	SPDES Violation	SPDES Limit
31JAN18		no violations	
22FEB18	Phosphorus	1.48	1.0 mgL ⁻¹
11APR18		no violations	
16MAY18		no violations	
27JUN18	pH	6.37	6.5 - 8.5

Olive Woods LLC (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
11JAN18		no violations	
15FEB18		no violations	
14MAR18		no violations	
12APR18		no violations	
10MAY18		no violations	

Olive Woods LLC (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
14JUN18		no violations	

Oorah Catskill Retreat - seasonal facility

date	Parameter	SPDES Violation	SPDES Limit
27JUN18		no violations	

Pine Hill (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
02JAN18	Ammonia	2.50	2.20 mgL ⁻¹
03JAN18		no violations	
09JAN18		no violations	
16JAN18		no violations	
17JAN18		no violations	
23JAN18		no violations	
30JAN18		no violations	
06FEB18		no violations	
07FEB18		no violations	
20FEB18		no violations	
21FEB18		no violations	
07MAR18		no violations	

Pine Hill (winter limits) - continued

date	Parameter	SPDES Violation	SPDES Limit
08MAR18		no violations	
20MAR18		no violations	
21MAR18		no violations	
03APR18		no violations	
04APR18		no violations	
17APR18		no violations	
18APR18		no violations	
01MAY18		no violations	
02MAY18		no violations	
15MAY18		no violations	
16MAY18		no violations	

Pine Hill (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
05JUN18		no violations	
06JUN18		no violations	
19JUN18		no violations	
20JUN18		no violations	

Pine Hill--% removals

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		% removals okay	
16JAN18		% removals okay	
06FEB18		% removals okay	
20FEB18		% removals okay	
07MAR18		% removals okay	
20MAR18		% removals okay	
03APR18		% removals okay	
17APR18		% removals okay	
01MAY18		% removals okay	
15MAY18		% removals okay	
05JUN18		% removals okay	
19JUN18		% removals okay	

Prattsville WTP

date	Parameter	SPDES Violation	SPDES Limit
11JAN18		no violations	
23JAN18		no violations	
14FEB18		no violations	
08MAR18		no violations	

Prattsville WTP - continued

date	Parameter	SPDES Violation	SPDES Limit
05APR18		no violations	
15APR18		no violations	
03MAY18		no violations	
07JUN18		no violations	

Tannersville (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
02JAN18	Ammonia	2.83	2.20 mgL ⁻¹
03JAN18		no violations	
09JAN18		no violations	
16JAN18		no violations	
17JAN18		no violations	
23JAN18		no violations	
30JAN18		no violations	
06FEB18		no violations	
07FEB18		no violations	
20FEB18		no violations	
21FEB18		no violations	
22FEB18		no violations	
07MAR18		no violations	
08MAR18		no violations	
20MAR18		no violations	
21MAR18		no violations	
03APR18		no violations	
04APR18		no violations	
17APR18		no violations	
18APR18		no violations	
01MAY18		no violations	
02MAY18		no violations	
15MAY18		no violations	
16MAY18		no violations	

Tannersville (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
05JUN18		no violations	
06JUN18		no violations	
19JUN18		no violations	
20JUN18		no violations	

Tannersville--% removals

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		% removals okay	
16JAN18		% removals okay	
06FEB18		% removals okay	
20FEB18		% removals okay	
07MAR18		% removals okay	
20MAR18		% removals okay	
03APR18		% removals okay	
17APR18		% removals okay	
01MAY18		% removals okay	
15MAY18		% removals okay	
05JUN18		% removals okay	
19JUN18		% removals okay	

Windham (winter limits)

date	Parameter	SPDES Violation	SPDES Limit
11JAN18		no violations	
14FEB18		no violations	
21FEB18		no violations	
08MAR18		no violations	
05APR18		no violations	
03MAY18		no violations	
21MAY18		no violations	

Windham (summer limits)

date	Parameter	SPDES Violation	SPDES Limit
07JUN18		no violations	

Delaware System:

Andes

date	Parameter	SPDES Violation	SPDES Limit
24JAN18		no violations	
14FEB18		no violations	
20MAR18		no violations	
28MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	
13JUN18		no violations	
27JUN18		no violations	

Delhi WWTP

date	Parameter	SPDES Violation	SPDES Limit
24JAN18		no violations	
14FEB18		no violations	
27FEB18		no violations	
28MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	
13JUN18		no violations	

Fleischmanns WWTP

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
21FEB18		no violations	
14MAR18		no violations	
20MAR18		no violations	
04APR18		no violations	
02MAY18		no violations	
06JUN18		no violations	
27JUN18		no violations	

Grahamsville WWTP

date	Parameter	SPDES Violation	SPDES Limit
03JAN18		no violations	
18JAN18		no violations	
07FEB18		no violations	
06MAR18		no violations	
26MAR18		no violations	

Grahamsville WWTP - continued

date	Parameter	SPDES Violation	SPDES Limit
04APR18		no violations	
02MAY18		no violations	
22MAY18		no violations	
30MAY18		no violations	
06JUN18		no violations	

Grahamsville WWTP--% removals

date	Parameter	SPDES Violation	SPDES Limit
03JAN18		% removals okay	
07FEB18		% removals okay	
06MAR18		% removals okay	
04APR18		% removals okay	
02MAY18		% removals okay	
06JUN18		% removals okay	

Hanah Country Inn and Golf Resort

date	Parameter	SPDES Violation	SPDES Limit
24JAN18		no violations	
14FEB18		no violations	
28MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	
13JUN18		no violations	

Hobart

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
21FEB18		no violations	
14MAR18		no violations	
04APR18		no violations	
02MAY18		no violations	
06JUN18		no violations	

Margaretville

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		no violations	
03JAN18		no violations	
16JAN18		no violations	
17JAN18		no violations	
06FEB18		no violations	
07FEB18		no violations	
20FEB18		no violations	
21FEB18		no violations	
07MAR18		no violations	
08MAR18		no violations	
20MAR18		no violations	
21MAR18		no violations	
03APR18		no violations	
04APR18		no violations	
17APR18		no violations	
18APR18		no violations	
01MAY18		no violations	
02MAY18		no violations	
15MAY18		no violations	
16MAY18		no violations	
05JUN18		no violations	
06JUN18		no violations	
19JUN18		no violations	
20JUN18		no violations	

Margaretville--% removals

date	Parameter	SPDES Violation	SPDES Limit
02JAN18		% removals okay	
16JAN18		% removals okay	
06FEB18		% removals okay	
20FEB18		% removals okay	
07MAR18		% removals okay	
20MAR18		% removals okay	
03APR18		% removals okay	
17APR18		% removals okay	
01MAY18		% removals okay	
15MAY18		% removals okay	
05JUN18		% removals okay	
19JUN18		% removals okay	

Mountainside Farms Inc.

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
30JAN18		no violations	

Mountainside Farms Inc. - continued

date	Parameter	SPDES Violation	SPDES Limit
21FEB18		no violations	
14MAR18		no violations	
04APR18		no violations	
02MAY18		no violations	
21MAY18		no violations	
06JUN18		no violations	

Denver Sewer Corp.

date	Parameter	SPDES Violation	SPDES Limit
10JAN18	Ammonia	1.37	1.30 mgL ⁻¹
21FEB18		no violations	
14MAR18		no violations	
04APR18		no violations	
02MAY18		no violations	
06JUN18		no violations	

Stamford WWTP

date	Parameter	SPDES Violation	SPDES Limit
10JAN18		no violations	
21FEB18		no violations	
14MAR18		no violations	
28MAR18		no violations	
04APR18		no violations	
02MAY18		no violations	
06JUN18		no violations	
18JUN18		no violations	

Walton WWTP

date	Parameter	SPDES Violation	SPDES Limit
24JAN18		no violations	
14FEB18		no violations	
27FEB18		no violations	
28MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	
13JUN18		no violations	

Robert W. Harold Campus

date	Parameter	SPDES Violation	SPDES Limit
24JAN18		no violations	
14FEB18		no violations	
27FEB18		no violations	
28MAR18		no violations	
11APR18		no violations	
09MAY18		no violations	
13JUN18		no violations	

Clear Pool Camp

date	Parameter	SPDES Violation	SPDES Limit
15FEB18		no violations	
04JUN18		no violations	
12JUN18		no violations	
18JUN18		no violations	

Camp L'Man A'Chai - seasonal facility

date	Parameter	SPDES Violation	SPDES Limit
27JUN18		no violations	

Table 3. Data Qualifiers

Site	Analyte	Date	Sample ID	Qualifier
Ashland WTP	Phosphorus, Total (as P)	01/11/18	K-1800120-03	Data reanalyzed due to result above calibration range.
Boiceville WTP	pH	02/15/18	K-1800568-02	The duplicate analysis was not within the control limits.
CLEAR POOL CAMP	pH	02/15/18	E-1800525-01	The duplicate analysis was not within the control limits.
CLEAR POOL CAMP	Phosphorus, Total (as P)	06/04/18	E-1801798-03	This sample is associated with a duplicate result that was above the high calibrant. The duplicate result was calculated using an extrapolated value. .
CLEAR POOL CAMP	Phosphorus, Total (as P)	06/04/18	E-1801798-03	This sample is associated with a spiked sample result that was above the high calibrant. The spike recovery was calculated using an extrapolated value.
CLEAR POOL CAMP	CBOD	06/04/18	E-1801798-03	QC failed. GGA-QC LIMIT.
CLEAR POOL CAMP	pH	06/18/18	E-1802224-02	Analytical procedure error. CK6 performed after the first sample. .
CLEAR POOL CAMP	Solids, Total Suspended	06/18/18	E-1802224-02	The end-of-run LOQ was not within 50-150%.
CLEAR POOL CAMP	CBOD	06/18/18	E-1802224-02	This sample is associated with a dilution water blank that has a DO uptake of >0.2 mg/L.
CWDB	Ammonia (as NH3)	01/24/18	G-1800109-01	This sample is associated with a method blank that is above the LOQ.
CWDB	Turbidity	01/24/18	G-1800109-01	Data was manually entered due to computer issues.
CWDB	Solids, Total Dissolved	02/14/18	G-1800491-01	Ship and storage temp failure. USPS did not deliver samples in a timely manner. Samples exceeded temperature acceptance criteria. Samples recollected. .
DCD	MBAS	01/10/18	G-1800045-04	Laboratory Error. Incorrect test was requested for sample. TDS was analyzed as opposed to MBAS. .
DCD	MBAS	01/30/18	G-1800373-01	Sample frozen with visible ice crystals.
DCD	Nitrate (as N)	02/21/18	G-1800600-04	This sample is associated with an equipment blank that is greater than two times the LOQ.
DCD	Nitrate (as N)	03/14/18	G-1800778-04	Data reanalyzed due to result above calibration range.
DCD	Chloride	03/14/18	G-1800778-04	Data reanalyzed due to result above calibration range.
DCD	Nitrate (as N)	04/04/18	G-1801173-04	Data reanalyzed due to result above calibration range.
DCD	Nitrate (as N)	05/02/18	G-1801505-04	Data reanalyzed due to result above calibration range.
DCD	Chloride	05/02/18	G-1801505-04	Data reanalyzed due to result above calibration range.
DCD	Nitrate (as N)	05/02/18	G-1801505-04	Data reanalyzed due to result above calibration range.
DCD	MBAS	05/02/18	G-1801505-04	Analysis omitted deliberately. Contrac lab sent incorrect sample bottle. Sample recollected 5/21/18. .
DCD	Nitrate (as N)	06/06/18	G-1802005-04	This sample is not filtered within 15 minutes of sample collection.
DCD	Chloride	06/06/18	G-1802005-04	This sample is not filtered within 15 minutes of sample collection.
DTP	Ammonia (as NH3)	01/24/18	G-1800109-02	This sample is associated with a method blank that is above the LOQ.
DTP	Turbidity	01/24/18	G-1800109-02	Data was manually entered due to computer issues.
DTP	Total Kjeldahl Nitrogen	02/14/18	G-1800491-02	Ship and storage temp failure. USPS did not deliver samples in a timely manner. Samples exceeded temperature acceptance criteria. Samples recollected. .
DTP	Total Kjeldahl Nitrogen	02/27/18	G-1800721-02	Sample required dilution due to matrix.
DTP	Total Kjeldahl Nitrogen	03/28/18	G-1800949-02	Sample required dilution due to matrix.
Elka Park	Phosphorus, Total (as P)	02/08/18	K-1800454-02	This sample is associated with a spiked sample result that was above the high calibrant. The spike recovery was calculated using an extrapolated value.
Elka Park	Temperature	02/08/18	K-1800454-02	The duplicate analysis was not within the control limits.
Elka Park	Phosphorus, Total (as P)	02/08/18	K-1800454-02	Data reanalyzed due to result above calibration range.
Elka Park	Phosphorus, Total (as P)	04/11/18	K-1801292-02	Data reanalyzed due to result above calibration range.
Elka Park	Phosphorus, Total (as P)	05/09/18	K-1801658-01	Data reanalyzed due to result above calibration range.
Elka Park	Phosphorus, Total (as P)	06/06/18	K-1802024-02	Data reanalyzed due to result above calibration range.
EPE	Solids, Total Suspended	01/16/18	K-1800015-12	The end-of-run LOQ was not within 50-150%.
EPE	Ammonia (as NH3)	01/23/18	K-1800198-02	This sample is associated with a method blank that is above the LOQ.
EPE	Ammonia (as NH3)	01/30/18	K-1800292-02	This sample is associated with a method blank that is above the LOQ.
EPEG	Coliform, Fecal	04/04/18	K-1800967-08	Sample received with insufficient head space.
EPR	Solids, Total Suspended	01/16/18	K-1800015-07	The end-of-run LOQ was not within 50-150%.
HCITP	Phosphorus, Total (as P)	04/11/18	G-1801280-05	Data reanalyzed due to result above calibration range.
HCITP	Phosphorus, Total (as P)	06/13/18	G-1802041-05	This sample is associated with a spiked sample result that was above the high calibrant. The spike recovery was calculated using an extrapolated value.
HCITP	Phosphorus, Total (as P)	06/13/18	G-1802041-05	Data reanalyzed due to result above calibration range.
Hunter WTP	pH	01/23/18	K-1800287-02	QC failed. field check 7 failed.
MSC	Solids, Total Suspended	01/16/18	K-1800015-10	The end-of-run LOQ was not within 50-150%.
MSC	Coliform, Fecal	04/04/18	K-1800967-11	Sample received with insufficient head space.
MSR	Solids, Total Suspended	01/16/18	K-1800015-09	The end-of-run LOQ was not within 50-150%.
Mt View TC	Phosphorus, Total (as P)	01/31/18	K-1800391-02	This sample is associated with a spiked sample result that was above the high calibrant. The spike recovery was calculated using an extrapolated value.
Mt View TC	Ammonia (as NH3)	01/31/18	K-1800391-02	This sample is associated with a method blank that is above the LOQ.
Mt View TC	Phosphorus, Total (as P)	02/22/18	K-1800671-01	Data reanalyzed due to result above calibration range.
Mt View TC	Phosphorus, Total (as P)	05/16/18	K-1801764-02	Data reanalyzed due to result above calibration range.
PANDE	Ammonia (as NH3)	01/24/18	G-1800109-03	This sample is associated with a method blank that is above the LOQ.
PANDE	Turbidity	01/24/18	G-1800109-03	Data was manually entered due to computer issues.
PANDE	Solids, Settleable	03/28/18	G-1800949-03	Method requires 1,000 mL sample volume; sample volume was 950 mL
Prattville WTP	Total Kjeldahl Nitrogen	01/11/18	K-1800120-02	The spike analysis was not within the control limits. Matrix Spike 2 Recovery= 71%; LCL=90%.
Prattville WTP	Total Kjeldahl Nitrogen	01/11/18	K-1800120-02	The duplicate analysis was not within the control limits. Matrix Spike Duplicate 2 RPD=21%; LCL=10%.
Prattville WTP	Total Kjeldahl Nitrogen	01/11/18	K-1800120-02	The spike analysis was not within the control limits. Matrix Spike Duplicate 2 Recovery= 88%; LCL=90%.
Prattville WTP	pH	01/23/18	K-1800287-01	QC failed. field check 7 failed.
Prattville WTP	Dissolved Oxygen	03/08/18	K-1800822-02	The duplicate analysis was not within the control limits.
Prattville WTP	Temperature	03/08/18	K-1800822-02	The duplicate analysis was not within the control limits.
Prattville WTP	Total Kjeldahl Nitrogen	04/05/18	K-1801194-02	The spike analysis was not within the control limits. MS Yield=89%, LCL=90%.
Prattville WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-02	The spike analysis was not within the control limits. MSD1 Yield= 43%; LCL= 90%.
Prattville WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-02	The duplicate analysis was not within the control limits. MSD1 RPD= 38; Limit= 10.
Prattville WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-02	The spike analysis was not within the control limits. MS1 Yield= 29%; LCL= 90%.
Prattville WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-02	The spike analysis was not within the control limits. MS2 Yield= -2.25%; LCL= 90%.
Prattville WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-02	The spike analysis was not within the control limits. MSD2 Yield= -2.20%; LCL= 90%.
SGE	Solids, Total Suspended	01/16/18	K-1800015-05	The end-of-run LOQ was not within 50-150%.
SGE	Phosphorus, Total (as P)	01/16/18	K-1800015-05	This sample is associated with a spiked sample result that was above the high calibrant. The spike recovery was calculated using an extrapolated value.
SGE	Nitrate/Nitrite (as N)	04/17/18	K-1801176-05	This sample is not filtered within 15 minutes of sample collection.
SGE	Ammonia (as NH3)	06/05/18	K-1801760-05	Data reanalyzed due to result above calibration range.
SGE	Phosphorus, Total (as P)	06/05/18	K-1801760-05	Anomalous Result. Suspected sampling error.
SGE	Solids, Total Suspended	06/05/18	K-1801760-05	Anomalous Result. Suspected sampling error.
SGE	CBOD	06/05/18	K-1801760-05	Anomalous Result; suspected sampling error.
SGE	Ammonia (as NH3)	06/05/18	K-1801760-05	Anomalous Result. Suspected sampling error.
SGE	Ammonia (as NH3)	06/05/18	K-1801760-05B	Anomalous Result. Suspected sampling error.
SGE	Ammonia (as NH3)	06/05/18	K-1801760-05A	Original extrapolated result was more than 2x lower than the diluted sample result. Reran sample to confirm.
SGE	Ammonia (as NH3)	06/05/18	K-1801760-05A	Anomalous Result. Suspected sampling error.
SGE	Ammonia (as NH3)	06/07/18	K-1802083-02	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	CBOD	06/07/18	K-1802083-02	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	Solids, Total Suspended	06/07/18	K-1802083-02	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	Phosphorus, Total (as P)	06/07/18	K-1802083-02	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGEG	Coliform, Fecal	04/04/18	K-1800967-06	Sample received with insufficient head space.
SGR	Solids, Total Suspended	01/16/18	K-1800015-04	The end-of-run LOQ was not within 50-150%.
SGR	Solids, Total Suspended	06/05/18	K-1801760-04	Anomalous Result. Suspected sampling error.
SGR	CBOD	06/05/18	K-1801760-04	Anomalous Result; suspected sampling error.
SGR	Solids, Total Suspended	06/07/18	K-1802083-01	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGR	CBOD	06/07/18	K-1802083-01	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
STE	Solids, Total Suspended	01/16/18	K-1800015-02	The end-of-run LOQ was not within 50-150%.
STE	Ammonia (as NH3)	01/23/18	K-1800198-01	This sample is associated with a method blank that is above the LOQ.
STE	Ammonia (as NH3)	01/30/18	K-1800292-01	This sample is associated with a method blank that is above the LOQ.
STEG	Coliform, Fecal	04/04/18	K-1800967-03	Sample received with insufficient head space.
STR	Solids, Total Suspended	01/16/18	K-1800015-01	The end-of-run LOQ was not within 50-150%.
Windham WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-01	The spike analysis was not within the control limits. MSD1 Yield= 43%; LCL= 90%.
Windham WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-01	The duplicate analysis was not within the control limits. MSD1 RPD= 38; Limit= 10.
Windham WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-01	The spike analysis was not within the control limits. MS1 Yield= 29%; LCL= 90%.
Windham WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-01	The spike analysis was not within the control limits. MS2 Yield= -2.25%; LCL= 90%.
Windham WTP	Total Kjeldahl Nitrogen	06/07/18	K-1801967-01	The spike analysis was not within the control limits. MSD2 Yield= -2.20%; LCL= 90%.
WSP	Ammonia (as NH3)	01/24/18	G-1800109-04	This sample is associated with a method blank that is above the LOQ.
WSP	Ammonia (as NH3)	01/24/18	G-1800109-04	Data reanalyzed due to result above calibration range.
WSP	Turbidity	01/24/18	G-1800109-04	Data was manually entered due to computer issues.
WSP	Turbidity	01/24/18	G-1800109-04	The duplicate analysis was not within the control limits.
WSP	Total Kjeldahl Nitrogen	02/14/18	G-1800491-04	Ship and storage temp failure. USPS did not deliver samples in a timely manner. Samples exceeded temperature acceptance criteria. Samples recollected. .
WSP	Ammonia (as NH3)	04/11/18	G-1801280-04	Data reanalyzed due to result above calibration range.

Catskill System

Table 4. Raw Data for CAT/DEL WWTP effluent samples collected January - June 2018. Influent data (*) is included for the five plants that require percent removal calculations (Grand Gorge, Pine Hill, Tannersville, Grahamsville, and Margaretville).

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Ashland WTP	2018-01-11		<3.0			10.6	<1	0.64		6.35	<0.1	<1.0		9.8	332	0.15			
Ashland WTP	2018-02-14	0.009	<3.0			10.9	<1	1.07		6.46	<0.1	<1.1		6.9	37	<0.1			
Ashland WTP	2018-03-08	0.006	<3.0			8.6	<1	0.61		6.50	<0.1	<1.0		11.1	119	0.10			
Ashland WTP	2018-04-05	0.009	<3.0			10.8	<1	1.85		6.28	<0.1	<1.0		5.9	38	<0.1			
Ashland WTP	2018-05-03		<3.0			9.5	<1	0.27		6.48	<0.1	<1.0		12.4	45	0.10			
Ashland WTP	2018-06-07	0.0008	<3.0			9.6	<1	<0.20		6.43	<0.1	<1.0		13.2	10	<0.1			
Boiceville WTP	2018-01-11	0.018		<3.0		11.0	<1	<0.20		7.36	<0.1	<1.0		12.6	41	0.15			
Boiceville WTP	2018-01-11			<3.0				<0.20				<1.0			39				
Boiceville WTP	2018-02-15	0.027		<3.0		11.3	<1	0.29		7.24	<0.1	<1.0		10.6	32	0.20			
Boiceville WTP	2018-03-14	0.018		<3.0		10.8	<1	<0.20		7.78	<0.1	<1.0		11.8	32	0.15			
Boiceville WTP	2018-04-12			<3.0		10.4	<1	<0.20		7.81	<0.1	<1.0		13.9	43	0.30			
Boiceville WTP	2018-05-10			<3.0		10.1	<1	<0.20		8.40	<0.1	<1.0		16.7	57	0.25			
Boiceville WTP	2018-06-14	0.018		<3.0		9.4	<1	<0.20		8.44	<0.1	<1.0		20.0	126	0.35			
Camp Machne Tashbar	2018-06-27			<3.0		8.5	<1	<0.20		7.45	<0.1	<1.0	<0.05	19.2	5	0.25			
Elka Park	2018-01-10	0		<3.0		11.2	<1	<0.20		7.10	<0.1	<1.0		8.1	173	0.15			
Elka Park	2018-02-08	0.0008		<3.0		10.4	<1	0.30		6.73	<0.1	<1.0		10.5	219	0.15			
Elka Park	2018-03-15			<3.0		10.3	<1	<0.20		6.80	<0.1	<1.0		9.0	176	0.10			
Elka Park	2018-04-11	0.002		<3.0		10.0	<1	<0.20		7.62	<0.1	<1.0		11.4	201	0.10			
Elka Park	2018-05-09			<3.0		10.4	<1	<0.20		7.55	<0.1	<1.0		11.4	233	0.10			
Elka Park	2018-06-06			<3.0		9.5	E6	<0.20		7.55	<0.1	<1.0		14.1	218	0.30			
Grand Gorge*	2018-01-02			118								209							
Grand Gorge	2018-01-02			<3.0				<0.20				<1.0			6				
Grand Gorge*	2018-01-16			41.1								73.5							
Grand Gorge	2018-01-03						<1												
Grand Gorge	2018-01-16			<3.0				<0.20				<1.0			121				
Grand Gorge	2018-01-17						<1												
Grand Gorge*	2018-02-06			95.2								77.0							
Grand Gorge	2018-02-06			<3.0				<0.20				<1.0			6				
Grand Gorge	2018-02-07						<1												
Grand Gorge*	2018-02-20			54.2								53.0							
Grand Gorge	2018-02-20			<3.0				<0.20				<1.0			5				
Grand Gorge	2018-02-21						<1												
Grand Gorge*	2018-03-07			47.8								60.5							
Grand Gorge	2018-03-07			<3.0				<0.20				<1.0			6				
Grand Gorge	2018-03-08						<1												
Grand Gorge*	2018-03-20			108								93.7							
Grand Gorge	2018-03-20			<3.0				<0.20				<1.0			6				
Grand Gorge	2018-03-21						<1												

Catskill System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Grand Gorge*	2018-04-03			36.4								30.6							
Grand Gorge	2018-04-03			<3.0				<0.20				<1.1			6				
Grand Gorge	2018-04-04						<1												
Grand Gorge*	2018-04-17			21.8								27.3							
Grand Gorge	2018-04-17			<3.0				<0.20				<1.1			9				
Grand Gorge	2018-04-18						<1												
Grand Gorge*	2018-05-01			46.2								40.6							
Grand Gorge	2018-05-01			<3.0				<0.20				<1.0			6				
Grand Gorge	2018-05-02						<1												
Grand Gorge*	2018-05-15			57.1								64.2							
Grand Gorge	2018-05-15			<3.0				<0.20				<1.0			13				
Grand Gorge	2018-05-16						<1												
Grand Gorge*	2018-06-05			122				31.6				111			29				
Grand Gorge	2018-06-05			<3.0								<1.0							
Grand Gorge	2018-06-05							32.2											
Grand Gorge	2018-06-06						<1												
Grand Gorge*	2018-06-07			94.4								78.6							
Grand Gorge	2018-06-07			<3.0				<0.20				<1.1			30				
Grand Gorge*	2018-06-19			128								160							
Grand Gorge	2018-06-19			<3.0				<0.20				<1.1			34				
Grand Gorge	2018-06-20						<1												
Trailside at Hunter LLC	2018-02-27									7.45				7.2		0.95			
Trailside at Hunter LLC	2018-02-28	0.043		4.2		10.5	<1	<0.20		7.05	<0.1	3.6	<0.05	7.8	179	2.0			
Trailside at Hunter LLC	2018-03-15			<3.0		10.3	<1	<0.20		6.73	<0.1	1.3	<0.05	5.0	50	0.65			
Trailside at Hunter LLC	2018-03-15			5.5				<0.20				4.6	<0.05		80				
Trailside at Hunter LLC	2018-04-11	0.006		<3.0		10.2	<1	<0.20		6.86	<0.1	<1.0	<0.05	7.7	19	0.30			
Trailside at Hunter LLC	2018-05-16	0.0157		<3.0		7.5	<1	<0.20		6.97	<0.1	<1.0	<0.05	16.6	20	0.25			
Trailside at Hunter LLC	2018-05-23									7.29				16.2		0.10			
Trailside at Hunter LLC	2018-05-30															0.30			
Trailside at Hunter LLC	2018-06-06			<3.0		8.2	<1	<0.20		6.83	<0.1	<1.0	<0.05	17.6	13	0.15			
Hunter WTP	2018-01-10	0.08	<3.0			12.5	<1	<0.20		6.53	<0.1	<1.0	0.05	5.0	15	0.20			
Hunter WTP	2018-01-23													6.5		0.25			
Hunter WTP	2018-02-08		<3.0			12.6	<1	0.27		6.41	<0.1	<1.1	<0.05	4.1	12	0.20			
Hunter WTP	2018-02-08		<3.0					<0.20				<1.1	<0.05		13				
Hunter WTP	2018-04-11	0.08	<3.0			11.6	<1	<0.20		6.66	<0.1	<1.0	<0.05	6.6	17	0.15			
Hunter WTP	2018-04-16									6.59				6.6		0.15			
Hunter WTP	2018-05-16		<3.0			9.9	<1	<0.20		6.50	<0.1	<1.0	<0.05	13.3	24	0.30			
Hunter WTP	2018-06-06	0.082	<3.0			9.3	<1	<0.20		6.47	<0.1	<1.0	0.18	15.5	11	0.10			

Catskill System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Mountain View Estates	2018-01-31			<3.0		9.9	<1	<0.20		7.22	<0.1	<1.0		14.1	165	0.20			
Mountain View Estates	2018-02-22			<3.0		10.0	<1	<0.20		8.23	<0.1	<1.0		15.7	1480	0.15			
Mountain View Estates	2018-04-11			<3.0		9.7	<1	<0.20		7.00	<0.1	<1.0		15.2	70	0.10			
Mountain View Estates	2018-05-16			<3.0		8.6	<1	<0.20		6.90	0.1	1.0		21.1	194	0.60			
Mountain View Estates	2018-06-27			<3.0		8.2	<1	<0.20		6.37	<0.1	<1.0		21.1	26	0.25			
Olive Woods	2018-01-11			<3.0		11.2	<1	<0.20		7.70	<0.1	<1.1		10.2	187	0.10			
Olive Woods	2018-02-15	0.0008		<3.0		11.1	<1	1.31		7.41	<0.1	<1.0		9.8	20	0.10			
Olive Woods	2018-03-14	0.0016		<3.0		10.8	<1	<0.20		7.41	<0.1	<1.0		10.0	6	<0.1			
Olive Woods	2018-04-12	0.001		<3.0		10.8	<1	0.23		7.81	<0.1	<1.0		10.4	9	0.10			
Olive Woods	2018-05-10			<3.0		9.9	<1	<0.20		7.82	<0.1	<1.0		15.4	9	0.30			
Olive Woods	2018-06-14	0.0003		<3.0		9.0	<1	<0.20		7.92	<0.1	<1.0		18.6	16	0.10			
Oorah Catskill Retreat	2018-06-27			<3.0		9.4	<1	<0.20		7.65	<0.1	<1.0		14.9	649	0.15			
Pine Hill*	2018-01-02		110									200							
Pine Hill	2018-01-02		<3.0					2.50				<1.1			17				
Pine Hill	2018-01-03						<1												
Pine Hill	2018-01-09							<0.20											
Pine Hill*	2018-01-16		59.9									67.3							
Pine Hill	2018-01-16		<3.0					0.64				<1.1			25				
Pine Hill	2018-01-17						<1												
Pine Hill	2018-01-23							0.95											
Pine Hill	2018-01-30							<0.20											
Pine Hill*	2018-02-06		81.6									152							
Pine Hill	2018-02-06		<3.0					0.58				<1.0			37				
Pine Hill	2018-02-07						<1												
Pine Hill*	2018-02-20		80.0									63.6							
Pine Hill	2018-02-20		<3.0					1.19				<1.1			38				
Pine Hill	2018-02-21						<1												
Pine Hill*	2018-03-07		90.8									152							
Pine Hill	2018-03-07		<3.0					<0.20				<1.1			42				
Pine Hill	2018-03-08						<1												
Pine Hill*	2018-03-20		129									152							
Pine Hill	2018-03-20		<3.0					<0.20				<1.1			54				
Pine Hill	2018-03-21						<1												
Pine Hill*	2018-04-03		28.1									36.6							
Pine Hill	2018-04-03		<3.0					<0.20				<1.0			46				
Pine Hill	2018-04-04						<1												
Pine Hill*	2018-04-17		39.4									15.5							
Pine Hill	2018-04-17		<3.0					<0.20				<1.1			42				
Pine Hill	2018-04-18						<1												
Pine Hill*	2018-05-01		45.0									29.1							
Pine Hill	2018-05-01		<3.0					<0.20				<1.1			13				

Catskill System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Pine Hill	2018-05-02						<1												
Pine Hill*	2018-05-15		117									150							
Pine Hill	2018-05-15		<3.0					<0.20				<1.1			21				
Pine Hill	2018-05-16						<1												
Pine Hill*	2018-06-05		76.4									119							
Pine Hill	2018-06-05		<3.0					<0.20				<1.1			14				
Pine Hill	2018-06-06						<1												
Pine Hill*	2018-06-19		118									313							
Pine Hill	2018-06-19		<3.0					<0.20				<1.1			11				
Pine Hill	2018-06-20						<1												
Prattsville WTP	2018-01-11			<3.0								<1.0			47				0.8
Prattsville WTP	2018-01-11	0.016		<3.0		9.1	<1			7.07	<0.1	<1.0		12.6	42	0.10			0.82
Prattsville WTP	2018-01-23													11.8		0.15			
Prattsville WTP	2018-02-14	0.015		<3.0		8.7	<1			6.88	<0.1	<1.0		11.8	39	0.10			1.4
Prattsville WTP	2018-03-08	0.016		<3.0		8.1	<1			6.71	<0.1	<1.0		11.2	29	0.10			1.3
Prattsville WTP	2018-04-05	0.016		<3.0		7.3	<1			6.95	<0.1	<1.0		11.1	31	0.10			1.7
Prattsville WTP	2018-04-16									7.03				10.8		0.10			
Prattsville WTP	2018-05-03	0.015		<3.0		7.3	<1			6.86	<0.1	<1.0		12.6	33	0.10			1.2
Prattsville WTP	2018-06-07	0.018		<3.0		6.1	<1			6.99	<0.1	<1.0		15.4	34	0.10			1.2
Tannersville*	2018-01-02			95.2								77.6							
Tannersville	2018-01-02			<3.0				2.83				<1.1			32				
Tannersville	2018-01-03						<1												
Tannersville	2018-01-09							<0.20											
Tannersville*	2018-01-16			44.1								50.0							
Tannersville	2018-01-16			<3.0				0.38				<1.1			8				
Tannersville	2018-01-17						<1												
Tannersville	2018-01-23							1.61											
Tannersville	2018-01-30							<0.20											
Tannersville*	2018-02-06			84.4								71.0							
Tannersville	2018-02-06			<3.0				0.22				<1.1			13				
Tannersville	2018-02-07						<1												
Tannersville*	2018-02-20			69.2								49.0							
Tannersville	2018-02-20			<3.0				<0.20				<1.0			8				
Tannersville	2018-02-21						420												
Tannersville	2018-02-22						<1												
Tannersville*	2018-03-07			67.6								61.1							
Tannersville	2018-03-07			<3.0				<0.20				<1.1			7				
Tannersville	2018-03-08						<1												
Tannersville*	2018-03-20			68.8								58.2							
Tannersville	2018-03-20			<3.0				<0.20				<1.1			11				

Catskill System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Tannersville	2018-03-21						<1												
Tannersville*	2018-04-03			51.8								50.6							
Tannersville	2018-04-03			<3.0				<0.20				<1.1		6					
Tannersville	2018-04-04						<1												
Tannersville*	2018-04-17			22.8								21.0							
Tannersville	2018-04-17			<3.0				<0.20				<1.0		7					
Tannersville	2018-04-18						<1												
Tannersville*	2018-05-01			32.8								30.2							
Tannersville	2018-05-01			<3.0				<0.20				<1.1		9					
Tannersville	2018-05-02						<1												
Tannersville*	2018-05-15			98.4								92.6							
Tannersville	2018-05-15			<3.0				<0.20				<1.0		42					
Tannersville	2018-05-16						<1												
Tannersville*	2018-06-05			116								133							
Tannersville	2018-06-05			<3.0				<0.20				<1.1		61					
Tannersville	2018-06-06						<1												
Tannersville*	2018-06-19			148								331							
Tannersville	2018-06-19			<3.0				<0.20				<1.1		64					
Tannersville	2018-06-20						<1												
Windham WTP	2018-01-11		3.6									<1.2	<0.04	7					
Windham WTP	2018-01-11		<3.0			11.7	<1			6.57	<0.1	<1.0	<0.04	6.7	6	0.45			
Windham WTP	2018-02-14	0.252	<3.0			12.1	<1			6.64	<0.1	<1.0	<0.05	6.4	10	0.20			
Windham WTP	2018-02-21									6.33				7.8		0.15			
Windham WTP	2018-03-08	0.283	<3.0			11.3	<1			6.59	<0.1	<1.1	<0.05	6.9	6	0.15			
Windham WTP	2018-04-05	0.401	<3.0			11.9	<1			6.75	<0.1	<1.1	<0.05	5.7	17	0.70			
Windham WTP	2018-05-03	0.251	<3.0			11.1	<1			6.94	<0.1	<1.0	<0.05	10.4	10	0.20			
Windham WTP	2018-05-21									6.64				12.4		0.40			
Windham WTP	2018-06-07	0.179		<3.0		10.1	<1	<0.20		6.95	<0.1	5.6	<0.05	14.4	29	0.45			0.82

Delaware System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Andes	2018-01-24	0.0766	<3.0			11.4	<1	<0.20		7.52	<0.1	<1.1		6.7	11	0.10			
Andes	2018-02-14	0.065	<3.0			12.2	<1	<0.20		7.41	<0.1	<1.1		7.1	9	0.20			
Andes	2018-03-20									7.48				7.8		0.10			
Andes	2018-03-28	0.051	<3.0			11.0	<1	<0.20		7.22	<0.1	<1.0		8.3	7	<0.1			
Andes	2018-04-11	0.057	<3.0			11.2	<1	<0.20		7.72	<0.1	<1.0		8.2	9	0.30			
Andes	2018-05-09	0.042	<3.0			10.5	<1	<0.20		7.54	<0.1	<1.0		11.8	11	0.45			
Andes	2018-06-13	0.032	<3.0			9.2	<1	<0.20		7.74	<0.1	<1.0		15.9	19	0.55			
Andes	2018-06-27									7.58				16.6		0.10			
Camp L'Man A'Chai	2018-06-27			<3.0		8.7	<1	0.32		7.14	<0.1	<1.0		18.0	317	0.30			
CLEAR POOL CAMP	2018-02-15			<3.0		8.9	<1	<0.20		7.82	<0.1	<1.0		18.7	68				
CLEAR POOL CAMP	2018-06-04					7.7	<1	0.21		8.45	<0.1	<1.0		26.0	126				
CLEAR POOL CAMP	2018-06-12			<3.0															
CLEAR POOL CAMP	2018-06-18			<3.0		8.0	<1	<0.20		8.07	<0.1	<1.0		26.8	32				
Delhi	2018-01-24	0.807		<3.0		9.4	<1	<0.20		7.46	<0.1	<1.0	<0.04	12.9	17	0.65			0.29
Delhi	2018-02-14	0.542		<3.0		10.5	<1	<0.20		7.30	<0.1	<1.1	<0.04	11.4	15	0.20			
Delhi	2018-02-27	0.684																	<0.4
Delhi	2018-03-28	0.547		<3.0		8.3	<1	<0.20		7.31	<0.1	<1.0	<0.04	15.2	21	0.45			<0.2
Delhi	2018-04-11	0.628		<3.0		8.5	<1	<0.20		7.57	<0.1	<1.0	<0.04	15.2	17	0.30			0.41
Delhi	2018-05-09	0.652		<3.0		7.5	<1	<0.20		7.40	<0.1	<1.0	<0.04	19.3	15	0.50			<0.2
Delhi	2018-06-13	0.593		<3.0		6.5	<1	<0.20		7.65	<0.1	<1.0	0.04	23.2	29	0.70			<0.2
Denver Sewer Corp.	2018-01-10	0.007		3.2		12.1	<1	1.37		7.16	<0.1	<1.0	<0.04	4.2	50	0.40			
Denver Sewer Corp.	2018-02-21	0.016		3.4		11.1	43	<0.20		7.24	<0.1	<1.1	<0.04	6.2	46	<0.1			
Denver Sewer Corp.	2018-03-14	0.014		<3.0		11.5	<1	<0.20		7.50	<0.1	<1.1	<0.04	4.3	41	0.10			
Denver Sewer Corp.	2018-04-04	0.024		<3.0		11.6	<1	<0.20		7.60	<0.1	<1.0	<0.04	5.8	48	0.35			
Denver Sewer Corp.	2018-05-02	0.023		<3.0		10.8	<1	<0.20		7.60	<0.1	<1.0	<0.04	8.6	53	0.10			
Denver Sewer Corp.	2018-06-06	0.008		<3.0		9.0	<1	<0.20		7.37	<0.1	<1.0	<0.04	14.1	62	0.40			
Fleischmanns	2018-01-10	0.02		<3.0		12.5	<1	0.31		7.21	<0.1	<1.0	<0.04	5.5	10	0.20			
Fleischmanns	2018-02-21	0.041		<3.0		12.6	<1	<0.20		6.84	<0.1	<1.0	<0.04	6.4	7	0.20			
Fleischmanns	2018-03-14	0.036		<3.0		11.8	<1	<0.20		7.30	<0.1	<1.0	<0.04	6.1	8	0.25			
Fleischmanns	2018-03-20									7.22				5.3		0.45			
Fleischmanns	2018-04-04			<3.0		11.5	<1	<0.20		7.04	<0.1	<1.0	<0.04	7.0	11	0.25			
Fleischmanns	2018-05-02	0.412		<3.0		13.0	<1	<0.20		7.13	<0.1	<1.0	<0.04	8.1	9	0.15			
Fleischmanns	2018-06-06	0.041		<3.0		9.4	<1	<0.20		7.05	<0.1	<1.0	<0.04	14.9	14	0.20			
Fleischmanns	2018-06-27									7.11				15.8		0.10			
Grahamsville*	2018-01-03			110								57.7							
Grahamsville	2018-01-03			<3.0			<1	<0.20				<1.1			14				
Grahamsville	2018-01-18									7.32				9.3		0.10			
Grahamsville*	2018-02-07			121								128							
Grahamsville	2018-02-07			<3.0			<1	<0.20				<1.1			20				
Grahamsville*	2018-03-06			108								114							
Grahamsville	2018-03-06			<3.0			<1	<0.20				<1.1			27				

Delaware System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Grahamsville	2018-03-26									7.32				10.1		0.10			
Grahamsville*	2018-04-04			59.7								64.5							
Grahamsville	2018-04-04			<3.0			<1	<0.20				<1.0			19				
Grahamsville*	2018-05-02			100								142							
Grahamsville	2018-05-02			<3.0			<1	<0.20				<1.1			25				
Grahamsville	2018-05-22									7.49				14.5		0.10			
Grahamsville	2018-05-30									7.54				16.5		0.10			
Grahamsville*	2018-06-06			182								151							
Grahamsville	2018-06-06			<3.0			<1	<0.20				<1.1			33				
Hanah Country Inn and Golf Resort	2018-01-24	0.0016				8.0				7.26		4.0		5.9	196				
Hanah Country Inn and Golf Resort	2018-02-14	0.004				7.1				7.05		3.4		5.2	194				
Hanah Country Inn and Golf Resort	2018-03-28	0.005				11.0				7.14		1.6		4.2	194				
Hanah Country Inn and Golf Resort	2018-04-11	0.003				9.1				7.48		2.2		4.5	411				
Hanah Country Inn and Golf Resort	2018-05-09	0.003				9.6				6.93		2.2		10.7	179				
Hanah Country Inn and Golf Resort	2018-06-13	0.003				3.2				6.84		7.4		15.3	848				
Hobart	2018-01-10	0.092		<3.0		10.1	<1	<0.20		6.68	<0.1	<1.1		10.9	13	0.15			
Hobart	2018-02-21	0.085		<3.0		8.5	<1	<0.20		6.45	<0.1	<1.1		11.1	8	0.10			
Hobart	2018-03-14	0.093		<3.0		7.8	<1	<0.20		6.51	<0.1	<1.0		11.1	12	0.25		680	
Hobart	2018-04-04	0.126		<3.0		9.5	<1	<0.20		6.64	<0.1	<1.1		10.2	18	0.60			
Hobart	2018-05-02	0.125		<3.0		8.0	<1	<0.20		6.69	<0.1	<1.1		12.3	10	0.15		430	
Hobart	2018-06-06	0.102		<3.0		7.9	<1	<0.20		6.60	<0.1	<1.0		16.6	16	0.10			
Margaretville*	2018-01-02			129								187							
Margaretville	2018-01-02			<3.0				<0.20				<1.1			37				
Margaretville	2018-01-03						<1												
Margaretville*	2018-01-16			101								112							
Margaretville	2018-01-16			<3.0				<0.20				<1.0			40				
Margaretville	2018-01-17						<1												
Margaretville*	2018-02-06			102								184							
Margaretville	2018-02-06			<3.0				<0.20				<1.1			36				
Margaretville	2018-02-07						<1												
Margaretville*	2018-02-20			103								106							
Margaretville	2018-02-20			<3.0				<0.20				<1.1			41				
Margaretville	2018-02-21						<1												
Margaretville*	2018-03-07			68.2								107							
Margaretville	2018-03-07			<3.0				<0.20				<1.1			44				
Margaretville	2018-03-08						<1												
Margaretville*	2018-03-20			159								239							
Margaretville	2018-03-20			<3.0				<0.20				<1.0			44				
Margaretville	2018-03-21						<1												

Delaware System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Margaretville*	2018-04-03			142								300							
Margaretville	2018-04-03			<3.0				<0.20				<1.0			41				
Margaretville	2018-04-04						<1												
Margaretville*	2018-04-17			95.3								89.0							
Margaretville	2018-04-17			<3.0				<0.20				<1.1			35				
Margaretville	2018-04-18						<1												
Margaretville*	2018-05-01			79.2								105							
Margaretville	2018-05-01			<3.0				<0.20				<1.1			35				
Margaretville	2018-05-02						<1												
Margaretville*	2018-05-15			106								84.5							
Margaretville	2018-05-15			<3.0				<0.20				<1.0			53				
Margaretville	2018-05-16						<1												
Margaretville*	2018-06-05			226								585							
Margaretville	2018-06-05			<3.0				0.51				<1.0			64				
Margaretville	2018-06-06						<1												
Margaretville*	2018-06-19			182								114							
Margaretville	2018-06-19			<3.0				<0.20				<1.1			85				
Margaretville	2018-06-20						<1												
Mountainside Farms	2018-01-10	0.05	<3.0		528	8.8			5.34	7.51		6.0		16.6	119	1.4			
Mountainside Farms	2018-01-30	0.064																<0.1	
Mountainside Farms	2018-02-21	0.048	<3.0		216	7.7			10.50	7.58		<1.0		21.2	17	0.25		<0.1	
Mountainside Farms	2018-03-14	0.058	<3.0		371	8.4			9.10	7.58		<1.1		15.5	16	0.80		<0.1	
Mountainside Farms	2018-04-04	0.055	<3.0		371	8.2			12.58	7.54		<1.0		19.3	19	0.35		<0.1	
Mountainside Farms	2018-05-02	0.054	<3.0		297	7.6			18.68	7.55		<1.0		22.1	16	0.45			
Mountainside Farms	2018-05-21	0.023																<0.1	
Mountainside Farms	2018-06-06	0.065	<3.0		331	7.6			9.58	7.44		<1.0		25.4	17	0.35		<0.1	
Robert W. Harold Campus	2018-01-24	0.0073		<3.0		7.1	<1	0.29		6.94	<0.1	<1.0		15.3	51	0.35		1200	
Robert W. Harold Campus	2018-02-14	0.006		<3.0		7.2	<1	<0.20		6.90	<0.1	<1.0		19.3	86	0.25			
Robert W. Harold Campus	2018-02-27	0.004																1100	
Robert W. Harold Campus	2018-03-28	0.001		<3.0		8.2	<1	<0.20		7.45	<0.1	<1.1		11.8	94	0.25		1700	
Robert W. Harold Campus	2018-04-11	0.004		<3.0		5.9	<1	1.73		7.08	<0.1	<1.0		15.0	138	0.35		1200	
Robert W. Harold Campus	2018-05-09	0.004		<3.0		5.3	<1	0.20		7.08	<0.1	<1.1		16.8	94	0.20		850	
Robert W. Harold Campus	2018-06-13	0.003		<3.0		6.1	<1	<0.20		7.34	<0.1	<1.1		21.0	166	0.50		1200	
Stamford	2018-01-10	0.215		3.3		11.1	<1	<0.20		6.70	<0.1	<1.1	<0.04	8.8	10	0.55			0.64
Stamford	2018-02-21	0.618		<3.0		11.0	<1	<0.20		6.73	<0.1	<1.1	<0.04	8.4	5	<0.1			0.27
Stamford	2018-03-14	0.361		3.9		11.3	<1	<0.20		6.58	<0.1	<1.1	<0.04	7.3	6	0.10			0.33
Stamford	2018-03-28									6.56				6.6		0.10			
Stamford	2018-04-04	0.787		<3.0		11.2	E1	<0.20		6.59	<0.1	<1.1	<0.04	7.9	8	0.95			0.68
Stamford	2018-05-02	0.668		3.4		10.9	<1	<0.20		6.76	<0.1	<1.0	<0.04	10.6	6	0.30			0.35
Stamford	2018-06-06	0.214		3.1		9.9	E1	<0.20		6.34	<0.1	<1.1	<0.04	14.4	8	0.30			0.48
Stamford	2018-06-18									6.67				15.7		0.20			

Delaware System

PLANT	SAMPDATE	FLOW	BOD5	CBOD5	CL	DO	FCOLI	NH3	NO3	PH	SETSLDS	SUSPSLDS	TCREFF	TEMP	TP	TURB	MBAS	TDS	TKN
Walton	2018-01-24	1.7081		4.7		9.8	<1	14.6		7.25	<0.1	<1.1	<0.04	11.9	14	0.70			12
Walton	2018-02-14	1.478		<3.0		10.3	<1	<0.20		7.12	<0.1	<1.0	<0.04	12.2	12	0.20			
Walton	2018-02-27	2.014																	0.67
Walton	2018-03-28	1.408		<3.0		9.6	<1	<0.20		7.25	<0.1	<1.0	<0.04	14.1	11	0.10			0.93
Walton	2018-04-11	1.18		<3.0		11.0	<1	13.2		7.21	<0.1	<1.0	<0.04	8.5	6	0.55			13
Walton	2018-05-09	1.562		<3.0		9.5	<1	0.23		7.30	<0.1	<1.0	<0.04	15.9	6	0.35			0.94
Walton	2018-06-13	1.304		<3.0		8.5	<1	<0.20		7.65	<0.1	<1.0	<0.04	20.3	7	0.60			0.88



Vincent Saplenza, P.E.
Commissioner

Paul V. Rush, P.E.
Deputy Commissioner
Bureau of Water Supply
prush@dep.nyc.gov

71 Smith Avenue
Kingston, NY 12401
T: (845) 340-7800
F: (845) 340-7175

To: Erik Coddington, Deputy Chief, Wastewater Operations

From: Kirsten Askildsen, Section Chief, BWS

Date: July 09, 2018

Re: MOR Data Submission – Grand Gorge WWTP June 2018

Report No.: C18-65KGN

.....
Attached are the analytical results, qualifiers, and methods for the Grand Gorge Wastewater Treatment Plant for the month of June 2018. The test results in this report meet all NELAP requirements for parameters for which accreditation are required or available.

Operations was notified on June 6, 2018, the laboratory observed the samples received did not appear to represent SGR and SGE as the raw sample did not have solids and had no color while the effluent sample had solids and a brown color. Another sample collection was completed on June 7, 2018. All are reported here.

If there are any questions regarding this information, please contact Michelle Rissolo, Technical Director, Kingston Laboratory (ELAP # 10030 - NELAP Recognized), 71 Smith Avenue, Kingston, NY 12401, 845-340-7714.

The full report contains 6 pages, including this cover memo.

K. Askildsen
Kirsten Askildsen, Chief, BWS

7/9/2018
Date

KA:nel

- cc: A. Bader
- K. Askildsen
- A. Reaves
- E. Wentz
- K. Taylor
- P. LaFiandra
- J. Broderick
- M. Burd
- M. Rissolo
- File



BWS Watershed Water Quality Operations

Wastewater Treatment Plant Monthly Operations Report

Samples collected during June, 2018
 Kingston Laboratory, ELAP Lab ID No. 10030
 71 Smith Ave, Kingston, NY, 12401

Lab Director: Kirsten Askildsen
 845-340-7713

Grand Gorge Wastewater Treatment Plant

Site	Sample Description	ID
SGR	Composite sample collected from 06/05/18 09:00 to 06/05/18 15:00	K-1801760-04
Analyte	Result	Qualifying Code
CBOD (mg/L)	<3.0	OOS-B
Solids, Total Suspended (mg/L)	<1.0	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
SGE	Composite sample collected from 06/05/18 09:00 to 06/05/18 15:00	K-1801760-05
Analyte	Result	Qualifying Code
Ammonia (as NH3) (mg/L)	14.7	OOS-A
CBOD (mg/L)	122	OOS-B
Phosphorus, Total (as P) (mg/L)	0.029	OOS-B
Solids, Total Suspended (mg/L)	111	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
SGE	Composite sample collected from 06/05/18 09:00 to 06/05/18 15:00	K-1801760-05A
Analyte	Result	Qualifying Code
Ammonia (as NH3) (mg/L)	31.6	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
SGE	Composite sample collected from 06/05/18 09:00 to 06/05/18 15:00	K-1801760-05B
Analyte	Result	Qualifying Code
Ammonia (as NH3) (mg/L)	32.2	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
SGEG	Grab sample Collected on 06/06/18 at 09:00	K-1801760-06
Analyte	Result	Qualifying Code
Coliform, Fecal (FC/100mL)	<1	
		Analyzed At
		NYC DEP Kingston Lab (10030)
SGR	Composite sample collected from 06/07/18 09:00 to 06/07/18 15:00	K-1802083-01
Analyte	Result	Qualifying Code
CBOD (mg/L)	94.4	OOS-B
Solids, Total Suspended (mg/L)	78.6	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
SGE	Composite sample collected from 06/07/18 09:00 to 06/07/18 15:00	K-1802083-02
Analyte	Result	Qualifying Code
Ammonia (as NH3) (mg/L)	<0.20	OOS-B
CBOD (mg/L)	<3.0	OOS-B
Phosphorus, Total (as P) (mg/L)	0.030	OOS-B
Solids, Total Suspended (mg/L)	<1.1	OOS-B
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
SGR	Composite sample collected from 06/19/18 09:00 to 06/19/18 15:00	K-1802002-04
Analyte	Result	Qualifying Code
CBOD (mg/L)	128	
Solids, Total Suspended (mg/L)	160	
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
SGE	Composite sample collected from 06/19/18 09:00 to 06/19/18 15:00	K-1802002-05
Analyte	Result	Qualifying Code
Ammonia (as NH3) (mg/L)	<0.20	
CBOD (mg/L)	<3.0	
Phosphorus, Total (as P) (mg/L)	0.034	
Solids, Total Suspended (mg/L)	<1.1	
		Analyzed At
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)
		NYC DEP Kingston Lab (10030)

This data report shall not be reproduced except in full without approval of the Laboratory Director.
 Results relate only to the samples received.

Report Printed on
 07/06/2018
 1:42:00 pm

All results that fall within the scope of the NELAP program meet that program's requirements unless stated in the qualifiers section printed at the end of this report. OOS-B qualifying code refers to analysis Out of Specification due to QC or other analysis criteria. OOS-A data has been rejected by laboratory due to QC or other analysis criteria. Details of all QC for the data reported are available upon request. Contact the Laboratory Director as needed. **Data considered provisional.



BWS Watershed Water Quality Operations Wastewater Treatment Plant Monthly Operations Report

Samples collected during June, 2018
Kingston Laboratory, ELAP Lab ID No. 10030
71 Smith Ave, Kingston, NY, 12401

Lab Director: Kirsten Askildsen
845-340-7713

Site: SGEG	Grab sample Collected on 06/20/18 at 09:06	ID: K-1802002-06
Analyte Coliform, Fecal (FC/100mL)	Result <1	Qualifying Code Analyzed At NYC DEP Kingston Lab (10030)

This data report shall not be reproduced except in full without approval of the Laboratory Director.
Results relate only to the samples received.

Report Printed on
07/06/2018
1:42:00 pm

All results that fall within the scope of the NELAP program meet that program's requirements unless stated in the qualifiers section printed at the end of this report. **OOS-B** qualifying code refers to analysis Out of Specification due to QC or other analysis criteria. **OOS-A** data has been rejected by laboratory due to QC or other analysis criteria. Details of all QC for the data reported are available upon request. Contact the Laboratory Director as needed. **Data considered provisional.



BWS Watershed Water Quality Operations

Wastewater Treatment Plant Monthly Operations Report

Samples collected during June, 2018
 Kingston Laboratory, ELAP Lab ID No. 10030
 71 Smith Ave, Kingston, NY, 12401

Lab Director: Kirsten Askildsen
 845-340-7713

Key to Data Qualifiers

Site	Date	Sample ID	Analyte	Qualifier
SGR	06/05/2018	K-1801760-04	CBOD	Anomalous Result; suspected sampling error.
SGR	06/05/2018	K-1801760-04	TSS	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05	NH3	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05	TP	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05	CBOD	Anomalous Result; suspected sampling error.
SGE	06/05/2018	K-1801760-05	TSS	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05	NH3	Data reanalyzed due to result above calibration range.
SGE	06/05/2018	K-1801760-05A	NH3	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05B	NH3	Anomalous Result. Suspected sampling error.
SGE	06/05/2018	K-1801760-05B	NH3	Original extrapolated result was more than 2x lower than the diluted sample result. Reran sample to confirm.
SGR	06/07/2018	K-1802083-01	TSS	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGR	06/07/2018	K-1802083-01	CBOD	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	06/07/2018	K-1802083-02	TSS	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	06/07/2018	K-1802083-02	NH3	Sample delivered on wet ice; sample cooling could not be verified upon receipt.
SGE	06/07/2018	K-1802083-02	TP	Sample delivered on wet ice; sample cooling could not be verified upon receipt.

This data report shall not be reproduced except in full without approval of the Laboratory Director.
 Results relate only to the samples received.

Report Printed on
 07/06/2018
 1:42:00 pm

All results that fall within the scope of the NELAP program meet that program's requirements unless stated in the qualifiers section printed at the end of this report. **OOS-B** qualifying code refers to analysis Out of Specification due to QC or other analysis criteria. **OOS-A** data has been rejected by laboratory due to QC or other analysis criteria. Details of all QC for the data reported are available upon request. Contact the Laboratory Director as needed. ****Data considered provisional.**



BWS Watershed Water Quality Operations

Wastewater Treatment Plant Monthly Operations Report

Samples collected during June, 2018
Kingston Laboratory, ELAP Lab ID No. 10030
71 Smith Ave, Kingston, NY, 12401

Lab Director: Kirsten Askildsen
845-340-7713

SGE 06/07/2018 K-1802083-02 CBOD Sample delivered on wet ice; sample cooling could not be verified upon receipt.

Sample results between 10 and 20 times the limit of quantitation may be associated with a method blank that is greater than one-tenth the sample level.

This data report shall not be reproduced except in full without approval of the Laboratory Director.
Results relate only to the samples received.

Report Printed on
07/06/2018
1:42:00 pm

All results that fall within the scope of the NELAP program meet that program's requirements unless stated in the qualifiers section printed at the end of this report. **OOS-B** qualifying code refers to analysis Out of Specification due to QC or other analysis criteria. **OOS-A** data has been rejected by laboratory due to QC or other analysis criteria. Details of all QC for the data reported are available upon request. Contact the Laboratory Director as needed. ****Data considered provisional.**

Page 4 of 5



BWS Watershed Water Quality Operations

Wastewater Treatment Plant Monthly Operations Report

Samples collected during June, 2018
Kingston Laboratory, ELAP Lab ID No. 10030
71 Smith Ave, Kingston, NY, 12401

Lab Director: Kirsten Askildsen
845-340-7713

Analytical Methods Used

Analyte	Method
Ammonia (as NH ₃)	SM4500-NH ₃ B (97): Lachat 10-107-06-1-B, 27 August 2001
CBOD	SM 5210B-2011
Coliform, Fecal	SM 9222D-2006
Solids, Total Suspended	SM 2540D-2011
Phosphorus, Total (as P)	Lachat 10-115-01-1-F, rev. 5 December 2007

This data report shall not be reproduced except in full without approval of the Laboratory Director.
Results relate only to the samples received.

All results that fall within the scope of the NELAP program meet that program's requirements unless stated in the qualifiers section printed at the end of this report. **OOS-B** qualifying code refers to analysis Out of Specification due to QC or other analysis criteria. **OOS-A** data has been rejected by laboratory due to QC or other analysis criteria. Details of all QC for the data reported are available upon request. Contact the Laboratory Director as needed. ****Data considered provisional.**

Report Printed on
07/06/2018
1:42:00 pm

Page 5 of 5