November 17, 2017

Mr. Kuruvilla Powathil
Acting Director, Consultant Management Bureau
NYS Dept. of Transportation
POD # 33
50 Wolf Road
Albany, NY 12232

Attention: Mr. Tony Palumbo

Re: PIN HMFR.00.301
New York Air National Guard Base, Stewart International Airport
Newburgh, Orange County, New York
Recreation Pond Pre-Design Investigation

Dear Mr. Palumbo:

The following letter report summarizes the procedures and results of the pre-design investigation (PDI) activities conducted July through September 2017 at Recreation Pond by HDR Engineering, Inc. (HDR) on behalf of New York State. Sampling was conducted in accordance with HDR's approved scope of work dated July 5, 2017.

Background

Previous investigations of the source(s) of poly- and perfluorinated alkyl substances (PFASs) encountered in Lake Washington, a drinking water supply reservoir for the City of Newburgh, revealed the presence of high concentrations of PFASs in Recreation Pond. Recreation Pond, a retention pond located immediately south of the New York Air National Guard Base (ANG) (see Figure 1 – Site Location), receives runoff from the site property via three permitted outfalls (Outfalls 2, 3, and A). Outfall 2 collects surface water from the western portion of the ANG base, which consists of the Kilo and Juliet Ramps, a maintenance hanger, and fuel storage (two aboveground storage tanks in the northeast corner of the site). Outfall 3 collects water from the eastern portion of the ANG base, which includes the remainder of the ANG facilities and parking areas. Outfall A, also referred to as Outfall 14, is a curtain drain located along the western boundary of the ANG base with Stewart International Airport (SWF). A fourth outfall that collects drainage from the watershed located on the north side of Route 17K also drains to Recreation Pond; this outfall was included in the PDI program to estimate the contribution from the upstream watershed and evaluate if diversion is warranted. Note the 17K Outfall is not permitted, sampled or monitored so there is no other letter or

number designation associated with it. Recreation Pond discharges to Silver Stream (via a weir, also known as Outfall 10), which eventually leads to Lake Washington. Recreation Pond and the above-described drainage areas and outfalls are shown on Figure 2 – Site Layout.

Due to the high concentrations of PFASs encountered in Recreation Pond during an initial site investigation by NYSDEC and the relationship of the Pond to Lake Washington, the NYSDEC recommended a treatment system be designed for the Pond. HDR was tasked with conducting a PDI that would aid in the development of the treatment system design and included a bathymetric survey, the collection of flow monitoring data, the collection of sediment and surface water quality data, and a rapid small scale column test (RSSCT).

Field Investigative Procedures and Results

Bathymetric Survey

On July 19, 2017 HDR's subcontractor Aqua Survey, Inc. (ASI) completed a bathymetric survey of Recreation Pond with oversight by an HDR Geologist. ASI mobilized a small jon boat, a two person crew, an ODOM dual-frequency fathometer, notebook computer, Hypack for survey control, ship track recording with data acquisition, and an RTK-GPS navigational system to perform the survey. ASI occupied a known benchmark close to the site for quality assurance/quality control (QA/QC) of the differential global positional system (DGPS). ASI used 50-foot lane spacing when performing the survey and ran additional cross lanes as a cross check of the data collected. In addition, soft sediments were probed using a calibrated rod to cross check the sounding data and verify sediment thickness results.

The plot points and contours of the survey area are provided on geo-referenced maps (Figures 3A through 3C). Figure 3A provides elevation data for the top of soft sediments, Figure 3B provides elevation data for the bottom of soft sediments, and Figure 3C provides the sediment thickness. Note that the measurements provided are in whole numbers (feet) with the corresponding subscript representing tenths of feet. For example in Figure 3C, "2_4" would equate to a sediment thickness at this plot point of 2.4 feet. As provided in Figure 3C, sediment thickness ranges from 0.1 to 3.8 feet at the surveyed locations.

Flow Monitoring Data Collection and Processing

On July 20, 2017, HDR installed flow meters for purposes of collecting and evaluating flow data into Recreation Pond. HDR set-up Son-Tek™ meters at each Outfall (2, 3, A and 17K). For the 17K Outfall, flow meters were installed both at the access point

adjacent to the Pond (17KDown) and at the upstream culvert located adjacent to Route 17K (17KUp). Note that the ANG had a flow meter set up at the discharge point of Recreation Pond (i.e., the weir/Outfall 10) and data collected from this meter was to be provided by ANG for purposes of this evaluation.

The meters installed by HDR were mounted with hardware to the culverts and collected data for flow, total volume, level and velocity over a two-month time period. Outfalls 2, 3, and A daylight at the top of the hill located adjacent to Recreation Pond (at the relative elevation of the ANG base). Surface water then flows down the respective chute at each location, passes by baffles (in place for energy dispersion) located at the bottom of the chute and then flows through a short culvert underneath the access road that surrounds Recreation Pond before entering the Pond. The flow meters at these locations were installed at the top of the hill where the water would exit prior to flowing down the chute. The meters were mounted at the invert approximately five to ten ft back into the culvert in order to prevent any potential interference in flow as the water exited the culvert and entered the chute. The 17K culvert does not have a chute. The culvert pipe traverses the ANG base and daylights at the Pond; a storm water grate, located on the north side of the access road, was used to access the 17KDown location and install the flow meter. At the 17KUp location stormwater from the north side of Route 17K flows through a pipe underneath Route 17K, enters a box culvert and then flows into a swale before entering the 48" culvert pipe that traverses underneath the ANG base. Additional flow from a culvert pipe on the south side of Route 17K, which runs parallel to the south side of Route 17K, also enters the swale and flows through the 48" culvert pipe toward Recreation Pond.

HDR returned to check on the meters and download data on August 14, 2017. At this time, the five flow meters were in good condition and the data appeared to be logging normally with no noted issues. On August 25, 2017, the ANG informed HDR that after a check of their meter, installed at Outfall 10, it was determined that the meter had been compromised and only data through August 2, 2017 could be saved. On September 1, 2017, HDR returned to the site to install a temporary replacement meter at Outfall 10 in order to obtain additional discharge data for the last approximately two weeks of the two-month monitoring event. HDR returned to the site on September 12, 2017 to dismantle the meters from the culverts and weir. HDR technicians extracted the data from the meters and together with the available Outfall 10 flow data provided by ANG, reduced and plotted the data. Rain data was provided by SWF staff from their automated weather observing system (AWOS); this data is presented alongside the flow monitoring data in the attached plots. The raw data from the flow monitoring event is included in folders by outfall/flow meter on the attached DVD (Attachment A). In addition the DVD contains an excel database file that includes summary tables of the combined raw flow data, the rain data, and the plots presented as part of this letter

report.

With the exception of the gap in Outfall 10 data described above, the data collected during the flow monitoring event was of good quality with no notable issues in the way the meters operated and collected the data. The following items were noted upon initial evaluation of the data:

- 17KUp to 17KDown correlation - As described above the configuration of the 17K culvert pipe is different than the other outfalls. It was evident from the data that the 17KDown location was experiencing backflow from the Pond, particularly during rain events, but was also apparent during low flow conditions as well. Generally the flow from the 17KUp and 17KDown locations correlated well with the flow from 17KUp being slightly higher, which is likely due to the reduction observed at 17KDown due to backflow but could also indicate some loss in volume through small cracks or breaks in the 48" pipe as it traverses under the ANG base. For this reason, the flow data collected from the 17KUp location was used to asses flow into Recreation Pond for this outfall as a more conservative estimate on the contribution from north of Route 17K.

- Outfall 10/weir data – as described above discharge data was only available from the start of the monitoring event on July 20, 2017 through August 2, 2017 and from September 1, 2017 through September 12, 2017; approximately two weeks at the start and end of the monitoring event, respectively. During the first two weeks only one small rain event was recorded and during the second two weeks of data two rain events were recorded. A general discussion of the results for these events is provided below. With the limited data available for Outfall 10, the results discussion largely focuses on inputs to the Pond.

The following describes the contribution of the outfalls to Recreation Pond for the ten rain events that occurred during the two-month monitoring event. Table 1 provides the total volume and percent contribution by rain event at each outfall, presented as greatest to least volume in cubic feet (cf). Outfall 2 fairly consistently is the largest contributor of water to Recreation Pond and in general, especially for larger rain events, accounts for approximately half of the overall contribution with the 17K Outfall making up approximately one quarter of the volume and Outfalls 3 and A combined the remaining one quarter. Volumetric contributions are also shown graphically on Figures 4 and 5. Figure 4 provides median volumetric contributions for all events (Chart a), the top three rain events (Chart b), and the top three flow events (Chart c), respectively. Figure 5 is a stacked bar graph showing percent contribution from each outfall for each of the ten rain events. Similar relative contributions can be seen here as described above; however, for some of the smaller rain events the volume contributed by the 17K Outfall is more on the order of approximately 40% of the total and is comparable to that

contributed by Outfall 2, with Outfalls 3 and A combined making up the remaining approximately 20% of total volume to the Pond.

The top three rain events are also depicted graphically on Figure 6 in terms of flow and plot each of the outfalls and precipitation versus time. In general a response is noted at the outfalls within one hour and a half of the start of a rain event, and peak flow is observed within approximately one hour of peak rain. Flow appears to drop off gradually along with the gradual decrease in precipitation. The highest flow rates are observed from Outfall 2, followed by Outfall 3 with relatively half the flow rate observed at Outfall 2, and finally Outfall A and Outfall 17K appear to have relatively comparable flow rates to one and another that are again relatively half the flow rate observed at Outfall 3.

As described above, the data set for discharge data from Outfall 10 is missing data from the majority of the rain events that occurred throughout the two-month monitoring event. Figure 7 depicts the September rain events and shows Outfall 10 in relation to the other outfalls that input to the Pond. A response can be seen at Outfall 10 within one half hour of an increase in flow at the input outfalls and similarly this increase in flow continues approximately one half hour after flow returns to baseline conditions at the input outfalls.

Sediment Sampling

Prior to mobilization, the results of the bathymetric survey were reviewed by the State and it was determined that eight sediment samples were sufficient for purposes of evaluating historical deposition in the Pond and providing sufficient preliminary data for design purposes. Sediment samples were collected from eight of the plot points surveyed during the bathymetric survey where sufficient sediment could be obtained (see Figure 8). In accordance with the scope of work samples were collected from:

- In front of where Outfall 2 and Outfall A enter the Pond, SED-POND-3;
- In front of where Outfall 3 and the 17K Outfall enter the pond, SED-POND-4;
- Prior to the discharge point (Outfall 10), SED-POND-8; and
- Within the center of the Pond. As recommended by the New York State Department of Environmental Conservation (NYSDEC) samples were collected from two of three locations where more than three feet of sediment was present and the remainder from where one to three feet of sediment was present (SED-POND-1, -2, -5, -6, and -7).

As part of the sediment sample collection activities on September 7, 2017, HDR

subcontractor ASI mobilized a small jon boat, petite ponar dredge sampler, DGPS, and a two person crew. The dredge sampler was deployed from the jon boat to collect sediment samples at the locations described above, which were located using DGPS.

Sediment sample from each location was contained in high density polyethylene (HDPE) buckets with lids and transferred to HDR on shore for processing. The HDR Geologist characterized the material visually and collected eight samples for laboratory analysis of target compound list (TCL) volatile organic compounds (VOCs), semivolatile organics compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs), target analyte list (TAL) metals plus mercury, and the PFAS six analyte list. As described in the scope of work, although not part of this investigation, additional analytes may be required for full disposal characterization purposes, such as toxicity characteristic leaching procedure (TCLP), corrosivity, reactivity, etc., and will ultimately be dictated by disposal facility requirements.

Analysis of the sediment samples was provided by Test America. Results are summarized in detail on Table 2; totals for each analyte group are also displayed on Figure 8. NYSDEC Freshwater Sediment Values for Class A Sediments were used for comparison purposes. The laboratory analytical data package is included as Attachment B.

In general the sediment was very dark brown to black in color. No notable odors or sheen were observed for any of the samples.

Although there are no guidance values for PFASs in sediment, the United States Environmental Protection Agency (EPA) Region 2 values for PFASs in soil are discussed here for comparison purposes. The soil screening level developed by EPA Region 2 is 1,000,000 nanograms per kilogram (ng/kg) for the sum of PFOA and PFOS. This value was developed by EPA Region 2 for a site in upstate New York (EPA, July 2016) for comparison of soil sampling results for the Project. All of the sediment samples are well below the EPA Region 2 soil screening level of 1,000,000 ng/kg for the sum of PFOA and PFOS.

Of the TAL metals, concentrations of arsenic, cadmium, copper, lead, nickel, silver, and zinc exceeded the respective NYSDEC Sediment Value in the majority of sediment samples. Of the organics analyzed, TCL VOCs results were all non-detect with the exception of acetone, 2-butanone, carbon disulfide, and methylene chloride all of which could potentially be a result of laboratory contamination. Detections of polycyclic aromatic hydrocarbons (PAHs) and select pesticides in the sediment samples are to be expected considering the nature of the runoff into the Pond and historic land use. The reporting limits for TCL SVOCs, pesticides, PCBs were raised, and in some instances

were elevated above available Sediment Values, due to dilution or matrix interferences to enable the quantification of target analytes. The results obtained are largely non-detect or below the respective Sediment Values, where available.

One matrix spike/matrix spike duplicate (MS/MSD) sample was collected from SED-POND-1 and an equipment blank was collected on the petite ponar dredge sampler. Several analytes failed the recovery criteria low and the relative percent difference (RPD) for the MS/MSD. The laboratory noted matrix interference and reporting limits were raised accordingly. Given the results obtained for pesticides, PCBs, and metals this does impact the usability of the data for its intended purpose. Concentrations of five of the six PFASs were detected in the sediment equipment blank sample, which could mean a potential bias high in the field sample results.

Surface Water Sampling

HDR collected surface water samples on September 7, 2017 from all four of the outfalls that feed the Pond, including both 17KUp and 17KDown for the 17KOutfall input, as well as sampling from two locations within the Pond itself and at the discharge point (Outfall 10) (see Figure 9). Surface water samples from Outfalls 2, 3, and A were collected at the base of the chute, prior to entering the respective pipes that lead under the access road to Recreation Pond. Samples were collected using a stainless steel dip bucket. As the 17K Outfall does not have a chute, surface water was sampled at the manhole cover located adjacent to the Pond and at the upstream culvert located adjacent to Route 17K. Samples were collected using a peristaltic pump and HDPE tubing. As sampling was conducted concurrently with the sediment sample collection, HDR utilized the subcontractor's jon boat to collect surface water samples from within the Pond. Samples were collected from approximately six inches below the surface (SW-POND-1S and -2S) and from approximately six inches above the sediment (SW-POND-1D and -2D) using a peristaltic pump and lowering the HDPE tubing to the appropriate depth. Surface water samples were collected for the same parameters described above for sediment. In addition, diesel range organics and gasoline range organics (DRO/GRO) and glycols were also analyzed in surface water. This suite of analysis as well as analyzing for total organic carbon (TOC) was completed to provide information necessary to assess carbon demand for the future treatment system design.

Analysis of the surface water samples was provided by Test America. Results are summarized in detail on Table 3; totals for each analyte group are also displayed on Figure 9. NYSDEC Surface Water Standards and the EPA Health Advisory Limits were used for comparison purposes. The laboratory analytical data package is included as Attachment B.

Detectable concentrations of all six of the PFASs analyzed were detected in all samples. Results are compared to the EPA Health Advisory Limit of 70 ng/l, which applies to PFOS and PFOA individually as well as the sum. The results from all of the surface water samples with the exception of 17KUp and 17KDown exceeded the advisory limit. The samples collected from Outfalls 2 and 3 contained elevated concentrations above the advisory limit for both PFOS and PFOA; the respective sums were 1190 ng/l and 1191.8 ng/l. Of the remaining samples that exceeded the advisory limit, only PFOS concentrations were greater than 70 ng/l. Concentrations of PFOS in these samples ranged from 259 to 450 ng/l.

Of the remaining parameters analyzed, very low level, estimated concentrations of DRO were detected in the majority of the samples. GRO, pesticides and PCBs were non-detect in all samples. VOCs were also all non-detect with the exception of acetone, a common laboratory contaminant. The reporting limits for TCL SVOCs and select other organics were raised, and in some instances were elevated above available Surface Water Standards, due to dilution or matrix interferences to enable the quantification of target analytes. The results obtained are largely non-detect or below the respective Surface Water Standards, where available, with the exception of benzo(a)pyrene in one sample. Concentrations of metals detected were all below available Surface Water Standards with the exception of iron and manganese. TOC was detected at concentrations less than 5 mg/l in all samples; however, the majority were qualified “B” as TOC was also detected in the blank, the concentrations in the samples are likely biased high. Based on these results, any potential competition for carbon from other classes of contaminants (besides PFASs) relative to the proposed design would likely be minimal.

Of note, the concentrations obtained for the samples within the Pond were generally comparable to one another as well as between the shallow and deep intervals sampled with the deeper sample results being slightly higher than the shallow sample results at both locations. In addition, the concentrations obtained in the surface water sample collected from 17KDown were higher and in most cases concentrations were double those detected in the 17KUp sample. This could mean potential infiltration from surface water and/or groundwater within the ANG as the pipe traverses underneath the Base. Overall the concentrations detected from the 17K culvert pipe were much lower than the samples collected from the other inputs with PFASs below the EPA advisory limit as noted above.

One MS/MSD sample was collected from SW-POND-1S and an equipment blank was collected on a stainless steel dip bucket. In addition a trip blank and field blank sample were collected as well as a duplicate sample from Outfall A. One or more analytes failed the recovery criteria low and the relative percent difference (RPD) for the MS/MSD.

There were no detections in the equipment blank, trip blank or field blank. Of the data pairs that could be evaluated from the duplicate, PFNA (48.7%) and PFOS (47.9%) as well as seven of the ten pairs of metals results revealed relatively large RPDs. This could be due in part to improper filling of the sample jars to ensure a truly duplicate sample. The higher concentrations were observed in the parent sample, which were used for purposes of the results discussion.

Carbon Pilot Study

In addition to the above surface water quality data, HDR collected sufficient sample from the Pond for a bench scale study by Engineering Performance Solutions (EPS), an independent performance based laboratory. The study evaluated the effectiveness of granular activated carbon (GAC) considering the site-specific concentrations of PFASs and other contaminants present in the Pond. Bituminous coal-based re-agglomerated GAC has proven to have better performance than other GAC remediating PFASs and was recommended for the study. HDR collected the necessary sample volume concurrently with the above surface water sampling activities. EPS performed a RSSCT that simulates full scale performance and provides information on carbon type, breakthrough data, and usage rates that are critical to the system design. The report is included as Attachment C. Note that the information contained within the report is not definitive. Changes in water quality or activated carbon quality could influence the results presented in the report, i.e., seasonal changes in water quality could impact removal efficiencies.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

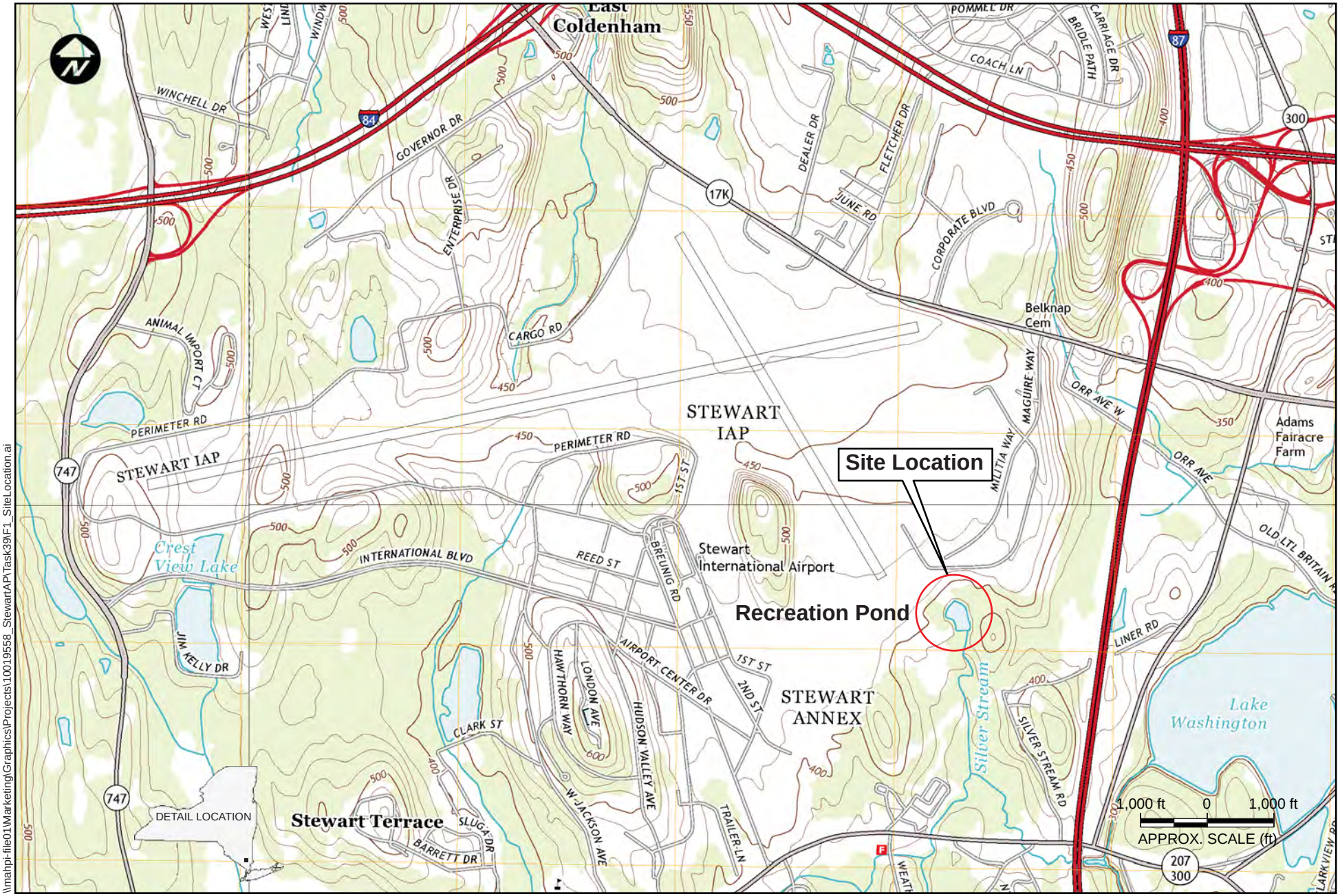
_____

Melissa E. LaMacchia, MS, PG
Associate | Senior Project Manager

cc: J. Bass, NYSDOT

Attachments

FIGURES



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HDR Engineering, Inc.
1 International Blvd.
Mahwah, NJ 07495

Map source: USGS 7.5-min. Quadrangle Series: Cornwall-on-Hudson, NY, 2013; Maybrook, NY, 2013; Newburgh, NY, 2013; Walden, NY, 2013.

Site Location

Recreation Pond Pre-Design Investigation
Stewart International Airport - Air National Guard Base
Newburgh, NY

Figure 1

FACILITIES

100 COMPOSITE MAINTENANCE HANGAR
101 CORROSION CONTROL/FUEL CELL
102 FUEL CELL NOSE DOCK
104 FIRE STATION
105 LRS/AP
106 SFS/97041
107 COMPOSITE MAINTENANCE FACILITY
1107 HAZARDOUS MATERIAL STORAGE
108 UTILITY CENTER
109 HIGH VOLTAGE SWITCHGEAR
110 WATER SUPPLY BOOSTER PUMP STATION
111 DIVERSION CHAMBER WITH OIL/FUEL SEPERATORS
200 SUPPORT EQUIPMENT MAINTENANCE SHOP
201 GUARD HOUSE
202 COMPOSITE SQUADRON OPS./TELECOM.
203 COMPOSITE OPERATIONAL TRAINING
204 ANG/USMCR BASE SUPPLY
205 HAZARDOUS STORAGE (USMCR)
206 HAZARDOUS STORAGE (ANG)
207 BASE ENGINEERING
208 AUTOMOTIVE VEHICLE MAINTENANCE SHOP
209 AUTO PARKING SHED
211 BASE CIVIL ENGINEERING COVERED STORAGE
300 COMPOSITE AIRCRAFT MAINT./SQ OPS. (USMCR)
301 FUEL CELL HANGAR (USMCR)
302 INTERMEDIATE MAINTENANCE ACTIVITY (USMCR)
303 AVIONICS PAD (USMCR)
401 PUMP HOUSE
402 CONTROL HOUSE
403 OPERATIONS BUILDING
404 VEHICLE INSPECTION CANOPY
405 GATE HOUSE
406 GATE HOUSE

EVACUATION ROUTE
SPILL FLOW DIRECTION
RIP RAP-LIZED DITCH
ABOVEGROUND STORAGE TANKS
UNDERGROUND STORAGE TANKS
OIL/WATER SEPARATER
MONITORING WELL
INDUSTRIAL WASTE LINE
STORM SEWER SYSTEM
STORM SEWER
CATCHBASIN
FLOOR DRAIN
REINFORCED CONCRETE PIPE
DRAIN 201
CATCHBASIN #34
CORR. POLY
STORM WATER CONC. PIPE
CORR. METAL PIPE
CAST IRON
STORM WATER
DRAIN INLET

FIRE STATION
CB 1A: Apron
KILO
JULIET
Fuel Hydrants
CB #2 and CB #5: Hangar 100
#4: Tank storage on northeast corner of the site
C-98: Hangar 101
EOC
AGE
CB 2: Central eastern portion of the site
C-48: Hangar 101
O/W separator and waste storage tank
C-15: Hangar 300

NOTES:
1. For a complete inventory of facility oil storage, refer to Facility Response Plan Tables 1.4.1, 1.4.2 and 1.4.3.
2. A map of current fire hydrant locations is maintained by Fire Emergency Services, Bldg. 101.

OUTFALL 003
OUTFALL A
RECREATION POND
WEIR
17K OUTFALL
OUTFALL 010 DISCHARGE POINT

Note: The catch basins identified by blue boxes were chosen to refine the areas of concern listed following the catch basin identification for further investigation. Sediment and surface water samples will be collected from the identified catch basins.

LEGEND

OUTFALL A
OUTFALL 002
OUTFALL 003
17K OUTFALL
RECREATION POND

0 400 ft
SCALE (ft)

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HDR Engineering, Inc.
1 International Blvd.
Mahwah, NJ 07495

Site Layout

Recreation Pond Pre-Design Investigation
Stewart International Airport - Air National Guard Base
Newburgh, NY

Figure 2

FIGURE 3A

605300X 605400X 605500X 605600X 605700X 605800X

970300Y 970200Y 970100Y 970000Y 969900Y 969800Y

AQUA SURVEY, INC.
469 POINT BREEZE ROAD
FLEMINGTON, NJ 08822 USA

STEWART AIRPORT POND DEPTH 1

JULY 2017
NEW WINDSOR, NY

ASI PROJECT #: 37-133
SOUNDINGS IN US SURVEY FEET

SURVEY PERFORMED BY ASI, PREPARED FOR HDR
HORIZONTAL COORDINATE SYSTEM: NYE STATE PLANE NAD 83
SOUNDINGS IN US SURVEY FEET, NAVD88

SHEET 1 OF 1

370_1 372_1 373_2 370_7 370_2 371_2 370_6 372_2 371_2 372_7 370_3 370_3 371_4 370_9 372_2 372_1 370_1 370_4 371_2 371_7 372_2 368_2 370_3 372_6 371_5 371_7 369 369_6 370 368_5 367_9 371_2 368 368 369_8 371_9 368_7 371_8 370_7

FIGURE 3B

605300X 605400X 605500X 605600X 605700X 605800X

970300Y 970200Y 970100Y 970000Y 969900Y 969800Y

AQUA SURVEY, INC.
469 POINT BREEZE ROAD
FLEMINGTON, NJ 08822 USA

STEWART AIRPORT POND DEPTH 2

JULY 2017
NEW WINDSOR, NY

ASI PROJECT #: 37-133
SOUNDINGS IN US SURVEY FEET

SURVEY PERFORMED BY ASI, PREPARED FOR HDR
HORIZONTAL COORDINATE SYSTEM: NYE STATE PLANE NAD 83
SOUNDINGS IN US SURVEY FEET, NAVD88

SHEET 1 OF 1

370 371 372_9 368_3 368_7 369_2 368_6 369_4 369_2 372_5 367_2 367_2 370_6 369_9 371_2 371_1 367_1 368 370_7 370_3 370_2 364_7 368_4 371 369_5 371_6 367 366_6 368_2 366_2 366_5 369_2 364_2 364_9 367_3 371_6 367_2 371_4 369_2

605300X 605400X 605500X 605600X 605700X 605800X

FIGURE 3C

605300X 605400X 605500X 605600X 605700X 605800X

970300Y 970200Y 970100Y 970000Y 969900Y 969800Y

AQUA SURVEY, INC.
469 POINT BREEZE ROAD
FLEMINGTON, NJ 08822 USA

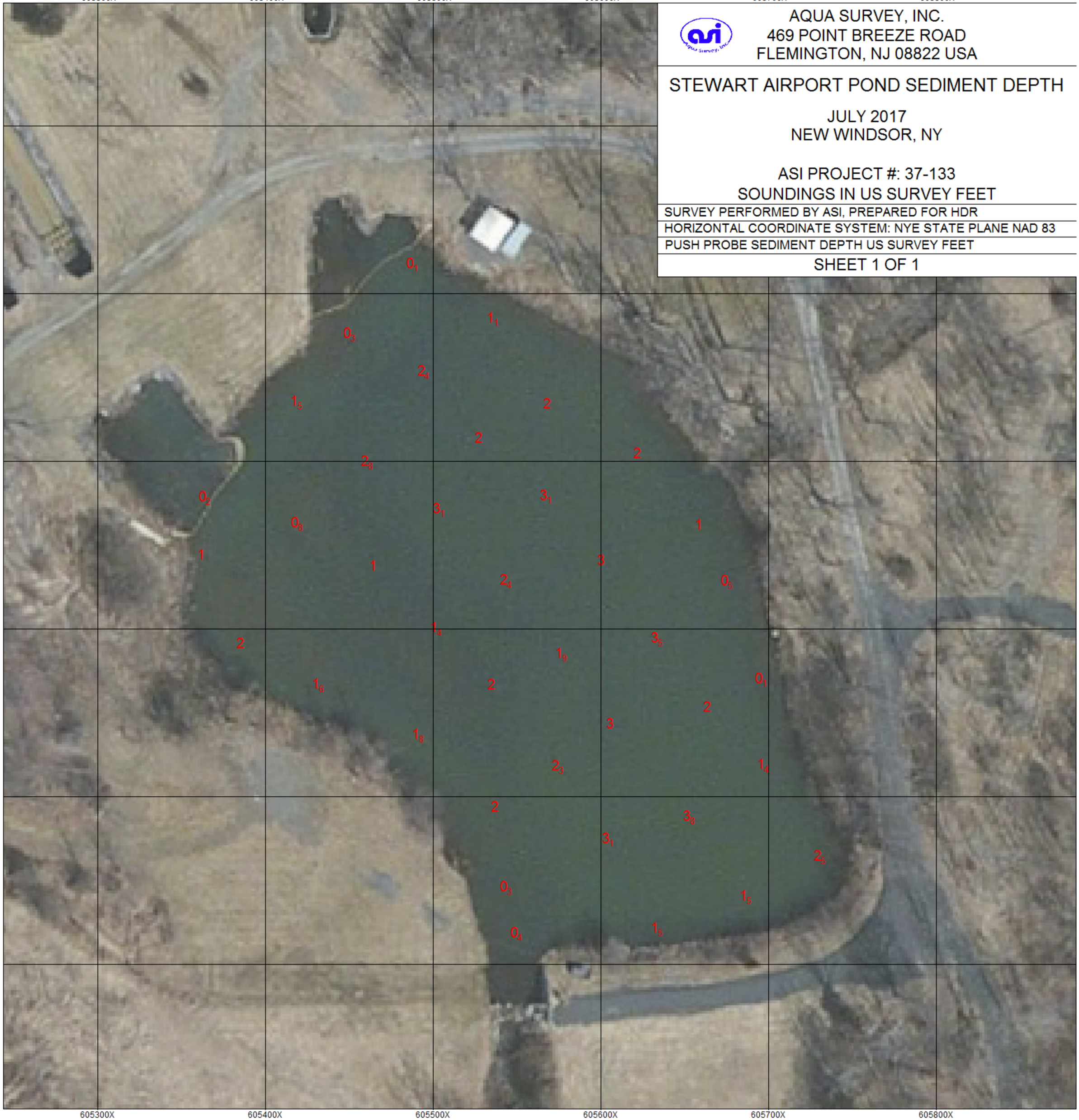
STEWART AIRPORT POND SEDIMENT DEPTH

JULY 2017
NEW WINDSOR, NY

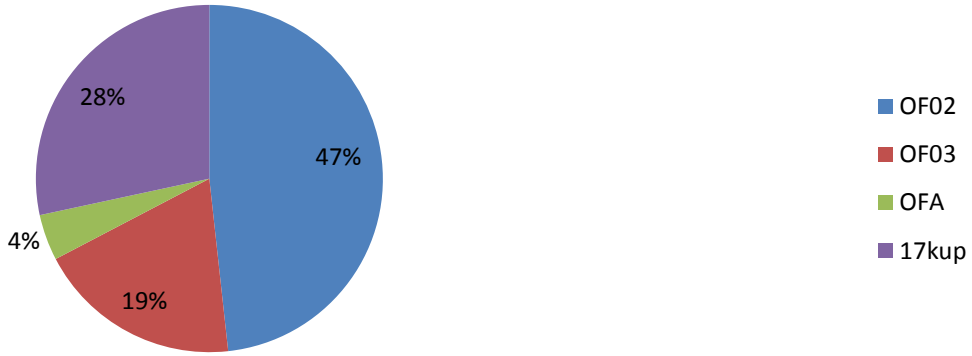
ASI PROJECT #: 37-133
SOUNDINGS IN US SURVEY FEET

SURVEY PERFORMED BY ASI, PREPARED FOR HDR
HORIZONTAL COORDINATE SYSTEM: NYE STATE PLANE NAD 83
PUSH PROBE SEDIMENT DEPTH US SURVEY FEET

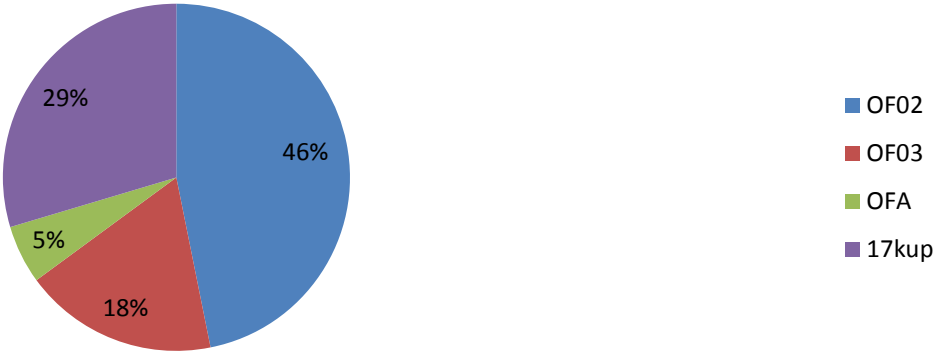
SHEET 1 OF 1



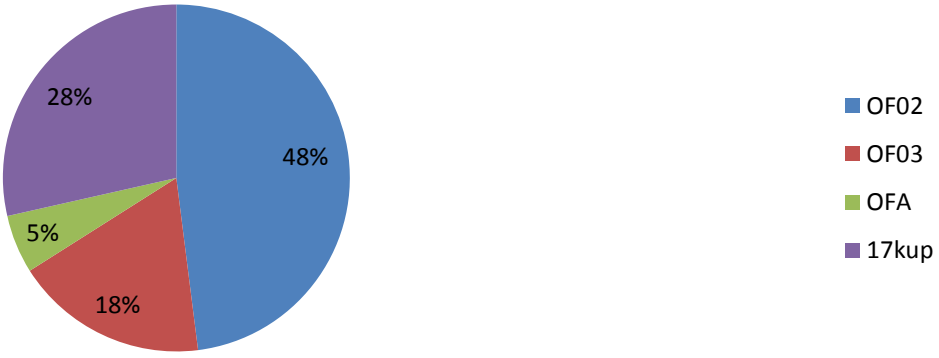
a) Median Volumetric Contribution All Events



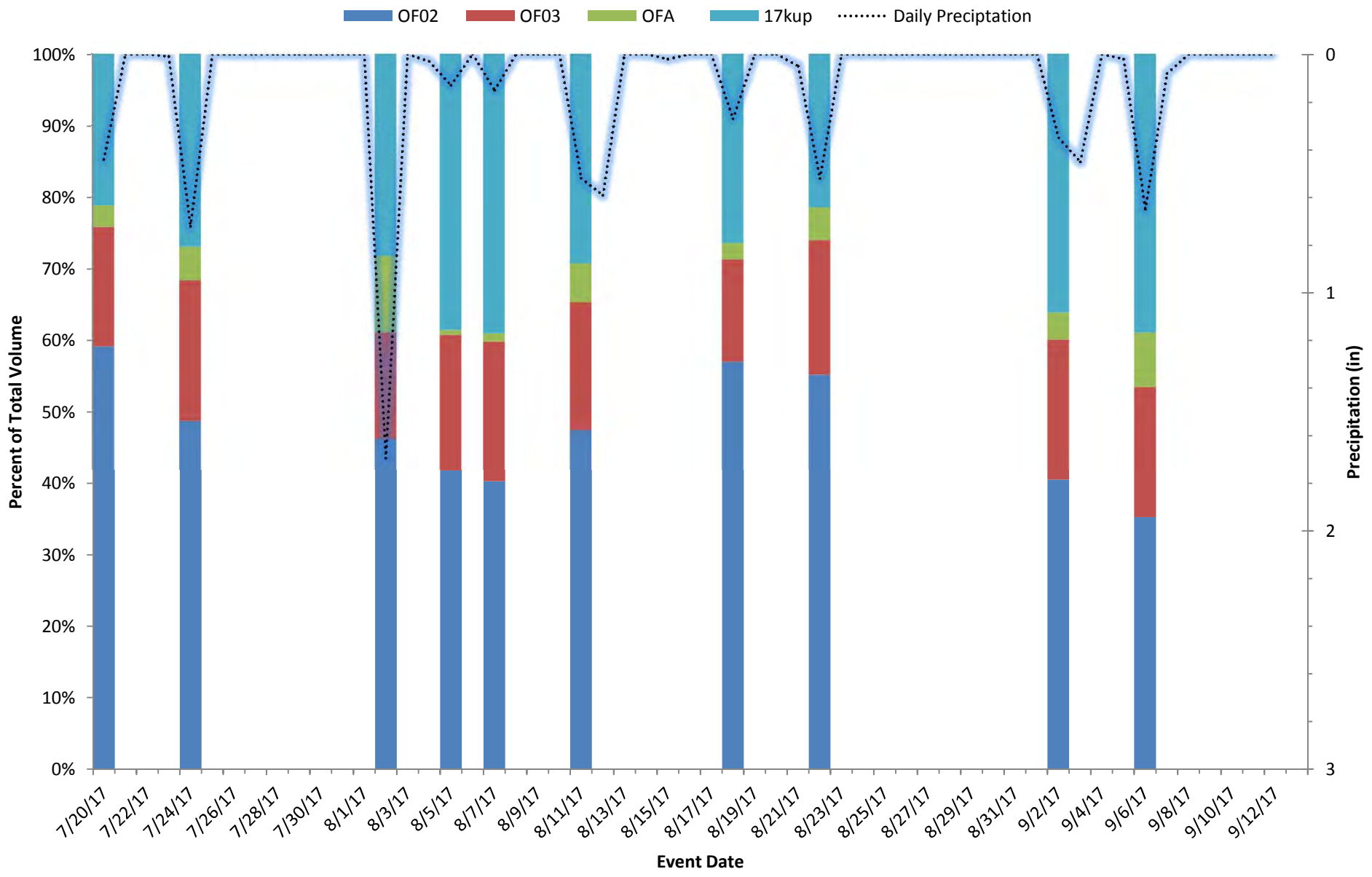
b) Median Volumetric Contribution Top 3 Rain Events



c) Median Volumetric Contribution Top 3 Flow Events

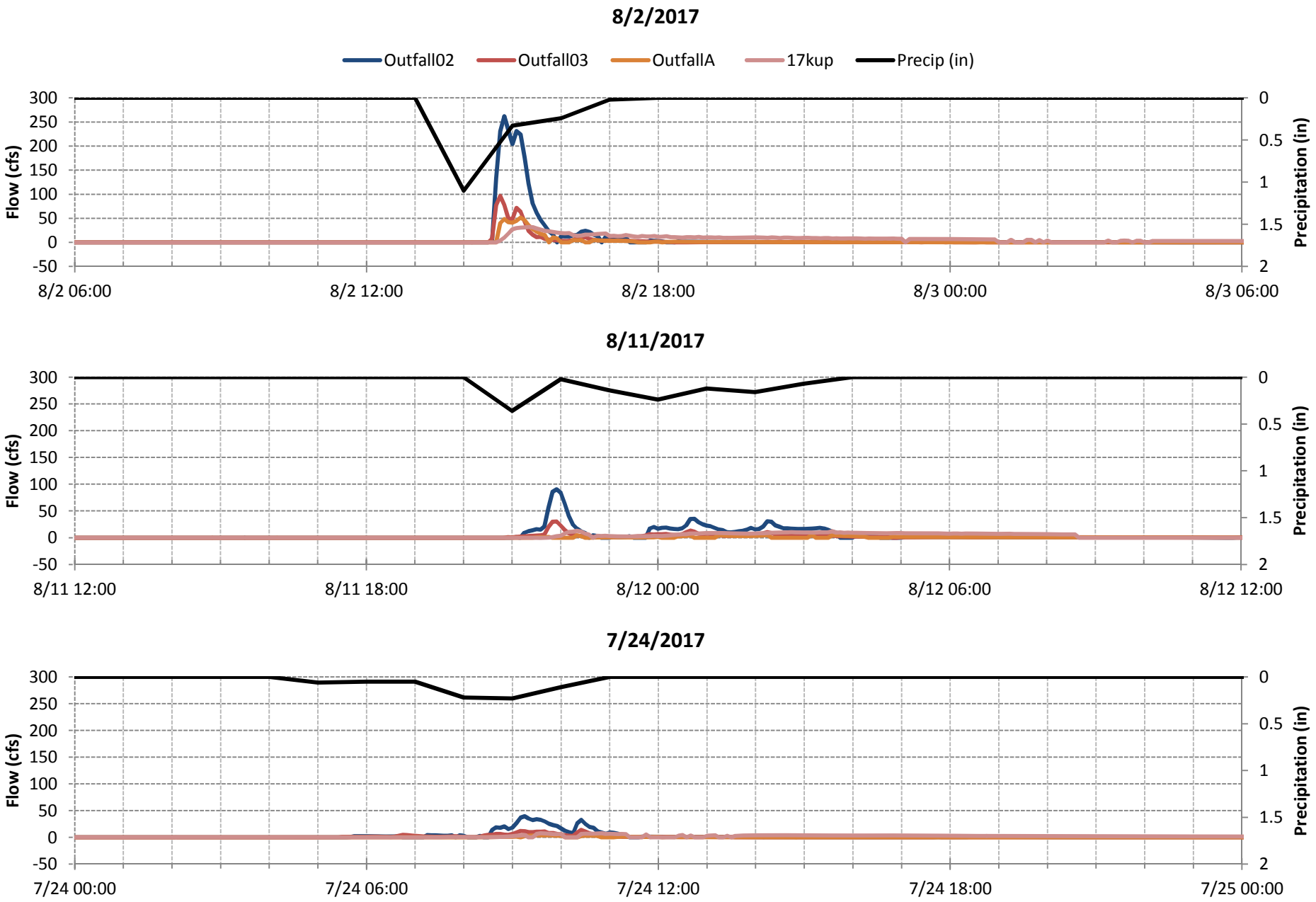


HDR	*Recreation Pond 2017 Flow Monitoring*	**Median Volume Contribution by Outfall for a) All Events; b) Top 3 Rain Events; and c) Top 3 Flow Events**	DATE:	10/10/17	**FIGURE**
			CREATED BY:	JV	**4**
			REVIEWED BY:		
			JOB NO:		



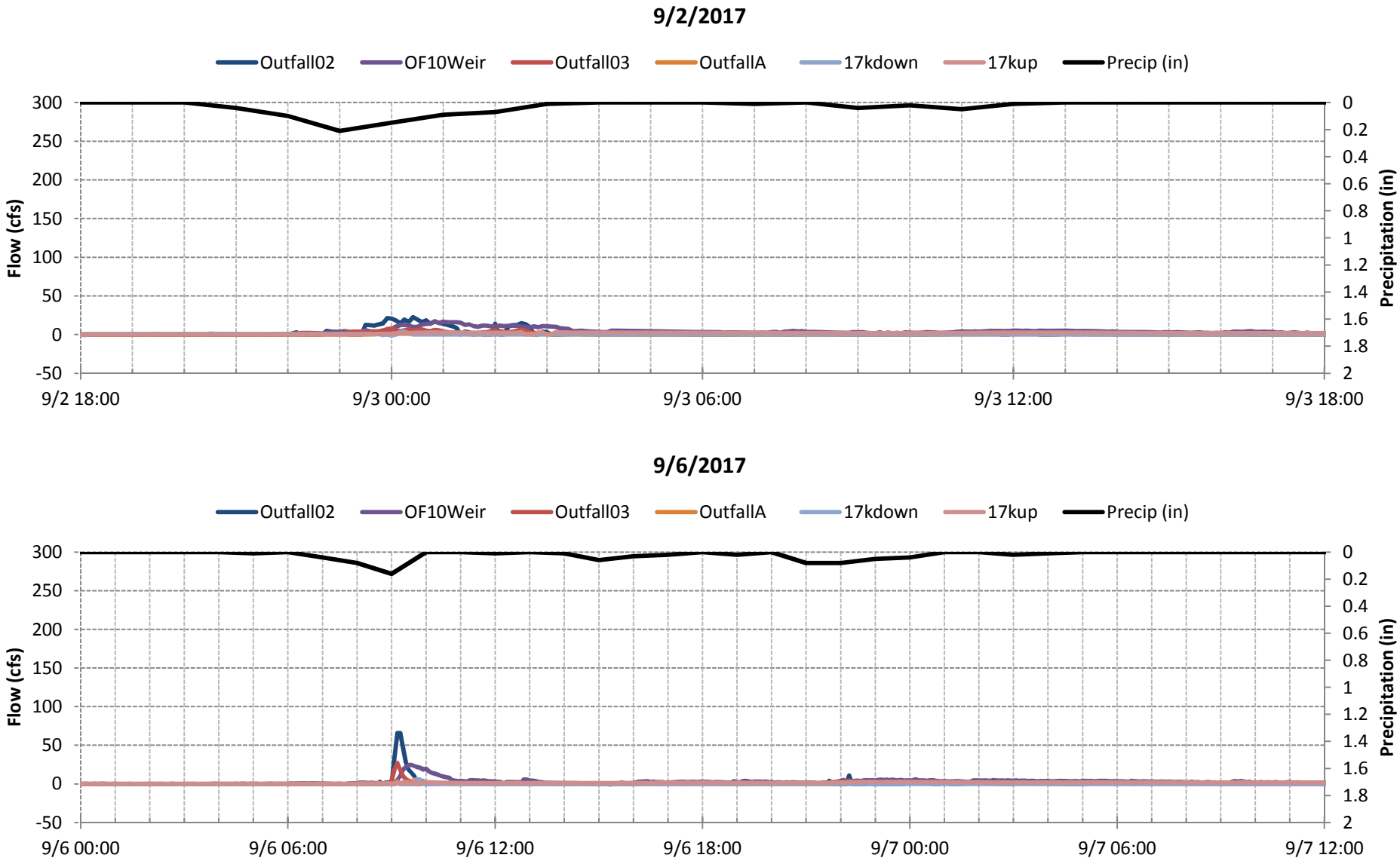
HDR	*Recreation Pond 2017 Flow Monitoring*	**Percent Volume Contribution of Each Outfall to Rec Pond for each Rain Event**	DATE:	10/10/2017	**FIGURE**
			CREATED BY:	JV	**5**
			REVIEWED BY:		
			JOB NO:		

C:\Users\JVANDENS\Desktop\oldSWF_RECPond_FlowData.xlsb



HDR	*Recreation Pond 2017 Flow Monitoring*	**Top 3 Flow Events at Each Outfall**	DATE:	10/10/2017	**FIGURE**
			CREATED BY:	JV	**6**
			REVIEWED BY:		
			JOB NO:		

c:\pwworking\pitt\d2016065\SWF_RECPond_FlowData_20171010.xlsb



HDR	*Recreation Pond 2017 Flow Monitoring*	**September Events**	DATE:	10/10/2017	**FIGURE**
			CREATED BY:	JV	**7**
			REVIEWED BY:		
			JOB NO:		

c:\pwworking\pitt\d2016065\SWF_RECPond_FlowData_20171010.xlsb

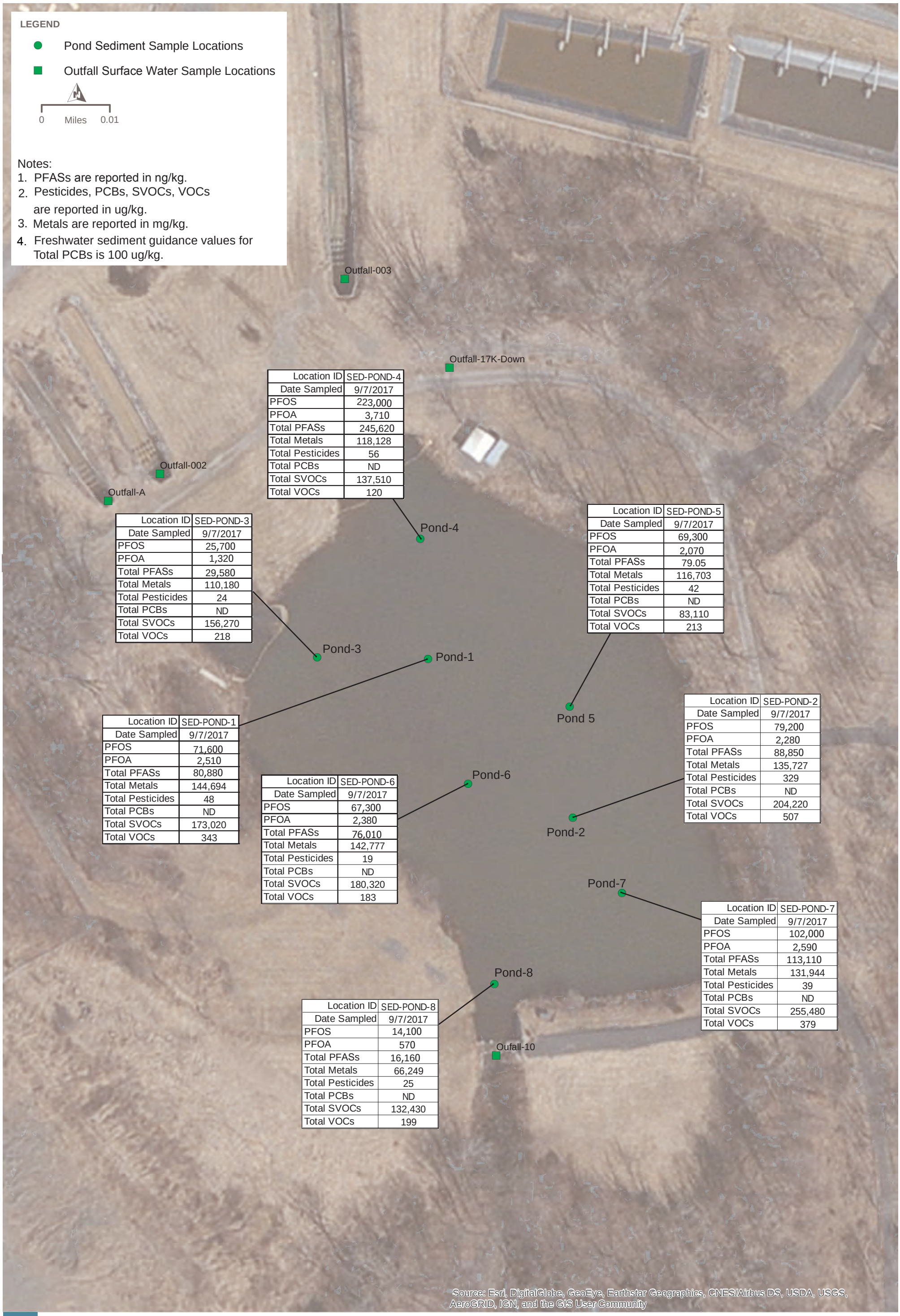


FIGURE 8 - SEDIMENT ANALYTICAL RESULTS

NEW YORK AIR NATIONAL GUARD, STEWART INTERNATIONAL AIRPORT - NEWBURGH, NY

LEGEND

- Pond Sediment Sample Locations
- Outfall Surface Water Sample Locations

0 Miles 0.01

Notes:
1. PFASs are reported in ng/l.
2. DRO/GRO are reported in mg/l.
3. Metals, Pesticides, PCBs, SVOCs, VOCs are reported in ug/l.
4. Locations that exceed the EPA Health Advisory for the sum of PFOS and PFOA (70 ng/l) are highlighted in yellow.

Location ID	OUTFALL-17K-UP
Date Sampled	9/7/2017
PFOS	3.7
PFOA	4.1
Total PFASs	16
DRO	0.15 J
GRO	0.025 U
DRO/GRO	0.15 J/0.025 U
TOC	4.5
Total Metals	84,633
Total Pesticides	ND
Total PCBs	ND
Total SVOCs	ND
Total VOCs	3.4

Outfall-003

Location ID	OUTFALL-003
Date Sampled	9/7/2017
PFOS	1,120
PFOA	71.8
Total PFASs	1,582
DRO	0.084 J
GRO	0.025 U
DRO/GRO	0.084 J/0.025 U
TOC	3.3
Total Metals	189,327
Total Pesticides	ND
Total PCBs	ND
Total SVOCs	0.87
Total VOCs	3.4

Location ID	OUTFALL-002
Date Sampled	9/7/2017
PFOS	1,060
PFOA	130
Total PFASs	1,511
DRO	0.1 J
GRO	0.025 U
DRO/GRO	0.1 J/0.025 U
TOC	1.8
Total Metals	63,825
Total Pesticides	ND
Total PCBs	ND
Total SVOCs	ND
Total VOCs	11

Outfall-002

Outfall-17K-Down

Location ID	OUTFALL-17K-DOWN
Date Sampled	9/7/2017
PFOS	16.5
PFOA	8.2
Total PFASs	43
DRO	0.12 J
GRO	0.025 U
DRO/GRO	0.12 J/0.025 U
TOC	4.1
Total Metals	97,333
Total Pesticides	ND
Total PCBs	ND
Total SVOCs	0.99
Total VOCs	7.8

Outfall-A

Location ID	OUTFALL-A	OUTFALL-A (DUP)
Date Sampled	9/7/2017	9/7/2017
PFOS	450	276
PFOA	56.6	49.0
Total PFASs	868	681
DRO	0.084 J	0.11 J
GRO	0.025 U	0.025 U
DRO/GRO	0.084 J/0.025 U	0.11 J/0.025 U
TOC	3.7	3.5
Total Metals	226,101	156,698
Total Pesticides	ND	ND
Total PCBs	ND	ND
Total SVOCs	1.12	ND
Total VOCs	3	3.1

Pond-4

Pond-3

Location ID	SW-POND-1-S	SW-POND-1-D
Date Sampled	9/7/2017	9/7/2017
PFOS	262	278
PFOA	37.9	40.2
Total PFASs	444	468
DRO	0.4 U	0.096 J
GRO	0.025 U	0.025 U
DRO/GRO	0.4 U/0.025 U	0.096 J/0.025 U
TOC	3.4	3.4
Total Metals	62,253	66,592
Total Pesticides	ND	ND
Total PCBs	ND	ND
Total SVOCs	1.2	1
Total VOCs	5.8	4.5

Pond 5

Pond-6

Location ID	SW-POND-2-S	SW-POND-2-D
Date Sampled	9/7/2017	9/7/2017
PFOS	259	313
PFOA	38.0	41.0
Total PFASs	439	514
DRO	0.089 J	0.092 J
GRO	0.025 U	0.025 U
DRO/GRO	0.089 J/0.025 U	0.092 J/0.025 U
TOC	3.2	3.3
Total Metals	68,982	67,695
Total Pesticides	ND	ND
Total PCBs	ND	ND
Total SVOCs	1.3	1.3
Total VOCs	4.8	4.7

Pond-7

Pond-8

Oufall-10

Location ID	OUTFALL-10
Date Sampled	9/7/2017
PFOS	277
PFOA	41.7
Total PFASs	481
DRO	0.11 J
GRO	0.025 U
DRO/GRO	0.11 J/0.025 U
TOC	3.2
Total Metals	64,984
Total Pesticides	ND
Total PCBs	ND
Total SVOCs	1.1
Total VOCs	5.6

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FIGURE 9 - SURFACE WATER ANALYTICAL RESULTS

NEW YORK AIR NATIONAL GUARD, STEWART INTERNATIONAL AIRPORT - NEWBURGH, NY

TABLES

Table 1. Total Volume and Percent Contribution by Event at Each Outfall

Event	Volume (cf)					Percent of Total				
	OF02	OF03	OFA	17kup	Total	OF02	OF03	OFA	17kup	Total
08/02/17	719,861	231,572	165,209	439,155	1,555,797	46%	15%	11%	28%	100%
08/11/17	460,890	173,039	52,352	283,838	970,119	48%	18%	5%	29%	100%
07/24/17	235,040	94,408	22,506	129,738	481,692	49%	20%	5%	27%	100%
09/06/17	165,983	85,927	35,592	183,010	470,512	35%	18%	8%	39%	100%
09/02/17	186,282	90,288	17,336	165,928	459,834	41%	20%	4%	36%	100%
08/22/17	205,498	69,764	16,952	79,754	371,969	55%	19%	5%	21%	100%
07/20/17	185,342	52,209	9,488	66,125	313,164	59%	17%	3%	21%	100%
08/18/17	107,631	26,980	4,306	49,828	188,745	57%	14%	2%	26%	100%
08/07/17	22,902	11,122	664	22,156	56,843	40%	20%	1%	39%	100%
08/05/17	21,873	9,926	366	20,147	52,312	42%	19%	1%	39%	100%

TABLE 2
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Sediment Sampling Results - September 2017

			Location:	SED-POND-1	SED-POND-2	SED-POND-3	SED-POND-4	SED-POND-5	SED-POND-6	SED-POND-7	SED-POND-8
			Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**Freshwater Sediment Guidance Value**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
Perfluorinated Compounds											
Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/kg	NS	480 J	640 J	550 U	830	670 J	1000 U	780 J	350 U
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/kg	NS	920 J	770 J	330 J	1840	1050	900 J	1040	220 J
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/kg	NS	4590	5250	1930	13600	5960	4700	5810	1110
Perfluorononanoic Acid (PFNA)	375-95-1	ng/kg	NS	780 J	710 J	300 J	2640	820 U	730 J	890 J	160 J
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/kg	NS	71600	79200	25700	223000 D	69300	67300	102000	14100
Perfluorooctanoic acid (PFOA)	335-67-1	ng/kg	NS	2510	2280	1320	3710	2070	2380	2590	570
Total PFCs		ng/kg	NS	80880	88850	29580	245620	79050	76010	113110	16160
Metals											
Aluminum	7429-90-5	mg/kg	NS	12800	11800	7060	11900	13200	11300	11900	6980
Antimony	7440-36-0	mg/kg	NS	17.2 U	17.1 U	10.4 U	14.4 U	16 U	19.6 U	17.7 U	6.5 U
Arsenic	7440-38-2	mg/kg	**10**	**14.7**	**12.5 J**	7.1 J	8.1 J	**12.9**	**13 J**	**13.2 J**	6
Barium	7440-39-3	mg/kg	NS	103 J	95.8 J	58.9 J	86.1 J	91.2 J	99 J	97.9 J	48.4 J
Beryllium	7440-41-7	mg/kg	NS	0.59 J	0.57 J	0.31 J	0.59 J	0.64 J	0.61 J	0.6 J	0.32 J
Cadmium	7440-43-9	mg/kg	**1**	**6.5**	**8.1**	**3.3**	**4**	**5.4**	**6.6**	**7**	**1.6**
Calcium	7440-70-2	mg/kg	NS	83100	78000	71500	63700	56900	86300	73600	34300
Chromium, Total	7440-47-3	mg/kg	43	33.1	32.8	27.1	28.5	32.2	31	31.9	15.9
Cobalt	7440-48-4	mg/kg	NS	13.1 J	12.5 J	9.7 J	12.4 J	13 J	12.2 J	13.3 J	10.5 J
Copper	7440-50-8	mg/kg	**32**	**87.1**	**76.5**	**38.2**	**80.4**	**72.4**	**72.5**	**79**	24.1
Iron	7439-89-6	mg/kg	NS	28000	27100	18100	24700	28400	25800	27600	16100
Lead	7439-92-1	mg/kg	**36**	**59.4**	**59.3**	**63.8**	**57.4**	**64.4**	**52.3**	**51.8**	26.8
Magnesium	7439-95-4	mg/kg	NS	10200	9170	6710	10900	8100	9240	9610	5210
Manganese	7439-96-5	mg/kg	NS	7000	6260	4870	3770	6860	6760	5950	2460
Mercury	7439-97-6	mg/kg	0.2	0.13	0.098	0.056	0.12	0.18	0.14	0.11	0.05
Nickel	7440-02-0	mg/kg	**23**	**27.6 J**	**25.5 J**	16.1 J	**26.4 J**	**27.6 J**	**24 J**	**25.2 J**	15.1
Potassium	7440-09-7	mg/kg	NS	1960 J	1850 J	1090 J	1770 J	1900 J	1900 J	1850 J	871 J
Selenium	7782-49-2	mg/kg	NS	17.2 U	17.1 U	10.4 U	14.4 U	16 U	19.6 U	17.7 U	6.5 U
Silver	7440-22-4	mg/kg	**1**	8.6 U	**1.3 J**	5.2 U	7.2 U	**1.3 J**	**1.5 J**	**1.4 J**	3.3 U
Sodium	7440-23-5	mg/kg	NS	597 J	518 J	232 J	419 J	376 J	559 J	538 J	1630 U
Thallium	7440-28-0	mg/kg	NS	17.2 U	17.1 U	10.4 U	14.4 U	16 U	19.6 U	17.7 U	6.5 U
Vanadium	7440-62-2	mg/kg	NS	39 J	37.4 J	20.1 J	35.4 J	36.6 J	33.3 J	36.8 J	14.4 J
Zinc	7440-66-6	mg/kg	**120**	**653**	**667**	**373**	**630**	**609**	**572**	**538**	**165**
Total Metals		mg/kg	NS	144,694	135,727	110,180	118,128	116,703	142,777	131,944	66,249
Pesticides											
Aldrin	309-00-2	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	319-84-6	ug/kg	NS	9.3 U	8.9 U	5.5 U	7.7 U	8.1 U	10 U	9.5 U	3.5 U
Alpha Endosulfan	959-98-8	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	ug/kg	NS	9.3 U	8.9 U	5.5 U	7.7 U	8.1 U	10 U	9.5 U	3.5 U
Beta Endosulfan	33213-65-9	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Chlordane	57-74-9	ug/kg	68	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
Delta BHC (Delta Hexachlorocyclohexane)	319-86-8	ug/kg	NS	9.3 U	8.9 U	5.5 U	7.7 U	8.1 U	10 U	9.5 U	3.5 U
Dieldrin	60-57-1	ug/kg	180	9.3 U	8.9 U	5.5 U	7.7 U	8.1 U	10 U	9.5 U	3.5 U
Endosulfan Sulfate	1031-07-8	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Endrin	72-20-8	ug/kg	90	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Endrin Aldehyde	7421-93-4	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Endrin Ketone	53494-70-5	ug/kg	NS	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Gamma Bhc (Lindane)	58-89-9	ug/kg	47	9.3 U	8.9 U	5.5 U	7.7 U	8.1 U	10 U	9.5 U	3.5 U
Heptachlor	76-44-8	ug/kg	75	48	30 U	19 U	26 U	27 U	34 U	32 U	12 U

Note: 1. Exceedances of NYSDEC Freshwater Sediment Guidance Values for Class A sediments are highlighted in bold. 2. NS = no standard

TABLE 2
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Sediment Sampling Results - September 2017

			Location:	SED-POND-1	SED-POND-2	SED-POND-3	SED-POND-4	SED-POND-5	SED-POND-6	SED-POND-7	SED-POND-8
			Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**Freshwater Sediment Guidance Value**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
Heptachlor Epoxide	1024-57-3	ug/kg	15	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
Methoxychlor	72-43-5	ug/kg	59	31 U	30 U	19 U	26 U	27 U	34 U	32 U	12 U
P,P'-DDD	72-54-8	ug/kg	NS	31 U	87	11 J	30	18 JP	34 U	15 J	13
P,P'-DDE	72-55-9	ug/kg	NS	31 U	190	13 J	26	24 J	19 J	24 J	12
P,P'-DDT	50-29-3	ug/kg	NS	31 U	52	19 U	26 U	27 U	34 U	32 U	12 U
Toxaphene	8001-35-2	ug/kg	6	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
Total Pesticides		ug/kg	NS	48	329	24	56	42	19	39	25
PCBs											
PCB-1016 (Aroclor 1016)	12674-11-2	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1221 (Aroclor 1221)	11104-28-2	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1232 (Aroclor 1232)	11141-16-5	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1242 (Aroclor 1242)	53469-21-9	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1248 (Aroclor 1248)	12672-29-6	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1254 (Aroclor 1254)	11097-69-1	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1260 (Aroclor 1260)	11096-82-5	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1262 (Aroclor 1262)	37324-23-5	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
PCB-1268 (Aroclor 1268)	11100-14-4	ug/kg	NS	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
Polychlorinated Biphenyl (PCBs)	1336-36-3	ug/kg	100	310 U	300 U	190 U	260 U	270 U	340 U	320 U	120 U
VOCs											
1,1,1-Trichloroethane (TCA)	71-55-6	ug/kg	1900	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	2800	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,1,2-Trichloroethane	79-00-5	ug/kg	1900	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,1-Dichloroethane	75-34-3	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,1-Dichloroethene	75-35-4	ug/kg	520	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2,3-Trichlorobenzene	87-61-6	ug/kg	230	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2,4-Trichlorobenzene	120-82-1	ug/kg	35000	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2-Dichlorobenzene	95-50-1	ug/kg	280	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2-Dichloroethane	107-06-2	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,2-Dichloropropane	78-87-5	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,3-Dichlorobenzene	541-73-1	ug/kg	1800	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,4-Dichlorobenzene	106-46-7	ug/kg	720	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
1,4-Dioxane (P-Dioxane)	123-91-1	ug/kg	NS	92 U	87 U	56 U	79 U	55 U	96 U	97 U	33 U
2-Hexanone	591-78-6	ug/kg	NS	23 U	22 U	14 U	20 U	14 U	24 U	24 U	8.2 U
Acetone	67-64-1	ug/kg	NS	240	360	160	60	160	110	280	160
Benzene	71-43-2	ug/kg	530	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Bromochloromethane	74-97-5	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Bromodichloromethane	75-27-4	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Bromoform	75-25-2	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Bromomethane	74-83-9	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Carbon Disulfide	75-15-0	ug/kg	NS	1.9 J	2.1 J	1.9 J	1.7 J	2.3 J	2.1 J	2.1 J	2.4
Carbon Tetrachloride	56-23-5	ug/kg	1070	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Chlorobenzene	108-90-7	ug/kg	200	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Chloroethane	75-00-3	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Chloroform	67-66-3	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Chloromethane	74-87-3	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U

Note: 1. Exceedances of NYSDEC Freshwater Sediment Guidance Values for Class A sediments are highlighted in bold. 2. NS = no standard

TABLE 2
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Sediment Sampling Results - September 2017

			Location:	SED-POND-1	SED-POND-2	SED-POND-3	SED-POND-4	SED-POND-5	SED-POND-6	SED-POND-7	SED-POND-8
			Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**Freshwater Sediment Guidance Value**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
Cis-1,2-Dichloroethylene	156-59-2	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Cis-1,3-Dichloropropene	10061-01-5	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Cyclohexane	110-82-7	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Dibromochloromethane	124-48-1	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Dichlorodifluoromethane	75-71-8	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Ethylbenzene	100-41-4	ug/kg	430	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Isopropylbenzene (Cumene)	98-82-8	ug/kg	210	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
m,p-Xylene	179601-23-1	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Methyl Acetate	79-20-9	ug/kg	NS	23 U	22 U	14 U	20 U	14 U	24 U	24 U	8.2 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	ug/kg	NS	100	100	55	58	46	70	92	35
Methyl Isobutyl Ketone (4-Methyl-2-Pentar	108-10-1	ug/kg	NS	23 U	22 U	14 U	20 U	14 U	24 U	24 U	8.2 U
Methylcyclohexane	108-87-2	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Methylene Chloride	75-09-2	ug/kg	NS	1.2 J	45	1.3 J	4 U	4.5	0.82 J	4.6 J	1.9
O-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/kg	820	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Styrene	100-42-5	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Tert-Butyl Methyl Ether	1634-04-4	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Tetrachloroethylene (PCE)	127-18-4	ug/kg	16000	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Toluene	108-88-3	ug/kg	930	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Trans-1,2-Dichloroethene	156-60-5	ug/kg	1200	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Trans-1,3-Dichloropropene	10061-02-6	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Trichloroethylene (TCE)	79-01-6	ug/kg	1800	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Trichlorofluoromethane	75-69-4	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Vinyl Chloride	75-01-4	ug/kg	NS	4.6 U	4.3 U	2.8 U	4 U	2.8 U	4.8 U	4.8 U	1.6 U
Total VOCs		ug/kg	NS	343	507	218	120	213	183	379	199
SVOCs											
1,2,4,5-Tetrachlorobenzene	95-94-3	ug/kg	3000	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2,3,4,6-Tetrachlorophenol	58-90-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2,4,5-Trichlorophenol	95-95-4	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2,4,6-Trichlorophenol	88-06-2	ug/kg	NS	3100 U	3000 U	1800 U	2500 U	2700 U	3300 U	3100 U	1200 U
2,4-Dichlorophenol	120-83-2	ug/kg	NS	3100 U	3000 U	1800 U	2500 U	2700 U	3300 U	3100 U	1200 U
2,4-Dimethylphenol	105-67-9	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2,4-Dinitrophenol	51-28-5	ug/kg	NS	6200 U	5900 U	3700 U	5100 U	5400 U	6700 U	6300 U	2300 U
2,4-Dinitrotoluene	121-14-2	ug/kg	NS	1600 U	1500 U	920 U	1300 U	1400 U	1700 U	1600 U	590 U
2,6-Dinitrotoluene	606-20-2	ug/kg	NS	1600 U	1500 U	920 U	1300 U	1400 U	1700 U	1600 U	590 U
2-Chloronaphthalene	91-58-7	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2-Chlorophenol	95-57-8	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2-Methylnaphthalene	91-57-6	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	110 J
2-Methylphenol (O-Cresol)	95-48-7	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2-Nitroaniline	88-74-4	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
2-Nitrophenol	88-75-5	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
3,3'-Dichlorobenzidine	91-94-1	ug/kg	NS	3100 U	3000 U	1800 U	2500 U	2700 U	3300 U	3100 U	1200 U
3-Nitroaniline	99-09-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4,6-Dinitro-2-Methylphenol	534-52-1	ug/kg	NS	6200 U	5900 U	3700 U	5100 U	5400 U	6700 U	6300 U	2300 U
4-Bromophenyl Phenyl Ether	101-55-3	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4-Chloro-3-Methylphenol	59-50-7	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4-Chloroaniline	106-47-8	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4-Chlorophenyl Phenyl Ether	7005-72-3	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4-Methylphenol (P-Cresol)	106-44-5	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U

Note: 1. Exceedances of NYSDEC Freshwater Sediment Guidance Values for Class A sediments are highlighted in bold. 2. NS = no standard

TABLE 2
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Sediment Sampling Results - September 2017

			Location:	SED-POND-1	SED-POND-2	SED-POND-3	SED-POND-4	SED-POND-5	SED-POND-6	SED-POND-7	SED-POND-8
			Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	CAS Number	Units	Freshwater Sediment Guidance Value	Results	Results	Results	Results	Results	Results	Results	Results
4-Nitroaniline	100-01-6	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
4-Nitrophenol	100-02-7	ug/kg	NS	16000 U	15000 U	9200 U	13000 U	14000 U	17000 U	16000 U	5900 U
Acenaphthene	83-32-9	ug/kg	NS	250 J	360 J	240 J	210 J	6700 U	290 J	470 J	360 J
Acenaphthylene	208-96-8	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Acetophenone	98-86-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Anthracene	120-12-7	ug/kg	NS	1200 J	2200 J	1400 J	890 J	6700 U	1600 J	2400 J	1400 J
Atrazine	1912-24-9	ug/kg	NS	3100 U	3000 U	1800 U	2500 U	2700 U	3300 U	3100 U	1200 U
Benzaldehyde	100-52-7	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Benzo(A)Anthracene	56-55-3	ug/kg	NS	9800	13000	11000	8400	5200	11000	16000	9800
Benzo(A)Pyrene	50-32-8	ug/kg	NS	14000	16000	14000	12000	7200	15000	21000	11000
Benzo(B)Fluoranthene	205-99-2	ug/kg	NS	26000	27000	23000	22000	13000	28000	39000	19000
Benzo(G,H,I)Perylene	191-24-2	ug/kg	NS	14000	11000	8400	7100	4000 J	8200 J	11000	5000
Benzo(K)Fluoranthene	207-08-9	ug/kg	NS	770 U	9300	7500	7100	5000	9300	13000	6500
Benzyl Butyl Phthalate	85-68-7	ug/kg	NS	7700 U	7300 U	4600 U	340 J	6700 U	8300 U	240 J	2900 U
Biphenyl (Diphenyl)	92-52-4	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Bis(2-Chloroethoxy) Methane	111-91-1	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Eth	111-44-4	ug/kg	NS	770 U	730 U	460 U	630 U	670 U	830 U	780 U	290 U
Bis(2-Chloroisopropyl) Ether	108-60-1	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Bis(2-Ethylhexyl) Phthalate	117-81-7	ug/kg	360000	1900 J	1500 J	800 J	1600 J	1300 J	1500 J	1800 J	1000 J
Caprolactam	105-60-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Carbazole	86-74-8	ug/kg	NS	1400 J	1900 J	1400 J	1300 J	500 J	1600 J	2600 J	1400 J
Chrysene	218-01-9	ug/kg	NS	20000	21000	17000	16000	9300	20000	28000	14000
Dibenz(A,H)Anthracene	53-70-3	ug/kg	NS	2800	2600	590	440 J	670 U	2000	680 J	1400
Dibenzofuran	132-64-9	ug/kg	NS	230 J	330 J	190 J	6300 U	6700 U	280 J	440 J	300 J
Diethyl Phthalate	84-66-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Dimethyl Phthalate	131-11-3	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Di-N-Butyl Phthalate	84-74-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Di-N-Octylphthalate	117-84-0	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Fluoranthene	206-44-0	ug/kg	NS	33000	41000	31000	27000	16000	36000	53000	27000
Fluorene	86-73-7	ug/kg	NS	440 J	800 J	450 J	430 J	310 J	550 J	850 J	670 J
Hexachlorobenzene	118-74-1	ug/kg	NS	770 U	730 U	460 U	630 U	670 U	830 U	780 U	290 U
Hexachlorobutadiene	87-68-3	ug/kg	1200	1600 U	1500 U	920 U	1300 U	1400 U	1700 U	1600 U	590 U
Hexachlorocyclopentadiene	77-47-4	ug/kg	810	7700 UT	7300 UT	4600 UT	6300 UT	6700 UT	8300 UT	7800 UT	2900 UT
Hexachloroethane	67-72-1	ug/kg	NS	770 U	730 U	460 U	630 U	670 U	830 U	780 U	290 U
Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/kg	NS	16000	13000	10000	8900	5000	10000	14000	6400
Isophorone	78-59-1	ug/kg	NS	3100 U	3000 U	1800 U	2500 U	2700 U	3300 U	3100 U	1200 U
Naphthalene	91-20-3	ug/kg	NS	7700 U	230 J	4600 U	6300 U	6700 U	8300 U	7800 U	190 J
Nitrobenzene	98-95-3	ug/kg	NS	770 U	730 U	460 U	630 U	670 U	830 U	780 U	290 U
N-Nitrosodi-N-Propylamine	621-64-7	ug/kg	NS	770 U	730 U	460 U	630 U	670 U	830 U	780 U	290 U
N-Nitrosodiphenylamine	86-30-6	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Pentachlorophenol	87-86-5	ug/kg	14000	6200 U	5900 U	3700 U	5100 U	5400 U	6700 U	6300 U	2300 U
Phenanthrene	85-01-8	ug/kg	NS	10000	15000	9300	6800	5300 J	12000	18000	9900
Phenol	108-95-2	ug/kg	NS	7700 U	7300 U	4600 U	6300 U	6700 U	8300 U	7800 U	2900 U
Pyrene	129-00-0	ug/kg	NS	22000	28000	20000	17000	11000	23000	33000	17000
Total SVOCs		ug/kg	NS	173,020	204,220	156,270	137,510	83,110	180,320	255,480	132,430

Note: 1. Exceedances of NYSDEC Freshwater Sediment Guidance Values for Class A sediments are highlighted in bold. 2. NS = no standard

TABLE 3
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Surface Water Sampling Results - September 2017

				Location:	OUTFALL-002	OUTFALL-003	OUTFALL-10	UTFALL-17K-DOW	OUTFALL-17K-UP	OUTFALL-A	OUTFALL-A (Dup)	SW-POND-1-D	SW-POND-1-S	SW-POND-2-D	SW-POND-2-S
				Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	CAS Number	Units	TOGS 1.1.1 Surface Water Standard	EPA Health Advisory	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
Perfluorinated Compounds															
Perfluorobutanesulfonic acid (PFBS)	375-73-5	ng/l	NS	NS	18.9	47.5	14.7	3.94	3.33	31.5	32.7	12.5	12.4	15.4	12.4
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	132	88.1	46.2	7.74	2.62	102	106	42.5	40.3	43.7	39.6
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	ng/l	NS	NS	137	240	91.9	4.95	1.01 J	217	211	85.3	82.3	90.4	81.5
Perfluorononanoic Acid (PFNA)	375-95-1	ng/l	NS	NS	33.3	14.5	9.47	1.84	1.29 J	10.6	6.45	9.56	8.84	10.3	8.78
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	**70**	**1060**	**1120**	**277**	16.5	3.66	**450**	**276**	**278**	**262**	**313**	**259**
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	**70**	**130**	**71.8**	41.7	8.22	4.07	56.6	49	40.2	37.9	41	38
Sum of PFOS and PFOA		ng/l	NS	**70**	**1190**	**1191.8**	**318.7**	24.72	7.73	**506.6**	**325**	**318.2**	**299.9**	**354**	**297**
Total PFCs		ng/l	NS	NS	1511.2	1581.9	480.97	43.19	15.98	867.7	681.15	468.06	443.74	513.8	439.28
Organics															
Diesel Range Organics	PHCC10C28	mg/l	NS	NS	0.1 J	0.084 J	0.11 J	0.12 J	0.15 J	0.084 J	0.11 J	0.096 J	0.4 U	0.092 J	0.089 J
Gasoline Range Organics	8006-61-9	mg/l	NS	NS	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Total Organic Carbon	TOC	mg/l	NS	NS	1.8 B	3.3 B	3.2	4.1 B	4.5 B	3.7 B	3.5 B	3.4 B	3.4 B	3.3 B	3.2 B
Nonhalogenated Organics															
Ethylene Glycol	107-21-1	mg/l	0.05	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Oxy Bis Ethanol	111-46-6	mg/l	NS	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Propylene Glycol	57-55-6	mg/l	1	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Metals															
Aluminum	7429-90-5	ug/l	NS	NS	60.1	62.5	390	69.2	74.3	281	131	53.4	56.8	46.9	39.9 J
Antimony	7440-36-0	ug/l	3	NS	2 U	2 U	2 U	0.71 J	0.66 J	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	7440-38-2	ug/l	50	NS	2.1	0.8 J	0.97 J	1.5 J	1.3 J	6.5	3.3	1 J	0.97 J	0.84 J	1.1 J
Barium	7440-39-3	ug/l	1000	NS	16.9	15.8	15.4	22.2	22.4	102	51.7	15.6	15.5	15.1	15.8
Beryllium	7440-41-7	ug/l	3	NS	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	7440-43-9	ug/l	5	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Calcium	7440-70-2	ug/l	NS	NS	46400	43400	29400	33700	26900	193000	131000	33500	31800	30200	31100
Chromium, Total	7440-47-3	ug/l	50	NS	3 J	4 U	2.3 J	2.1 J	4 U	2.6 J	2.3 J	1.4 J	4 U	4 U	2.2 J
Cobalt	7440-48-4	ug/l	NS	NS	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Copper	7440-50-8	ug/l	200	NS	4 U	3.8 J	67.4	4 U	4.3	9.4	6.3	1.6 J	1.7 J	1.5 J	1.4 J
Iron	7439-89-6	ug/l	**300**	NS	**557**	95.1 J	248	**314**	**341**	**6140**	**2830**	211	221	273	**303**
Lead	7439-92-1	ug/l	50	NS	1.2 U	1.2 U	0.82 J	1.2 U	0.43 J	1.5	0.95 J	1.2 U	1.2 U	1.2 U	1.2 U
Magnesium	7439-95-4	ug/l	35000	NS	5870	11000	4720	5680	4530	11100	10200	5010	4740	4810	4960
Manganese	7439-96-5	ug/l	**300**	NS	283	8.6	191	133	139	**3630**	**1670**	178	197	256	299
Mercury	7439-97-6	ug/l	0.7	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	7440-02-0	ug/l	100	NS	4 U	4 U	1.8 J	4 U	4 U	1.6 J	4 U	4 U	4 U	4 U	4 U
Potassium	7440-09-7	ug/l	NS	NS	5070	2730	2430	2510	1420	4950	4520	3020	2920	2480	2460
Selenium	7782-49-2	ug/l	10	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	7440-22-4	ug/l	50	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Sodium	7440-23-5	ug/l	NS	NS	5560	132000	27500	54900	51200	6850	6270	24600	22300	29600	29800
Thallium	7440-28-0	ug/l	0.5	NS	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	7440-62-2	ug/l	NS	NS	3 J	4 U	4 U	4 U	4 U	3 J	4 U	4 U	4 U	4 U	4 U
Zinc	7440-66-6	ug/l	2000	NS	16 U	10 J	16.4	16 U	16 U	22.9	12.6 J	16 U	16 U	11.5 J	16 U
Total Metals		ug/l	NS	NS	63,825	189,327	64,984	97,333	84,633	226,101	156,698	66,592	62,253	67,695	68,982
Pesticides															
Aldrin	309-00-2	ug/l	0.02	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	319-84-6	ug/l	0.01	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	959-98-8	ug/l	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	319-85-7	ug/l	0.04	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Beta Endosulfan	33213-65-9	ug/l	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Chlordane	57-74-9	ug/l	0.05	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Delta BHC (Delta Hexachlorocyclohexane)	319-86-8	ug/l	0.04	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	60-57-1	ug/l	0.004	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan Sulfate	1031-07-8	ug/l	NS	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin	72-20-8	ug/l	0.2	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Aldehyde	7421-93-4	ug/l	5	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Ketone	53494-70-5	ug/l	5	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Gamma Bhc (Lindane)	58-89-9	ug/l	0.05	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	76-44-8	ug/l	0.04	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor Epoxide	1024-57-3	ug/l	0.03	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	72-43-5	ug/l	35	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDD	72-54-8	ug/l	0.3	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDE	72-55-9	ug/l	0.2	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

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TABLE 3
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Surface Water Sampling Results - September 2017

					Location:	OUTFALL-002	OUTFALL-003	OUTFALL-10	UTFALL-17K-DOW	OUTFALL-17K-UP	OUTFALL-A	OUTFALL-A (Dup)	SW-POND-1-D	SW-POND-1-S	SW-POND-2-D	SW-POND-2-S
					Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**TOGS 1.1.1 Surface Water Standard**	**EPA Health Advisory**		**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
P,P'-DDT	50-29-3	ug/l	0.2	NS		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toxaphene	8001-35-2	ug/l	0.06	NS		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Pesticides		ug/l	NS	NS		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs																
PCB-1016 (Aroclor 1016)	12674-11-2	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	11104-28-2	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	11141-16-5	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	53469-21-9	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	12672-29-6	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	11097-69-1	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	11096-82-5	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	37324-23-5	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	11100-14-4	ug/l	NS	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Polychlorinated Biphenyl (PCBs)	1336-36-3	ug/l	0.09	NS		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
VOCs																
1,1,1-Trichloroethane (TCA)	71-55-6	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.2	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	79-00-5	ug/l	1	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	75-35-4	ug/l	0.07	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	87-61-6	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NS	NS		1 UT	1 UT	1 UT	1 UT	1 UT	1 UT	1 UT	1 UT	1 UT	1 UT	1 UT
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	ug/l	0.0006	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	ug/l	3	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2	ug/l	0.6	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5	ug/l	1	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	ug/l	3	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	ug/l	3	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane (P-Dioxane)	123-91-1	ug/l	NS	NS		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Hexanone	591-78-6	ug/l	50	NS		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	67-64-1	ug/l	50	NS		11	3.4 J	5.6	7.8	3.4 J	3 J	3.1 J	4.5 J	5.8	4.7 J	4.8 J
Benzene	71-43-2	ug/l	1	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	74-97-5	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	75-27-4	ug/l	50	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	75-25-2	ug/l	50	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	74-83-9	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	75-15-0	ug/l	60	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	56-23-5	ug/l	0.4	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	75-00-3	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	67-66-3	ug/l	7	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	74-87-3	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	156-59-2	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	10061-01-5	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	124-48-1	ug/l	50	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	100-41-4	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	98-82-8	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m,p-Xylene	179601-23-1	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	79-20-9	ug/l	NS	NS		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	ug/l	50	NS		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentan	108-10-1	ug/l	NS	NS		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane	108-87-2	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	75-09-2	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	100-42-5	ug/l	50	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	1634-04-4	ug/l	10	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	127-18-4	ug/l	0.7	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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					Location:	OUTFALL-002	OUTFALL-003	OUTFALL-10	UTFALL-17K-DOW	OUTFALL-17K-UP	OUTFALL-A	OUTFALL-A (Dup)	SW-POND-1-D	SW-POND-1-S	SW-POND-2-D	SW-POND-2-S
					Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**TOGS 1.1.1 Surface Water Standard**	**EPA Health Advisory**		**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
Toluene	108-88-3	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	156-60-5	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	10061-02-6	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	79-01-6	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	75-69-4	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	75-01-4	ug/l	0.3	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total VOCs		ug/l	NS	NS		11	3.4	5.6	7.8	3.4	3	3.1	4.5	5.8	4.7	4.8
SVOCs																
1,2,4,5-Tetrachlorobenzene	95-94-3	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol	58-90-2	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	95-95-4	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	88-06-2	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	120-83-2	ug/l	0.3	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	105-67-9	ug/l	1	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	51-28-5	ug/l	1	NS		20 U	20 U	21 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	121-14-2	ug/l	5	NS		2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,6-Dinitrotoluene	606-20-2	ug/l	0.7	NS		2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Chloronaphthalene	91-58-7	ug/l	10	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	95-57-8	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	91-57-6	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol (O-Cresol)	95-48-7	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	88-74-4	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	88-75-5	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	91-94-1	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	99-09-2	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-Methylphenol	534-52-1	ug/l	NS	NS		20 U	20 U	21 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4-Bromophenyl Phenyl Ether	101-55-3	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	59-50-7	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	106-47-8	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	7005-72-3	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol (P-Cresol)	106-44-5	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	100-01-6	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	100-02-7	ug/l	NS	NS		20 U	20 U	21 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	83-32-9	ug/l	20	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	208-96-8	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetophenone	98-86-2	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	120-12-7	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Atrazine	1912-24-9	ug/l	3	NS		2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	100-52-7	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(A)Anthracene	56-55-3	ug/l	0.002	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(A)Pyrene	50-32-8	ug/l	**0.002**	NS		1 U	1 U	1 U	1 U	1 U	**0.24 J**	1 U	1 U	1 U	1 U	1 U
Benzo(B)Fluoranthene	205-99-2	ug/l	0.002	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(G,H,I)Perylene	191-24-2	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(K)Fluoranthene	207-08-9	ug/l	0.002	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzyl Butyl Phthalate	85-68-7	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Biphenyl (Diphenyl)	92-52-4	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethoxy) Methane	111-91-1	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Eth	111-44-4	ug/l	0.03	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bis(2-Chloroisopropyl) Ether	108-60-1	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	117-81-7	ug/l	5	NS		2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	105-60-2	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	86-74-8	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	218-01-9	ug/l	0.002	NS		2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(A,H)Anthracene	53-70-3	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibenzofuran	132-64-9	ug/l	NS	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl Phthalate	84-66-2	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl Phthalate	131-11-3	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-N-Butyl Phthalate	84-74-2	ug/l	50	NS		10 U	0.87 J	1.1 BJ	0.99 J	10 U	10 U	10 U	1 J	0.85 BJ	1.3 BJ	1.3 J
Di-N-Octylphthalate	117-84-0	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	206-44-0	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	0.88 J	10 U	10 U	10 U	10 U	10 U
Fluorene	86-73-7	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Note: 1. Exceedances of TOGS 1.1.1 Surface Water Sandard and the EPA Health Advisory are highlighted in bold. 2. NS = no standard

TABLE 3
New York Air National Guard
Stewart International Airport
Newburgh, NY
Recreation Pond Surface Water Sampling Results - September 2017

					Location:	OUTFALL-002	OUTFALL-003	OUTFALL-10	UTFALL-17K-DOW	OUTFALL-17K-UP	OUTFALL-A	OUTFALL-A (Dup)	SW-POND-1-D	SW-POND-1-S	SW-POND-2-D	SW-POND-2-S
					Sample Date:	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017	9/7/2017
Chemical Name	**CAS Number**	**Units**	**TOGS 1.1.1 Surface Water Standard**	**EPA Health Advisory**		**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
Hexachlorobenzene	118-74-1	ug/l	0.04	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	87-68-3	ug/l	0.5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene	77-47-4	ug/l	5	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	67-72-1	ug/l	5	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.35 J	1 U	1 U
Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/l	0.002	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isophorone	78-59-1	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	91-20-3	ug/l	10	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	98-95-3	ug/l	0.4	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-Nitrosodi-N-Propylamine	621-64-7	ug/l	NS	NS		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-Nitrosodiphenylamine	86-30-6	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	87-86-5	ug/l	1	NS		20 U	20 U	21 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	85-01-8	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	108-95-2	ug/l	1	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	129-00-0	ug/l	50	NS		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total SVOCs		ug/l	NS	NS		ND	0.87	1.1	0.99	ND	1.12	ND	1	1.2	1.3	1.3

Note: 1. Exceedances of TOGS 1.1.1 Surface Water Sandard and the EPA Health Advisory are highlighted in bold. 2. NS = no standard