US Army Corps of Engineers
Baltimore District

QUARTERLY OM&M REPORT NO. 11

January to March 2023

PFOS/PFOA Mitigation
Interim Storm Water Treatment System
Long Term Operation, Maintenance, and Monitoring Services

Stewart Air National Guard Base, New York
Contract No. W912DR-21-C-0035

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ACRONYMS AND ABBREVIATIONS

AFFF	aqueous film forming foam
ANG	Air National Guard
BES	Bristol Environmental Solutions, LLC
EPA	U.S Environmental Protection Agency
F400	Calgon Filtrasorb 400
GAC	granular activated carbon
GPM	gallons per minute
HA	Health Advisory
ISWTS	Interim Storm Water Treatment System
mg/L	milligrams per liter
NTU	nephelometric turbidity units
OEC	Onion Equipment Company
OM&M	Operations, Maintenance, and Monitoring
PE	Process Effluent
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
ppt	parts per trillion
SANGB	Stewart Air National Guard Base
TOC	total organic carbon
USACE	US Army Corps of Engineers

EXECUTIVE SUMMARY

An Interim Storm Water Treatment System (ISWTS) is operating at Stewart Air National Guard Base (SANGB) in Newburgh, New York. The stormwater is contaminated with perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). PFOS and PFOA are two constituents of aqueous film-forming foam (AFFF), that have been detected above the 2016 U.S. Environmental Protection Agency (EPA) drinking water lifetime Health Advisory (HA) standard of 70 parts per trillion (ppt) (individually or combined).

The ISWTS has been operating consistently since July 13, 2020. The ISWTS consists of four treatment trains with three treatment vessels per train. This report summarizes OM&M between January 1 and March 31, 2023. The use of treatment trains consisting of two granular activated carbon (GAC) followed by a resin (IX) vessel and treatment trains consisting of three GAC vessels was evaluated during this reporting period.

During the performance period, a total of 38,730,960 gallons of stormwater were treated and discharged over the outfall weir by the ISWTS. There were 90 days of operation between January 1 and March 31, 2023. During this period of performance, the Recreation Pond was drawn down for 27 of the 90 days or 30% of the time.

PFOS and PFOA samples were collected 13 times on the influent and effluent during the performance period. The combined PFOS and PFOA influent and effluent average concentrations during the performance period were 293 ppt and 13.1 ppt respectively. The highest effluent PFOS and PFOA concentration detected in the ISWTS effluent was 49.6 ppt for the OM&M period between January 1 and March 31, 2023.

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1.0 INTRODUCTION

Bristol Environmental Solutions, LLC (BES), under Contract with the US Army Corps of Engineers (USACE) is operating an Interim Storm Water Treatment System (ISWTS) on behalf of the Air National Guard (ANG) at Stewart Air National Guard Base (SANGB) in Newburgh, New York. The stormwater is contaminated with perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). PFOS and PFOA are two constituents of aqueous film-forming foam (AFFF), that have been detected above the 2016 U.S. Environmental Protection Agency (EPA) drinking water lifetime Health Advisory (HA) standard of 70 parts per trillion (ppt) (individually or combined).

The ISWTS intercepts stormwater from a Recreation Pond and discharges treated effluent over the existing Recreation Pond outfall weir. When weather conditions allow, the ISWTS draws down the pond level and treats all stormwater discharges. The Recreation Pond drawdown provides a storage reservoir to prevent discharge of PFOS/PFOA when precipitation occurs. When precipitation events occur that exceed the ISWTS capacity the Recreation Pond fills up and both treated effluent and untreated stormwater go over the outfall weir.

This is the 11th quarterly report that summarizes Operations, Maintenance, and Monitoring (OM&M) activities conducted by BES at SANGB. This report summarizes ISWTS operations between January 1 and March 31, 2023, at SANGB and includes the contract award of Option Year 1 extending OM&M activities under modification 0001 and 0002 through the period of performance of September 13, 2023.

2.0 GENERAL COMPLIANCE SUMMARY

The ISWTS has been operating consistently since July 13, 2020, following installation and commissioning of pretreatment system improvements in June and early July 2020. The ISWTS consists of four treatment trains with three treatment vessels per train. This report

summarizes OM&M between January 1 and March 31, 2023, or months 31, 32, and 33 post start-up. During the performance period two (2) all-carbon treatment configurations from trains A and C were compared against 2 carbon and ion exchange resin (IX) configurations from trains B and D. The comparison of two media configurations was performed to evaluate the best system effectiveness for PFOS and PFOA mitigation as well as other per- and polyfluoroalkyl substances (PFAS) while evaluating the two configurations for extending media lifecycle and combating the seasonal effects of Recreation Pond water quality.

In January 2023, BES observed elevated PFOS/PFOA in the combined effluent for the ISWTS but did not detect elevated PFOS/PFOA at any of the intra-process sampling locations, which prompted additional sampling and monitoring activities. In an effort to isolate and evaluate each treatment train's (A-B-C-D) performance, additional samples were first collected from the effluent sample port with combined flow from treatment trains (A-B-C) and the D train taken offline on January 24, 2023, to compare to the combined effluent (e.g., all four trains). This sampling confirmed that the combined effluent was 15.7 ppt for PFOS/PFOA when all four trains were running and that the effluent concentration increased to 20.5 ppt when Train D was taken offline. This sampling confirmed that Train D (carbon and resin), was not the likely source of elevated PFOS/PFOA concentration in the effluent.

To determine where the elevated PFOS/PFOA was coming from, BES operated each train (A-B-C-D) independently at 125 gallons per minute (GPM) for 90 minutes and collected a sample from each train's effluent on February 7, 2023. These treatment train effluent samples with each treatment train running independently are summarized as follows:

Treatment Train	Treatment Train Effluent PFOS/PFOA (ppt)
Treatment Train A – All Carbon	83.0
Treatment Train B – Carbon and Resin	1.1
Treatment Train C – All Carbon	65.6
Treatment Train D – Carbon and Resin	1.3

These treatment train effluent sample results confirmed PFOS/PFOA detections were coming from the all-GAC trains A and C. Following briefs to project stakeholders, BES reduced elevated effluent PFOS/PFOA by taking the two all-GAC trains A and C offline on Friday February 17, 2023, BES immediately began planning for the next media change with Onion Equipment Company (OEC).

BES expedited mobilization of OEC to perform comprehensive media changeout and system improvements between March 1 and 10, 2023.

Because intra-process sample results were not detecting PFOS/PFOA breakthrough, BES and OEC also installed additional sample ports on the direct effluent from each treatment vessel to evaluate if the existing intra-process sample ports were representative for detection of PFOS and PFOA at each vessel's effluent as further discussed in Section 5.0. Activities included complete media replacement to evaluate the new sample locations and extend testing and evaluation of two all-carbon treatment configurations from trains A and C operating against two carbon and resin configurations from trains B and D. The sand filter media was also replaced during this media change.

The analytical method used was EPA 537.1 M. Final PFAS results are provided in **Table 1**.

3.0 ISWTS CONFIGURATION DURING PERFORMANCE PERIOD

The ISWTS maintained the following unit processes; centrifugal separator, coarse sand filtration, fine sand filtration, primary and secondary bag filtration followed by three stages of PFOS/PFOA treatment media.

To extend media configuration comparison of all GAC treatment against GAC and IX treatment, BES installed twelve (12) additional sample ports, one from each treatment vessel, to evaluate new process flow locations against the existing intra-process location results.

As described in Quarterly Report No. 10 (October to December 2022), a comparison of the performance of the GAC-GAC-IX regime against an all GAC treatment regime was extended, to directly compare performance of each regime. The GAC media is new Calgon Filtrasorb 400 (F400) and the IX resin is Purolite PFA694. Peracetic acid was available but not introduced this quarter to see if any increased biofouling may be observed as a result of it not being introduced to the ISWTS influent. The system configuration is shown in **Figure 1**.

4.0 GENERAL FACILITY OPERATIONS SUMMARY

During the performance period, a total of 38,730,960 gallons of stormwater were treated and discharged over the outfall weir by the ISWTS. All treated effluent was discharged over the outfall weir and no effluent was recirculated to the Recreation Pond during the performance period. The table below summarizes the total volume treated (gallons), operational time (hours), run time (% of total time), and average treatment rate (gallons per minute) during each month of system operations. The total gallons summarized below represent the total water discharged over the weir. The ISWTS and influent pump does not run all the time. It is turned off when system maintenance is being performed, during power failures, and during periods when Recreation Pond drawdown objectives were achieved. These are the primary reasons why reduced run time occurs.

Month	Volume Treated (Gallons)	Operational Time[1] (Hours)	Run Time[2] (Percent)	Average Treatment Flow[3] (GPM)
January 2023	14,012,800	763	100%	306
February 2023	12,219,123	663	99%	307
March 2023	12,499,037	733	99%	284
Total	38,730,960	2,159		

[1]Operation Time – Hours influent pump in operation during month
[2]Run Time – Hours pump running divided by the total period time
[3]Average GPM – Average flow total gallons divided by operational hours

There were 90 days of operation between January 1 and March 31, 2023. During this period of performance, the Recreation Pond was drawn down for 27 of the 90 days or 30% of the time. The Recreation Pond level during the performance period is shown on **Figure 2**.

5.0 FACILITY PERFORMANCE MONITORING

5.1 INFLUENT AND EFFLUENT PFOS AND PFOA MONITORING

As previously noted, PFOS and PFOA samples were collected 13 times on the influent and effluent during the performance period. **Figure 3** shows the influent and effluent combined PFOS and PFOA concentrations based on the validated results. As shown in **Figure 3**, the combined PFOS and PFOA influent and effluent averaged concentrations during the performance period were 293.1 ppt and 13.1 ppt, respectively. The maximum combined PFOS and PFOA influent concentration was 367 ppt on March 21, 2023.

The maximum detection of PFOS/PFOA in the combined effluent, before the February 17, 2023, shut down of trains A and C was 49.6 ppt on February 7, 2023. The effluent detection of PFOS/PFOA after trains A and C (all carbon) were taken offline was non-detect (ND) on February 21 and 28, 2023.

5.2 INTRA-PROCESS PFOS/PFOA AND TOTAL PFAS MONITORING

During the performance period, intra-process monitoring for PFOS/PFOA and Total PFAS was performed after all three media stages. Sample results are provided in **Table 1**.

Intra-process samples were collected to compare the performance of GAC and IX treatment against all GAC treatment. The all GAC treatment was initially believed to be equally effective in PFOS, PFOA, and Total PFAS mitigation when compared to trains configured with GAC and IX. However, supplemental testing discussed in Section 2.0 confirmed that PFOS/PFOA and total PFAS breakthrough measured in the effluent was caused by the two all GAC treatment trains (trains A and C). These results were in conflict with the intra-process sampling that did not detect PFOS/PFOA above 1.7 ppt in the third stage effluent during the performance period.

The ISWTS media vessels use a hub and lateral design to collect treated effluent. Effluent to the next vessel discharges from the top side of the hub. However, the samples are collected from the drain line at the bottom of the vessels, which is connected to the bottom of the effluent hub. The low detections in the intra-process sample ports suggest that these ports are not accurately representing the effluent water quality from each vessel. At the end of the media change, new sample ports (Identified as PE for Process Effluent) were installed on each vessel effluent. Going forward these new sample locations will be used for intra-process monitoring. Both the original and new (PE) sample port locations are highlighted in **Figure 1**.

5.3 OTHER WATER QUALITY MONITORING

During the performance period additional monitoring was performed for total organic carbon (TOC), and glycols on the influent, secondary GAC effluent, and final effluent on January 26, 2023. These results are shown in **Table 2**. Elevated TOC is known to impact treatment media life. The ion exchange resin manufacturer recommends that TOC not be

more than 2 milligrams per liter (mg/L). The influent TOC was 8.6 mg/L, and the GAC-2 effluent (influent to the resin) was 6.60 mg/L indicating that the influent TOC level to the ion exchange resin was elevated. Effluent TOC concentration was 14.0 mg/L. These results are significantly higher than what is recommended. We are unable to confirm why the results were so high. However, based on the performance of the resin, we do not believe they negatively impacted the ISWTS performance.

5.4 TURBIDITY MONITORING

Turbidity is a measurement that can quantify the level of solids present in the water. It is an onsite test that is helpful to measure in real time, the influent water quality and intra-process performance to confirm the effectiveness of the treatment system in removing solids. During the performance period, influent and effluent turbidity averaged 2.8 nephelometric turbidity units (NTU) and 0.51 NTU, respectively. A graph of the influent and effluent turbidity during the performance period is included as **Figure 4**.

5.5 PERACETIC ACID ADDITION

As discussed, peracetic acid was not introduced into the process influent during the performance period to evaluate if increased biofouling could be detected. No peracetic acid will likely be introduced at least until the end of the next media change.

6.0 SCHEDULED PREVENTIVE MAINTANANCE

During the performance period the following preventive maintenance activities were completed:

- Winterization activities;
- Coarse and fine sand filter backwashes;
- Coarse and fine sand filter cleanings;
- Primary and secondary bag filter changes;
- Primary, secondary, and tertiary carbon backwashing;
- Isolated system flushes and system inspections and checks;

- Ion exchange resin observations and;
- Replaced sample ports and sample tubing.

During this quarterly reporting period the sand filtration media was replaced in March. The coarse and fine sand filters were each backwashed 632 times, respectively and a total of six (6) cleaning events were completed. The primary and secondary bag filters were changed 10 and 19 times, respectively, during the performance period. To maintain acceptable PFAS treatment media pressure, the primary, secondary, and tertiary GAC vessels were backwashed 21 times, during the quarter. The resin was inspected once during the quarter on February 9, 2023. The sand filter maintenance, bag filter changes, GAC backwash events, and ion exchange resin observations are summarized in **Table 3**.

7.0 MATERIAL DISPOSAL

Waste bag filters, sand/gravel media as well as spent GAC and ion exchange resin wastes were generated during the quarter. Spent GAC materials were shipped to Calgon Corporation facility in Catlettsburg, Kentucky, for thermal reactivation on March 23, 2023. Waste bag filters, sand filter media and spent resin waste were shipped to US Ecology for disposal in a Subtitle C Landfill in Belleville, Michigan, on March 16, 2023. Spent media disposal activities are scheduled immediately following each media changeout to eliminate any onsite storage of solid wastes at SANGB. Material disposal documents are provided in Attachment 1.

8.0 PROJECTED ACTIVITIES FOR NEXT PERFORMANCE PERIOD

During the next performance period another media change is anticipated in June to meet performance objectives. Configuring all four trains using GAC, GAC, IX media is envisioned for the next media cycle.

The effectiveness of the Peracetic acid has been uncertain. Bristol turned off the Peracetic acid for the fourth quarter 2022, to see if increased biofouling impacts can be detected. No

increased biofouling effects were observed during the first quarter and will likely remain off to test Ultrasonic Algae Control System proposed for installation in the Recreation Pond to reduce algae growth. The ultrasonic equipment transforms electrical signals to multiple soundwaves of ultrasonic frequencies that breaks the outer membrane of individual algae cells and destroys growth. The new technology will be deployed prior to seasonal impacts and monitored through the end of 2023.

During the second quarter of 2023, offsite disposal and reactivation (GAC) of all spent wastes/media is anticipated. Bristol will continue to evaluate new technologies/materials to reduce biofouling impacts. No capital improvements are planned at this time.

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TABLES

TABLE 1 - COMBINED ANALYTICAL RESULTS

C301684V1_C301691V1 - 01/03/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	USK144	USK149	USK150	USK146	USK148	USK147	USK165	USK164	USK163	USK145			
		Sampling Date	2023/01/03 09:10	2023/01/03 09:45	2023/01/03 09:45	2023/01/03 09:22	2023/01/03 09:38	2023/01/03 09:30	2023/01/03 09:40	2023/01/03 09:32	2023/01/03 09:24	2023/01/03 09:15			
		Sample ID	**SANG-FB-01032023**	**SANG-INF-01032023**	**SANG-INF-01032023D**	**SANG-PBR1-01032023**	**SANG-PBG1-01032023**	**SANG-PBG2-01032023**	**SANG-PAG1-01032023**	**SANG-PAG2-01032023**	**SANG-PAG3-01032023**	**SANG-EFF-01032023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**													
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	25	23	1.4 U	1.5 J	1.4 U	1.4 U	1.4 U	1.4 U	3.2	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	84	79	0.22 J (1)	0.58 J	0.22 J	0.55 J	0.24 J	0.23 J	3.5	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	66	62	0.70 U	0.30 J (2)	0.70 U	0.32 J	0.70 U	0.70 U	1.7 J	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	37	34	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.70 J	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	33	32	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.62 J	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.3	7.6	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	6.8	6.7	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.54 J	0.50 J	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.59 J	0.61 J	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.74 U	0.70 U	0.70 U	0.74 U	0.25 J (2)	0.27 J (2)	0.34 J	0.31 J (2)	0.70 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	13	12	1.0 U	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U	0.33 J	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	14	13	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	96	86	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.59 J	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	5	4.8	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	250 (3)	260 (3)	0.53 J	0.65 J	1.0 U	0.59 J	1.0 U	1.0 U	1.9 J	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.48 J (2)	0.47 J	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	0.60 J	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.4 J	1.4 J	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	86	82	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	20	19	0.67 J	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.69 J	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.5 U	0.78 J	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.42 U	0.40 U	0.40 U	0.42 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-01032023 is a field blank.

Sample SANG-INF-01032023D is a field duplicate of SANG-INF-01032023.

(1) Result is estimated as analyte confirmation criteria (signal to noise ratio) were not met.

(2) Result is estimated as analyte confirmation criteria (ion ratio) were not met.

(3) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PBG1 = post B train GAC Unit 1

PBG2 = post B train GAC Unit 2

PBR1 = post B train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C308688V1_C308677V1 - 01/10/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	UTU619	UTU624	UTU625	UTU621	UTU623	UTU622	UTU590	UTU591	UTU592	UTU620			
		Sampling Date	2023/01/10 08:30	2023/01/10 09:10	2023/01/10 09:10	2023/01/10 08:42	2023/01/10 09:00	2023/01/10 08:50	2023/01/10 08:44	2023/01/10 08:52	2023/01/10 09:02	2023/01/10 08:35			
		Sample ID	**SANG-FB-01102023**	**SANG-INF-01102023**	**SANG-INF-01102023D**	**SANG-PDR1-01102023**	**SANG-PDG1-01102023**	**SANG-PDG2-01102023**	**SANG-PCG3-01102023**	**SANG-PCG2-01102023**	**SANG-PCG1-01102023**	**SANG-EFF-01102023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**													
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	21	23	1.7 J	1.4 U	10	1.4 U	1.4 U	1.4 U	5.6	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	74	76	0.70 U	1.2 J	30	0.70 U	0.29 J	0.29 J	10	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	61	62	0.70 U	0.75 J	26	0.70 U	0.28 J (1)	0.29 J (1)	6.4	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	34	34	1.0 U	0.51 J	1.6 J	1.0 U	1.0 U	1.0 U	2.9	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	31	32	1.0 U	0.50 J	1.5 J	1.0 U	1.0 U	1.0 U	2.5	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.1	8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.70 J	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	7.5	7.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.66 J	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.49 J	0.59 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.58 J	0.59 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.40 J (1)	0.70 U	0.44 J	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	12	12	1.0 U	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	0.96 J	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	13	13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.79 J	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	94	95	1.0 U	0.41 J	0.31 J	1.0 U	1.0 U	1.0 U	4.8	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	4.5	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	260 (2)	250 (2)	1.0 U	0.84 J	1.0 U	1.0 U	1.0 U	1.0 U	12	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.49 J	0.56 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.1 J	1.2 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	78	79	1.4 U	1.4 U	2.1 J	1.4 U	1.4 U	1.4 U	4.0 J	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	16	16	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.0 J	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-01102023 is a field blank.

Sample SANG-INF-01102023D is a field duplicate of SANG-INF-01102023.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PDG1 = post B train GAC Unit 1

PDG2 = post B train GAC Unit 2

PDR1 = post B train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

(1) Result is estimated as analyte confirmation criteria (ion ratio & signal to noise) were not met. There is no direct correlation to the bias regardless of whether the ratio is above or below established limits. Sample results fall below the method LOD. Sample results were usable as flagged.

(2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

TABLE 1 - COMBINED ANALYTICAL RESULTS

C316114V1_C316117V1 - 01/17/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	UVI061	UVI066	UVI067	UVI063	UVI065	UVI064	UVI072	UVI071	UVI070	UVI062			
		Sampling Date	2023/01/17 09:00	2023/01/17 09:45	2023/01/17 09:45	2023/01/17 09:12	2023/01/17 09:30	2023/01/17 09:20	2023/01/17 09:32	2023/01/17 09:22	2023/01/17 09:14	2023/01/17 09:05			
		Sample ID	**SANG-FB-01172023**	**SANG-INF-01172023**	**SANG-INF-01172023D**	**SANG-PBR1-01172023**	**SANG-PBG1-01172023**	**SANG-PBG2-01172023**	**SANG-PAG1-01172023**	**SANG-PAG2-01172023**	**SANG-PAG3-01172023**	**SANG-EFF-01172023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**													
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	24	24	1.1 J	2.4	1.4 U	4.8	1.4 U	1.4 U	9.4	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.28 J	80	80	0.42 J	3.6	0.36 J	2.8	0.45 J	0.39 J	17	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.41 J	64	64	0.64 J	2.4	0.62 J	1.0 J	0.55 J	0.45 J	11	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	34	35	1.0 U	0.91 J	1.0 U	0.36 J	1.0 U	1.0 U	5.2	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	32	31	1.0 U	0.71 J	1.0 U	1.0 U	1.0 U	1.0 U	4.2	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	0.69 J	7.6	7.5	0.84 J	0.85 J	0.94 J	0.65 J	0.67 J	0.68 J	1.5 J	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	5.7	5.6	1.0 U	0.41 J	0.35 J	1.0 U	1.0 U	1.0 U	0.94 J	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.52 J	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.54 J	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	14	14	1.0 U	0.33 J	1.0 U	1.0 U	1.0 U	1.0 U	1.7 J	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	15	15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 J	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	92	94	1.0 U	1.1 J	1.0 U	0.33 J	1.0 U	1.0 U	9.5	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	5	5.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65 J	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	240 (1)	250 (1)	0.68 J	3.7	0.50 J	0.96 J	0.65 J	0.52 J	25	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.5 J	1.5 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	82	80	1.4 U	0.98 J	1.4 U	1.4 U	1.4 U	1.4 U	8.4	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	14	14	1.4 U	0.58 J	1.4 U	1.4 U	1.4 U	1.4 U	1.7 J	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-01172023 is a field blank.

Sample SANG-INF-01172023D is a field duplicate of SANG-INF-01172023.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PBG1 = post B train GAC Unit 1

PBG2 = post B train GAC Unit 2

PBR1 = post B train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

TABLE 1 - COMBINED ANALYTICAL RESULTS

C323152V2R_C323158V1 - 01/24/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

	Bureau Veritas ID		UWU960	UWU965	UWU966	UWU964	UWU963	UWU962	UWU961	UWU977	UWU979	UWU978	UWU980			
	Sampling Date		2023/01/24 08:25	2023/01/24 09:00	2023/01/24 09:00	2023/01/24 08:53	2023/01/24 08:45	2023/01/24 08:38	2023/01/24 08:30	2023/01/24 08:40	2023/01/24 08:54	2023/01/24 08:48	2023/01/24 10:20			
	Sample ID		**SANG-FB-01242023**	**SANG-INF-01242023**	**SANG-INF-01242023D**	**SANG-PCG1-01242023**	**SANG-PCG2-01242023**	**SANG-PCG3-01242023**	**SANG-EFF-01242023**	**SANG-PDR1-01242023**	**SANG-PDG1-01242023**	**SANG-PDG2-01242023**	**SANG-EFF-ABC-01242023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**														
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	14	14	1.4 U	0.72 J	1.4 U	8.1	5.7	0.86 J	11	8.8	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	48	47	0.32 J	0.50 J	0.70 U	11	1.4 J	1.0 J	33	15	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.21 J	38	38	0.24 J (1)	0.25 J	0.22 J	6.4	0.72 J	0.53 J	28	8.7	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	24	23	1.0 U	1.0 U	1.0 U	3.1	0.44 J	0.34 J (1)	1.9 J	4.3	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	23	23	1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	1.9 J	3.5	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	6.9	6.6	1.0 U	1.0 U	1.0 U	0.81 J	1.0 U	1.0 U	1.0 U	0.94 J	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	7.3	6.8	1.0 U	1.0 U	1.0 U	0.63 J	1.0 U	1.0 U	1.0 U	0.69 J	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.81 J	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.91 J	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	7.9	7.9	1.0 U	1.0 U	1.0 U	0.92 J	1.0 U	1.0 U	1.0 U	1.2 J	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	7.7	7.6	1.0 U	1.0 U	1.0 U	0.79 J	1.0 U	1.0 U	1.0 U	0.96 J	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	70	67	1.0 U	1.0 U	1.0 U	5.2	0.38 J	0.30 J	0.73 J	7.3	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	3.1	3	1.0 U	1.0 U	1.0 U	0.53 J	1.0 U	1.0 U	1.0 U	0.59 J	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	190 (2)	180 (2)	1.0 U	1.0 U	1.0 U	13	0.82 J	0.50 J	1.0 J	17	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	0.78 J (1)	0.79 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	45	44	1.4 U	1.4 U	1.4 U	3.8 J	1.4 U	1.4 U	2.6 J	5	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	12	11	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-01242023 is a field blank.

Sample SANG-INF-01242023D is a field duplicate of SANG-INF-01242023.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PCG1 = post A train GAC Unit 1

PCG2 = post A train GAC Unit 2

PCG3 = post A train GAC Unit 3

PDR1 = post D train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

(1) Result is estimated as analyte confirmation criterion (ion ratio) was not met. There is no direct correlation to the bias regardless of whether the ratio is above or below established limits. Sample results fall below the method LOD. Sample results were usable as flagged.

(2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

TABLE 1 - COMBINED ANALYTICAL RESULTS

C328918V1_C328910V1 - 01/30/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	UYD127	UYD132	UYD133	UYD129	UYD131	UYD130	UYD104	UYD102	UYD101	UYD100	UYD103	UYD128			
		Sampling Date	2023/01/30 09:00	2023/01/30 09:50	2023/01/30 09:50	2023/01/30 09:12	2023/01/30 09:29	2023/01/30 09:20	2023/01/30 09:40	2023/01/30 09:32	2023/01/30 09:22	2023/01/30 09:14	2023/01/30 09:38	2023/01/30 09:05			
		Sample ID	**SANG-FB-01302023**	**SANG-INF-01302023**	**SANG-INF-01302023D**	**SANG-PBR1-01302023**	**SANG-PBG1-01302023**	**SANG-PBG2-01302023**	**SANG-PDR1-01302023**	**SANG-PAG1-01302023**	**SANG-PAG2-01302023**	**SANG-PAG3-01302023**	**SANG-PCG3-01302023**	**SANG-EFF-01302023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**															
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	21	21	1.8 J	3.6	1.4 U	5.9	2	1.4 U	1.4 U	1.4 U	8.9	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	67	69	0.70 U	1.4 J	0.27 J	0.51 J	2.3	0.35 J	0.70 U	0.27 J	12	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	59	57	0.70 U	0.61 J	0.70 U	0.70 U	1.1 J	0.70 U	0.70 U	0.70 U	7.6	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	34	33	1.0 U	0.38 J	1.0 U	1.0 U	0.56 J	1.0 U	1.0 U	1.0 U	3.5	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	32	32	1.0 U	0.43 J	1.0 U	1.0 U	0.51 J	1.0 U	1.0 U	1.0 U	3.2	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.3	8.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.87 J	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	6.4	6.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.77 J	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.70 J	0.67 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.61 J	0.68 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.26 J	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	12	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 J	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	13	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	93	92	1.0 U	0.34 J	1.0 U	1.0 U	0.57 J	1.0 U	1.0 U	1.0 U	5.2	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	4.8	4.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.52 J	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	280 (1)	280 (1)	1.0 U	1.0 U	1.0 U	1.0 U	0.90 J	1.0 U	1.0 U	1.0 U	14	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.62 J	0.55 J (2)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.0 J (2)	0.99 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	75	70	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	4.0 J	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	17	17	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.89 J	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-01302023 is a field blank.

Sample SANG-INF-01302023D is a field duplicate of SANG-INF-01302023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

(2) Result is estimated as analyte confirmation criteria (ion ratio) was not met.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PBG1 = post B train GAC Unit 1

PBG2 = post B train GAC Unit 2

PBR1 = post B train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C337403V1_C337436 - 02/07/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

	Bureau Veritas ID		UZW323	UZW328	UZW329	UZW325	UZW327	UZW326	UZW444	UZW443	UZW442	UZW324	UZW445	UZW446	UZW447	UZW448			
	Sampling Date		2023/02/07 08:00	2023/02/07 08:38	2023/02/07 08:38	2023/02/07 08:12	2023/02/07 08:30	2023/02/07 08:20	2023/02/07 08:32	2023/02/07 08:22	2023/02/07 08:14	2023/02/07 08:05	2023/02/07 10:10	2023/02/07 11:40	2023/02/07 13:10	2023/02/07 14:40			
	Sample ID		**SANG-FB-02072023**	**SANG-INF-02072023**	**SANG-INF-02072023D**	**SANG-PDR1-02072023**	**SANG-PDG1-02072023**	**SANG-PDG2-02072023**	**SANG-PCG1-02072023**	**SANG-PCG2-02072023**	**SANG-PCG3-02072023**	**SANG-EFF-02072023**	**SANG-EFF-TRAIN D**	**SANG-EFF-TRAIN C**	**SANG-EFF-TRAIN B**	**SANG-EFF- TRAIN A**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**																	
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.5 U	31	32	13	4.8	9.6	7.1	2.9	1.4 U	15	12	19	8.2	17	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.77 U	89	88	4.2	6.6	30	13	1.9 J	0.70 U	24	1.3 J	41	0.74 J	40	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.77 U	74	73	1.0 J	3.4	27	7.7	0.65 J	0.70 U	16	0.70 U	27	0.70 U	29	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.1 U	37	38	1.1 U	1.3 J	2.3	3.4	1.0 U	1.0 U	7.4	1.0 U	12	1.0 U	13	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.1 U	36	36	1.1 U	1.4 J	2.1 J	3.2	1.0 U	0.66 J	6.6	1.0 U	9.6	1.0 U	11	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.1 U	8.7	8.4	1.1 U	1.1 U	1.1 U	0.75 J	1.0 U	1.0 U	1.4 J	1.0 U	2	1.0 U	2.2	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.1 U	6.2	6	1.1 U	0.41 J	1.1 U	0.58 J	1.0 U	1.0 U	1.1 J	1.0 U	1.3 J	1.0 U	1.4 J	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.1 U	0.45 J	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.70 U	0.70 U	0.70 U	0.77 U	0.70 U	0.70 U	0.70 U	0.70 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.1 U	14	14	1.1 U	0.32 J	0.60 J	1.0 U	1.0 U	1.0 U	2.4	1.0 U	3.1	1.0 U	3.3	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.1 U	15	15	1.1 U	1.1 U	0.43 J	0.59 J	1.0 U	1.0 U	2.0 J	1.0 U	3	1.0 U	3.5	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.1 U	100	100	1.1 U	1.9 J	2.2 J	5.3	1.0 U	1.0 U	14	1.0 U	22	1.0 U	28	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.1 U	6	6	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U	0.85 J	1.0 U	0.75 J	1.0 U	0.99 J	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.1 U	310 (1)	300 (1)	0.57 J	7.9	6.1	20	0.53 J	1.0 U	43	1.3 J	56	1.1 J	72	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	1.3 J	1.3 J	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	100	100	0.90 J	2.4 J	3.9 J	5.7	1.4 U	1.4 U	14	1.4 U	19	1.4 U	24	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	21	21	1.5 U	1.1 J	1.5 U	1.7 J	1.4 U	1.4 U	2.5 J	0.59 J	3.1 J	0.80 J	4.3	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.40 U	0.40 U	0.40 U	0.44 U	0.40 U	0.40 U	0.40 U	0.40 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-02072023 is a field blank.

Sample SANG-INF-02072023D is a field duplicate of SANG-INF-02072023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PDG1 = post A train GAC Unit 1

PDG2 = post A train GAC Unit 2

PDR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C344633V1_C344625V1 - 02/14/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

	Bureau Veritas ID		VBK589	VBK594	VBK595	VBK591	VBK593	VBK592	VBK568	VBK567	VBK566	VBK590			
	Sampling Date		2023/02/14 08:30	2023/02/14 09:10	2023/02/14 09:10	2023/02/14 08:42	2023/02/14 09:00	2023/02/14 08:50	2023/02/14 09:02	2023/02/14 08:52	2023/02/14 08:44	2023/02/14 08:35			
	Sample ID		**SANG-FB-02142023**	**SANG-INF-02142023**	**SANG-INF-02142023D**	**SANG-PBR1-02142023**	**SANG-PBG1-02142023**	**SANG-PBG2-02142023**	**SANG-PAG1-02142023**	**SANG-PAG2-02142023**	**SANG-PAG3-02142023**	**SANG-EFF-02142023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**													
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.5 U	31	31	6.2	18	1.5 U	8.6	1.1 J	1.5 U	16	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.77 U	91	91	0.61 J	24	0.77 U	14	1.1 J	0.77 U	25	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.77 U	81	80	0.77 U	11	0.77 U	8.7	0.77 U	0.77 U	16	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.1 U	38	37	1.1 U	3.1	1.1 U	2.8	1.1 U	1.1 U	6	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.1 U	36	37	1.1 U	2.0 J	1.1 U	2.4	1.1 U	1.1 U	5.1	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.1 U	8.2	8.3	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.76 J	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.1 U	5	5.1	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.36 J	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.1 U	15	15	1.1 U	0.93 J	1.1 U	0.42 J	1.1 U	1.1 U	1.9 J	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.1 U	16	16	1.1 U	0.50 J	1.1 U	0.47 J	1.1 U	1.1 U	1.8 J	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.1 U	120 (1)	110 (1)	1.1 U	4.4	1.1 U	5	1.1 U	1.1 U	13	2.8	10	20
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.1 U	6.1	5.8	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.1 U	330 (1)	310 (1)	1.1 U	10	1.1 U	14	1.1 U	1.1 U	35	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	0.97 J	0.95 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	110	110	1.5 U	3.7 J	1.5 U	4.1 J	1.5 U	1.5 U	11	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	21	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 J	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-02142023 is a field blank.

Sample SANG-INF-02142023D is a field duplicate of SANG-INF-02142023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PBG1 = post A train GAC Unit 1

PBG2 = post A train GAC Unit 2

PBR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C351024V1 - 02/21/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	**VCS278**	**VCS283**	**VCS284**	**VCS280**	**VCS282**	**VCS281**	**VCS279**			
		Sampling Date	**2023/02/21 09:30**	**2023/02/21 10:10**	**2023/02/21 10:10**	**2023/02/21 09:47**	**2023/02/21 10:03**	**2023/02/21 09:55**	**2023/02/21 09:40**			
		Sample ID	**SANG-FB-02212023**	**SANG-INF-02212023**	**SANG-INF-02212023D**	**SANG-PDR1-02212023**	**SANG-PDG1-02212023**	**SANG-PDG2-02212023**	**SANG-EFF-02212023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	26	26	14	9.9	8.3	11	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	86	88	6.6	17	24	1.9 J	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	75	74	1.5 J	9.7	22	0.28 J (1)	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	33	35	0.45 J (2)	3.8	1.6 J	1.0 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	33	34	1.0 U	3.2	1.4 J	1.0 U	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.1	7.6	1.0 U	0.63 J	1.0 U	1.0 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	5.7	5.6	1.0 U	0.40 J	1.0 U	1.0 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.48 J	0.52 J	1.0 U	1.1 U	1.0 U	1.0 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.77 U	0.77 U	0.70 U	0.77 U	0.70 U	0.70 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	15	15	1.0 U	1.3 J	0.50 J	1.0 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	15	15	1.0 U	0.99 J	1.0 U	1.0 U	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	110	110	1.0 U	6.1	0.76 J	1.0 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	5	5.3	1.0 U	1.1 U	1.0 U	1.0 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	280 (3)	290 (3)	1.0 U	17	1.6 J	1.0 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.3 J	1.4 J	1.4 U	1.5 U	1.4 U	1.4 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	97	96	0.88 J	6.2	2.6 J	1.4 U	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	16	17	1.4 U	1.0 J	1.4 U	1.4 U	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.44 U	0.44 U	0.40 U	0.44 U	0.40 U	0.40 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-02212023 is a field blank.

Sample SANG-INF-02212023D is a field duplicate of SANG-INF-02212023.

(1) Result is estimated as analyte confirmation criteria (ion ratio & signal to noise) were not met.

(2) Result is estimated as analyte confirmation criteria (ion ratio) were not met.

(3) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PDG1 = post A train GAC Unit 1

PDG2 = post A train GAC Unit 2

PDR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C358129V1 - 02/28/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	VEE265	VEE270	VEE271	VEE267	VEE269	VEE268	VEE266			
		Sampling Date	2023/02/28 09:00	2023/02/28 09:40	2023/02/28 09:40	2023/02/28 09:17	2023/02/28 09:32	2023/02/28 09:25	2023/02/28 09:10			
		Sample ID	**SANG-FB-02282023**	**SANG-INF-02282023**	**SANG-INF-02282023D**	**SANG-PBR1-02282023**	**SANG-PBG1-02282023**	**SANG-PBG2-02282023**	**SANG-EFF-02282023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	21	21	12	21	1.2 J	16	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	72	71	4	44	0.97 J	4	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	61	59	1.0 J	27	0.52 J	0.70 U	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	29	28	0.54 J	10	1.0 U	1.0 U	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	30	30	0.61 J	9.7	1.0 U	1.0 U	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	6.8	6.8	1.0 U	2.2	1.0 U	1.0 U	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	6.6	6.9	1.0 U	1.9 J	1.0 U	1.0 U	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.74 J	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.86 J	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	12	12	1.0 U	4.4	1.0 U	1.0 U	0.27	1	2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	12	12	1.0 U	3.2	1.0 U	1.0 U	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	79	80	1.0 U	20	1.0 U	1.0 U	0.28	1	2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	4.1	4.2	1.0 U	0.96 J	1.0 U	1.0 U	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	220 (2)	220 (2)	0.50 J	47	1.0 U	1.0 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.43 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.7 J	1.3 J (1)	1.4 U	0.55 J (1)	1.4 U	1.4 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	95	94	1.0 J	22	1.4 U	1.4 U	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	15	15	1.4 U	3.1 J	1.4 U	1.4 U	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.12	0.4	4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42	1	4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32	1	4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-02282023 is a field blank.

Sample SANG-INF-02282023D is a field duplicate of SANG-INF-02282023.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PBG1 = post A train GAC Unit 1

PBG2 = post A train GAC Unit 2

PBR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

(1) Result is estimated as analyte confirmation criteria (ion ratio) was not met.

(2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

TABLE 1 - COMBINED ANALYTICAL RESULTS

C65527V1 - 03/07/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

	Bureau Veritas ID		VFR548	VFR550	VFR549			
	Sampling Date		2023/03/07 07:40	2023/03/07 07:50	2023/03/07 07:45			
	Sample ID		**SANG-FB-03072023**	**SANG-INF-03072023**	**SANG-EFF-03072023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**						
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	21	9.2	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	66	2.2	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	55	0.29 J	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	32	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	33	1.1 U	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	9.4	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	9.3	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.90 J	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.76 J	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.77 U	0.77 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	9.8	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	11	1.1 U	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	86	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	3.7	1.1 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	260 (1)	0.63 J	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.58 J	1.5 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	0.86 J	1.5 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	75	1.5 U	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	19	0.87 J	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.44 U	0.44 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-03072023 is a field blank.

Sample SANG-INF-03072023D is a field duplicate of SANG-INF-03072023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

TABLE 1 - COMBINED ANALYTICAL RESULTS

C372914V1_C373197V1 - 03/14/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	VHG321	VHG326	VHG327	VHG323	VHG325	VHG324	VHH619	VHH620	VHH621	VHG322			
		Sampling Date	2023/03/14 07:30	2023/03/14 08:05	2023/03/14 08:05	2023/03/14 07:42	2023/03/14 07:58	2023/03/14 07:50	2023/03/14 07:44	2023/03/14 07:52	2023/03/14 08:00	2023/03/14 07:36			
		Sample ID	**SANG-FB-03142023**	**SANG-INF-03142023**	**SANG-INF-03142023D**	**SANG-PEDR1-03142023**	**SANG-PEDG1-03142023**	**SANG-PEDG2-03142023**	**SANG-PDR1-03142023**	**SANG-PDG2-03142023**	**SANG-PDG1-03142023**	**SANG-EFF-03142023**			
Perfluorinated Compounds	**Method**	**UNITS**											**DL**	**LOD**	**LOQ**
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.5 U	14	14	1.5 U	1.7 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.77 U	47	48	0.77 U	3	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.77 U	39	39	0.77 U	2.1 J	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.1 U	23	23	1.1 U	1.2 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.1 U	23	24	1.1 U	1.1 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.1 U	6.6	7	1.1 U	0.64 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.1 U	5.1	5.3	1.1 U	0.50 J	0.33 J (1)	1.1 U	1.1 U	1.1 U	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.1 U	0.69 J	0.72 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.1 U	0.67 J	0.66 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.1 U	8	8.2	1.1 U	0.45 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.1 U	8.5	8.6	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.1 U	64	65	1.1 U	1.5 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.1 U	3.1	2.9	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.1 U	200 (2)	210 (2)	1.1 U	4.7	1.2 J	1.1 U	1.1 U	1.1 U	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.5 U	0.54 J (1)	0.54 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	1.0 J	1.0 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	61	62	1.5 U	1.6 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	13	13	0.93 J	1.3 J	1.0 J	0.84 J	1.5 U (1)	0.69 J	0.68 J	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-03142023 is a field blank.

Sample SANG-INF-03142023D is a field duplicate of SANG-INF-03142023.

(1) Result is estimated as analyte confirmation criteria (ion ratio) was not met.

(2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PDG1 = post A train GAC Unit 1

PDG2 = post A train GAC Unit 2

PDR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C380345V1_C380348V1 - 03/21/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	VIT960	VIT965	VIT966	VIT962	VIT964	VIT963	VIT985	VIT984	VIT983	VIT961			
		Sampling Date	2023/03/21 08:00	2023/03/21 08:35	2023/03/21 08:35	2023/03/21 08:12	2023/03/21 08:28	2023/03/21 08:20	2023/03/21 08:30	2023/03/21 08:22	2023/03/21 08:14	2023/03/21 08:05			
		Sample ID	**SANG-FB-03212023**	**SANG-INF-03212023**	**SANG-INF-03212023D**	**SANG-PEAR1-03212023**	**SANG-PEAG1-03212023**	**SANG-PEAG2-03212023**	**SANG-PAG1-03212023**	**SANG-PAG2-03212023**	**SANG-PAG3-03212023**	**SANG-EFF-03212023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**													
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.5 U	21	21	1.5 U	8.5	0.78 J	1.5 U	1.5 U	1.5 U	1.5 U	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.77 U	73	72	0.77 U	21	0.40 J	0.77 U	0.77 U	0.77 U	0.77 U	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.77 U	61	60	0.77 U	14	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.1 U	35	34	1.1 U	7.1	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.1 U	37	36	1.1 U	6.7	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.1 U	9.9	9.9	1.1 U	1.7 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.1 U	8.2	7.8	1.1 U	1.2 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.1 U	0.45 J	0.60 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	0.70 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.55 J	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.69 J	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.68 J	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.1 U	12	12	1.1 U	1.8 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.1 U	13	13	1.1 U	1.4 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.1 U	110	100	1.1 U	14	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.1 U	4.1	4.1	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.1 U	330 (1)	330 (1)	0.59 J	46	1.1 J	1.1 U	1.1 U	1.1 U	1.3 J	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 J	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 J	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	0.71 J	0.63 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	88	81	1.5 U	13	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.5 U	23	22	1.5 U	3.5 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-03212023 is a field blank.

Sample SANG-INF-03212023D is a field duplicate of SANG-INF-03212023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, such as: PBG1= post B train GAC unit 1.

PAG1 = post A train GAC Unit 1

PAG2 = post A train GAC Unit 2

PAR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 1 - COMBINED ANALYTICAL RESULTS

C387918V1_C387908V1 - 03/28/2023

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

		Bureau Veritas ID	VKJ601	VKJ606	VKJ607	VKJ603	VKJ605	VKJ604	VKJ559	VKJ602			
		Sampling Date	2023/03/28 09:00	2023/03/28 09:48	2023/03/28 09:48	2023/03/28 09:18	2023/03/28 09:40	2023/03/28 09:25	2023/03/28 09:42	2023/03/28 09:05			
		Sample ID	**SANG-FB-03282023**	**SANG-INF-03282023**	**SANG-INF-03282023D**	**SANG-PEBR1-03282023**	**SANG-PEBG1-03282023**	**SANG-PEBG2-03282023**	**SANG-PBG1-03282023**	**SANG-EFF-03282023**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds	**Method**	**UNITS**											
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	22	21	1.5 U	13	2.5	3.8	1.5 U	0.65	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	68	65	0.77 U	32	3.4	7.6	0.77 U	0.24	0.77	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	59	57	0.77 U	25	1.9 J	5.4	0.77 U	0.22	0.77	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	30	29	1.1 U	11	0.79 J	2.3	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	31	31	1.1 U	11	0.79 J	2.2 J	1.1 U	0.45	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.2	8	1.1 U	2.6	1.1 U	0.57 J	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	8	8	1.1 U	2.4	0.32 J	0.60 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.67 J	0.70 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.53 J	0.56 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.26	0.77	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	11	11	1.1 U	3.6	1.1 U	0.75 J	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid PFPes	EPA 537.1 M	ng/L	1.0 U	12	11	1.1 U	3.1	1.1 U	1.1 U	1.1 U	0.37	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	80	81	1.1 U	22	0.52 J	3.7	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid PFHpS	EPA 537.1 M	ng/L	1.0 U	3.9	4	1.1 U	0.97 J	1.1 U	1.1 U	1.1 U	0.47	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	250 (1)	250 (1)	1.1 U	65	1.8 J	9.9	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.66	1.5	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.61 J	0.64 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.44	1.5	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.77	1.5	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.59	1.5	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	0.98 J	0.95 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.52	1.5	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	74	74	1.5 U	22	1.5 U	3.4 J	1.5 U	0.69	1.5	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	16	17	1.5 U	4.7	1.5 U	1.1 J	1.5 U	0.58	1.5	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.45	1.5	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.13	0.44	4.4
9Cl-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.46	1.1	4.4
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.35	1.1	4.4

Notes:

ng/L - nanograms per Liter or parts per trillion.

U - Undetected. Compound was analyzed for, but not detected.

J - Estimated result. Associated value may not be accurate or precise.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-03282023 is a field blank.

Sample SANG-INF-03282023D is a field duplicate of SANG-INF-03282023.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x). Some results reference different lab limits due to dilution.

Sample ports located in each of the 4 trains; A, B, C, D, E, such as: PBG1= post B train GAC unit 1.

PBG1 = post A train GAC Unit 1

PBG2 = post A train GAC Unit 2

PBR1 = post A train Resin 1

Effluent (EFF) = Treated water that has passed through the ISWTS

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Glycols				
Sample Parameter/Sample ID	**Sampling Date**	**Influent (SANG-INF-01262023 mg/L)**	**PBG2 Effluent (SANG-PCG2-01262023 mg/L)**	**Effluent (SANG-EFF-01262023 mg/L)**
Diethylene glycol	1/26/2023	<52	<52	<52
Ethylene glycol		<10	<10	<10
Propylene glycol		<10	<10	<10
Triethylene Glycol		<54	<54	<54

Total Organic Carbon (TOC)				
Sample Parameter	**Sampling Date**	**Influent (mg/L)**	**PDG2 Effluent (mg/L)**	**Effluent (mg/L)**
TOC	1/26/2023	8.60	6.60	14.00

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning or Changeout	Media Change Out	Resin Vessel Inspection or Skimming
1/2/2023						
1/3/2023				Fine Sand Filters (5A/5B)		
1/4/2023			Primary Carbon vessels A1, B1, C1, & D2			
1/5/2023						
1/6/2023	25 Micron Pleated	10 Micron Pleated				
1/9/2023						
1/10/2023						
1/11/2023			Primary Carbon vessels A1, B1, C1, & D2			
1/12/2023				Coarse Sand Filters (1A/1B)		
1/13/2023		10 Micron Regular				
1/16/2023			Third Stage Carbon vessels A3, C3			
1/17/2023						
1/18/2023		10 Micron Regular	Secondary Carbon vessels A1, B1, C1, & D2			
1/19/2023				Coarse Sand Filters (2A/2B)		
1/20/2023		10 Micron Pleated				

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning or Changeout	Media Change Out	Resin Vessel Inspection or Skimming
1/23/2023						
1/24/2023			Primary Carbon vessels A1, B1, C1, & D2			
1/25/2023				Fine Sand Filters (3A/3B)		
1/26/2023						
1/27/2023	25 Micron Pleated	10 Micron Pleated				
1/30/2023						
1/31/2023				Fine Sand Filters (4A/4B)		
2/1/2023		10 Micron Regular	Primary Carbon vessels A1, B1, C1, & D2			
2/2/2023	25 Micron Pleated					
2/3/2023		10 Micron Pleated				
2/6/2023			Primary Carbon vessels A1, B1, C1, & D2			
2/7/2023						
2/8/2023			Secondary Carbon vessels A1, B1, C1, & D2			
2/9/2023			Primary Carbon vessels A1, B1, C1, & D1			Resin Vessel Inspections (Trains B&D). No Skimming

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning or Changeout	Media Change Out	Resin Vessel Inspection or Skimming
2/10/2023	25 Micron Pleated	10 Micron Pleated				
2/13/2023			Primary Carbon vessels A1, B1, C1, & D1			
2/14/2023						
2/15/2023						
2/16/2023			Primary Carbon vessels A1, B1, C1, & D1			
2/17/2023	25 Micron Pleated	10 Micron Pleated				
2/20/2023						
2/21/2023						
2/22/2023			Primary Carbon vessels D1 and B1			
2/23/2023				Fine Sand Filters (5A/5B)		
2/24/2023		10 Micron Pleated				
2/27/2023			Primary Carbon vessels D1 and B1			
2/28/2023	25 Micron Pleated					
3/1/2023			Primary Carbon vessels D1 and B1		Initiate Sand, GAC & IX Media Changeout	
3/2/2023						

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning or Changeout	Media Change Out	Resin Vessel Inspection or Skimming
3/3/2023			Primary Carbon vessels A1/C!, Secondary Carbon vessels A2/C2 and Tertiary Carbon vessels A3/C3.	Replaced media in Coarse Sand Filters (1A/1B) with (2.5 cu ft) of gravel & (8 cu ft) of fine sand	Trains A and C (GAC-GAC-GAC) Media change complete and new media put back in service.	
3/4/2023		10 Micron Pleated		Replaced media in Coarse Sand Filters (2A/2B) with (2.5 cu ft) of gravel & (8 cu ft) of fine sand		
3/6/2023						
3/7/2023	25 Micron Regular		Primary Carbon vessels B1 and Secondary Carbon vessels B2		Train B (GAC-GAC-IX) Media change complete and new media put back in service	
3/8/2023			Primary Carbon vessels D1 and Secondary Carbon vessels D2	Replaced media in Fine Sand Filters (3A/3B) with (2.5 cu ft) of gravel & (8 cu ft) of fine sand	Train D (GAC-GAC-IX) Media change complete and new media put back in service	
3/9/2023				Replaced media in Fine Sand Filters (4A/4B) and (5A/5B) with (2.5 cu ft) of gravel & (8 cu ft) of fine sand		
3/10/2023		10 Micron Pleated			Media Changeout Complete. Installed new Intra-Process Sample ports.	
3/13/2023	25 Micron Regular	10 Micron Regular				
3/14/2023						
3/15/2023			Primary Carbon vessels A1, B1, C1, & D1			

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning or Changeout	Media Change Out	Resin Vessel Inspection or Skimming
3/16/2023						
3/17/2023		10 Micron Pleated				
3/20/2023						
3/21/2023			Primary Carbon vessels A1, B1, C1, & D1			
3/22/2023	25 Micron Regular	10 Micron Regular				
3/23/2023			Secondary Carbon vessels A1, B1, C1, & D1			
3/24/2023		10 Micron Pleated				
3/27/2023		10 Micron Regular				
3/28/2023						
3/29/2023			Primary Carbon vessels A1, B1, C1, & D1			
3/30/2023		10 Micron Regular				
3/31/2023	25 Micron Pleated	10 Micron Pleated				

FIGURES

FIGURE 1

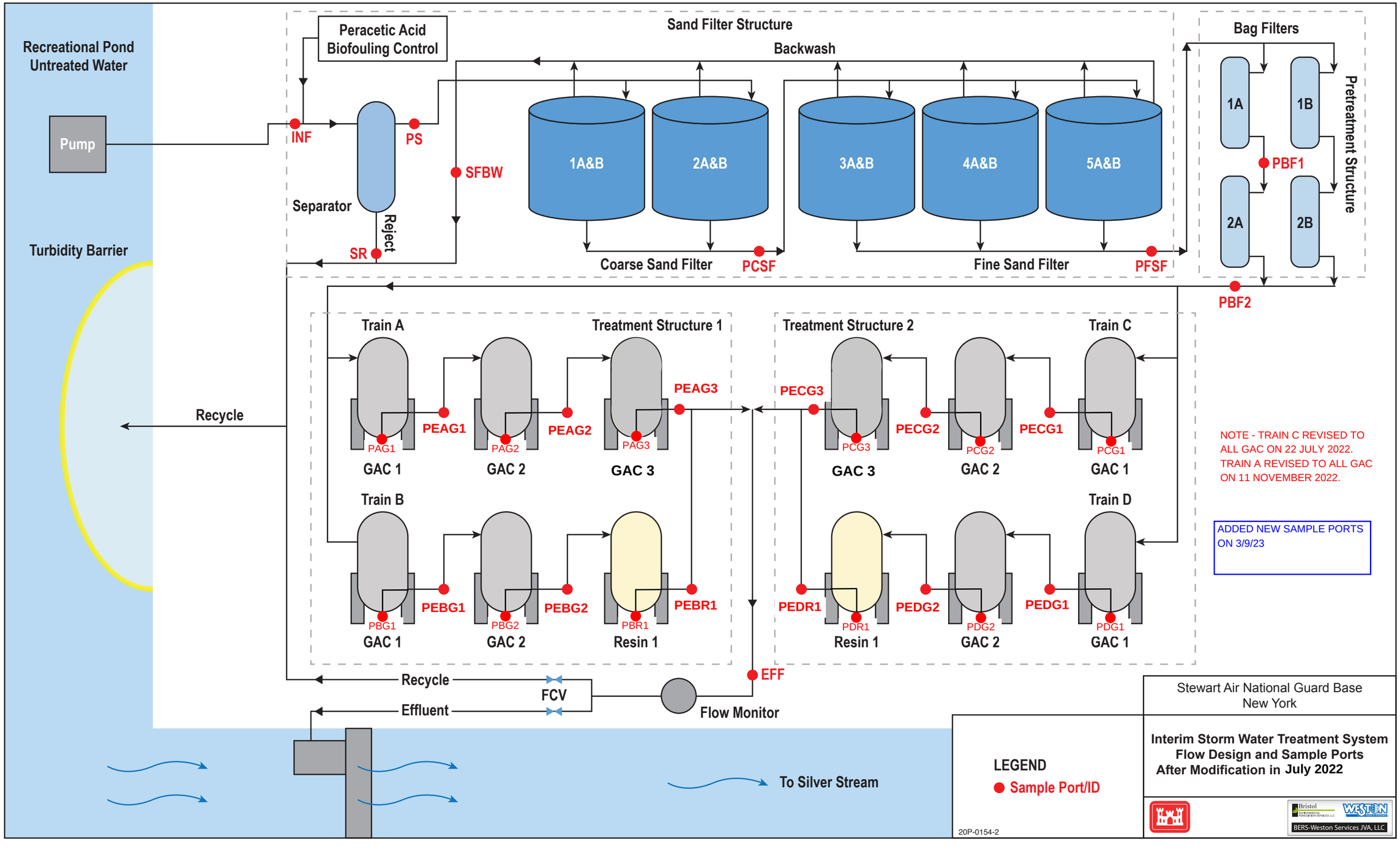

Recreational Pond
Untreated Water
Pump
Turbidity Barrier
Peracetic Acid
Biofouling Control
Sand Filter Structure
Backwash
INF
PS
SFBW
Separator
Reject
SR
1A&B
2A&B
3A&B
4A&B
5A&B
Coarse Sand Filter
PCSF
Fine Sand Filter
PFSF
Bag Filters
1A
1B
2A
2B
PBF1
PBF2
Pretreatment Structure
Train A
Treatment Structure 1
PEAG1
PEAG2
PEAG3
PAG1
PAG2
PAG3
GAC 1
GAC 2
GAC 3
Train B
PEBG1
PEBG2
PEBR1
PBG1
PBG2
PBR1
GAC 1
GAC 2
Resin 1
Treatment Structure 2
Train C
PECG3
PECG2
PECG1
PCG3
PCG2
PCG1
GAC 3
GAC 2
GAC 1
Train D
PEDR1
PEDG2
PEDG1
PDR1
PDG2
PDG1
Resin 1
GAC 2
GAC 1
Recycle
EFF
Recycle
Effluent
FCV
Flow Monitor
To Silver Stream
NOTE - TRAIN C REVISED TO ALL GAC ON 22 JULY 2022. TRAIN A REVISED TO ALL GAC ON 11 NOVEMBER 2022.
ADDED NEW SAMPLE PORTS ON 3/9/23
Stewart Air National Guard Base
New York
Interim Storm Water Treatment System
Flow Design and Sample Ports
After Modification in July 2022
LEGEND
Sample Port/ID
20P-0154-2
BERS-Weston Services JVA, LLC

FIGURE 2 - RECREATION POND LEVEL CHART

JANUARY TO MARCH 2023

ISWTS SANGB - RECREATION POND LEVEL

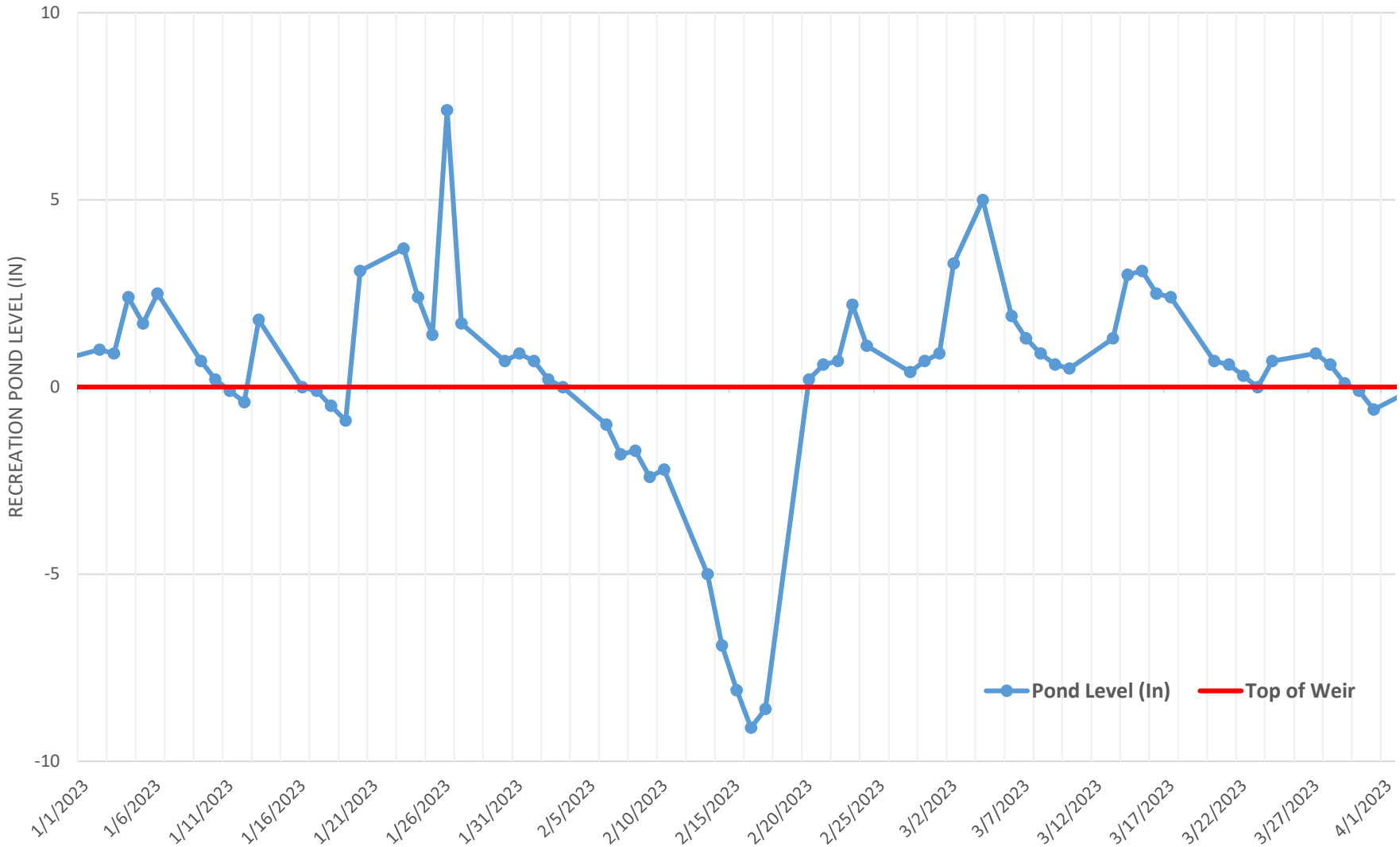
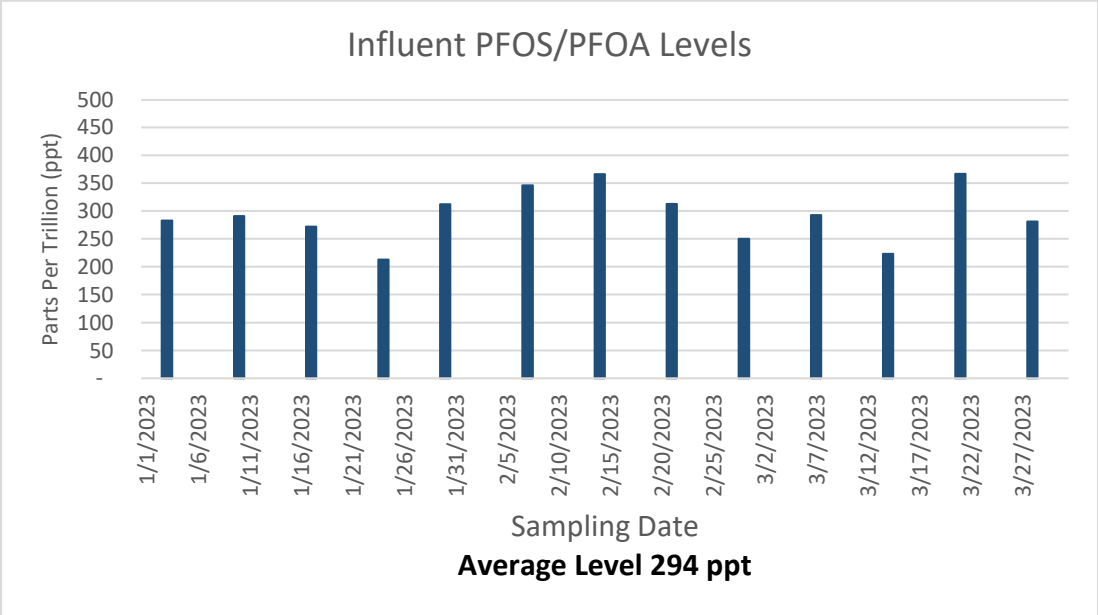


FIGURE 3 - INFLUENT AND EFFLUENT PFOS AND PFOA CHARTS



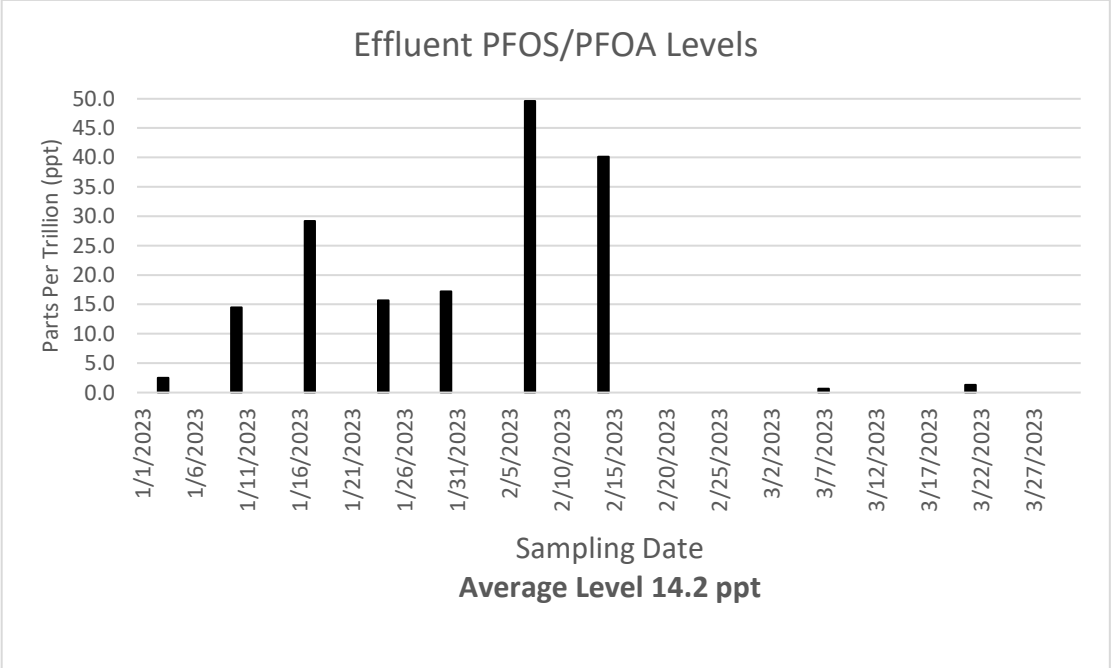
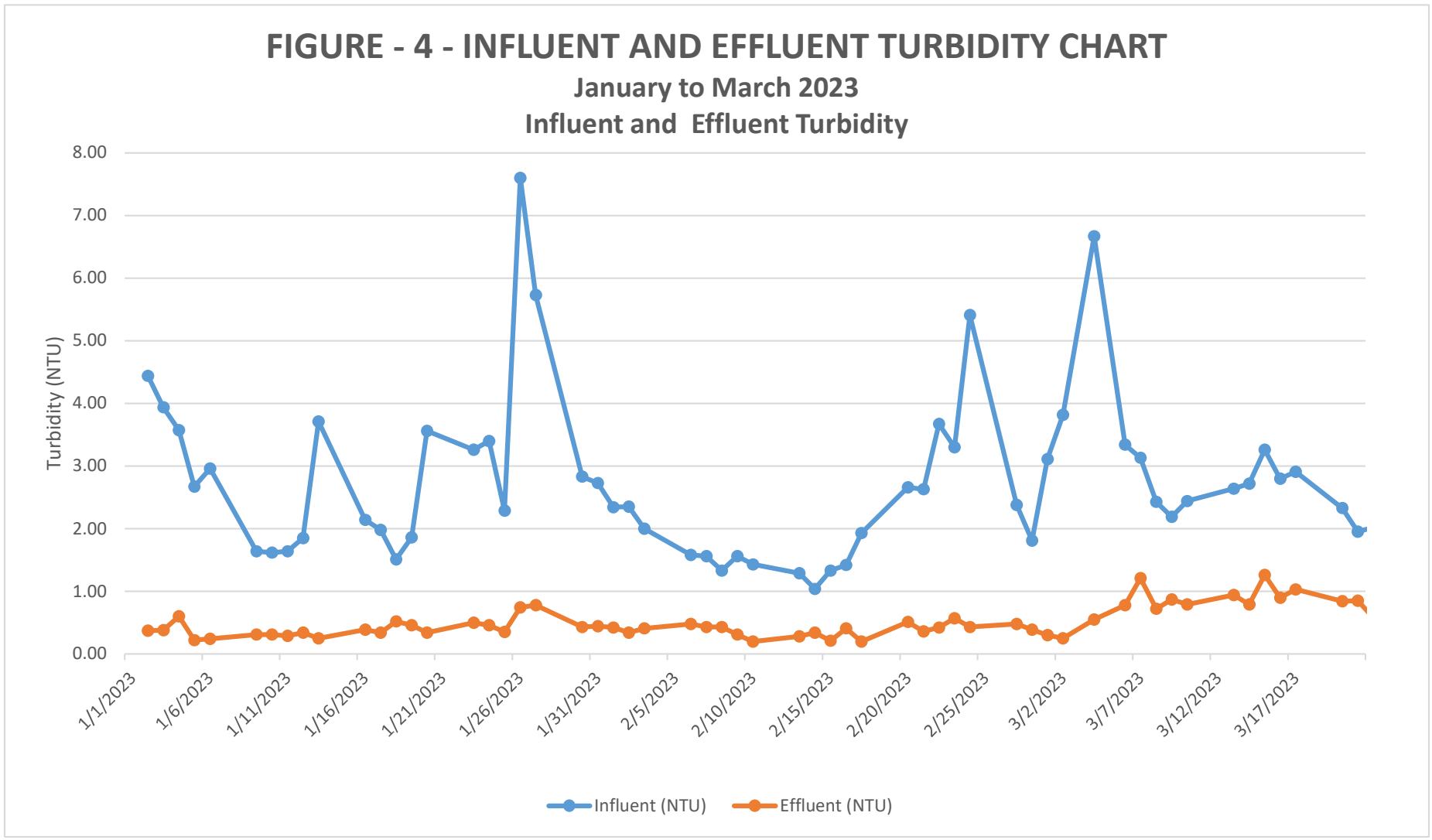


FIGURE - 4 - INFLUENT AND EFFLUENT TURBIDITY CHART



ATTACHMENT 1

Material Disposal Documents

ONION EQUIPMENT COMPANY

5705 W 73rd Street
Indianapolis, IN 46278
Phone: (317) 762-6007

April 24, 2023

Re: Stewart ANG March 2023 Media Exchange Event

To whom it may concern,

Attached are the manifests and disposal certificates for the waste generated on the service event which occurred on and after March 20, 2023

Thank you,

Eric Patterson

CERTIFICATE OF DESTRUCTION AND ACTIVATED CARBON REACTIVATION

CAN Number: 6973N

Company: Onion Equipment Company
5705 West 73rd St.
Indianapolis, IN 46278-1741

Issue Date: April 17, 2023

Service Order # 60016185

CCC CAN Number: 6973N

Waste Classification: RCRA non-hazardous

Treatment Method: Thermal Reactivation

Calgon Carbon hereby certifies on the above date 20,000 pounds of spent carbon received under the indicated carbon profile application number was reactivated in accordance with the state and federal regulations by thermal processing that removes and destroys the volatile and semi-volatile contaminants adsorbed on the spent carbon.

Calgon Carbon Corporation

Matt Asbury

Quality Assurance Manager

Calgon Carbon Corporation
200 Neville Road
Pittsburgh, PA 15225

Phone 412-771-4050

CalgonCarbon
A Kuraray Company

Neville Island Plant
200 Neville Road Pittsburgh PA 15225

Pick Up Location:

Customer No. 8046094
STEWART ANG BASE
1 MAQUIRE WAY
NEWBURGH NY 12550-5075

Bill of Lading 387922
ORIGINAL

Customer PO No.	RMA Onion
Sales Order No.	60016185
Delivery No.	84089489
Actual Shipment Date	03/24/2023
Page	1 of 4

Subject to Section 7 of conditions,if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. CALGON CARBON CORPORATION

SHIPPER SIGNATURE _____ **SHPD DATE** 3/24/23

RECEIVER SIGNATURE James Moore **RECD DATE** 3-24-23

Requirements

Freight Terms: 10 COLLECT
Freight Agent: DART TRUCKING CO INC

Req Delv Date : 03/24/2023
Registration :

Return to:

Neville Island Plant
c/o Calgon Carbon Corp
200 Neville Road
Pittsburgh PA 15225

Weight

Gross Weight: 9,071.840 KG
Net Weight: 9,071.840 KG
No. of Pieces _____

51443 Mike Fletcher

Item	Material No. Description	Qty	Weight
10	7000002 SPENT CARBON - 6973N Carbon Acceptance Number : 6973N Offsite Storage: Y	20,000.000 LB	-

ECCN #: EAR99

THIS DOCUMENT IS AN APPROVED BOL FOR SPENT PICKUP

RECEIVED, subject to individually determined rates or contracts that heve been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to shipper, on request the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which seid carrier agrees to cerry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. That service to be performed hareunder shell be subject to all the terms and conditions of the Uniform Straight Bill of Lading set forth et 49 CFR Part 1035.2 which are made a part hereof to the same extent as if set forth herein, to the extent that they do not conflict with the terms end conditions of any contract between the carrier and shipper.

CARRIER SIGNATURE:_____ DATE:_____

Non-Hazardous Waste Manifest

GENERATOR SECTION

Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number	Waste Tracking (Manifest) Number
	NYD981183338	6973N	19-03J-1

Customer Billing Name and Mailing	Generator's Site Address
Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576	Stewart ANG Base 1 Maquire Way, Newburgh, NY 12550 Generator's Phone:

Transporter 1 Company Name	US EPA ID Number
Dart Trucking	
Transporter 2 Company Name	**US EPA ID Number**
Designated Facility Name and Site Address	**US EPA ID Number**
Calgon Carbon Corporation C/O Dart Trucking 11017 Market St North Lima, OH 44452 Facility's Phone: 412-771-4050, X4116	PAD000736942

	Waste Shipping Name and Description	Containers No.	Containers Type	Total Quantity	Unit Wt / Vol.	Disposal Method
1	non RCRA Spent Activated Carbon; Non DOT Regulated	20	1 CYD BAG	22,500	LB	Reactivation
2						
3						
4						

Special Handling Instructions and Additional Information	24 Hour Emergency Response Phone
Profile 6973N Note item 1 weight is dry weight basis	(317) 694-7576
	Emergency Response Guide Number

GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Generator's Offeror's Printed / Typed Name	Signature	Month	Day	Year
Eric D Patterson		March	10	2023

TRANSPORTER SECTION

Transporter's Acknowledgement of Receipt of Materials

Transporter 1 Printed / Typed Name	Signature	Month	Day	Year
		March	24	2023
Transporter 2 Printed / Typed Name	**Signature**	**Month**	**Day**	**Year**

DESIGNATED FACILITY SECTION

Discrepancy

Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection

Alternate Facility (or Generator)	US EPA ID Number
Facility's Phone:	

Signature of Alternate Facility (or Generator)	Month	Day	Year

Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section

Non-Hazardous Waste Manifest 517 53580

GENERATOR SECTION

Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number	Waste Tracking (Manifest) Number
	NYD 981 183 338	F220121WDI-OTS	19-03J-2

Customer Billing Name and Mailing	Generator's Site Address
Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576	Stewart ANG Base 1 Maquire Way, Newburgh, NY 12550 Generator's Phone:

Transporter 1 Company Name	US EPA ID Number
Transporter 2 Company Name	**US EPA ID Number**

Designated Facility Name and Site Address	US EPA ID Number
WAYNE DISPOSAL, INC. SITE #2 LANDFILL 49350 N I-94 SERVICE DRIVE- BELLEVILLE, MI 48111 Facility's Phone: 412-771-4050, X4116	MID 048 090 633

	Waste Shipping Name and Description	Containers No.	Containers Type	Total Quantity	Unit Wt / Vol.	Disposal Method
1	F220121WDI / Spent PFAS Filtration Media	13	1 CYD BAG	25,000	LB	Landfill
2						
3						
4						

Special Handling Instructions and Additional Information	24 Hour Emergency Response Phone
(5) Bags Resin, (3) Bags Filter Bags, (5) Bags Sand Appointment Info Thurs. 3/14 at 12PM. Conf.# 1180020	317-694-7576
	Emergency Response Guide Number

GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Generator's Offeror's Printed / Typed Name	Signature	Month	Day	Year
Eric Patterson (agent for SANG)	Digitally signed by Eric Patterson DN: cn=Eric Patterson, o=OEC Process, ou, email=epatterson@oecprocess.com, c=US Date: 2022.11.21 13:07:44 -05'00'	March	10	2023

TRANSPORTER SECTION

Transporter's Acknowledgement of Receipt of Materials

Transporter 1 Printed / Typed Name	Signature	Month	Day	Year
TJ TRANSP				
Transporter 2 Printed / Typed Name	**Signature**	**Month**	**Day**	**Year**

DESIGNATED FACILITY SECTION

Discrepancy

Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection

Alternate Facility (or Generator)	US EPA ID Number
Facility's Phone:	

Signature of Alternate Facility (or Generator)	Month	Day	Year

Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section

Printed / Typed Name	Signature	Month	Day	Year
Sandia Anderson	SA	3	14	2023

CERTIFICATE OF DISPOSAL

US ecology

This certificate is to verify the wastes specified on Manifest # 19-03J-2

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☐ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☑ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____