US Army Corps of Engineers Baltimore District



# QUARTERLY OM&M REPORT NO. 8

April to June 2022

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

> > September 2022



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# **ACRONYMS AND ABBREVIATIONS**

AFFF	aqueous film forming foam
ANG	Air National Guard
BES	Bristol Environmental Solutions, LLC
DoD	U.S. Department of Defense
EPA	Environmental Protection Agency
GAC	granular activated carbon
HA	Health Advisory
ISWTS	Interim Storm Water Treatment System
mg/L	milligrams per liter
NTU	nephelometric turbidity units
OM&M	Operations, Maintenance, and Monitoring
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
ppt	parts per trillion
SANGB	Stewart Air National Guard Base
ТОС	total organic carbon
USACE	US Army Corps of Engineers

# **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 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 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 and fill up the Recreation Pond both treated effluent and untreated stormwater go over the outfall weir.

This is the eighth quarterly report that summarizes Operations, Maintenance, and Monitoring (OM&M) activities conducted by BES at SANGB. This report summarizes ISWTS operations between April 01 and June 30, 2022, at SANGB.

# 2.0 GENERAL COMPLIANCE SUMMARY

The ISWTS operations began treatment of water on July 13, 2020, following installation and commissioning of pretreatment system improvements in June and early July 2020. This report summarizes OM&M between April 01 and June 30, 2022, or months 22, 23, and 24 post start-up. During the performance period the system influent, intra-process monitoring (3 locations) and effluent was monitored weekly to confirm treatment system effectiveness for PFOS and PFOA as well as other per- and polyfluoroalkyl substances (PFAS). Performance sampling was conducted a total of 13 days during the quarterly period. The analytical method used was EPA 537.1 M. Final PFAS results are provided in **Table 1**. Based on validated analytical data, all effluent sample results were well below the discharge criteria of 70 ppt (individually or combined) in the off-base stormwater discharge at Recreation Pond.

# 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, primary and secondary granular activated carbon (GAC), and ion exchange resin serving as a polishing media throughout this performance period. Peracetic acid continued to be introduced prior to the centrifugal separator at a low (safe) concentration to reduce biological growth in the system. The system configuration is shown on **Figure 1**.

# 4.0 GENERAL FACILITY OPERATIONS SUMMARY

During the performance period, a total of 35,383,470 gallons of stormwater was treated and discharged over the outfall weir by the ISWTS. In addition, during this performance period, a total of 22,542 gallons of stormwater was recirculated to the Recreation Pond. 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 and recycled back to the pond. 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 100% run time is not achieved.

Final

Month	Volume Treated (Gallons)	Operational Time <sup>1</sup> (Hours)	Run Time <sup>2</sup> (Percent)	Average Treatment Flow <sup>3</sup> (GPM)
April 2022	8,863,410	674	97%	219
May 2022	13,362,800	745	99%	299
June 2022	13,179,800	727	98%	302
Total	35,406,010	2,146		

<sup>1</sup>Operation Time – Hours influent pump in operation during month

<sup>2</sup>Run Time – Hours pump running divided by the total period time

<sup>3</sup>Average GPM – Average flow total gallons divided by operational hours

There were 91 days of operation between April 01 and June 30, 2022. During this period of performance, the Recreation Pond was drawn down for 30 of the 91 days or 33% 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 298 ppt and 0.44 ppt, respectively. The maximum combined PFOS and PFOA influent concentration was 417 ppt on May 3, 2022, and the maximum combined PFOS and PFOA effluent concentration was 1.6 ppt on June 28, 2022, of the performance period.

# 5.2 INTRA-PROCESS PFOS AND PFOA MONITORING

During the performance period, intra-process monitoring for PFOS and PFOA was performed after the primary and secondary GAC and Ion Exchange resin to confirm media effectiveness. Based on intra-process sample results the maximum detection of PFOS/PFOA in the primary GAC was 44.2 ppt. The maximum detection of PFOS and PFOA in the secondary GAC and ion exchange resin was 1.8 ppt and 29.1 ppt respectively. The high detection of PFOS and PFOA in the ion exchange effluent occurred on 28 June and again in an early July 2022 (next quarter), indicating the resin performance was degrading and a media exchange was required. No media exchanges were performed the period of April 1 through June 30, 2022; however, a media exchange was subsequently performed in July 2022 due to both excessive media fouling and reduced ion exchange resin performance.

# 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. 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 4.4 mg/L, and the GAC-2 effluent (influent to the resin) was 0.7 mg/L indicating that the influent TOC level to the ion exchange resin was acceptable. Glycol was not detected in the May 24, 2022, samples. No results were cause for concern or believed to negatively impact 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 intraprocess performance to confirm the effectiveness of the treatment system in removing solids. During the performance period, influent and effluent turbidity averaged 7.89 nephelometric turbidity units (NTU) and 1.96 NTU, respectively. A graph of the influent and effluent turbidity during the performance period is included as **Figure 4**.

Final

# 5.5 PERACETIC ACID ADDITION

As discussed, peracetic acid was added to the process influent to help reduce biological growth in the system. During the performance period 16.3 gallons of peracetic acid was introduced, and the average dose was 0.46-gallon of peracetic acid per million gallons of water treated or 1.51 pounds per day.

# 6.0 SCHEDULED PREVENTIVE MAINTANANCE

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

- Coarse and fine sand filter backwashes;
- Coarse and fine sand filter cleanings;
- Primary and secondary bag filter changes;
- Primary and secondary carbon backwashing; and
- Ion exchange resin skimming.

During the performance period the coarse and fine sand filters were backwashed 548 and 652 times, respectively and a total of 12 cleaning events were completed. The primary and secondary bag filters were changed 22 and 40 times, respectively, during the performance period. To maintain acceptable PFAS treatment media pressure, the primary and secondary GAC was backwashed 23 and 6 times, respectively during the quarter. The resin was inspected, skimmed and leveled twice to remove solids and reduce media pressure during the quarter. The sand filter maintenance, bag filter changes, GAC backwash events, and ion exchange resin skimming activities are summarized in **Table 3**.

# 7.0 MATERIAL DISPOSAL

Waste bag filters, as well as spent ion exchange resin wastes were generated during the quarter. However, no wastes were shipped off site for disposal due to the temporary moratorium on incineration by the U.S. Department of Defense (DoD) of Perfluoroalkyl Substances, Polyfluoroalkyl Substances, and Aqueous Film-Forming Foam. Instead, these spent media generated during the quarter were staged on site while waiting for DoD interim guidance or EPA final ruling on PFAS waste destruction/disposal.

# 8.0 PROJECTED ACTIVITIES FOR NEXT PERFORMANCE PERIOD

During the next performance period, one media change is anticipated to meet performance objectives. Bristol received approval to test one of the four trains with all GAC media during the next media exchange that will likely occur in July 2022. Testing one train of all GAC will allow for its performance to be compared to the existing system (e.g., two GAC vessels with ion exchange resin polishing) for both media life/fouling as well as PFOS/PFOA and other long/short PFAS compound removal performance.

During the third quarter of 2022, offsite disposal or reactivation (GAC) of all stored wastes/medias currently staged on site is anticipated. No capital improvements are planned at this time.

TABLES

#### C290288V1 - 04/05/2022

#### RESULTS OF ANALYSES OF WATER

RESULTS OF ANALYSES OF WATER						VALIDATED D	ATA					
	Bureau Veritas ID		SHE247	SHE252	SHE253	SHE249	SHE251	SHE250	SHE248		<u> </u>	
	Sampling Date		2022/04/05 08:10	2022/04/05 08:50	2022/04/05 08:50	2022/04/05 08:28	2022/04/05 08:43	2022/04/05 08:35	2022/04/05 08:20		i	
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A		<u> </u>	
Perfluorinated Compounds	Method	UNITS	SANG-FB-04052022	SANG-INF-04052022	SANG-INF-04052022D	SANG-PAR1-04052022	SANG-PAG1-04052022	SANG-PAG2-04052022	SANG-EFF-04052022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	19	19	9.8	1.5 U	1.5 U	9.3	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	55	55	28	1.3 U	1.3 U	22	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	45	45	9.9	1.5 U	1.5 U	5.8	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	22	22	1.3 U	1.3 U	1.3 U	1.3 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	26	26	1.3 U	1.3 U	1.3 U	1.3 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	7.3	7.3	1.8 U	1.8 U	1.8 U	1.8 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	5.3	5.3	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.53	1.3	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	9.2	9.2	1.3 U	1.3 U	1.3 U	1.3 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	11	12	1.8 U	1.8 U	1.8 U	1.8 U	0.8	1.8	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	76	78	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	2.8	3	1.3 U	1.3 U	1.3 U	1.3 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	190 (1)	190 (1)	1.3 U	1.3 U	1.3 U	1.3 U	4.3	12	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	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.89	2.2	4.4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.3	3.3	4.4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	50	50	1.8 U	1.8 U	1.8 U	1.8 U	0.65	1.8	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	15	15	1.8 U	1.8 U	1.8 U	1.8 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34	1.3	4.4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62	2.2	4.4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.57	2.2	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-04052022 is a field blank.

Sample SANG-INF-04052022D is a field duplicate of SANG-INF-04052022.

(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

#### C299540V1 - 04/12/2022

RESULTS OF ANALYSES OF WATER						VALIDATED D	ATA					
	Bureau Veritas ID		SJD708	SJD713	SJD714	SJD710	SJD712	SJD711	SJD709			
	Sampling Date		2022/04/12 08:30	2022/04/12 09:00	2022/04/12 09:00	2022/04/12 08:43	2022/04/12 08:57	2022/04/12 08:50	2022/04/12 08:35			
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-04122022	SANG-INF-04122022	SANG-INF-04122022D	SANG-PBR1-04122022	SANG-PBG1-04122022	SANG-PBG2-04122022	SANG-EFF-04122022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	23	22	6.7	1.6 J	1.4 U	6.4	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	60	54	12	1.6 J	1.2 U	16	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	49	44	1.8 J	0.79 J	1.4 U	3.6	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	28	26	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	32	30	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	9.9	9.1	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	6.3	5.8	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	0.59 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	9.6	8.3	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	11	10	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	90	80	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	3.6	3.3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	280 (1)	260 (1)	1.2 U	0.90 J	1.2 U	0.47 J	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	57	52	1.6 U	1.6 U	1.6 U	1.9 J	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	21	19	1.6 U	1.6 U	1.6 U	0.99 J	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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

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INF = Influent

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-04122022 is a field blank.

Sample SANG-INF-04122022D is a field duplicate of SANG-INF-04122022.

(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 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

#### C2A3868V1 - 04/19/2022

RESULTS OF ANALYSES OF WATER						VALIDATED DA	TA					
E	Bureau Veritas ID		SKC772	SKC777	SKC778	SKC774	SKC776	SKC775	SKC773			
	Sampling Date		2022/04/19 08:00	2022/04/19 08:30	2022/04/19 08:30	2022/04/19 08:12	2022/04/19 08:24	2022/04/19 08:18	2022/04/19 08:05			
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A		I'	
Perfluorinated Compounds	Method	UNITS	SANG-FB-04192022	SANG-INF-04192022	SANG-INF-04192022D	SANG-PCR1-04192022	SANG-PCG1-04192022	SANG-PCG2-04192022	SANG-EFF-04192022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	14	14	5.5	1.4 J	1.4 U	4.2	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	25	26	17	1.7 J	1.2 U	12	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	21	21	3.6	1.1 J	1.4 U	3	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	11	11	1.2 U	0.64 J	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	13	14	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	4	3.9	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	3.3	3.3	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	0.61 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	5.5	5.1	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	5.3	5.6	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	36	35	1.2 U	0.74 J	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	1.8 J	2	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	110 (1)	110 (1)	1.2 U	2.3	1.2 U	1.2 U	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	24	24	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	9.1	9.6	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-04192022 is a field blank.

Sample SANG-INF-04192022D is a field duplicate of SANG-INF-04192022.

(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.

PCG1 = post C train GAC Unit 1

PCG2 = post C train GAC Unit 2

PCR1 = post C train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

#### C2B1708V1 - 04/26/2022

<table-container>          Image         Image         SIT38         SIT39         <t< th=""><th>RESULTS OF ANALYSES OF WATER</th><th></th><th></th><th></th><th></th><th></th><th>VALIDATED D</th><th>АТА</th><th></th><th></th><th></th><th></th><th></th></t<></table-container>	RESULTS OF ANALYSES OF WATER						VALIDATED D	АТА					
Image         Image         Note         Note        Note        Note <t< th=""><th></th><th>Bureau Veritas ID</th><th></th><th>SLT153</th><th>SLT158</th><th>SLT159</th><th>SLT155</th><th>SLT157</th><th>SLT156</th><th>SLT154</th><th></th><th></th><th></th></t<>		Bureau Veritas ID		SLT153	SLT158	SLT159	SLT155	SLT157	SLT156	SLT154			
Image betwImage betw <th></th> <th>Sampling Date</th> <th></th> <th>2022/04/26 08:00</th> <th>2022/04/26 08:30</th> <th>2022/04/26 08:30</th> <th>2022/04/26 08:12</th> <th>2022/04/26 08:25</th> <th>2022/04/26 08:18</th> <th>2022/04/26 08:05</th> <th></th> <th></th> <th></th>		Sampling Date		2022/04/26 08:00	2022/04/26 08:30	2022/04/26 08:30	2022/04/26 08:12	2022/04/26 08:25	2022/04/26 08:18	2022/04/26 08:05			
Perthemporne       Mort       Mort       Sector       Sector <th></th> <th>COC Number</th> <th></th> <th>N/A</th> <th>N/A</th> <th>N/A</th> <th>N/A</th> <th>N/A</th> <th>N/A</th> <th>N/A</th> <th></th> <th></th> <th></th>		COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perthonorenance add (PFNA)       PMA       Mail       1.4 U       Mail       Mail </th <th>Perfluorinated Compounds</th> <th>Method</th> <th>UNITS</th> <th>SANG-FB-04262022</th> <th>SANG-INF-04262022</th> <th>SANG-INF-04262022D</th> <th>SANG-PDR1-04262022</th> <th>SANG-PDG1-04262022</th> <th>SANG-PDG2-04262022</th> <th>SANG-EFF-04262022</th> <th>DL</th> <th>LOD</th> <th>LOQ</th>	Perfluorinated Compounds	Method	UNITS	SANG-FB-04262022	SANG-INF-04262022	SANG-INF-04262022D	SANG-PDR1-04262022	SANG-PDG1-04262022	SANG-PDG2-04262022	SANG-EFF-04262022	DL	LOD	LOQ
Pertlanorspectanois aid (PFNA)         PAS37.1 M         ngL         1.2 U         1.2 U <th1.2 th="" u<="">         1.2 U         1.2 U</th1.2>	Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	31	33	5.6	1.4 U	1.4 U	4.6	0.67	1.4	2
Pertlononbanois and (PHA)PA37.1MNgL1.4.U74758.11.4.U1.4.U1.4.U5.10.71.42.2Pertlononbanois and (PFA)PA37.1MNgL1.2.U32391.2.U	Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	86	87	26	1.2 U	1.2 U	17	0.52	1.2	2
Perthonocentaria acid (PPMA)Pers PS7.1.WPag.P.1.2.UP.1.2.	Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	74	75	8.1	1.4 U	1.4 U	5.1	0.7	1.4	2
Perfluxonctanoic add (PFOA)         PAS 37.1 M         ng/L         1.2 U	Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	38	39	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluxonnanoic aid (PPNA)PAS37.1MngL1.6.U1.6.U1.6.U1.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U1.6.U0.6.U<	Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	42	43	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perflorobacanoic aid (PPA)PM S37.1 Mngl1.4 U5.8 S5.7 L1.4 U1.4	Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	12	13	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluor         PEA 537.1M         ng/L         1.6.0         1.6.0         1.6.0         1.6.0         1.6.0         1.6.0         0.7.0         1.6.0         2           Perfluorddecanoic add (PFDA)         PA 537.1M         ng/L         1.2.0         <	Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	5.8	5.7	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorododeanoe and (PFDOA)         EPA 537.1 M         ngl         1.2 U	Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorbidecanoic add (PFTROA)FPA \$37.1Mng/L1.2 u1.2 u <t< td=""><td>Perfluorododecanoic acid (PFDoA)</td><td>EPA 537.1 M</td><td>ng/L</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>0.59</td><td>1.2</td><td>2</td></t<>	Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfuncenter decay of PEDASFigAIngLInluI	Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfunctobanesulfonic add (PFBs)PerfA 37.1 Mng/L1.2 U1.2 L1.2 L <td>Perfluorotetradecanoic acid (PFTEDA)</td> <td>EPA 537.1 M</td> <td>ng/L</td> <td>1.2 U</td> <td>0.37</td> <td>1.2</td> <td>2</td>	Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfuoropentanesuffonic dol (PPHs)PA 537.1Ng/L1.6 U1.6 U1.2 U<	Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	15	16	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfuorohexanesufonic aid (PFHx)EPA \$37.1 Mng/L1.2 U150 (1)140 (1)1.2 U1.2 U<	Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	18	18	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
PerfuncePerfairsNMNM1.2 U5.51.2 U1.2 U1.	Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	150 (1)	140 (1)	1.2 U	1.2 U	1.2 U	1.2 U	5.3	12	20
PerfunctorPAS37.1MNg/L1.2 U3.40 (1)3.60 (1)1.2 U1.2 U1	Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	5.1	5.5	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluoronanesulfonic acid (PFNS)EPA 537.1MIn/LI.4.U <td>Perfluorooctanesulfonic acid (PFOS)</td> <td>EPA 537.1 M</td> <td>ng/L</td> <td>1.2 U</td> <td>340 (1)</td> <td>360 (1)</td> <td>1.2 U</td> <td>1.2 U</td> <td>1.2 U</td> <td>1.2 U</td> <td>4.3</td> <td>12</td> <td>20</td>	Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	340 (1)	360 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
PerfluorPerfluo	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
PerfunctodeEPA 537.1MIngl.2.0 U2.0 U2.0 U2.0 U2.0 U2.0 U2.0 U2.0 U0.0	Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
MeFOSAAEPA 537.1M $ng/L$ $3.0$ U <th< td=""><td>Perfluorooctane Sulfonamide (PFOSA)</td><td>EPA 537.1 M</td><td>ng/L</td><td>2.0 U</td><td>2.0 U</td><td>2.0 U</td><td>2.0 U</td><td>2.0 U</td><td>2.0 U</td><td>2.0 U</td><td>0.81</td><td>2</td><td>4</td></th<>	Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
EPGSAAEPA 537.1M $ngL$ $3.0$ U	MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
4:2 Fluoredelmer sulforcia cialEPA 537.1 M $9/L$ $1.6$ U	EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
62 Fuorotelome sulforic acid         EPA 537.1 M         Infl         1.6 U         1.6 U         1.6 U         1.6 U         0.5 P         1.6 U           82 Fuorotelome sulforic acid         EPA 537.1 M         Infl         1.6 U         1.6 U         1.6 U         1.6 U         0.5 P	4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.1 J	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
82 Fuordedmer sufforcia cid         EPA 53.1 M         Ind         1.6 U         1.6 U         1.6 U         0.6 U         <	6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	89	87	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
Hexafluoroprophenoxide dimension         EPA 537.1 M         Ingl.         2.0 U	8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	26	27	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
4,8-bioxa-3H-perfluoronanoic aid         EPA 537.1 M         ng/L         1.2 U	Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
9C1-PF3ONS (F-53B Major)         EPA 537.1 M         ng/L         2.0 U         2.0 U <t< td=""><td>4,8-Dioxa-3H-perfluorononanoic acid</td><td>EPA 537.1 M</td><td>ng/L</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>1.2 U</td><td>0.31</td><td>1.2</td><td>4</td></t<>	4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
11C1-PF3OUds (F-538 Minor) EPA 537.1 M ng/L 2.0 U 2.0	9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
	11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-04262022 is a field blank.

Sample SANG-INF-04262022D is a field duplicate of SANG-INF-04262022.

(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 D train GAC Unit 1

PDG2 = post D train GAC Unit 2

PDR1 = post D train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

#### C2B9020 - 05/03/2022

RESULTS OF ANALYSES OF WATER						VALIDATED D	АТА					
	Bureau Veritas ID		SNH897	SNH902	SNH903	SNH899	SNH901	SNH900	SNH898		1	
	Sampling Date		2022/05/03 08:00	2022/05/03 08:35	2022/05/03 08:35	2022/05/03 08:15	2022/05/03 08:30	2022/05/03 08:22	2022/05/03 08:08		1	
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-05032022	SANG-INF-05032022	SANG-INF-05032022D	SANG-PAR1-05032022	SANG-PAG1-05032022	SANG-PAG2-05032022	SANG-EFF-05032022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	31	31	5.3	1.4 U	1.3 J	3.8	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	110 (1)	110 (1)	18	1.2 U	1.2 J	16	5.2	12	20
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	85	84	7.1	1.4 U	1.4 U	3.9	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	43	44	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	47	48	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	13	14	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	7.2	7.4	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	17	18	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	21	23	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	140 (1)	140 (1)	1.2 U	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	7.1	6.6	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	370 (1)	380 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.2 J	1.3 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	100 (1)	100 (1)	1.6 U	1.6 U	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	28	29	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-05032022 is a field blank.

Sample SANG-INF-05032022D is a field duplicate of SANG-INF-05032022.

(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 D 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

#### C2C684V1 - 05/10/2022

RESULTS OF ANALYSES OF WATER						VALIDATED D	ATA					
	Bureau Veritas ID		SPA303	SPA308	SPA309	SPA305	SPA307	SPA306	SPA304			
	Sampling Date		2022/05/10 08:00	2022/05/10 08:30	2022/05/10 08:30	2022/05/10 08:12	2022/05/10 08:26	2022/05/10 08:20	2022/05/10 08:05			
	COC Number	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-05102022	SANG-INF-05102022	SANG-INF-05102022D	SANG-PBR1-05102022	SANG-PBG1-05102022	SANG-PBG2-05102022	SANG-EFF-05102022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	20	21	4	4.8	1.4 U	4.1	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	55	55	17	6.6	1.2 U	16	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	47	46	2.2	3.9	1.4 U	4	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	25	26	1.2 U	1.7 J	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	29	28	1.2 U	1.6 J	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	8.1	8.2	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	4.5	4.6	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	10	10	1.2 U	0.54 J	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	12	12	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	78	78	1.2 U	3.2	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	3.7	3.7	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	220 (1)	220 (1)	1.2 U	8.3	1.2 U	1.2 U	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	59	59	1.6 U	2.8 J	1.6 U	0.64 J	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	16	15	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-05102022 is a field blank.

Sample SANG-INF-05102022D is a field duplicate of SANG-INF-05102022.

(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 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

#### C2D4431V1 - 05/17/2022

RESULTS OF ANALYSES OF WATER						VALIDATED DA	TA					
Bu	ıreau Veritas ID	)	SQR580	SQR585	SQR586	SQR582	SQR584	SQR583	SQR581			
	Sampling Date	9	2022/05/17 08:00	2022/05/17 08:35	2022/05/17 08:35	2022/05/17 08:15	2022/05/17 08:30	2022/05/17 08:22	2022/05/17 08:08			
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			1
Perfluorinated Compounds	Method	UNITS	SANG-FB-05172022	SANG-INF-05172022	SANG-INF-05172022D	SANG-PCR1-05172022	SANG-PCG1-05172022	SANG-PCG2-05172022	SANG-EFF-05172022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1	ng/L	1.4 U	21	23	4.5	10	1.4 U	4.3	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1	ng/L	1.2 U	59	62	19	21	1.2 U	15	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1	ng/L	1.4 U	49	52	4.5	15	1.4 U	4	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1	ng/L	1.2 U	27	29	1.2 U	6.6	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1	ng/L	1.2 U	29	32	1.2 U	6.2	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1	ng/L	1.6 U	10	11	1.6 U	1.6 J	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1	ng/L	1.4 U	5.2	5.5	1.4 U	0.70 J	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1	ng/L	1.2 U	10	11	1.2 U	2.4	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1	ng/L	1.6 U	15	16	1.6 U	2.2	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1	ng/L	1.2 U	81	89	1.2 U	14	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1	ng/L	1.2 U	4.2	4.6	1.2 U	0.77 J	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1	ng/L	1.2 U	350 (1)	350 (1)	1.2 U	38	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1	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	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1	ng/L	1.6 U	0.98 J	1.0 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1	ng/L	2.1 J	61	66	1.5 J	11	0.81 J	1.1 J	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1	ng/L	1.6 U	15	16	1.6 U	1.9 J	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-05172022 is a field blank.

Sample SANG-INF-05172022D is a field duplicate of SANG-INF-05172022.

(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.

PCG1 = post C train GAC Unit 1

PCG2 = post C train GAC Unit 2

PCR1 = post C train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

#### C2E0851 - 05/24/2022

RESULTS OF ANALYSES OF WATER						VALIDATED D	ATA					
Bu	ureau Veritas ID		SSA679	SSA684	SSA685	SSA681	SSA683	SSA682	SSA680			
	Sampling Date		2022/05/24 08:00	2022/05/24 08:45	2022/05/24 08:45	2022/05/24 08:17	2022/05/24 08:35	2022/05/24 08:25	2022/05/24 08:08		L	
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-05242022	SANG-INF-05242022	SANG-INF-05242022D	SANG-PDR1-05242022	SANG-PDG1-05242022	SANG-PDG2-05242022	SANG-EFF-05242022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	19	20	6.2	5.3	1.4 U	5.4	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	51	51	20	3.6	1.2 U	15	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	42	42	6	1.1 J	1.4 U	3.8	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	22	22	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	23	23	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	7.1	7.1	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	4.8	4.5	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	0.94 J	0.99 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	0.46 J	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	9.1	9.3	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	10	9.9	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	64	64	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	3.2	3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	210 (1)	200 (1)	0.89 J	1.1 J	1.2 U	0.83 J	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	0.92 J	0.93 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	47	47	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	10	9.3	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-05242022 is a field blank.

Sample SANG-INF-05242022D is a field duplicate of SANG-INF-05242022.

(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 d train GAC Unit 1

PDG2 = post D train GAC Unit 2

PDR1 = post D train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

#### C2E8542 - 5/31/2022

RESULTS OF ANALYSES OF WATER						VALIDATED D	ATA					
	Bureau Veritas ID		STS764	STS769	STS891	STS766	STS768	STS767	STS765			
	Sampling Date		2022/05/31 08:25	2022/05/31 08:55	2022/05/31 08:55	2022/05/31 08:36	2022/05/31 08:50	2022/05/31 08:42	2022/05/31 08:30			
	COC Number											
Perfluorinated Compounds	Method	UNITS	SANG-FB-05312022	SANG-INF-05312022	SANG-INF-05312022D	SANG-PAR1-05312022	SANG-PAG1-05312022	SANG-PAG2-05312022	SANG-EFF-05312022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	19	20	7.7	3.1	2.7	7.4	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	50	53	14	2.2	1.3 J	14	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	40	44	6.7	0.98 J	1.4 U	4.1	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	20	22	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	21	23	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	6.1	6.7	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	4.3	4.8	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	0.80 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	8.5	8.9	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	10	10	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	60	66	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	3.2	3.1	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	210 (1)	200 (1)	1.2 U	0.44 J	1.2 U	1.2 U	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	46	49	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	9.6	10	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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-05312022 is a field blank.

Sample SANG-INF-05312022D is a field duplicate of SANG-INF-05312022.

(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

#### C2F6274V1 - 06/07/2022

RESULTS OF ANALYSES OF WATER				VALIDATED DATA								
	Bureau Veritas ID		SVK089	SVK094	SVK095	SVK091	SVK093	SVK092	SVK090			
	Sampling Date		2022/06/07 07:30	2022/06/07 08:15	2022/06/07 08:15	2022/06/07 07:48	2022/06/07 08:05	2022/06/07 07:55	2022/06/07 07:40			
	COC Number											
Perfluorinated Compounds	Method	UNITS	SANG-FB-06072022	SANG-INF-06072022	SANG-INF-06072022D	SANG-PBR1-06072022	SANG-PBG1-06072022	SANG-PBG2-06072022	SANG-EFF-06072022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	23	23	13	9.5	0.86 J	11	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	69	69	26	8.9	1.3 U	15	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	52	53	4.4	3.1	1.5 U	4.6	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	28	28	1.3 U	1.0 J	1.3 U	1.3 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	29	29	1.3 U	0.77 J	1.3 U	1.3 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	8.2	8.2	1.8 U	1.8 U	1.8 U	1.8 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	5.3	5.1	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.0 J	0.99 J	1.3 U	1.3 U	1.3 U	1.3 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.60 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.64 J	0.53	1.3	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	0.65 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.68 J	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	12	12	1.3 U	0.78 J	1.3 U	1.3 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	14	14	1.8 U	1.8 U	1.8 U	1.8 U	0.8	1.8	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	89	87	1.3 U	1.4 J	1.3 U	1.3 U	0.58	1.3	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	4.5	4.6	1.3 U	1.3 U	1.3 U	1.3 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	280 (1)	270 (1)	2.3	3.8	1.8 J	1.6 J	4.3	12	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	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.89	2.2	4.4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.3	3.3	4.4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.0 J	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U	0.76	1.8	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	62	63	1.8 U	0.92 J	1.8 U	1.8 U	0.65	1.8	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	17	16	1.8 U	1.8 U	1.8 U	1.8 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34	1.3	4.4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62	2.2	4.4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.57	2.2	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-06072022 is a field blank.

Sample SANG-INF-06072022D is a field duplicate of SANG-INF-06072022.

(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.

PBG2 = post B train GAC Unit 2 PBR1 = post B train Resin 1

PBG1 = post B train GAC Unit 1

Effluent (EFF) = Treated water that has passed through the ISWTS Influent (INF) = Untreated water from Recreational Pond ISWTS = Interim Storm Water Treatment System

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

#### C2G4642V1 - 06/14/2022

RESULTS OF ANALYSES OF WATER						VALIDATED DATA						
	Bureau	Veritas ID	SXE945	SXE950	SXE951	SXE947	SXE949	SXE948	SXE946			
	Sam	oling Date	2022/06/14 13:00	2022/06/14 13:30	2022/06/14 13:30	2022/06/14 13:12	2022/06/14 13:26	2022/06/14 13:20	2022/06/14 13:05			
	CO	C Number	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-06142022	SANG-INF-06142022	SANG-INF-06142022D	SANG-PCR1-06142022	SANG-PCG1-06142022	SANG-PCG2-06142022	SANG-EFF-06142022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	0.78 J	25	24	12	11	1.2 J	13	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	78	76	17	17	0.57 J	15	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	60	56	5.1	11	1.4 U	4.1	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	29	29	1.2 U	4.4	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	29	29	1.2 U	3.8	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	8.9	8.2	1.6 U	1.3 J	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	5.9	5.6	1.4 U	0.71 J	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	0.97 J	0.94 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.3 J	1.2 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	0.59 J	0.50 J	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	14	13	1.2 U	2.2	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	16	16	1.6 U	2.1	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	100	95	1.2 U	11	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	5.6	5	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	250 (1)	230 (1)	1.4 J	25	0.72 J	1.2 J	0.43	1.2	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.1 J	1.1 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	51	51	1.6 U	4.7	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	7.8	7.5	1.6 U	0.80 J	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	0.60 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	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

LOD = Limit of Detec

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

Sample SANG-FB-06142022 is a field blank.

Sample SANG-INF-06142022D is a field duplicate of SANG-INF-06142022.

(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.

PCG1 = post C train GAC Unit 1

PCG2 = post C train GAC Unit 2

PCR1 = post C train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

#### C2H2743V1 - 06/21/2022

RESULTS OF ANALYSES OF WATER				VALIDATED DATA								
	Bureau Veritas ID		SYX885	SYX890	SYX891	SYX887	SYX889	SYX888	SYX886			
	Sampling Date		2022/06/21 08:00	2022/06/21 08:30	2022/06/21 08:30	2022/06/21 08:12	2022/06/21 08:27	2022/06/21 08:20	2022/06/21 08:05			
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-06212022	SANG-INF-06212022	SANG-INF-06212022D	SANG-PDR1-06212022	SANG-PDG106212022	SANG-PDG2-06212022	SANG-EFF-06212022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	30	31	16	20	1.5 J	15	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	86	88	21	24	0.67 J	16	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	71	72	6.4	8.5	1.4 U	4.2	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	33	34	1.2 U	1.8 J	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	32	34	1.2 U	0.89 J	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	7.7	8.2	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	5.1	4.9	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	16	17	1.2 U	0.90 J	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	31	31	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	130 (1)	130 (1)	1.2 U	2.5	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	5.7	6	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	320 (1)	320 (1)	1.2 U	3.7	1.2 U	1.2 U	4.3	12	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	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	1.3 J	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	80	84	1.6 U	1.1 J	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	14	13	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	4

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

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

Influent (INF) = Untreated water from Recreational Pond

ISWTS = Interim Storm Water Treatment System

#### 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-06212022 is a field blank.

Sample SANG-INF-06212022D is a field duplicate of SANG-INF-06212022.

(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.

PDG1 = post D train GAC Unit 1

PDG2 = post D train GAC Unit 2

PDR1 = post D train Resin 1

#### C2I0420V1 - 06/28/2022

RESULTS OF ANALYSES OF WATER

В	ureau Veritas ID		TAP153	TAP158	TAP159	TAP155	TAP157	TAP156	TAP154			
	Sampling Date		2022/06/28 08:30	2022/06/28 09:00	2022/06/28 09:00	2022/06/28 08:42	2022/06/28 08:57	2022/06/28 08:50	2022/06/28 08:35			
	COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Perfluorinated Compounds	Method	UNITS	SANG-FB-06282022	SANG-INF-06282022	SANG-INF-06282022D	SANG-PAR1-06282022	SANG-PAG1-06282022	SANG-PAG2-06282022	SANG-EFF-06282022	DL	LOD	LOQ
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	36	36	26	9.5	7.5	18	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	1.2 U	100	100	47	7	2.7	18	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	1.4 U	85	89	26	2.3	1.5 U	5.2	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.2 U	36	37	7.1	0.62 J	1.3 U	1.3 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.2 U	38	39	5.1	1.3 U	1.3 U	1.3 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.6 U	9.6	10	1.2 J	1.8 U	1.8 U	1.8 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.4 U	6	6.3	1.5 U	1.5 U	1.5 U	1.5 U	0.7	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.2 U	0.88 J	1.2 J	1.3 U	1.3 U	1.3 U	1.3 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.53	1.3	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.2 U	20	19	3.4	0.55 J	1.3 U	1.3 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.6 U	21	21	2.5	1.8 U	1.8 U	1.8 U	0.8	1.8	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.2 U	120 (1)	130 (1)	13	1.3 J	1.3 U	1.3 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.2 U	6.8	6.6	1.3 U	1.3 U	1.3 U	1.3 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.2 U	360 (1)	360 (1)	24	2.4	1.3 U	1.6 J	4.3	12	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	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.89	2.2	4.4
MeFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.3	3.3	4.4
EtFOSAA	EPA 537.1 M	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	2.1 J	2.2 J	0.84 J	1.8 U	1.8 U	1.8 U	0.76	1.8	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	110	110	14	1.8 U	1.8 U	1.1 J	0.65	1.8	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	17	18	1.5 J	1.8 U	1.8 U	1.8 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34	1.3	4.4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62	2.2	4.4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.57	2.2	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-06282022 is a field blank.

Sample SANG-INF-06282022D is a field duplicate of SANG-INF-06282022.

(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 B train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

# TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS



Glycols										
Sample Parameter	Sampling Date	Influent (mg/L)	PDG2 Effluent (mg/L)	Effluent (mg/L)						
Diethylene glycol	5/24/2022	<52	<52	<52						
Ethylene glycol		<10	<10	<10						
Propylene glycol	1	<10	<10	<10						
Triethylene Glycol	7	<54	<54	<54						

Total Organic Carbon (TOC)								
Sample Parameter     Sampling Date     Influent (mg/L)     PDG2 Effluent (mg/L)     Effluent (								
ТОС	5/24/2022	4.40	0.72	1.50				

# TABLE 3 PREVENTIVE MAINTENANCE TABLE

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	Media Change Out	Resin Vessel Skimming
4/1/2022	25 Micron Pleated	10 Micron Pleated				
4/4/2022		10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
4/5/2022						
4/6/2022		10 Micron Pleated		Fine Sand Filters 4A/4B		
4/7/2022			Primary Carbon vessels A, B, C, & D			
4/8/2022	25 Micron Pleated					
4/11/2022		10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
4/12/2022						
4/13/2022				Fine Sand Filters 5A/5B		
4/14/2022		10 Micron Regular				
4/15/2022	25 Micron Pleated					
4/18/2022		10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
4/19/2022				Coarse Sand Filters 1A/1B		
4/20/2022		10 Micron Regular		Coarse Sand Filters 2A/2B		
4/21/2022	25 Micron Pleated		Primary Carbon vessels A, B, C, & D			
4/25/2022		10 Micron Pleated		Fine Sand Filters 3A/3B		

# TABLE 3 PREVENTIVE MAINTENANCE TABLE (continued)

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	Media Change Out	Resin Vessel Skimming
4/26/2022	25 Micron Pleated	10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
4/27/2022		10 Micron Regular	Secondary Carbon vessels A, B, C, & D			Skimmed approximately .5" off each Resin vessel
4/28/2022		10 Micron Pleated				
4/29/2022			Primary Carbon vessels A, B, C, & D			
4/30/2022	25 Micron Pleated	10 Micron Pleated				
5/1/2022		10 Micron Pleated				
5/2/2022		10 Micron Regular				
5/3/2022	25 Micron Regular	10 Micron Regular				
5/4/2022		10 Micron Regular				
5/5/2022		10 Micron Regular	Primary Carbon vessels A, B, C, & D			
5/6/2022	25 Micron Pleated	10 Micron Pleated				
5/8/2022		10 Micron Pleated				
5/9/2022				Fine Sand Filters 5A/5B		
5/10/2022			Secondary Carbon vessels A, B, C, & D			
5/11/2022						
5/12/2022			Primary Carbon vessels A, B, C, & D			
5/13/2022	25 Micron Pleated	10 Micron Pleated				

# TABLE 3 PREVENTIVE MAINTENANCE TABLE (continued)

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	Media Change Out	Resin Vessel Skimming
5/16/2022	25 Micron Regular	10 Micron Regular		Coarse Sand Filters 1A/1B		
5/17/2022			Primary Carbon vessels A, B, C, & D			
5/18/2022		10 Micron Regular	Primary Carbon vessels A, B, C, & D			
5/19/2022				Coarse Sand Filters 2A/2B		
5/20/2022	25 Micron Pleated	10 Micron Pleated				
5/23/2022			Primary Carbon vessels A, B, C, & D			
5/24/2022				Fine Sand Filters 3A/3B		
5/25/2022	25 Micron Regular	10 Micron Regular	Secondary Carbon vessels A, B, C, & D			
5/26/2022			Primary Carbon vessels A, B, C, & D			
5/27/2022	25 Micron Pleated	10 Micron Pleated				
5/31/2022		10 Micron Regular	Primary Carbon vessels A, B, C, & D			
6/1/2022	25 Micron Regular					Skimmed approximately .75" off Resin vessels A and D; and approx. 1.5" off Resin vessels B and C
6/2/2022			Primary Carbon vessels A, B, C, & D			
6/3/2022	25 Micron Pleated	10 Micron Pleated	Secondary Carbon vessels A, B, C, & D			
6/6/2022			Primary Carbon vessels A, B, C, & D			
6/7/2022	25 Micron Regular	10 Micron Regular				
6/8/2022				Fine Sand Filters 5A/5B		

# TABLE 3 PREVENTIVE MAINTENANCE TABLE (continued)

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	Media Change Out	Resin Vessel Skimming
6/9/2022			Primary Carbon vessels A, B, C, & D			
6/10/2022	25 Micron Pleated	10 Micron Pleated				
6/13/2022			Primary Carbon vessels A, B, C, & D			
6/14/2022	25 Micron Regular	10 Micron Regular		Coarse Sand Filters 1A/1B		
6/15/2022		10 Micron Regular	Secondary Carbon vessels A, B, C, & D			
6/16/2022		10 Micron Regular	Primary Carbon vessels A, B, C, & D			
6/17/2022	25 Micron Pleated	10 Micron Pleated				
6/20/2022			Primary Carbon vessels A, B, C, & D			
6/21/2022		10 Micron Regular				
6/22/2022				Coarse Sand Filters 2A/2B		
6/23/2022	25 Micron Pleated	10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
6/25/2022		10 Micron Pleated				
6/27/2022	25 Micron Regular	10 Micron Regular	Primary Carbon vessels A, B, C, & D			
6/28/2022		10 Micron Regular				
6/29/2022	25 Micron Regular	10 Micron Pleated	Secondary Carbon vessels A, B, C, & D			
6/30/2022		10 Micron Regular	Primary Carbon vessels A, B, C, & D			

FIGURES

# FIGURE 1





FIGURE 3 - INFLUENT AND EFFLUENT PFOS AND PFOA CHARTS





