US Army Corps of Engineers Baltimore District



QUARTERLY OM&M REPORT NO. 16, REVISION 1

April to June 2024

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

August 2024

Prepared by:



Bristol Environmental Solutions, LLC 720 Corporate Circle, Suite D Golden, CO 80401

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ACRONYMS AND ABBREVIATIONS

AFFF aqueous film-forming foam

BES Bristol Environmental Solutions, LLC
EPA U.S Environmental Protection Agency

GAC granular activated carbon

ISWTS Interim Storm Water Treatment System

IX ion exchange resin 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

EXECUTIVE SUMMARY

An Interim Storm Water Treatment System (ISWTS) has been operating at Stewart Air National Guard Base (SANGB) in Newburgh, New York, since July 13, 2020. The ISWTS treats stormwater in the Recreation Pond. The stormwater is contaminated with perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), and other per- and polyfluoroalkyl substances (PFAS). Aqueous film-forming foam (AFFF) used at SANGB is the source of the PFAS contamination.

This report summarizes ISWTS Operations, Maintenance and Monitoring (OM&M) between April 1 and June 30, 2024. The ISWTS consists of pretreatment systems and four PFOS/PFOA treatment trains with three treatment vessels per train. Each treatment train consists of two granular activated carbon (GAC) vessels followed by one ion exchange resin (IX) vessel.

Performance monitoring PFOS/PFOA samples are normally collected weekly from the ISWTS influent, effluent, and intra-process sample ports to monitor ISWTS performance and PFOS/PFOA breakthrough. Intra-process sample ports are on the effluent from each PFOS/PFOA treatment vessel on all four trains, but only one of the four treatment trains are sampled each week.

Existing PFOS/PFOA treatment media operated throughout the reporting period; however, because fouling of the media restricted the hydraulic capacity to operate the ISWTS effectively, Bristol Environmental Solutions, LLC (BES) schedule a comprehensive media exchange and long term maintence activities for the month of July 2024.

During the performance period, a total of 37,246,825 gallons of stormwater were treated and discharged over the outfall weir by the ISWTS. There were 91 days between April 1 and June 30, 2024. The Recreation Pond was drawn down below the outfall weir for 32 of the 91 days or 35% of the quarter, which is below average. Reduced drawdown below the

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weir during this performance period was impacted by increased precipitation, which was measured to be 11.5" during the quarter.

PFOS and PFOA samples were collected 13 times on the influent and effluent during the performance period. The combined PFOS and PFOA influent average concentration during the performance period was 308 parts per trillion (ppt). The highest combined PFOS and PFOA effluent detection was 2.5 ppt on June 11 and the combined PFOS and PFOA effluent average concentration was 0.5 ppt during the OM&M period between April 1 and June 30, 2024.

1.0 INTRODUCTION

Bristol Environmental Solutions, LLC (BES), under Contract with the US Army Corps of Engineers is operating an Interim Storm Water Treatment System (ISWTS) on behalf of the Air National Guard at Stewart Air National Guard Base (SANGB) in Newburgh, New York. The stormwater is contaminated with perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA) and other per- and polyfluoroalkyl substances (PFAS). Aqueous film-forming foam (AFFF) used at SANGB is the source of the PFAS contamination that is present in the stormwater.

The ISWTS intercepts stormwater from the Recreation Pond and discharges treated effluent over the existing Recreation Pond outfall weir. When weather conditions allow, the ISWTS draws down the pond level below the outfall weir and treats all stormwater discharges. The Recreation Pond drawdown below the weir provides a storage reservoir to prevent discharge of untreated stormwater 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 16th Quarterly Report that summarizes Operations, Maintenance, and Monitoring (OM&M) activities conducted by BES at SANGB. This report summarizes ISWTS operations between April 1 and June 30, 2024, at SANGB.

2.0 GENERAL OPERATIONS SUMMARY

The ISWTS has been operating 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 April 1 and June 30, 2024, or months 46, 47, and 48 post startup.

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During the performance period the system influent, intra-process monitoring (three locations) and effluent was monitored weekly to confirm treatment system effectiveness for PFOS, PFOA, and other PFAS. Performance sampling was conducted for a total of 13 days during the quarterly period. Final PFAS results are provided in **Table 1**.

PFOS and PFOA mitigation is performed by granular activated carbon (GAC) and ion exchange resin (IX) media that absorb these compounds and other PFAS. No media change was required during the quarter to adequately remove PFAS compounds from the stormwater. A media change is scheduled for July 2024, because fouling of the media was restricting the hydraulic capacity. Prior to planned media change in July, the IX effluent and final ISWTS effluent were between non-detect and 2.5 ppt and demonstrating good performance.

Intra-process performance monitoring recorded limited PFOS/PFOA in the post IX effluent and combined effluent. During this period the highest PFOS and PFOA detected in the effluent was 2.5 ppt and the average was 0.5 ppt. As a result of increasing media pressures, this media will be replaced in July 2024.

The analytical method used for all PFAS monitoring during the performance period was Environmental Protection Agency (EPA) 537.1 M. Final PFAS results for the entire quarter 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 adsorption treatment media.

During this reporting period, four PFOS/PFOA treatment trains (Trains A, B, C and D) comprised of Primary GAC, Secondary GAC, and IX were employed. During previous

reporting periods, BES determined that this configuration outperformed one stage of GAC with two stages of IX or three stages of GAC.

The GAC media used during the quarter was Calgon Filtrasorb 400 and the IX resin is Purolite PFA694. The peracetic acid has not decreased biofouling and as a result will not be introduced to the ISWTS influent. During the quarter, the ultrasonic device (Pulsar 3000) was operated to mitigate seasonal algae growth in the Recreation Pond. The ISWTS configuration is shown in **Figure 1**.

4.0 GENERAL FACILITY OPERATIONS SUMMARY

During the performance period, over 37 million gallons of stormwater were treated. Effluent is either directed over the outfall weir or recycled back to the pond. During the performance period, all effluent was discharged over the outfall weir. The table below summarizes the total volume treated (gallons), 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 treated water discharged over the weir during the performance period. 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. Recreation Pond drawdown is managed to reduce excessive sediment intake from the bottom of the pond that would impact ISWTS operations and maintenance.

Month	Volume Treated (Gallons)	Run Time ¹ (Percent)	Average Treatment Flow ² (GPM)
April 2024	11,174,900	97%	276
May 2024	13,683,900	98%	312
June 2024	12,388,025	93%	298
Total	37,246,825		

¹Run Time – Hours pump running divided by the total period time

There were 91 days of scheduled operation between April 1 and June 30, 2024. During this period of performance, the Recreation Pond was drawn down below the weir for 32 of the 91 days or 35% of the time. The Recreation Pond level during the performance period is shown in **Figure 2**.

5.0 FACILITY PERFORMANCE MONITORING

The analytical method used for all PFAS monitoring during the performance period was EPA 537.1 M. Final PFAS results for the entire quarter are provided in **Table 1**.

5.1 INFLUENT AND EFFLUENT PFOS/PFOA AND TOTAL PFAS MONITORING

As previously noted, samples were collected 13 times on the influent and effluent during the performance period for PFOS, PFOA, and other PFAS compounds. **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 average detected concentrations during the performance period were 308 ppt and 0.5 ppt, respectively. The maximum combined PFOS and PFOA influent concentration was 409 ppt on April 9, 2024. The maximum detection of PFOS/PFOA in the combined effluent, was 2.5 ppt on June 11, 2024. All influent and effluent PFAS sample results are provided in **Table 1**.

²Average GPM – Average flow total gallons divided by operational hours

^{% =} percent

GPM = gallons per minute

5.2 Intra-Process PFOS/PFOA and Total PFAS Monitoring

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

Weekly intra-process samples are collected to monitor the performance of GAC and IX treatment from each of the four treatment trains. Each week one of the four trains (A, B, C, or D) are sampled. When intra-process samples are collected, they are collected from the primary GAC effluent, secondary GAC effluent, and IX effluent. Normally the trains are sampled in order and each train is sampled every fourth event. Results from intra-process monitoring, showed incremental breakthrough of PFOS/PFOA from the primary and then secondary GAC vessels followed by excellent PFOS/PFOA removal from the IX resin in the polish position. During the performance monitoring period the highest combined PFOS/PFOA concentrations in the Primary GAC, Secondary GAC, and IX were 232, 122, and 1.7 ppt respectively.

5.3 OTHER WATER QUALITY MONITORING

During the performance period additional monitoring was performed for total organic carbon, and glycols on the influent, IX resin influent and final effluent on May 15, 2024. These results are shown in **Table 2**. No glycols were detected in any of the samples. 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 4.00 mg/L, and the GAC-2 effluent (influent to the resin) was 2.10 mg/L indicating that the influent TOC level to the resin was higher than recommended by the resin manufacturer. Effluent TOC concentration was 0.98 mg/L. The IX influent result slightly exceeds the manufacturer's recommended maximum TOC concentration. Elevated TOC can shorten IX resin life but reduced resin life compared to historic ISWTS operations were not observed.

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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 pretreatment and filtration systems in removing solids. During the performance period, influent and effluent turbidity averaged 8.57 nephelometric turbidity units (NTUs) and 0.88 NTUs, respectively. A graph of the influent and effluent turbidity during the performance period is included as **Figure 4**.

5.5 BIOFOULING CONTROL

Peracetic acid was not introduced into the process influent during the performance period for biofouling mitigation. Instead, ultrasonic treatment in the pond was utilized to inhibit algae growth. See Section 8.0 for additional discussion on the observed effectiveness of the ultrasonic treatment.

6.0 SCHEDULED PREVENTIVE MAINTENANCE

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;

During the performance period, the coarse and fine filters were each backwashed 665 and 661 times respectively and a total of three cleaning events were completed. The primary and secondary bag filters were changed 22 and 56 times, respectively, during the performance period. To maintain acceptable PFAS treatment media pressure, the primary, and secondary GAC vessels were backwashed 11 and 3 times respectively during the

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quarter. 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, and spent ion exchange resin were generated during this quarter. On June 5, 2024, spent waste was demobilized from Stewart by the Onion Equipment Company for interim storage at the OEC facility in Indianapolis, Indiana. The spent waste generated in March and waste generated through June 2024 will be consolidated with all waste generated during the planned media exchange in July 2024 and combined for a single shipment to the US Ecology Subtitled C Landfill in Michigan. Material disposal documents will be provided in the next quarterly report.

8.0 PROJECTED ACTIVITIES FOR NEXT PERFORMANCE PERIOD

BES will continue operating the ISWTS with all four treatment trains configured as primary GAC, secondary GAC, and IX resin polish.

The replacement of IX resin in late March 2024, to address IX resin performance concerns did enhance media treatment performance for the remainder of the quarter. The resin was still removing PFAS effectively at the end of June but all media is scheduled to be replaced in early July 2024 to maintain hydraulic performance of the ISWTS.

During the planned July 2024 media change, three vessels in one of the four treatment trains will be replaced as part of planned corrective annual maintenance.

The effectiveness of the Peracetic acid has been uncertain. Bristol turned off the Peracetic acid in the fourth quarter of 2022 to see if increased biofouling impacts can be detected. No increased biofouling effects were observed while peracetic acid was off, therefore, the addition of peracetic acid will remain off at this time. Instead, BES will further evaluate ultrasonic equipment to mitigate the growth of algae at the Recreation Pond.

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BES will continue to operate ultrasonic algae control equipment installed directly in the Recreation pond during the 2024 warm weather season. The ultrasonic algae control equipment transforms electrical signals to multiple soundwaves of ultrasonic frequencies that breaks the outer membrane of individual algae cells and inhibits growth. The technology was deployed in April 2023, and was successful in mitigating visible seasonal algae through October 2023. BES redeployed the ultrasonic equipment in March 2024, and observed similar results through June 2024.

Bristol will continue to evaluate modifications that could be considered to improve the overall system performance. In the next quarter, BES is evaluating pilot testing of automated washable bag filters that could be considered to improve pre-treatment operations. No capital improvements are planned at this time.



C4A5548V1-C4A4091V1-C4A5931V1-C4A7320V1 - 04/09/2024

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

RESULTS OF ANALYSES OF WATER						VALIDATED DATA						
	Bureau V	/eritas ID	YVX942	YVX962	YVX963	YVX959	YVX961	YVX960	YVX958			
	Samp	oling Date	2024/04/09 08:30	2024/04/09 09:05	2024/04/09 09:05	2024/04/09 08:47	2024/04/09 09:00	2024/04/09 08:55	2024/04/09 08:40			
	S	Sample ID	SANG-FB-04092024	SANG-INF-04092024	SANG-INF-04092024D	SANG-PEAR1-04092024	SANG-PEAG1-04092024	SANG-PEAG2-04092024	SANG-EFF-04092024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	27	21	1.6 U	20	14	1.6 U	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	67	63	0.78 U	47	27	0.78 U	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.38 J	56	52	0.78 U	36	18	0.42 J (1)	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	36	34	1.1 U	22	9.6	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	39	38	1.1 U	22	9.5	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	15	15	1.1 U	8.1	3.6	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	6.4	6.1	1.1 U	2.9	1.2 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.59 J	0.55 J	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	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	0.70 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.27	0.78	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	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	11	9.9	1.1 U	5.9	2.5	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	12	12	1.1 U	6.1	2.4	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	110	100	1.1 U	55	19	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	4.8	4.7	1.1 U	2.4	1.0 J	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	370 (2)	350 (2)	1.1 U	210 (2)	63	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.44	1.6	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.6	1.6	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	0.60 J	1.6 U	1.6 U	1.6 U	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	67	85	1.4 U	29	10	1.4 U	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	28	26	1.6 U	8.1	2.7 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.46	1.6	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	4.5	0.97 J	0.79 J	0.68 J	0.69 J	0.65 J	0.93 J	0.13	0.44	4.4
9CI-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	0.47	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	0.36	1.1	4.4

Notes

(1) Result is estimated as analyte confirmation criterion (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. ng/L - nanograms per Liter or parts per trillion.

DL = Detection Limit

EFF = Effluent FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-04092024 is field blank.

Sample SANG-INF-04092024 D is a field duplicate of SANG-INF-04092024

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

PEAG1 = post E port A GAC Unit 1

PEAG2 = post E port A train GAC Unit 2

PEAR1 = post E port A train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4B3658V1-C4B2007V1 - 04/16/2024

RESULTS OF ANALYSES OF WATER

RESULTS OF ANALYSES OF WATER				1		VALIDATED DA			1			
		Veritas ID	YXP178	YXP183	YXP184	YXP180	YXP182	YXP181	YXP179			1
	Samı	pling Date	2024/04/16 08:30	2024/04/16 09:10	2024/04/16 09:10	2024/04/16 08:48	2024/04/16 09:03	2024/04/16 08:55	2024/04/16 08:40			<u> </u>
	9	Sample ID	SANG-FB-04162024	SANG-INF-04162024	SANG-INF-04162024D	SANG-PEBR1-04162024	SANG-PEBG1-04162024	SANG-PEBG2-04162024	SANG-EFF-04162024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.6 U	20	20	1.4 U	16	13	1.6 U	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.78 U	53	54	0.70 U	35	23	0.78 U	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.78 U	43	45	0.70 U	27	15	0.78 U	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.1 U	26	26	1.0 U	14	6.3	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.1 U	28	29	1.0 U	14	6.1	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.1 U	11	11	1.0 U	5.1	2.2 J	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.1 U	5.9	6.1	1.0 U	2.2	0.82 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.52 J	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1.0	2.0
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	0.48	1.0	2.0
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	0.70	2.0
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	1.0	2.0
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.1 U	8.8	8.9	1.0 U	4.9	2.0 J	1.1 U	0.30	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.1 U	10	10	1.0 U	3.9	1.6 J	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.1 U	79	82	1.0 U	35	11	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.1 U	4.0	4.0	1.0 U	1.5 J	0.68 J	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.1 U	300 (1)	290 (1)	1.0 U	130 (1)	40	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.4 U	1.4 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.4 U	1.4 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.4 U	1.4 U	1.6 U	1.6 U	0.44	1.6	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	0.70	1.4	4.0
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	4.0
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	0.64 J	0.68 J	1.4 U	1.4 U	1.6 U	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	57	59	1.4 U	20	7.0	1.6 U	0.70	1.6	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.6 U	26	25	1.4 U	4.6	1.2 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.6 U	1.6 U	1.6 U	1.4 U	1.4 U	1.6 U	1.6 U	0.46	1.6	4.4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.44 U	0.44 U	0.44 U	0.40 U	0.40 U	0.44 U	0.44 U	0.13	0.44	4.4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	0.47	1.1	4.4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	0.36	1.1	4.4
Intes:	•	•			•					•		

(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.

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

DL = Detection Limit

EFF = Effluent FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-04162024 is field blank.

Sample SANG-INF-04162024 D is a field duplicate of SANG-INF-04162024

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

PEBG1 = post E port B GAC Unit 1

PEBG2 = post E port B train GAC Unit 2

PEBR1 = post E port B train Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4C1486V1 - 04/23/2024

RESULTS OF ANALYSES OF WATER VALIDATED DATA

	Bureau V	/eritas ID	YZE737	YZE742	YZE743	YZE739	YZE741	YZE740	YZE738			
	Samp	ling Date	2024/04/23 08:00	2024/04/23 08:40	2024/04/23 08:40	2024/04/23 08:17	2024/04/23 08:32	2024/04/23 08:25	2024/04/23 08:10			
	S	ample ID	SANG-FB-04232024	SANG-INF-04232024	SANG-INF-04232024D	SANG-PECR1-04232024	SANG-PECG1-04232024	SANG-PECG2-04232024	SANG-EFF-04232024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	22	24	1.6 U	20	14	1.6 U	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	65	70	0.78 U	46	27	0.78 U	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	52	56	0.78 U	35	17	0.78 U	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	29	30	1.1 U	17	7.1	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	31	33	1.1 U	18	6.8	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	10	11	1.1 U	5.5	1.9 J	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	4.8	5.0	1.1 U	2.4	0.69 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	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	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.1 U	1.1 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	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.27	0.78	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	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	10	10	1.1 U	5.2	1.4 J	1.1 U	0.30	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	12	13	1.1 U	6.4	1.7 J	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	89	93	1.1 U	46	15	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	4.2	4.2	1.1 U	1.7 J	1.1 U	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	320 (1)	320 (1)	1.1 U	160 (1)	45	1.1 U	4.7	10	22
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.44	1.6	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.60	1.6	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	66	70	1.6 U	27	8.4	1.6 U	0.70	1.6	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	21	22	1.6 U	5.4	1.3 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.46	1.6	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	0.13	0.44	4.4
9CI-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	0.47	1.1	4.4
11CI-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	0.36	1.1	4.4

Notes

(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.

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

DL = Detection Limit EFF = Effluent

FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-04232024 is a field blank.

Sample SANG-INF-04232024 D is a field duplicate of SANG-INF-04232024 .

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

PECG1 = post E port C GAC Unit 1

PECG2 = post E port C train GAC Unit 2

PECR1 = post E port C Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4C9588V1 - 04/30/2024

RESULTS OF ANALYSES OF WATER VALIDATED DATA

	Bureau Ve	eritas ID	ZAX891	ZAX896	ZAX897	ZAX893	ZAX895	ZAX894	ZAX892			
	Sampli	ing Date	2024/04/30 09:00	2024/04/30 09:25	2024/04/30 09:25	2024/04/30 09:10	2024/04/30 09:20	2024/04/30 09:15	2024/04/30 09:05			
	Sa	mple ID	SANG-FB-04302024	SANG-INF-04302024	SANG-INF-04302024D	SANG-PEDR1-04302024	SANG-PEDG1-04302024	SANG-PEDG2-04302024	SANG-EFF-04302024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	29	28	1.4 U	25	18	1.4 U	0.59	1.4	2.0
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	70	69	0.70 U	54	32	0.70 U	0.22	0.70	2.0
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	63	63	0.70 U	46	22	0.70 U	0.20	0.70	2.0
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	31	31	1.0 U	20	8.3	1.0 U	0.28	1.0	2.0
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	35	35	1.0 U	21	7.2	1.0 U	0.41	1.0	2.0
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	12	11	1.0 U	6.9	2.1	1.0 U	0.35	1.0	2.0
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	5.7	5.5	1.0 U	2.8	0.76 J	1.0 U	0.29	1.0	2.0
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.63 J	0.84 J	1.0 U	1.0 U	1.0 U	1.0 U	0.37	1.0	2.0
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.65 J	1.2 J	1.0 U	1.0 U	1.0 U	1.0 U	0.48	1.0	2.0
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.70 U	0.74 J	0.70 U	0.70 U	0.70 U	0.70 U	0.24	0.70	2.0
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1.0	2.0
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	13	13	1.0 U	7.6	2.5	1.0 U	0.27	1.0	2.0
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	12	13	1.0 U	6.5	2.5	1.0 U	0.34	1.0	2.0
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	100 (1)	99	1.0 U	52	16	1.0 U	0.28	1.0	2.0
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	4.1	4.1	1.0 U	1.8 J	0.50 J	1.0 U	0.43	1.0	2.0
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	360 (1)	360 (1)	1.0 U	190 (1)	44	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	2.0
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	0.60	1.4	2.0
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	0.40	1.4	4.0
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	0.70	1.4	4.0
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	4.0
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.1 J	1.1 J	1.4 U	0.57 J	1.4 U	1.4 U	0.47	1.4	4.0
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	69	72	1.4 U	30	9.3	1.4 U	0.63	1.4	4.0
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	27	26	1.4 U	7.1	1.3 J	1.4 U	0.53	1.4	4.0
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	4.0
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	0.40	4.0
9CI-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	1.0	4.0
11CI-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	1.0	4.0

Notes

(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.

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

DL = Detection Limit EFF = Effluent

FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-04302024 is a field blank.

Sample SANG-INF-04302024 D is a field duplicate of SANG-INF-04302024 .

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

PEDG1 = post E port D GAC Unit 1

PEDG2 = post E port D train GAC Unit 2

PEDR1 = post E port D Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4D1122V1-C4D7240V1 - 05/07/2024

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

RESULTS OF ANALTSES OF WATER						VALIDATED D	AIA					
	Bureau	Veritas ID	ZCM044	ZCM049	ZCM050	ZCM046	ZCM048	ZCM047	ZCM045			\Box
	Sam	pling Date	2024/05/07 08:20	2024/05/07 08:45	2024/05/07 08:45	2024/05/07 08:30	2024/05/07 08:40	2024/05/07 08:35	2024/05/07 08:25			1
		Sample ID	SANG-FB-05072024	SANG-INF-05072024	SANG-INF-05072024D	SANG-PEAR1-050792024	SANG-PEAG1-05072024	SANG-PEAG2-05072024	SANG-EFF-05072024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	0.66 J	10	10	1.4 J	12	11	1.1 J	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	23	22	0.78 U	22	18	0.78 U	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.37 J	20	20	0.78 U	18	12	0.78 U	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	12	12	1.1 U	9.0	5.2	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	14	15	1.1 U	9.7	5.1	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	5.1	5.2	1.1 U	3.6	1.8 J	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	3.2	3.4	1.1 U	2.2	1.0 J (1)	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.74 J	0.74 J	1.1 U	0.62 J	0.45 J	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.71 J	0.77 J	1.1 U	0.53 J	1.1 U	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.78 U	0.53 J	0.78 U	0.78 U	0.78 U	0.78 U	0.27	0.78	2.2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	0.61 J	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	4.9	5.2	1.1 U	4.0	2.3	1.1 U	0.30	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	4.5	4.4	1.1 U	3.4	1.7 J	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	32	31	1.1 U	21	9.2	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	2.2	2.2 J	1.1 U	1.4 J	0.94 J	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	140 (2)	140 (2)	1.1 U	81	31	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	0.92 J (1)	1.1 J (1)	0.84 J (1)	0.92 J	0.94 J	1.1 J	0.79 J	0.44	1.6	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.60	1.6	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	0.63 J (1)	0.61 J	1.6 U	0.54 J (1)	1.6 U	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	22	22	1.6 U	10	4.5	1.6 U	0.70	1.6	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	10	11	1.6 U	5.1	2.1 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.46	1.6	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	0.13	0.44	4.4
9CI-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	0.47	1.1	4.4
11CI-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	0.36	1.1	4.4
Notos		•										

Notes:

(1) Result is estimated as analyte confirmation criterion (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. ng/L - nanograms per Liter or parts per trillion.

DL = Detection Limit

EFF = Effluent

FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-05072024 is a field blank.

Sample SANG-INF-05072024 D is a field duplicate of SANG-INF-05072024 .

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

PEAG1 = post E port A GAC Unit 1

PEAG2 = post E port A train GAC Unit 2

PEAR1 = post E port A Resin 1

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

 $Influent \ (INF) = Untreated \ water \ from \ Recreational \ Pond$

C4E7481V1 - 05/14/2024

RESULTS OF ANALYSES OF WATER

RESULTS OF ANALYSES OF WATER						VALIDATED DATA						
	Bureau V	eritas ID	ZEO855	ZEO860	ZEO861	ZE0857	ZEO859	ZEO858	ZEO856		1	
	Samp	ling Date	2024/05/14 07:25	2024/05/14 07:50	2024/05/14 07:50	2024/05/15 08:00	2024/05/15 08:10	2024/05/15 08:05	2024/05/14 07:30			
	S	ample ID	SANG-FB-05142024	SANG-INF-05142024	SANG-INF-05142024D	SANG-PEBR1-05152024	SANG-PEBG1-05152024	SANG-PEBG2-05152024	SANG-EFF-05142024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.8 U	25	32	1.3 J	27	24	1.9 J	0.74	1.8	2.5
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.88 U	66	65	0.88 U	56	44	0.88 U	0.28	0.88	2.5
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.88 U	53	54	0.88 U	43	28	0.88 U	0.25	0.88	2.5
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.3 U	28	28	1.3 U	19	11	1.3 U	0.35	1.3	2.5
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.3 U	30	31	1.3 U	18	9.0	1.3 U	0.51	1.3	2.5
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.3 U	9.4	10	1.3 U	5.3	2.3 J	1.3 U	0.44	1.3	2.5
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.3 U	5.7	5.5	1.3 U	2.3 J	0.98 J	1.3 U	0.36	1.3	2.5
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.3 U	0.55 J	0.50 J	1.3 U	1.3 U	1.3 U	1.3 U	0.46	1.3	2.5
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.3 U	0.80 J	0.88 J	1.3 U	1.3 U	1.3 U	1.3 U	0.60	1.3	2.5
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.30	0.88	2.5
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.49	1.3	2.5
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.3 U	11	12	1.3 U	7.4	4.1	1.3 U	0.34	1.3	2.5
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.3 U	13	13	1.3 U	6.7	2.9	1.3 U	0.43	1.3	2.5
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.3 U	84	86	1.3 U	45	20	1.3 U	0.35	1.3	2.5
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.3 U	4.3	4.3	1.3 U	1.8 J	0.64 J	1.3 U	0.54	1.3	2.5
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.3 U	240 (1)	250 (1)	1.3 U	96 (1)	51	1.5 J	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.80	1.8	2.5
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.75	1.8	2.5
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.8 U	0.69 J (2)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.50	1.8	5.0
MeFOSAA	EPA 537.1 M	ng/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.88	1.8	5.0
EtFOSAA	EPA 537.1 M	ng/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.68	1.8	5.0
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.8 U	1.8 U	0.60 J	1.8 U	1.8 U	1.8 U	1.8 U	0.59	1.8	5.0
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.8 U	62	62	1.8 U	22	9.1	1.8 U	0.79	1.8	5.0
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.8 U	17	17	1.8 U	4.9 J	1.9 J	1.8 U	0.66	1.8	5.0
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.51	1.8	5.0
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.15	0.50	5.0
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.53	1.3	5.0
11Cl-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.40	1.3	5.0

Notes:

(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 criterion (ion ratio) was not met.

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

DL = Detection Limit EFF = Effluent

FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-05142024 is a field blank.

Sample SANG-INF-05142024 D is a field duplicate of SANG-INF-05142024 .

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

PEBG1 = post E port B GAC Unit 1

PEBG2 = post E port B train GAC Unit 2

PEBR1 = post E port B Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4F2008V1 - 05/21/2024

RESULTS OF ANALYSES OF WATER

RESULTS OF ANALYSES OF WATER						VALIDATED DATA						
	Bureau V	eritas ID	ZFN225	ZFN230	ZFN231	ZFN227	ZFN229	ZFN228	ZFN226			
	Sampl	ing Date	2024/05/21 10:00	2024/05/21 10:18	2024/05/21 10:18	2024/05/21 10:08	2024/05/21 10:15	2024/05/21 10:11	2024/05/21 10:03			
	Sa	mple ID	SANG-FB-05212024	SANG-INF-05212024	SANG-INF-05212024D	SANG-PECR1-05212024	SANG-PECG1-05212024	SANG-PECG2-05212024	SANG-EFF-05212024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.3 U	29	26	3.6	26	25	3.5	0.61	1.5	2.1
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.67 U	64	68	0.73 U	60	49	0.73 U	0.23	0.73	2.1
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.67 U	55	55	0.73 U	46	34	0.73 U	0.21	0.73	2.1
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	0.96 U	28	28	1.0 U	22	13	1.0 U	0.29	1.0	2.1
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	0.96 U	30	30	1.0 U	21	12	1.0 U	0.43	1.0	2.1
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	0.96 U	8.4	9.0	1.0 U	5.8	3.1	1.0 U	0.36	1.0	2.1
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	0.96 U	5.2	5.3	1.0 U	2.8	1.2 J	1.0 U	0.30	1.0	2.1
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	0.96 U	0.42 J	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U	0.39	1.0	2.1
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	0.96 U	0.64 J	0.74 J	1.0 U	1.0 U	1.0 U	1.0 U	0.50	1.0	2.1
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.67 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.25	0.73	2.1
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	0.96 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41	1.0	2.1
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	0.96 U	12	12	1.0 U	8.9	5.6	1.0 U	0.28	1.0	2.1
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	0.96 U	14	15	1.0 U	9.3	5.0	1.0 U	0.35	1.0	2.1
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	0.96 U	88	89	1.0 U	57	29	1.0 U	0.29	1.0	2.1
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	0.96 U	4.7	4.7	1.0 U	2.5	1.2 J	1.0 U	0.45	1.0	2.1
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	0.96 U	270 (1)	270 (1)	1.0 U	160 (1)	79	1.0 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.67	1.5	2.1
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.62	1.5	2.1
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.3 U	1.5 U	0.99 J	1.5 U	1.5 U	1.5 U	1.5 U	0.42	1.5	4.2
MeFOSAA	EPA 537.1 M	ng/L	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.73	1.5	4.2
EtFOSAA	EPA 537.1 M	ng/L	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.56	1.5	4.2
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.3 U	1.1 J	1.0 J	1.5 U	0.64 J	1.5 U	1.5 U	0.49	1.5	4.2
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.3 U	68	70	1.5 U	34	17	1.5 U	0.66	1.5	4.2
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.3 U	18	18	1.5 U	6.6	2.6 J	1.5 U	0.55	1.5	4.2
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.43	1.5	4.2
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.38 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.12	0.42	4.2
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	0.96 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44	1.0	4.2
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	0.96 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.33	1.0	4.2
Notes:							·	·	•			

VALIDATED DATA

(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.

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

DL = Detection Limit

EFF = Effluent

FB= Field Blank INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-05212024 is a field blank.

Sample SANG-INF-05212024 D is a field duplicate of SANG-INF-05212024

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

PECG1 = post E port C GAC Unit 1

PECG2 = post E port C train GAC Unit 2

PECR1 = post E port C Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4G0575V1 - 05/28/2024

RESULTS OF ANALYSES OF WATER VALIDATED DATA **Bureau Veritas ID** ZHH256 ZHH259 ZHH257 ZHH261 ZHH262 ZHH258 ZHH260 Sampling Date 2024/05/28 08:55 2024/05/28 09:20 2024/05/28 09:20 2024/05/28 09:05 2024/05/28 09:15 2024/05/28 09:10 2024/05/28 09:00 Sample ID SANG-FB-05282024 SANG-INF-05282024 SANG-INF-05282024D SANG-PEDR1-05282024 SANG-PEDG1-05282024 SANG-PEDG2-05282024 SANG-EFF-05282024 DL LOD LOO Method Perfluorinated Compounds UNITS erfluorobutanoic acid (PFBA) EPA 537.1 M ng/L 1.4 U 13 1.4 Perfluoropentanoic acid (PFPeA) EPA 537.1 M ng/L 0.70 U 29 30 0.70 U 25 25 0.70 U 0.22 0.70 2.0 Perfluorohexanoic acid (PFHxA) 0.70 U 27 28 0.70 U 21 17 0.70 U 0.20 0.70 2.0 EPA 537.1 M ng/L Perfluoroheptanoic acid (PFHpA) 1.0 U 14 14 1.0 U 8.8 5.9 1.0 U 0.28 1.0 2.0 EPA 537.1 M ng/L Perfluorooctanoic acid (PFOA) EPA 537.1 M 1.0 U 16 16 1.0 U 9.2 5.1 1.0 U 0.41 1.0 2.0 ng/L Perfluorononanoic acid (PFNA) 1.0 U 5.3 5.2 1.0 U 3.0 1.3 J 1.0 U 0.35 1.0 2.0 EPA 537.1 M ng/L 0.65 J 0.29 Perfluorodecanoic acid (PFDA) 1.0 U 3.5 3.6 1.0 U 2.2 1.0 U 1.0 2.0 EPA 537.1 M ng/L Perfluoroundecanoic acid (PFUnA) EPA 537.1 M 1.011 0.47.1 0.46.1 1.0 [] 1.0 U 1.0 U 1.0 U 0.37 1.0 2.0 Perfluorododecanoic acid (PFDoA) 1.0 U 0.64 J 0.60 J 1.0 U 1.0 U 1.0 U 1.0 U 0.48 1.0 2.0 EPA 537.1 M ng/L Perfluorotridecanoic acid (PFTRDA) EPA 537.1 M 0.70 U 0.24 0.70 2.0 na/L Perfluorotetradecanoic acid (PFTEDA) 1.011 1.0 U 1.0 U 1.0 [] 1.0 U 1.0 U 1.0 U 0.39 1.0 2.0 EPA 537.1 M ng/L Perfluorobutanesulfonic acid (PFBS) EPA 537.1 M ng/L 1.0 U 5.4 5.6 1.0 U 4.2 2.7 1.0 U 0.27 1.0 2.0 3.7 0.34 Perfluoropentanesulfonic acid (PFPes) EPA 537.1 M ng/L 1.0 U 6.6 6.9 1.0 U 1.6 J 1.0 U 1.0 2.0 Perfluorohexanesulfonic acid (PFHxS) EPA 537.1 M 1.0 U 39 39 1.0 [] 22 11 1.0 U 0.28 1.0 2.0 ng/L Perfluoroheptanesulfonic acid (PFHpS) EPA 537.1 M ng/L 1.0 U 2.3 2.2 1.0 U 1.2 J 0.64 J 1.0 U 0.43 1.0 2.0 Perfluorooctanesulfonic acid (PFOS) 1.0 U 160 (1) 170 (1) 4.7 EPA 537.1 M ng/L 1.0 U 77 31 1.0 U 10 20 Perfluorononanesulfonic acid (PFNS) 1.4 U 0.64 1.4 2.0 EPA 537.1 M ng/L 0.60 Perfluorodecanesulfonic acid (PFDS) EPA 537.1 M ng/L 1.4 U 1.4 2.0 Perfluorooctane Sulfonamide (PFOSA) 1.4 U 0.40 1.4 4.0 EPA 537.1 M ng/L MeFOSAA EPA 537.1 M ng/L 1.4 U 0.70 1.4 4.0 EtFOSAA 0.54 4.0 1.4 U 1411 1.4 U 1.4 II 1.4 II 1.4 U 1.4 U 1.4 EPA 537.1 M ng/L 4:2 Fluorotelomer sulfonic acid EPA 537.1 M ng/L 1.4 U 0.47 1.4 4.0 6:2 Fluorotelomer sulfonic acid EPA 537.1 M ng/L 1.4 U 33 33 1.4 U 15 6.9 1.4 U 0.63 1.4 4.0 1.4 U 381 0.88.1 0.53 4.0 8:2 Fluorotelomer sulfonic acid EPA 537.1 M 1.4 U 10 10 1.4 U 1.4 ng/L 1.4 U 0.41 4.0 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 4,8-Dioxa-3H-perfluorononanoic acid EPA 537.1 M ng/L 0.40 U 0.12 0.40 4.0 9CI-PF3ONS (F-53B Major) 1.0 U 0.42 1.0 4.0 EPA 537.1 M ng/L

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

1.0 U

DL = Detection Limit

11CI-PF3OUdS (F-53B Minor)

EFF = Effluent FR= Field Blank

INF = Influent

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

EPA 537.1 M

ng/L

LOD = Limit of Detection

LOO = Limit of Ouantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-05212024 is a field blank.

Sample SANG-INF-05212024 D is a field duplicate of SANG-INF-05212024 .

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

1.0 U

1.0 U

1.0 U

1.0 U

0.32 1.0

1.0 U

4.0

PEDG1 = post E port D GAC Unit 1

PEDG2 = post E port D train GAC Unit 2

PEDR1 = post E port D Resin 1

1.0 U

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

Influent (INF) = Untreated water from Recreational Pond

C4G8629V1 - 06/04/2024

RESULTS OF ANALYSES OF WATER						VALIDATED DATA						
	Bureau V	eritas ID	ZJA185	ZJA190	ZJA191	ZJA187	ZJA189	ZJA188	ZJA186			
	Sampl	ing Date	2024/06/04 08:55	2024/06/04 09:20	2024/06/04 09:20	2024/06/04 09:05	2024/06/04 09:15	2024/06/04 09:10	2024/06/04 09:00			
	Sa	ample ID	SANG-FB-06042024	SANG-INF-06042024	SANG-INF-06042024D	SANG-PEAR1-06042024	SANG-PEAG1-06042024	SANG-PEAG2-06042024	SANG-EFF-06042024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	22	23	9.1	23	22	7.7	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	54	53	0.75 J	49	40	0.47 J	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	47	48	0.25 J (1)	37	27	0.27 J (1)	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	24	24	1.1 U	16	9.9	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	24	24	1.1 U	14	8	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	7.2	7.3	1.1 U	4	2.2	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	5.2	5	1.1 U	2.5	1.4 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.82 J	0.93 J	1.1 U	0.49 J	0.41 J	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	1.0 J	1.2 J	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	0.33 J (4)	0.32 J	0.78 U	0.78 U	0.78 U	0.78 U	0.27	0.78	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	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	10	10	1.1 U	7.4	4.6	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	15	15	1.1 U	8.6	4.4	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	74	72	1.1 U	41	21	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	4.6	4.6	1.1 U	2.1 J	1.2 J	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	270 (3)	250 (3)	1.1 U	130 (3)	63	0.93 J	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.53 J	0.61 J	1.6 U	1.6 U (1)	1.6 U	1.6 U	0.44	1.6	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.6	1.6	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.1 J	1.0 J	1.6 U	0.61 J (2)	1.6 U (2)	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	51	49	1.6 U	20	10	1.6 U	0.7	1.6	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	13	13	1.6 U	3.7 J	2.0 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.46	1.6	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	0.13	0.44	4.4
9CI-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	0.47	1.1	4.4
11CI-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	0.36	1.1	4.4

- (1) Result is estimated as analyte confirmation criterion (signal to noise) was not met.
- (2) Result is estimated as analyte confirmation criterion (ion ratio) was 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.
- (4) Result is estimated as analyte confirmation criteria (ion ratio and signal to noise) were not met.

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

DL = Detection Limit

EFF = Effluent

FB= Field Blank INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-06042024 is a field blank.

Sample SANG-INF-06042024 D is a field duplicate of SANG-INF-06042024 .

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

PEAG1 = post E port A GAC Unit 1

PEAG2 = post E port A train GAC Unit 2

PEAR1 = post E port A Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4H7798V1 - 06/11/2024

RESULTS OF ANALYSES OF WATER VALIDATA DATA

	Bureau \	/eritas ID	ZKX480	ZKX485	ZKX486	ZKX482	ZKX484	ZKX483	ZKX481			1
	Samp	oling Date	2024/06/11 10:15	2024/06/11 10:40	2024/06/11 10:40	2024/06/11 10:25	2024/06/11 10:35	2024/06/11 10:30	2024/06/11 10:20			1
	S	Sample ID	SANG-FB-06112024	SANG-INF-06112024	SANG-INF-06112024D	SANG-PEBR1-06112024	SANG-PEBG1-06112024	SANG-PEBG2-06112024	SANG-EFF-06112024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	28	23	9.9	28	26	11	0.59	1.4	2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	71	66	0.41 J	66	54	0.53 J	0.22	0.7	2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.33 J (1)	62	58	0.78 U	51	39	0.78 U	0.2	0.7	2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	29	27	1.1 U	22	15	1.1 U	0.28	1	2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	29	27	1.1 U	18	12	1.1 U	0.41	1	2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8.7	8.3	1.1 U	5	3.1	1.1 U	0.35	1	2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	6.5	6.1	0.40 J	3.8	2.0 J	0.45 J	0.29	1	2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	1.1 J	1.0 J	1.1 U	0.65 J	0.49 J	1.1 U (1)	0.37	1	2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	1.1 J	1.2 J	1.1 U	1.1 U	1.1 U	1.1 U	0.48	1	2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.78 U	0.70 U	0.78 U	0.78 U	0.78 U	0.78 U	0.24	0.7	2
Perfluorotetradecanoic acid (PFTEDA)	EPA 537.1 M	ng/L	1.0 U	1.1 U	0.51 J	1.1 U	1.1 U	1.1 U	1.1 U	0.39	1	2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	14	13	1.1 U	11	7.1	1.1 U	0.27	1	2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	19	19	1.1 U	13	7.3	1.1 U	0.34	1	2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	93	85	1.1 U	63	37	1.1 U	0.28	1	2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	5.7	5.2	1.1 U	3.1	2.0 J	1.1 U	0.43	1	2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	360 (2)	290 (2)	1.7 J	200 (2)	110	2.5	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.6	1.4	2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	0.60 J	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.4	1.4	4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.7	1.4	4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.54	1.4	4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	1.4 J	1.0 J	1.6 U	0.95 J	0.75 J	1.6 U	0.47	1.4	4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	71	59	1.6 U	35	20	1.6 U	0.63	1.4	4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	19	14	0.71 J	6.8	3.5 J	1.1 J	0.53	1.4	4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	0.41	1.4	4
4,8-Dioxa-3H-perfluorononanoic acid	EPA 537.1 M	ng/L	0.40 U	0.44 U	0.40 U	0.44 U	0.44 U	0.44 U	0.44 U	0.12	0.4	4
9CI-PF3ONS (F-53B Major)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	0.42	1	4
11CI-PF3OUdS (F-53B Minor)	EPA 537.1 M	ng/L	1.0 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	0.32	1	4

Notes:

(1) Result is estimated as analyte confirmation criterion (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.

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

DL = Detection Limit

EFF = Effluent

FB= Field Blank INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-06112024 is a field blank.

Sample SANG-INF-06112024 D is a field duplicate of SANG-INF-06112024 .

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

PEBG1 = post E port B GAC Unit 1

PEBG2 = post E port B train GAC Unit 2

PEBR1 = post E port B Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4I5840V1 - 06/18/2024

RESULTS OF ANALYSES OF WATER

RESULTS OF ANALYSES OF WATER						VALIDATED						
	Bureau Ve	eritas ID	ZMP569	ZMP574	ZMP575	ZMP571	ZMP573	ZMP572	ZMP570			
	Sampl	ing Date	2024/06/18 08:25	2024/06/18 08:50	2024/06/18 08:50	2024/06/18 08:35	2024/06/18 08:45	2024/06/18 08:40	2024/06/18 08:30			
	Sa	mple ID	SANG-FB-06182024	SANG-INF-06182024	SANG-INF-06182024D	SANG-PECR1-06182024	SANG-PECG1-06182024	SANG-PECG2-06182024	SANG-EFF-06182024	DL	LOD	LOQ
Perfluorinated Compounds	Method	UNITS										
Perfluorobutanoic acid (PFBA)	EPA 537.1 M	ng/L	1.4 U	26	25	14	31	31	13	0.66	1.6	2.2
Perfluoropentanoic acid (PFPeA)	EPA 537.1 M	ng/L	0.70 U	67	65	0.45 J	64	56	0.53 J	0.24	0.78	2.2
Perfluorohexanoic acid (PFHxA)	EPA 537.1 M	ng/L	0.70 U	60	57	0.78 U	49	36	0.78 U	0.22	0.78	2.2
Perfluoroheptanoic acid (PFHpA)	EPA 537.1 M	ng/L	1.0 U	27	27	1.1 U	19	12	1.1 U	0.31	1.1	2.2
Perfluorooctanoic acid (PFOA)	EPA 537.1 M	ng/L	1.0 U	27	27	1.1 U	15	11	1.1 U	0.46	1.1	2.2
Perfluorononanoic acid (PFNA)	EPA 537.1 M	ng/L	1.0 U	8	8	1.1 U	4.5	3.4	1.1 U	0.39	1.1	2.2
Perfluorodecanoic acid (PFDA)	EPA 537.1 M	ng/L	1.0 U	5.3	5.4	1.1 U	3.3	1.9 J	1.1 U	0.32	1.1	2.2
Perfluoroundecanoic acid (PFUnA)	EPA 537.1 M	ng/L	1.0 U	0.59 J	0.49 J	1.1 U	0.45 J	1.1 U	1.1 U	0.41	1.1	2.2
Perfluorododecanoic acid (PFDoA)	EPA 537.1 M	ng/L	1.0 U	0.71 J	0.62 J	1.1 U	0.65 J	1.1 U	1.1 U	0.53	1.1	2.2
Perfluorotridecanoic acid (PFTRDA)	EPA 537.1 M	ng/L	0.70 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.27	0.78	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	0.43	1.1	2.2
Perfluorobutanesulfonic acid (PFBS)	EPA 537.1 M	ng/L	1.0 U	13	13	1.1 U	10	6.9	1.1 U	0.3	1.1	2.2
Perfluoropentanesulfonic acid (PFPes)	EPA 537.1 M	ng/L	1.0 U	19	19	1.1 U	12	5.7	1.1 U	0.38	1.1	2.2
Perfluorohexanesulfonic acid (PFHxS)	EPA 537.1 M	ng/L	1.0 U	86	87	1.1 U	55	29	1.1 U	0.31	1.1	2.2
Perfluoroheptanesulfonic acid (PFHpS)	EPA 537.1 M	ng/L	1.0 U	4.5	4.5	1.1 U	2.1 J	1.1 J	1.1 U	0.48	1.1	2.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537.1 M	ng/L	1.0 U	310 (1)	320 (1)	1.1 U	190 (1)	95	1.1 U	4.7	10	20
Perfluorononanesulfonic acid (PFNS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.71	1.6	2.2
Perfluorodecanesulfonic acid (PFDS)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.67	1.6	2.2
Perfluorooctane Sulfonamide (PFOSA)	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.44	1.6	4.4
MeFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	4.4
EtFOSAA	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.6	1.6	4.4
4:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	0.75 J	0.71 J	1.6 U	1.6 U	1.6 U	1.6 U	0.52	1.6	4.4
6:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	54	51	1.6 U	20	15	1.6 U	0.7	1.6	4.4
8:2 Fluorotelomer sulfonic acid	EPA 537.1 M	ng/L	1.4 U	10	9.2	1.6 U	4.8	2.3 J	1.6 U	0.59	1.6	4.4
Hexafluoropropyleneoxide dimer acid	EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.46	1.6	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	0.13	0.44	4.4
9CI-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	0.47	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	0.36	1.1	4.4
Notes:	•									•		

(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.

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

DL = Detection Limit

EFF = Effluent FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-06182024 is a field blank.

Sample SANG-INF-06182024 D is a field duplicate of SANG-INF-06182024 .

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

PECG1 = post E port C GAC Unit 1

PECG2 = post E port C train GAC Unit 2

PECR1 = post E port C Resin 1

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

Influent (INF) = Untreated water from Recreational Pond

C4J4192V1 - 06/25/2024

RESULTS OF ANALYSES OF WATER

VALI	DAI	Ŀυ	DA	IΑ

Bureau V	eritas ID	ZOG849	ZOG860	ZOG862	ZOG854	ZOG858	ZOG856	ZOG852			
	,	2024/06/25 06:55	2024/06/25 07:20	2024/06/25 07:20	2024/06/25 07:05	2024/06/25 07:15	2024/06/25 07:10	2024/06/25 07:00			
Sa	ample ID	SANG-FB-06252024	SANG-INF-06252024	SANG-INF-06252024D	SANG-PEDR1-06252024	SANG-PEDG1-06252024	SANG-PEDG2-06252024	SANG-EFF-06252024	DL	LOD	LOQ
Perfluorinated Compounds Method UNI											
EPA 537.1 M	ng/L	1.4 U	20	20	13	26	28	11	0.67	1.6	2.3
EPA 537.1 M	ng/L	0.70 U	46	47	0.63 J	51	52	0.65 J	0.25	0.8	2.3
EPA 537.1 M	ng/L	0.70 U	45	45	0.80 U	39	31	0.80 U	0.23	0.8	2.3
EPA 537.1 M	ng/L	1.0 U	23	23	1.1 U	17	11	1.1 U	0.32	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	22	22	1.1 U	15	8	1.1 U	0.47	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	6.8	7	1.1 U	3.4	1.8 J	1.1 U	0.4	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	5.2	5.3	1.1 U	1.4 J	0.70 J	1.1 U	0.33	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	1.1 J	1.2 J	1.1 U	1.1 U	1.1 U	1.1 U	0.42	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	1.6 J	1.5 J	1.1 U	1.1 U	1.1 U	1.1 U	0.55	1.1	2.3
EPA 537.1 M	ng/L	0.70 U	0.80 U	0.46 J (1)	0.80 U	0.80 U	0.80 U	0.36 J (1)	0.27	0.8	2.3
EPA 537.1 M	ng/L	1.0 U	1.1 U	0.47 J	1.1 U	1.1 U	1.1 U	1.1 U	0.44	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	10	10	1.1 U	7.5	5.4	1.1 U	0.31	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	12	11	1.1 U	6.8	3.7	1.1 U	0.39	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	65	67	1.1 U	38	19	1.1 U	0.32	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	4.3	4	1.1 U	2.0 J	1.1 J	1.1 U	0.49	1.1	2.3
EPA 537.1 M	ng/L	1.0 U	210 (2)	220 (2)	1.1 U	110	43	1.1 U	4.7	10	20
EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.3
EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.68	1.6	2.3
EPA 537.1 M	ng/L	0.41 J	0.72 J (1)	0.67 J	0.65 J	0.70 J	1.6 U	0.53 J (1)	0.45	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.61	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	0.92 J (1)	1.1 J	1.6 U	0.62 J (1)	0.59 J (1)	1.6 U	0.53	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	46	46	1.6 U	21	9.3	1.6 U	0.72	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	13	13	1.6 U	2.4 J	1.1 J	1.6 U	0.6	1.6	4.5
EPA 537.1 M	ng/L	1.4 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.47	1.6	4.5
EPA 537.1 M	ng/L	0.40 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.14	0.45	4.5
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	0.48	1.1	4.5
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	0.36	1.1	4.5
	Sampi Si Method EPA 537.1 M EPA 537.1 M	Sampling Date Sample ID	Sampling Date 2024/06/25 06:55	Sampling Date 2024/06/25 06:55 2024/06/25 07:20	Sampling Date Sample Date Da	Sampling Date 2024/06/25 06:55 2024/06/25 07:20 2024/06/25 07:20 2024/06/25 07:20 2024/06/25 07:20 2024/06/25 07:05 Method UNITS EPA 537.1 M ng/L 1.4 U 20 20 13 EPA 537.1 M ng/L 0.70 U 46 47 0.63 J EPA 537.1 M ng/L 0.70 U 45 45 0.80 U EPA 537.1 M ng/L 1.0 U 22 22 1.1 U EPA 537.1 M ng/L 1.0 U 22 22 1.1 U EPA 537.1 M ng/L 1.0 U 6.8 7 1.1 U EPA 537.1 M ng/L 1.0 U 5.2 5.3 1.1 U EPA 537.1 M ng/L 1.0 U 1.6 J 1.5 J 1.1 U EPA 537.1 M ng/L 1.0 U 1.6 J 1.5 J 1.1 U EPA 537.1 M ng/L 1.0 U 1.6 J 1.5 J 1.1 U EPA 537.1 M ng/L 1.0 U 1.1 U	Sampling Date Sample ID SANG-FB-06252024 SANG-INF-06252024 SANG-INF-0625202	Sampling Date 2024/06/25 06:55 2024/06/25 07:20 2024/06/25 07:20 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10	Sampling Date 2024/06/25 07:55 2024/06/25 07:20 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:05 2024/06/25 07:15 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:10 2024/06/25 07:00 2024/06/25 07:10 2024/06/25 07:	Sample Date 2024/06/25 07:50 2024/06/25 07:20 2024/06/25 07:00 2024/06/25 07:	Sample Date 2024/06/25 07:50 2024/06/25 07:20 2024/06/25 07:00 2024/06/25 07:00 2024/06/25 07:00 2024/06/25 07:10 2024/06/25 07:10 2024/06/25 07:00 Date Date

Notes

(1) Result is estimated as analyte confirmation criterion (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.

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

DL = Detection Limit EFF = Effluent

FB= Field Blank

INF = Influent

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANGB = Stewart Air National Guard Base

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

Sample SANG-FB-06252024 is a field blank.

Sample SANG-INF-06252024 D is a field duplicate of SANG-INF-06252024 .

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

PEDG1 = post E port D GAC Unit 1

PEDG2 = post E port D train GAC Unit 2

PEDR1 = post E port D 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/Sample ID	Sampling Date	Influent (SANG-INF-05152024 mg/L)	PBG2 Effluent (SANG-PEBG2-05152024 mg/L)	L) Effluent (SANG-EFF-05152024 mg/L				
Diethylene glycol	5/15/2024	<52	<52	<52				
Ethylene glycol		<13	<13	<13				
Propylene glycol		<10	<10	<10				
Triethylene Glycol	1	<54	<54	<54				

Total Organic Carbon (TOC)						
Sample Parameter Sampling Influent (mg/L)		Influent (mg/L)	PDG2 Effluent (mg/L)	Effluent (mg/L)		
TOC	5/15/2024	4.00	2.10	0.98		

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 Skimming
4/1/2024		10 Micron Regular				
4/2/2024	25 Micron Regular	10 Micron Pleated				
4/3/2024			Primary Carbon vessels A1, B1, C1, & D1			
4/4/2024		10 Micron Regular				
4/8/2024		10 Micron Regular				
4/10/2024			Primary Carbon vessels A1, B1, C1, & D1			
4/11/2024		10 Micron Regular				
4/12/2024	25 Micron Pleated	10 Micron Pleated				
4/15/2024		10 Micron Regular				
4/17/2024		10 Micron Regular				Inspect Resin Vessels
4/19/2024	25 Micron Pleated	10 Micron Pleated				
4/22/2024		10 Micron Regular				
4/24/2024			Primary Carbon vessels A1, B1, C1, & D1			

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 Skimming
4/25/2024		10 Micron Regular				
4/26/2024		10 Micron Pleated				
4/28/2024		10 Micron Regular				
4/29/2024	25 Micron Regular	10 Micron Regular				
4/30/2024		10 Micron Regular (changed twice)				
5/1/2024		10 Micron Regular				
5/2/2024		10 Micron Regular (changed twice)		Fine Sand Filters (3A/3B)		
5/3/2024	25 Micron Pleated	10 Micron Pleated				
5/5/2024		10 Micron Regular				
5/6/2024		10 Micron Pleated	Primary Carbon vessels A1, B1, C1, & D1			
5/7/2024		10 Micron Regular				
5/8/2024	25 Micron Regular	10 Micron Regular				

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 Skimming
5/9/2024			Secondary Carbon vessels A2, B2, C2, & D2			
5/10/2024		10 Micron Pleated				
5/13/2024	25 Micron Regular					
5/14/2024		10 Micron Regular				
5/15/2024		10 Micron Regular	Primary Carbon vessels A1, B1, C1, & D1			
5/16/2024		10 Micron Regular		Fine Sand Filters (4A/4B)		
5/17/2024	25 Micron Pleated	10 Micron Pleated				
5/21/2024		10 Micron Regular				
5/22/2024	25 Micron Regular	10 Micron Regular	Primary Carbon vessels A1, B1, C1, & D1			
5/23/2024		10 Micron Regular				
5/24/2024	25 Micron Pleated	10 Micron Pleated				
5/28/2024	25 Micron Regular	10 Micron Regular				
5/29/2024		10 Micron Pleated				

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 Skimming
5/30/2024			Primary Carbon vessels A1, B1, C1, & D1			
5/31/2024	25 Micron Pleated	10 Micron Pleated				
6/3/2024	25 Micron Regular	10 Micron Regular	Secondary Carbon vessels A2, B2, C2, & D2			
6/4/2024		10 Micron Pleated				
6/6/2024	25 Micron Regular	10 Micron Regular then 10 Micron Pleated Changed Twice				
6/7/2024	25 Micron Pleated	10 Micron Pleated				
6/10/2024		10 Micron Regular	Primary Carbon vessels A1, B1, C1, & D1			
6/12/2024	25 Micron Regular	10 Micron Pleated				
6/13/2024		10 Micron Regular	Primary Carbon vessels A1, B1, C1, & D1			
6/14/2024	25 Micron Pleated	10 Micron Pleated				
6/17/2024		10 Micron Pleated				

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 Skimming
6/18/2024	25 Micron Regular	10 Micron Regular				
6/19/2024		10 Micron Pleated	Primary Carbon vessels A1, B1, C1, & D1			
6/20/2024		10 Micron Regular Changed Twice		Fine Sand Filters (5A/5B)		
6/21/2024	25 Micron Pleated	10 Micron Pleated				
6/24/2024	25 Micron Pleated	10 Micron Pleated				
6/25/2024			Primary Carbon vessels A1, B1, C1, & D1			
6/26/2024	25 Micron Regular	10 Micron Pleated				
6/27/2024		10 Micron Regular	Secondary Carbon vessels A2, B2, C2, & D2			
6/28/2024	25 Micron Pleated	10 Micron Pleated				
6/30/2024		10 Micron Pleated				

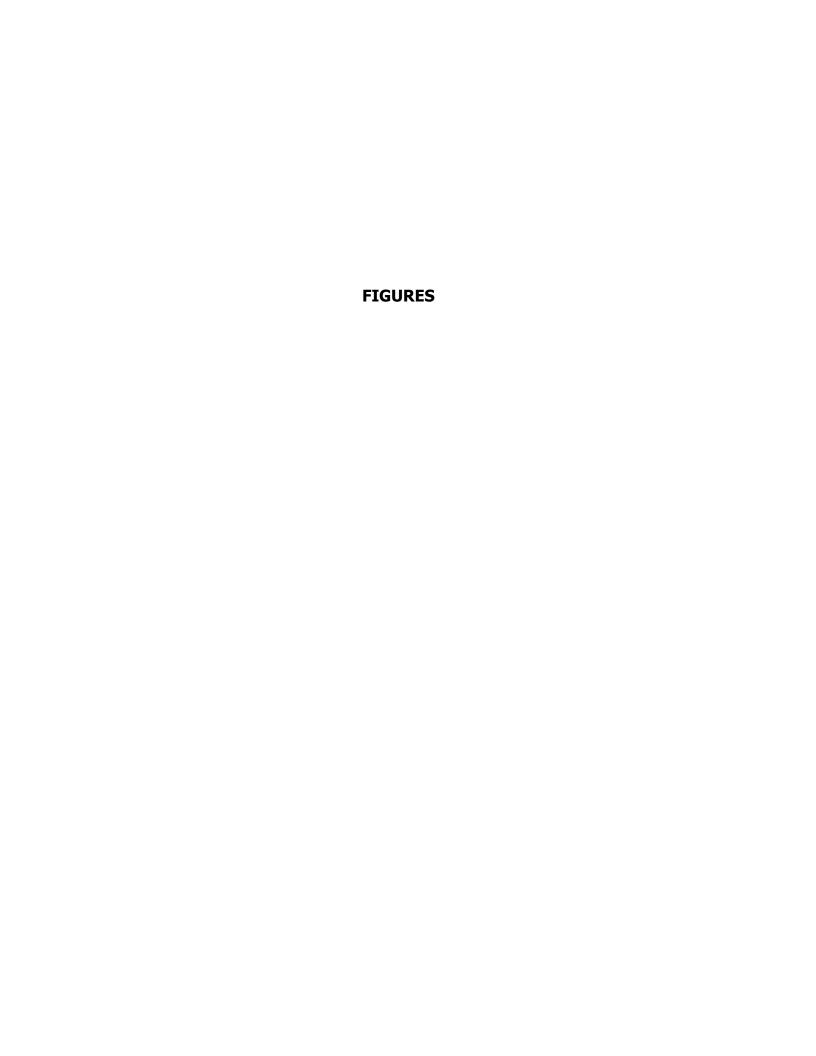
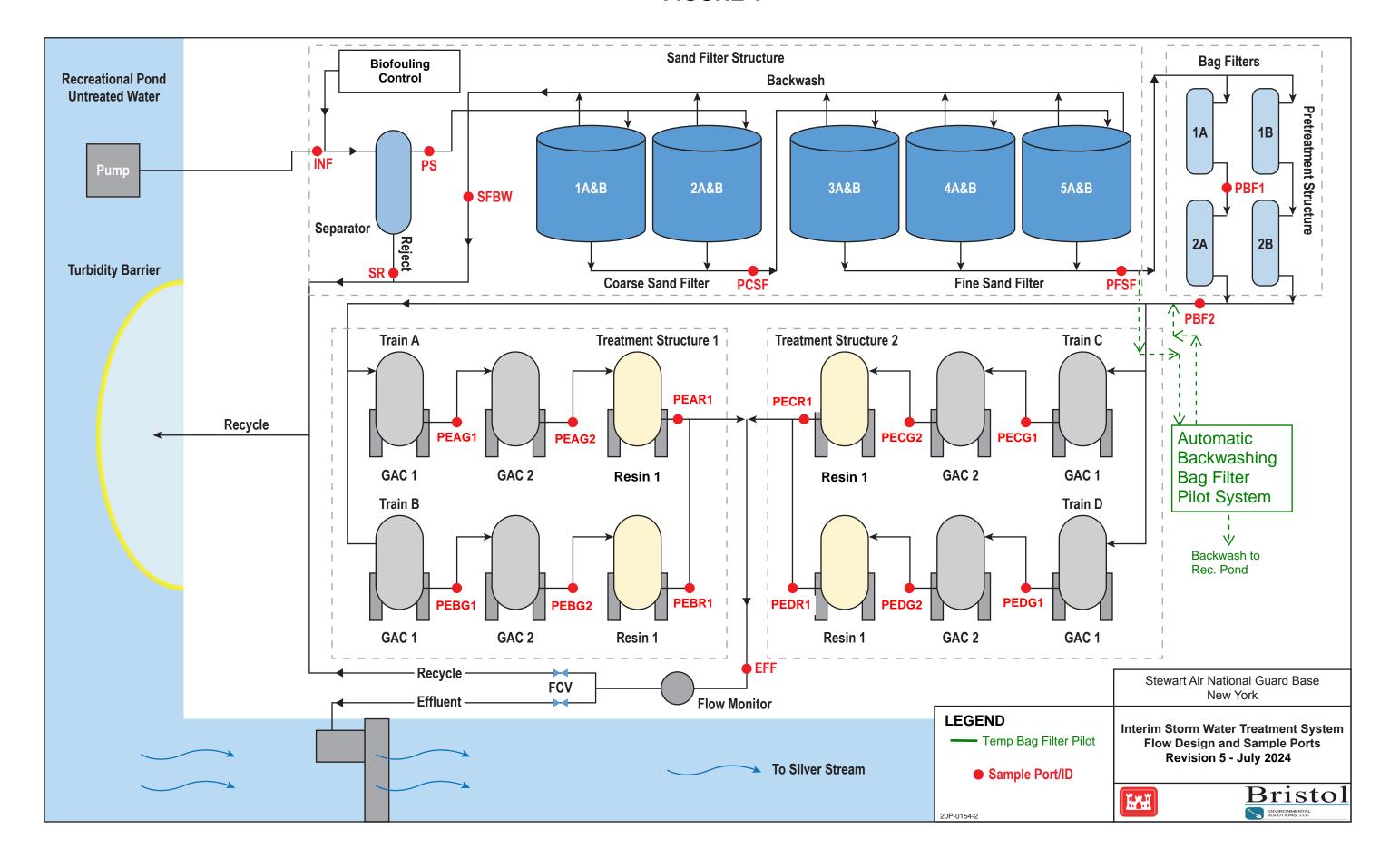


FIGURE 1



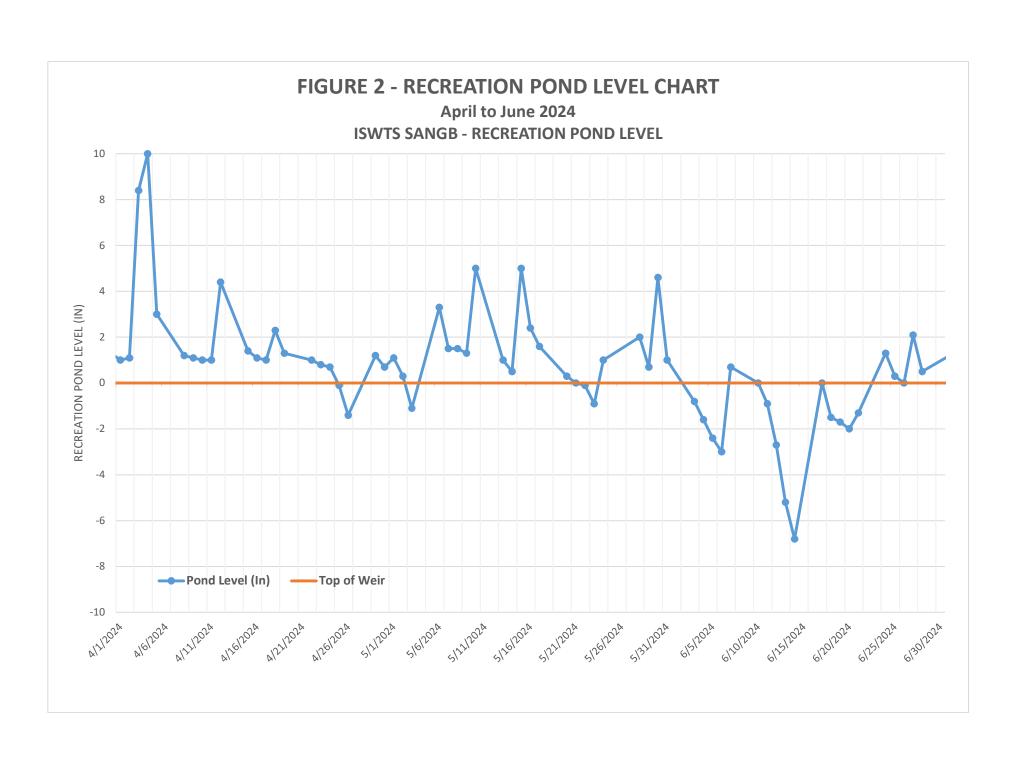


FIGURE 3 - INFLUENT AND EFFLUENT PFOS AND PFOA CHARTS

