STEWART AIR NATIONAL GUARD BASE
PFOS/PFOA – INTERIM MITIGATION PROJECT

INTERIM STORM WATER TREATMENT SYSTEM
OPERATIONS, MAINTENANANCE & MONITORING REPORT

QUARTERLY OM&M REPORT NO. 4
APRIL TO JUNE 2021

Immediate Response Action, Rapid Response Program
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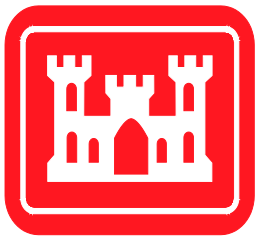

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September 2021

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NONE

ACRONYMS AND ABBREVIATIONS

AFFF	aqueous film forming foam
ANG	Air National Guard
BERS- Weston	BERS-Weston Services JVA, LLC
GAC	Granular Activated Carbon
GPM	gallons per minute
HA	Health Advisory
ISWTS	Interim Storm Water Treatment System
mg/L	milligrams per liter
NTU	Nephelometric Turbidity Units
OM&M	Operations, Maintenance and Monitoring
PFAS	polyfluoroalkyl substances
PFOA	Perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
ppt	parts per trillion
SANGB	Stewart Air National Guard Base
TOC	Total Organic Carbon
USACE	United States Army Corps of Engineers

1. INTRODUCTION

BERS-Weston Services JVA, LLC (BERS-Weston), under Contract with the US 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) in the off-base stormwater discharge into the Recreational Pond.

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 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 fourth quarterly report that summarizes Operations, Maintenance, and Monitoring (OM&M) activities conducted by BERS-Weston at SANGB. This report summarizes ISWTS operations between 01 April and 30 June 2021 at SANGB.

2. GENERAL COMPLIANCE SUMMARY

The ISWTS operations began treatment of water on 13 July 2020, following installation and commissioning of pretreatment system improvements in June and early July 2020. This report summarizes OM&M between 01 April and 30 June 2021. During the performance period the system influent, intra-process monitoring (3 locations) and effluent was monitored twice per week 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 25 days during the quarterly period. Final PFAS results are provided in **Table 1**. Based on validated analytical data, all effluent sample results were well below discharge criteria of 70 ppt (individually or combined) in the off-base stormwater discharge into the Recreational Pond.

3. 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 polish media. Peracetic Acid continued to be introduced prior to the Centrifugal Separator at a low concentration to reduce biological growth in the system. The system configuration is shown on **Figure 1**.

4. GENERAL FACILITY OPERATIONS SUMMARY

During the performance period, a total of 39,364,615 gallons of stormwater was treated and discharged over the outfall weir by the ISWTS. No stormwater was treated and recirculated to the Recreation Pond during the performance period. The chart 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 sum of water discharged over the weir as no water was treated and recycled back to the pond. As noted in the below summary, 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.

Month	Volume Treated (Gallons)	Operational Time[1] (Hours)	Run Time[2] (Percent)	Average Treatment Flow[3] (GPM)
April 2021	14,496,300	716	99%	337
May 2021	13,606,000	676	90%	335
June 2021	11,262,315	729	99%	257
Total	39,364,615	2,121		

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

There were 91 days of operation between 01 April and 30 June 2021. During this period of performance, the recreation pond was drawn down for 42 of the 91 days or 46% of the time. The Recreation Pond level during the performance period is shown on **Figure 2**.

5. FACILITY PERFORMANCE MONITORING

5.1 INFLUENT AND EFFLUENT PFOS AND PFOA MONITORING

As previously noted, PFOS and PFOA samples were collected 25 times on the influent and effluent during the performance period. **Figure 3** shows the combined influent and effluent PFOS and PFOA concentrations based on the validated results. As shown in **Figure 3**, the combined PFOS and PFOA influent and effluent concentrations during the performance period were 300 ppt and 0.26 ppt respectively.

5.2 INTRA-PROCESS PFOS AND PFOA MONITORING

Intra-process monitoring for PFOS and PFOA was performed after the Primary and Secondary GAC and Primary Resin to confirm media effectiveness. Based on intra-process sample results the maximum detection of PFOS/PFOA in the Primary GAC was 4.7 ppt, the Secondary GAC was 2.3 ppt and the Ion exchange resin was 3.1 ppt during the performance period. The media was previously changed in February 2021 and was not changed during the performance period. Although PFOS/PFOA media performance was acceptable during the quarter, the sand filtration media was fouling due to seasonal changes in Recreation Pond water and required more frequent maintenance. A complete sand filtration media exchange (coarse and fine sand) was performed

June 21 through June 24, 2021. Monitoring system performance after the sand filtration change continued to record increasing system pressures indicating the need for PFOS/PFOA media exchange (GAC and resin) and was coordinated and scheduled for July 2021.

5.3 OTHER WATER QUALITY MONITORING

During the performance period additional monitoring was performed monthly 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 average influent TOC was 4.0 mg/L and the GAC Effluent (influent to the resin) was 0.78 mg/L indicating that the influent TOC level to the Ion Exchange resin was acceptable. Glycol was not detected in any of the 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 the influent water quality and intra-process samples to confirm the effectiveness of the treatment system in removing solids. During the performance period, influent and effluent turbidity averaged 9.24 Nephelometric Turbidity Units (NTU) and 0.76 NTU, respectively. A graph of the Influent and Effluent Turbidity during the performance period is included in **Figure 4**.

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 16.1 gallons of Peracetic Acid was introduced and the average dose was 0.45 gallons of Peracetic Acid per million gallons of water treated or 1.47 pounds per day.

6. 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
- Coarse and Fine Sand Filter Media Exchange
- Primary and Secondary Bag Filter Changes
- Primary and Secondary Carbon Backwashing
- Ion Exchange Resin Skimming

During the performance period the Coarse and Fine Sand Filters were backwashed 500 and 478 times, respectively and a total of 15 cleaning events were completed. The sand filter coarse and fine media was also replaced between 15 and 17 June 2021. During media replacement, all sand filter effluent screens were removed, cleaned and reinstalled. The sand filter maintenance, bag filter changes, carbon backwash events and Ion Exchange Resin skimming activities are summarized in **Table 3**.

7. MATERIAL DISPOSAL

During the performance period the PFOS/PFOA treatment media did not require changing. The removed sand filter media was staged on site. As a result, no spent media were disposed during the performance period.

8. PROJECTED ACTIVITIES FOR NEXT PERFORMANCE PERIOD

During the next performance period additional media changes are anticipated to meet performance objectives. The ISWTS supplier is scheduled to perform system maintenance during the next performance period, including; power enhancements to the modem used for remote access, sand filter backwash control improvements, and installation of improved pressure gauges on the four media trains. No other capital improvements are expected.

FIGURES

FIGURE 1

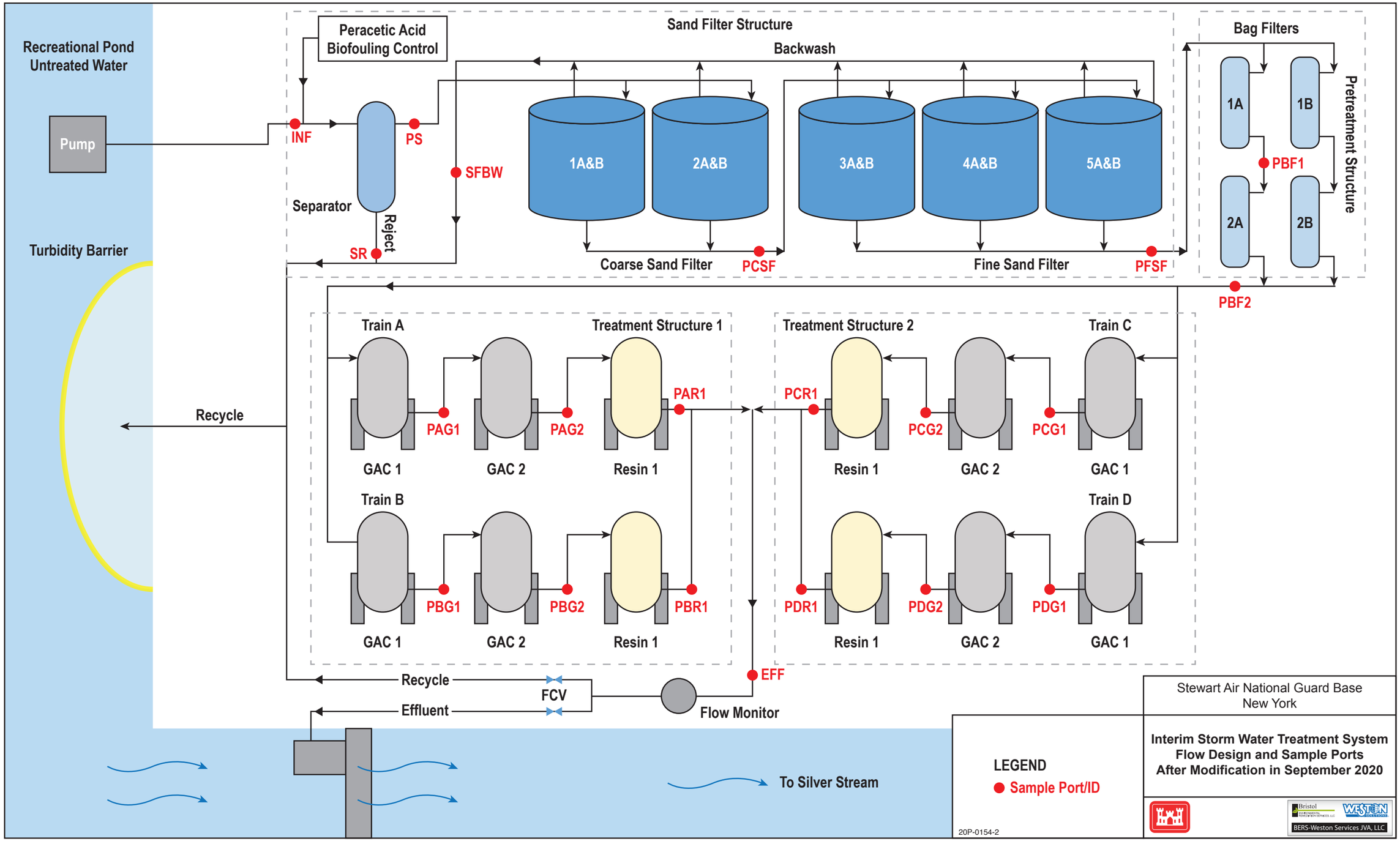

Recreational Pond
Untreated Water
Pump
Turbidity Barrier
Peracetic Acid
Biofouling Control
Sand Filter Structure
Backwash
INF
PS
SFBW
Separator
Reject
SR
1A&B
2A&B
3A&B
4A&B
5A&B
Coarse Sand Filter
PCSF
Fine Sand Filter
PFSF
Bag Filters
1A
1B
2A
2B
PBF1
Pretreatment Structure
PBF2
Train A
Treatment Structure 1
PAG1
PAG2
PAR1
GAC 1
GAC 2
Resin 1
Train B
PBG1
PBG2
PBR1
Treatment Structure 2
Train C
PCR1
PCG2
PCG1
Train D
PDR1
PDG2
PDG1
Recycle
Effluent
FCV
EFF
Flow Monitor
To Silver Stream
LEGEND
Sample Port/ID
20P-0154-2
Stewart Air National Guard Base
New York
Interim Storm Water Treatment System
Flow Design and Sample Ports
After Modification in September 2020
BERS-Weston Services JVA, LLC

FIGURE 2 - RECREATION POND LEVEL CHART

APRIL - JUNE 2021

ISWTS SANGB - RECREATION POND LEVEL

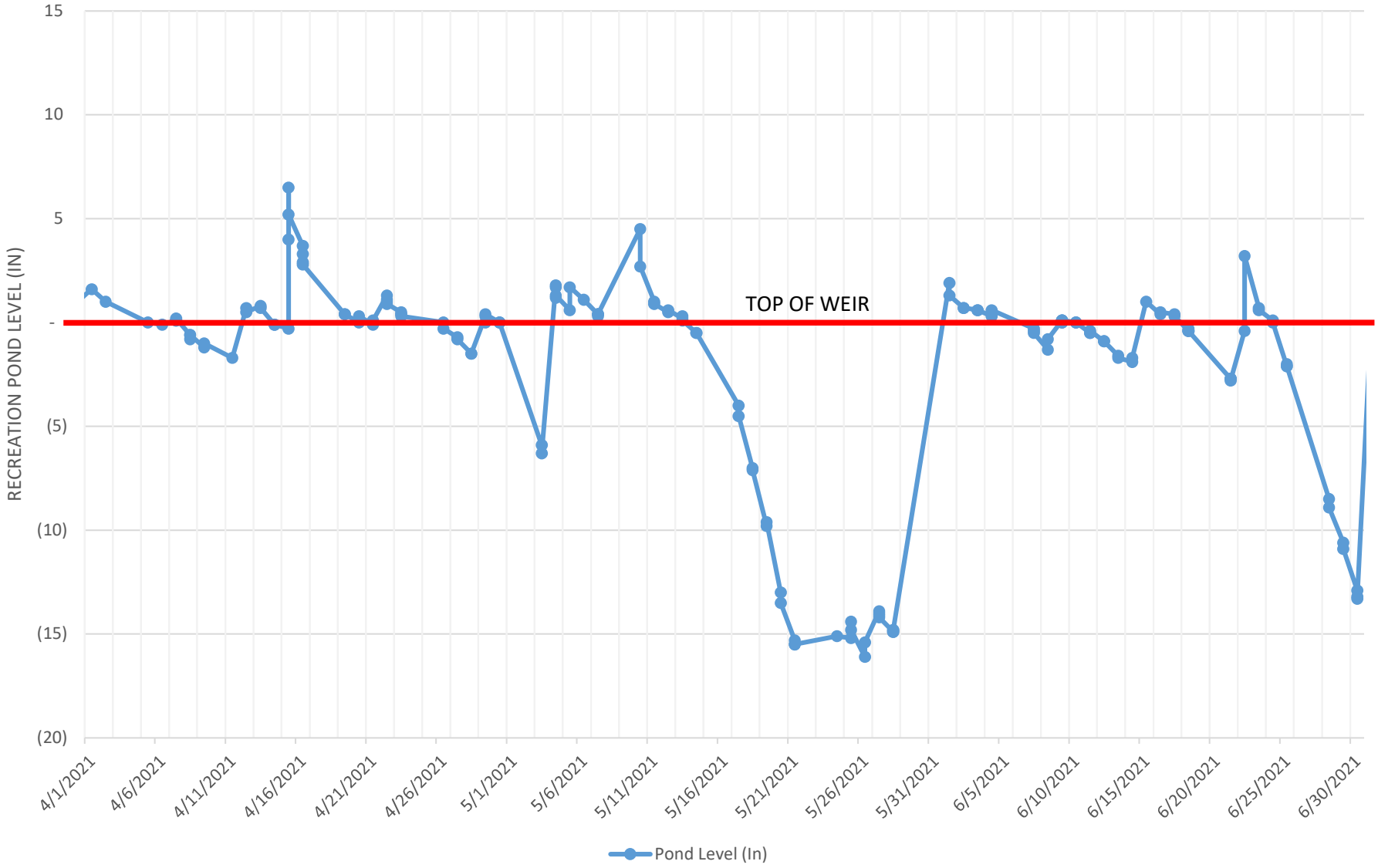
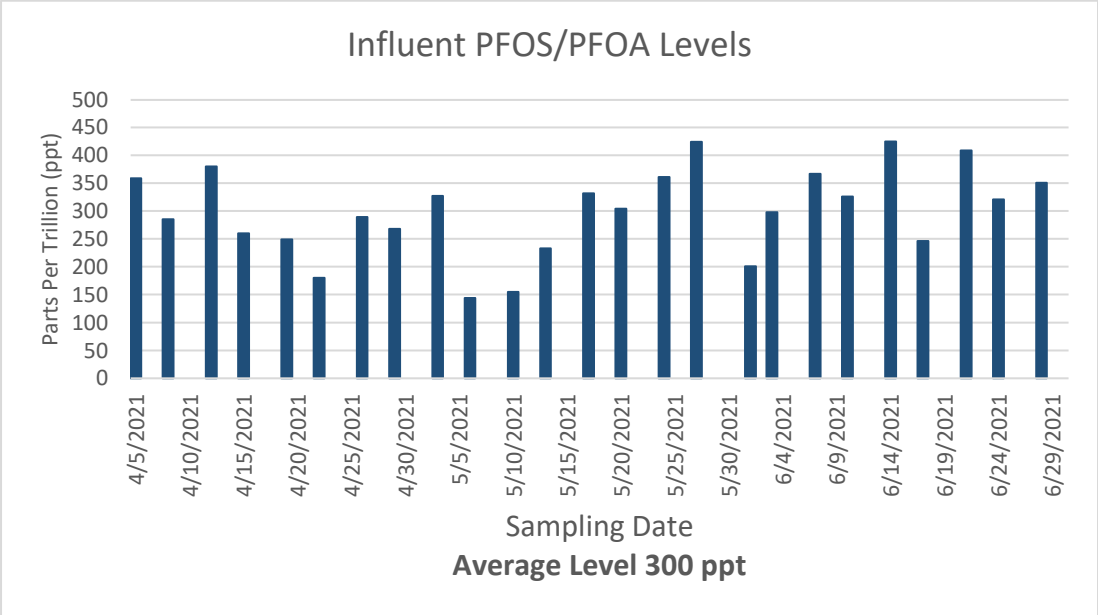


FIGURE 3 - INFLUENT AND EFFLUENT PFOS PFOA CHARTS



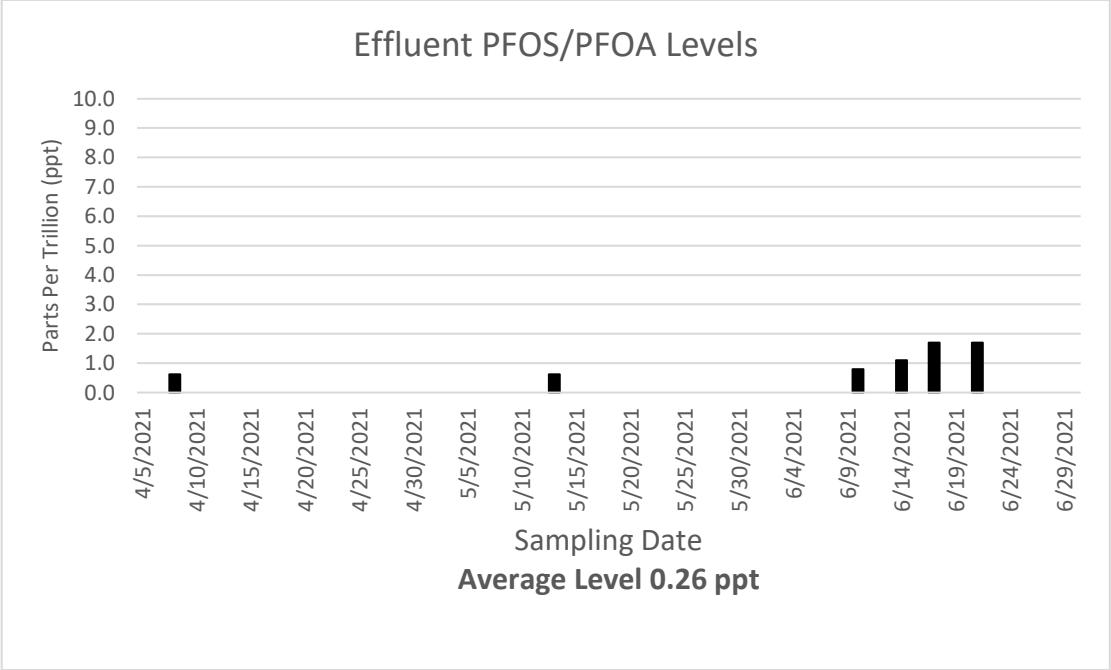
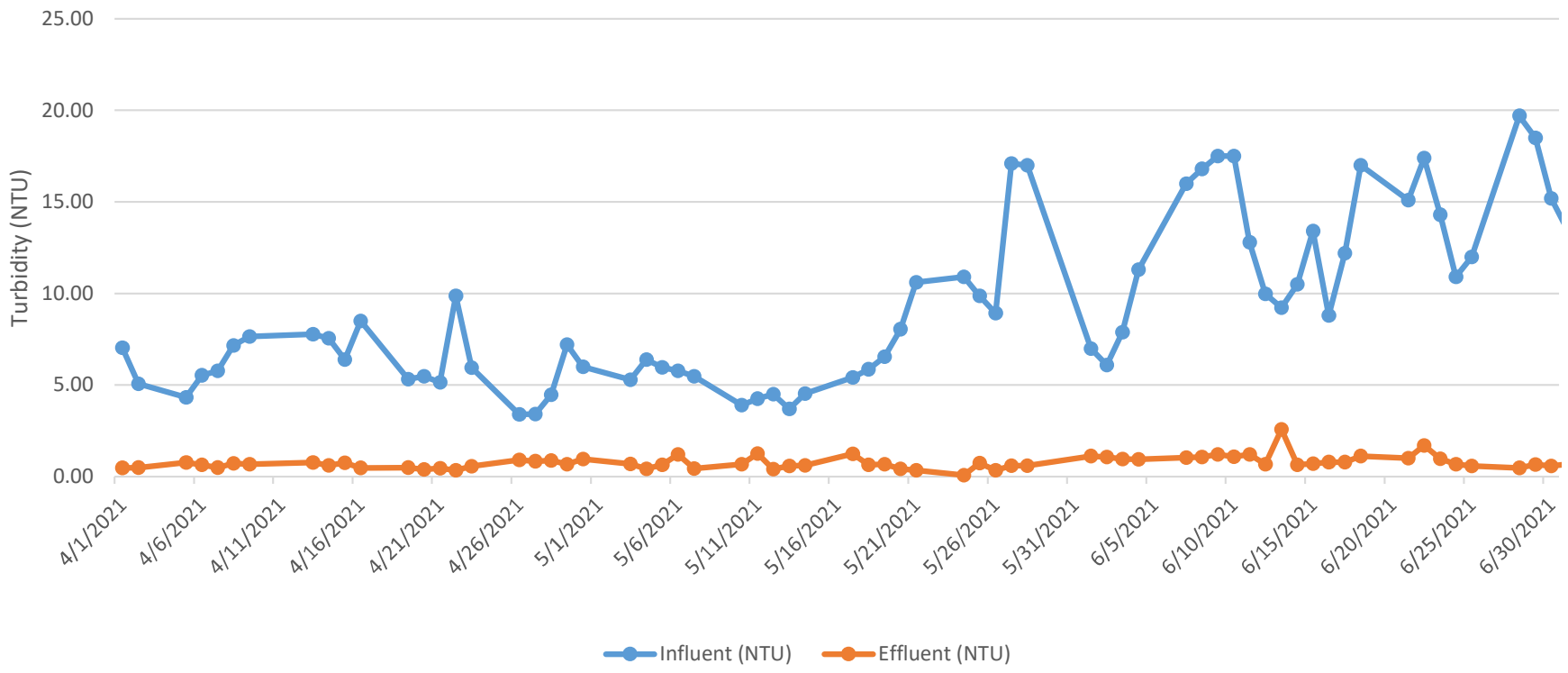


FIGURE - 4 - INFLUENT AND EFFLUENT TURBIDITY CHART

April - June 2021

Influent and Effluent Turbidity



TABLES

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PGA834	PGA839	PGA840	PGA838	PGA837	PGA836	PGA835			
Sampling Date		2021/04/05 07:50	2021/04/05 08:27	2021/04/05 08:27	2021/04/05 08:22	2021/04/05 08:15	2021/04/05 08:07	2021/04/05 07:55			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-04052021**	**SANG-INF-04052021**	**SANG-INF-04052021D**	**SANG-PBG1-04052021**	**SANG-PBG2-04052021**	**SANG-PBR1-04052021**	**SANG-EFF-04052021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	26	26	1.4 U	1.4 U	7.0	4.3	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	83	82	1.2 U	1.2 U	1.8 J	1.2 U	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	69	71	1.4 U	1.4 U	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	34	34	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	39	39	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	11	11	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	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	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.64 J	0.62 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	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	2.0
Perfluorotetradecanoic acid(PFTEDA)	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	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	14	14	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	12	13	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	110 (1)	110 (1)	1.2 U	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.9	4.7	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	320 (1)	310 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	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	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.4 J	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	77	80	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	21	20	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-04052021 is a field blank.

Sample SANG-INF-04052021D is a field duplicate of SANG-INF-04052021.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

Compounds highlighted in gray are the UCMR3 compounds.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PGW733	PGW738	PGW739	PGW737	PGW736	PGW735	PGW734			
Sampling Date		2021/04/08 08:00	2021/04/08 08:35	2021/04/08 08:35	2021/04/08 08:30	2021/04/08 08:22	2021/04/08 08:15	2021/04/08 08:08			
	UNITS	**SANG-FB-04082021**	**SANG-INF-04082021**	**SANG-INF-04082021D**	**SANG-PCG1-04082021**	**SANG-PCG2-04082021**	**SANG-PCR1-04082021**	**SANG-EFF-04082021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	25	26	**0.86 U**	1.4 U	**4.5 J+**	**4.4 J+**	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	73	76	0.62 J	0.52 J	1.1 J	0.62 J	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	63	66	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	32	32	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	35	36	0.50 J	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.7	10	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	9.6	9.8	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	0.86 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.81 J	0.84 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	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)	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)	ng/L	1.2 U	12	13	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	14	14	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	92	96	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	5	4.8	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	250 (1)	250 (1)	1.2 U	1.2 U	1.2 U	0.61 J	0.43	1.2	2
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	0.97 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	ng/L	1.6 U	75	75	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	18	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2	4
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	4

ng/L - nanograms per liter, or parts per trillion.
U - Undetected. Compound was analyzed for, but not detected. Associated value is the limit of detection.
J - Estimated result. Value may not be accurate or precise.
J+ - Estimated with a high bias. A more accurate result is expected to be lower.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04082021 is a field blank.
Sample SANG-INF-04082021D is a field duplicate of SANG-INF-04082021.
Compounds highlighted in gray represent the UCMR3 PFAS compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PHN387	PHN392	PHN393	PHN391	PHN390	PHN389	PHN388			
Sampling Date		2021/04/12 07:55	2021/04/12 08:25	2021/04/12 08:25	2021/04/12 08:20	2021/04/12 08:14	2021/04/12 08:07	2021/04/12 08:00			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-04122021**	**SANG-INF-04122021**	**SANG-INF-04122021D**	**SANG-PDG1-04122021**	**SANG-PDG2-04122021**	**SANG-PDR1-04122021**	**SANG-EFF-04122021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	21	22	0.98 J	1.4 U	7.3	6.5	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	91	93	1.2 U	1.2 U	1.2 U	1.2 U	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	77	79	1.4 U	1.4 U	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	38	38	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	40	41	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	10	10	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	11	11	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	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	2.0
Perfluorododecanoic acid (PFDoA)	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	2.0
Perfluorotridecanoic acid (PFTRDA)	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	2.0
Perfluorotetradecanoic acid(PFTEDA)	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	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	14	14	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	110	110	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2.0
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.2	4.1	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	340 (1)	350 (1)	1.2 U	1.2 U	1.2 U	1.2 U	0.43	1.2	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	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	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	0.98 J	0.83 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	91	87	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	23	24	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

ng/L - nanograms per liter, or parts per trillion.
U - Undetected. Compound was analyzed for, but not detected. Associated value is the limit of detection.
J - Estimated result. Value may not be accurate or precise.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04122021 is a field blank.
Sample SANG-INF-04122021D is a field duplicate of SANG-INF-04122021.
Compounds highlighted in gray represent the UCMR3 PFAS compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PIL140	PIL145	PIL146	PIL144	PIL143	PIL142	PIL141				
Sampling Date		2021/04/15 09:05	2021/04/15 09:50	2021/04/15 09:50	2021/04/15 09:40	2021/04/15 09:30	2021/04/15 09:22	2021/04/15 09:15				
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	UNITS	**SANG-FB-04152021**	**SANG-INF-04152021**	**SANG-INF-04152021D**	**SANG-PAG1-04152021**	**SANG-PAG2-04152021**	**SANG-PAR1-04152021**	**SANG-EFF-04152021**	**DL**	**LOD**	**LOQ**	**QC Batch**
Perfluorinated Compounds												
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	22	22	1.4 U	1.4 U	7.4	5.7	0.67	1.4	2.0	7304987
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	64	65	0.83 J	0.56 J	1.7 J	0.73 J	0.52	1.2	2.0	7304987
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	56	56	1.4 U	1.4 U	0.80 J	1.4 U	0.70	1.4	2.0	7304987
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	26	27	1.2 U	1.2 U	0.52 J	1.2 U	0.51	1.2	2.0	7304987
Perfluorooctanoic acid (PFOA)	ng/L	0.67 J	30	30	**0.54 U**	1.2 U	**0.61 U**	1.2 U	0.49	1.2	2.0	7304987
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.3	7.4	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0	7304987
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	8.3	8.7	1.4 U	1.4 U	1.4 U	0.67 J	0.64	1.4	2.0	7304987
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.0 J	1.1 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2.0	7304987
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.0 J	0.97 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2.0	7304987
Perfluorotridecanoic acid (PFTRDA)	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	2.0	7304987
Perfluorotetradecanoic acid(PFTEDA)	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	2.0	7304987
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	10	10	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0	7304987
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	12	12	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0	7304987
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	74	78	0.62 J	1.2 U	1.2 U	1.2 U	0.53	1.2	2.0	7304987
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.8	3.9	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0	7304987
Perfluorooctanesulfonic acid (PFOS)	ng/L	0.45 J	230 (1)	210 (1)	**1.1 U**	**0.80 U**	**1.3 U**	**1.6 U**	4.3	12	20	7304987
Perfluorononanesulfonic acid (PFNS)	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	7304987
Perfluorodecanesulfonic acid (PFDS)	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	2.0	7304987
Perfluorooctane Sulfonamide (PFOSA)	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	2.0	4.0	7304987
MeFOSAA	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	3.0	4.0	7304987
EtFOSAA	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	3.0	4.0	7304987
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.2 J	0.99 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4.0	7304987
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	60	61	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0	7304987
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	16	16	0.86 J	1.6 U	0.90 J	1.4 J	0.75	1.6	4.0	7304987
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0	7304987
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	0.82 J	0.81 J	0.81 J	0.84 J	0.88 J	1.0 J	0.31	1.2	4.0	7304987
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0	7304987
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0	7304987

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04152021 is a field blank.
Sample SANG-INF-04152021D is a field duplicate of SANG-INF-04152021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PJB198	PJB203	PJB204	PJB202	PJB201	PJB200	PJB199			
Sampling Date		2021/04/19 08:15	2021/04/19 08:45	2021/04/19 08:45	2021/04/19 08:41	2021/04/19 08:34	2021/04/19 08:27	2021/04/19 08:20			
COC Number		NA	NA	NA	NA	NA	NA	NA			
	UNITS	**SANG-FB-04192021**	**SANG-INF-04192021**	**SANG-INF-04192021D**	**SANG-PBG1-04192021**	**SANG-PBG2-04192021**	**SANG-PBR1-04192021**	**SANG-EFF-04192021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	19	18	1.4 U	1.4 U	9.7	6.4	0.68	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	59	58	1.2 U	1.2 U	2.8	0.53 J	0.53	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	48	47	1.4 U	1.4 U	1.4 U	1.4 U	0.71	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	24	24	1.2 U	1.2 U	1.2 U	1.2 U	0.52	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	0.98 J	29	28	1.2 U	1.2 U	1.2 U	1.2 U	0.5	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	6.9	7	1.6 U	1.6 U	1.6 U	1.6 U	0.81	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	7.2	6.8	1.4 U	1.4 U	1.4 U	1.4 U	0.65	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.78	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.90 J	0.71 J	1.2 U	1.2 U	1.2 U	1.2 U	0.6	1.2	2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.38	1.2	2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	9.3	9.2	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	8.8	8.7	1.6 U	1.6 U	1.6 U	1.6 U	0.74	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	71	72	1.2 U	1.2 U	1.2 U	1.2 U	0.54	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2.9	3	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	220 (1)	210 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.65	1.4	2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.54	1.2	2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.82	2	4.1
MeFOSAA	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	4.1
EtFOSAA	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	4.1
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	0.88 J	0.72 J	1.6 U	1.6 U	1.6 U	1.6 U	0.7	1.6	4.1
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	54	55	1.6 U	1.6 U	1.6 U	1.6 U	0.6	1.6	4.1
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	18	1.6 U	1.6 U	1.6 U	1.6 U	0.76	1.6	4.1
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.86	2	4.1
4,8-Dioxa-3H-perfluorononanoic acid	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	4.1
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.57	2	4.1
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.53	2	4.1

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04192021 is a field blank.
Sample SANG-INF-04192021D is a field duplicate of SANG-INF-04192021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PJW861	PJW866	PJW867	PJW865	PJW864	PJW863	PJW862			
Sampling Date		2021/04/22 07:45	2021/04/22 08:20	2021/04/22 08:20	2021/04/22 08:15	2021/04/22 08:08	2021/04/22 08:00	2021/04/22 07:50			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-04222021**	**SANG-INF-04222021**	**SANG-INF-04222021D**	**SANG-PCG1-04222021**	**SANG-PCG2-04222021**	**SANG-PCR1-04222021**	**SANG-EFF-04222021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	0.69 J	15	15	1.4 U	1.4 U	6.1	6.1	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	ng/L	0.76 J	42	42	1.2 U	1.2 U	**1.5 U**	**0.76 U**	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	35	35	1.4 U	1.4 U	1.4 U	1.4 U	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	18	18	1.2 U	1.2 U	1.2 U	1.2 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 J	20	19	1.2 U	1.2 U	1.2 U	1.2 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	5.2	5	1.6 U	1.6 U	1.6 U	1.6 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	4.9	4.9	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.3 U	0.77 J	1.2 U	1.2 U	1.2 U	1.2 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.3	2.2
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	6.9	7.5	1.2 U	1.2 U	1.2 U	1.2 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	8	8	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.8	2.2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	53	55	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2.6	2.7	1.2 U	1.2 U	1.2 U	1.2 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	160 (1)	160 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.89	2.2	4.5
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.3	3.3	4.5
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	1.4 J	3.0 U	3.0 U	3.0 U	1.5	3.3	4.5
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	0.76	1.8	4.5
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	35	35	1.6 U	1.6 U	1.6 U	1.6 U	0.65	1.8	4.5
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	12	12	1.6 U	1.6 U	1.6 U	1.6 U	0.83	1.8	4.5
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.94	2.2	4.5
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.34	1.3	4.5
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.62	2.2	4.5
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.57	2.2	4.5

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04222021 is a field blank.
Sample SANG-INF-04222021D is a field duplicate of SANG-INF-04222021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PKO988	PKO993	PKO994	PKO992	PKO991	PKO990	PKO989			
Sampling Date		2021/04/26 07:26	2021/04/26 08:05	2021/04/26 08:05	2021/04/26 08:00	2021/04/26 07:45	2021/04/26 07:38	2021/04/26 07:30			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-04262021**	**SANG-INF-04262021**	**SANG-INF-04262021D**	**SANG-PDG1-04262021**	**SANG-PDG2-04262021**	**SANG-PDR1-04262021**	**SANG-EFF-04262021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	0.69 J	20	20	**2.3 J+**	1.4 U	9.9	8	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	0.85 J	65	65	**2.7 J+**	1.2 U	**2.9 J+**	**1.0 U**	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	55	52	1.4 J	1.4 U	1.4 U	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	27	26	0.55 J	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	29	29	0.50 J	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.3	7.2	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.6	6.1	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	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)	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)	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)	ng/L	1.2 U	10	10	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	76	75	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.9	4	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	260 (1)	250 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	0.87 J	0.90 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	70	64	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	17	15	1.6 U	1.6 U	1.6 U	0.81 J	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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.
J+ - Estimated result, biased high. A more accurate value is expected to be lower.
DL = Detection LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-04262021 is a field blank.
Sample SANG-INF-04262021D is a field duplicate of SANG-INF-04262021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PLL443	PLL448	PLL449	PLL447	PLL446	PLL445	PLL444			
Sampling Date		2021/04/29 08:00	2021/04/29 08:30	2021/04/29 08:30	2021/04/29 08:26	2021/04/29 08:19	2021/04/29 08:12	2021/04/29 08:05			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-04292021**	**SANG-INF-04292021**	**SANG-INF-04292021D**	**SANG-PAG1-04292021**	**SANG-PAG2-04292021**	**SANG-PAR1-04292021**	**SANG-EFF-04292021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	23	23	1.6 J	1.4 U	11	9.1	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	64	64	1.1 J	1.2 U	2.8	1.1 J	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	54	53	1.4 U	1.4 U	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	27	26	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	28	29	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	6.9	6.9	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.6	6.0	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	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	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.65 J	0.68 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	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	2.0
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.2 U	0.40 J	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	10	10	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	12	11	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	77	79	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2.0
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.0	3.6	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	240 (1)	240 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	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	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	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	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	64	64	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	19	18	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

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.

J+ - Estimated result with a high bias. A more accurate result is expectd to be lower.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-04292021 is a field blank.

Sample SANG-INF-04292021D is a field duplicate of SANG-INF-04292021.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

Compunds highlighted in gray represent the UCMR3 PFAS analytes.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PMI940	PMI945	PMI946	PMI944	PMI943	PMI942	PMI941				
Sampling Date		2021/05/03 08:10	2021/05/03 08:50	2021/05/03 08:50	2021/05/03 08:42	2021/05/03 08:35	2021/05/03 08:28	2021/05/03 08:20				
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	UNITS	**SANG-FB-05032021**	**SANG-INF-05032021**	**SANG-INF-05032021D**	**SANG-PBG1-05032021**	**SANG-PBG2-05032021**	**SANG-PBR1-05032021**	**SANG-EFF-05032021**	**DL**	**LOD**	**LOQ**	**QC Batch**
Perfluorinated Compounds												
Perfluorobutanoic acid (PFBA)	ng/L	**1.4 UJ**	**28 J**	**26 J**	**3.4 J**	**0.88 J**	**14 J**	**11 J**	0.67	1.4	2	7336996
Perfluoropentanoic acid (PFPeA)	ng/L	**1.2 UJ**	**91 J**	**87 J**	**2.9 J**	**1.2 UJ**	**7.5 J**	**1.8 J**	0.52	1.2	2	7336996
Perfluorohexanoic acid (PFHxA)	ng/L	**1.4 UJ**	**75 J**	**73 J**	**1.1 J**	**1.4 UJ**	**1.0 J**	**1.4 UJ**	0.7	1.4	2	7336996
Perfluoroheptanoic acid (PFHpA)	ng/L	**1.2 UJ**	**35 J**	**33 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.51	1.2	2	7336996
Perfluorooctanoic acid (PFOA)	ng/L	**1.2 UJ**	**37 J**	**37 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.49	1.2	2	7336996
Perfluorononanoic acid (PFNA)	ng/L	**1.6 UJ**	**10 J**	**9.7 J**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	0.8	1.6	2	7336996
Perfluorodecanoic acid (PFDA)	ng/L	**1.4 UJ**	**8 J**	**7.4 J**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	0.64	1.4	2	7336996
Perfluoroundecanoic acid (PFUnA)	ng/L	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	0.77	1.6	2	7336996
Perfluorododecanoic acid (PFDoA)	ng/L	**1.2 UJ**	**0.77 J**	**0.85 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.59	1.2	2	7336996
Perfluorotridecanoic acid (PFTRDA)	ng/L	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.48	1.2	2	7336996
Perfluorotetradecanoic acid(PFTEDA)	ng/L	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.37	1.2	2	7336996
Perfluorobutanesulfonic acid (PFBS)	ng/L	**1.2 UJ**	**14 J**	**13 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.47	1.2	2	7336996
Perfluoropentanesulfonic acid PFPes	ng/L	**1.6 UJ**	**17 J**	**15 J**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	0.73	1.6	2	7336996
Perfluorohexanesulfonic acid(PFHxS)	ng/L	**1.2 UJ**	**100 (1) J**	**99 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.53	1.2	2	7336996
Perfluoroheptanesulfonic acid PFHpS	ng/L	**1.2 UJ**	**5.2 J**	**5.5 J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.57	1.2	2	7336996
Perfluorooctanesulfonic acid (PFOS)	ng/L	**1.2 UJ**	**290 (1) J**	**280 (1) J**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	4.3	12	20	7336996
Perfluorononanesulfonic acid (PFNS)	ng/L	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	**1.4 UJ**	0.64	1.4	2	7336996
Perfluorodecanesulfonic acid (PFDS)	ng/L	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.53	1.2	2	7336996
Perfluorooctane Sulfonamide (PFOSA)	ng/L	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	0.81	2	4	7336996
MeFOSAA	ng/L	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	1.2	3	4	7336996
EtFOSAA	ng/L	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	**3.0 UJ**	1.4	3	4	7336996
4:2 Fluorotelomer sulfonic acid	ng/L	**1.6 UJ**	**1.2 J**	**1.2 J**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	0.69	1.6	4	7336996
6:2 Fluorotelomer sulfonic acid	ng/L	**1.6 UJ**	**87 J**	**85 J**	**1.6 UJ**	**1.6 UJ**	**0.65 J**	**1.6 UJ**	0.59	1.6	4	7336996
8:2 Fluorotelomer sulfonic acid	ng/L	**1.6 UJ**	**23 J**	**22 J**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	**1.6 UJ**	0.75	1.6	4	7336996
Hexafluoropropyleneoxide dimer acid	ng/L	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	0.85	2	4	7336996
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	**1.2 UJ**	0.31	1.2	4	7336996
9Cl-PF3ONS (F-53B Major)	ng/L	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	0.56	2	4	7336996
11Cl-PF3OUdS (F-53B Minor)	ng/L	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	**2.0 UJ**	0.52	2	4	7336996

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.
UJ - Non-detects estimated results.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05032021 is a field blank.
Sample SANG-INF-05032021D is a field duplicate of SANG-INF-05032021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PMX980	PMX985	PMX986	PMX984	PMX983	PMX982	PMX981				
Sampling Date		2021/05/06 08:05	2021/05/06 08:40	2021/05/06 08:40	2021/05/06 08:32	2021/05/06 08:25	2021/05/06 08:17	2021/05/06 08:10				
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a				
	UNITS	**SANG-FB-05062021**	**SANG-INF-05062021**	**SANG-INF-05062021D**	**SANG-PCG1-05062021**	**SANG-PCG2-05062021**	**SANG-PCR1-05062021**	**SANG-EFF-05062021**	**DL**	**LOD**	**LOQ**	**QC Batch**
Perfluorinated Compounds												
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	12	11	0.95 J	0.82 J	10	11	0.67	1.4	2	7342261
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	27	24	0.57 J	1.2 U	2.5	1.7 J	0.52	1.2	2	7342261
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	24	22	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.4	2	7343851
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	12	12	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2	7343851
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	14	12	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2	7342261
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	4.5	4.2	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2	7342261
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	2.8	2.9	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2	7342261
Perfluoroundecanoic acid (PFUnA)	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	7342261
Perfluorododecanoic acid (PFDoA)	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	7342261
Perfluorotridecanoic acid (PFTRDA)	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	7342261
Perfluorotetradecanoic acid(PFTEDA)	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	7342261
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	5.8	5.6	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2	7343851
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	6	5.1	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2	7342261
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	36	34	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2	7343851
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2.0 J	2.1	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2	7343851
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	130 (1)	140 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20	7342261
Perfluorononanesulfonic acid (PFNS)	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	7342261
Perfluorodecanesulfonic acid (PFDS)	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	7342261
Perfluorooctane Sulfonamide (PFOSA)	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	7342261
MeFOSAA	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	7342261
EtFOSAA	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	7342261
4:2 Fluorotelomer sulfonic acid	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	7342261
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	26	24	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4	7342261
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	8.2	7.2	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4	7342261
Hexafluoropropyleneoxide dimer acid	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	7342261
4,8-Dioxa-3H-perfluorononanoic acid	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	7343851
9Cl-PF3ONS (F-53B Major)	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	7342261
11Cl-PF3OUdS (F-53B Minor)	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	7343851

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05062021 is a field blank.
Sample SANG-INF-05062021D is a field duplicate of SANG-INF-05062021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x)

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PNN866	PNN871	PNN872	PNN870	PNN869	PNN868	PNN867			
Sampling Date		2021/05/10 08:05	2021/05/10 08:35	2021/05/10 08:35	2021/05/10 08:32	2021/05/10 08:25	2021/05/10 08:17	2021/05/10 08:10			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-05102021**	**SANG-INF-05102021**	**SANG-INF-05102021D**	**SANG-PDG1-05102021**	**SANG-PDG2-05102021**	**SANG-PDR1-05102021**	**SANG-EFF-05102021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	11	12	2.5	1.4 U	10	8.7	0.7	1.5	2.1
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	31	37	2	1.2 U	4.5	1.7 J	0.55	1.3	2.1
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	25	30	1.1 J	1.4 U	1.4 U	1.4 U	0.74	1.5	2.1
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	13	15	0.52 J	1.2 U	1.2 U	1.2 U	0.54	1.3	2.1
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	15	17	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.3	2.1
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	5	5.3	1.6 U	1.6 U	1.6 U	1.6 U	0.84	1.7	2.1
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	3.5	3.7	1.4 U	1.4 U	1.4 U	1.4 U	0.67	1.5	2.1
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	0.81	1.7	2.1
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.77 J	0.64 J	1.2 U	1.2 U	1.2 U	1.2 U	0.62	1.3	2.1
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.5	1.3	2.1
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.39	1.3	2.1
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	5.3	6.3	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.3	2.1
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	5.4	5.8	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.7	2.1
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	37	44	1.2 U	1.2 U	1.2 U	1.2 U	0.56	1.3	2.1
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2	1.7 J	1.2 U	1.2 U	1.2 U	1.2 U	0.6	1.3	2.1
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	140 (1)	150 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.67	1.5	2.1
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.56	1.3	2.1
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	**2.0 UJ**	**2.0 UJ**	0.85	2.1	4.2
MeFOSAA	ng/L	3.0 U	3.0 U	3.2 U	3.0 U	3.0 U	3.0 U	3.0 U	1.3	3.2	4.2
EtFOSAA	ng/L	3.0 U	3.0 U	3.2 U	3.0 U	3.0 U	3.0 U	3.0 U	1.5	3.2	4.2
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	0.72	1.7	4.2
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	28	33	1.6 U	1.6 U	1.6 U	1.6 U	0.62	1.7	4.2
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.79	1.7	4.2
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.89	2.1	4.2
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.33	1.3	4.2
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.59	2.1	4.2
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.55	2.1	4.2

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.
UJ - Not detected at an estimated LOD.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05102021 is a field blank.
Sample SANG-INF-05102021D is a field duplicate of SANG-INF-05102021.
Compounds highlighted in gray are the UCMR3 PFAS analytes.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		POM114	POM119	POM120	POM118	POM117	POM116	POM115			
Sampling Date		2021/05/13 08:00	2021/05/13 08:35	2021/05/13 08:35	2021/05/13 08:27	2021/05/13 08:20	2021/05/13 08:15	2021/05/13 08:07			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-05132021**	**SANG-INF-05132021**	**SANG-INF-05132021D**	**SANG-PAG1-05132021**	**SANG-PAG2-05132021**	**SANG-PAR1-05132021**	**SANG-EFF-05132021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	16	15	**1.9 U**	1.4 U	18	15	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	51	49	**1.1 U**	**0.99 U**	7.4	2.8	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	41	37	1.4 U	1.4 U	1.4 U	1.4 U	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	21	20	1.2 U	1.2 U	1.2 U	1.2 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	23	22	1.2 U	1.2 U	1.2 U	1.2 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.0	6.3	1.6 U	1.6 U	1.6 U	1.6 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	4.6	4.5	1.4 U	1.4 U	1.4 U	1.4 U	0.70	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.3	2.2
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	8.5	7.9	1.2 U	1.2 U	1.2 U	1.2 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	8.8	8.1	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.8	2.2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	62	60	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.2	2.9	1.2 U	1.2 U	1.2 U	1.2 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	210 (1)	200 (1)	0.58 J	0.55 J	0.63 J	0.62 J	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.70	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	**2.0 UJ**	2.0 U	2.0 U	2.0 U	2.0 U	**2.0 UJ**	2.0 U	0.81	2.0	4.0
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.3	3.3	4.4
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	0.76	1.8	4.4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	51	49	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	13	13	1.6 U	1.6 U	1.6 U	1.6 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.34	1.3	4.4
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.62	2.2	4.4
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.57	2.2	4.4

ng/L - nanograms per Liter or parts per trillion.
U - Undetected. The compound was analyzed for, but not detected.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05132021 is a field blank.
Sample SANG-INF-05132021D is a field duplicate of SANG-INF-05132021.
(1) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Compounds highlighted in gray represent the UCMR3 PFAS analytes.
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PPD154	PPD159	PPD160	PPD158	PPD157	PPD156	PPD155				
Sampling Date		2021/05/17 09:20	2021/05/17 09:50	2021/05/17 09:50	2021/05/17 09:44	2021/05/17 09:39	2021/05/17 09:32	2021/05/17 09:25				
COC Number		na	na	na	na	na	na	na				
	UNITS	**SANG-FB-05172021**	**SANG-INF-05172021**	**SANG-INF-05172021D**	**SANG-PBG1-05172021**	**SANG-PBG2-05172021**	**SANG-PBR1-05172021**	**SANG-EFF-05172021**	**DL**	**LOD**	**LOQ**	**QC Batch**
Perfluorinated Compounds												
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	25	24	2.9	1.4 U	18	16	0.74	1.5	2.2	7361406
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	78	77	1.4 J	1.2 U	14	4.1	0.57	1.3	2.2	7361406
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	66	65	1.4 U	1.4 U	1.0 J	1.4 U	0.77	1.5	2.2	7361406
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	31	31	1.2 U	1.2 U	1.2 U	1.2 U	0.56	1.3	2.2	7361406
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	32	33	1.2 U	1.2 U	1.2 U	1.2 U	0.54	1.3	2.2	7361406
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.7	9.9	1.6 U	1.6 U	1.6 U	1.6 U	0.88	1.8	2.2	7361406
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.6	5.3	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.5	2.2	7361406
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	0.85	1.8	2.2	7361406
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.65	1.3	2.2	7361406
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.3	2.2	7361406
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.41	1.3	2.2	7361406
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	12	12	1.2 U	1.2 U	1.2 U	1.2 U	0.52	1.3	2.2	7361406
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	12	11	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.8	2.2	7361406
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	96	96	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2	7361406
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.8	4.3	1.2 U	1.2 U	1.2 U	1.2 U	0.63	1.3	2.2	7361406
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	300 (1)	300 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20	7361406
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	0.7	1.5	2.2	7361406
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.58	1.3	2.2	7361406
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.89	2.2	4.5	7361406
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.3	3.3	4.5	7361406
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.0 U	3.0 U	3.0 U	3.0 U	1.5	3.3	4.5	7361406
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.8 U	0.90 J	1.6 U	1.6 U	1.6 U	1.6 U	0.76	1.8	4.5	7361406
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	75	74	1.6 U	1.6 U	0.70 J	1.6 U	0.65	1.8	4.5	7361406
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	20	21	1.6 U	1.6 U	1.6 U	1.6 U	0.83	1.8	4.5	7361406
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.94	2.2	4.5	7361406
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.34	1.3	4.5	7361406
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.62	2.2	4.5	7361406
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U	2.0 U	2.0 U	0.57	2.2	4.5	7361406

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05172021 is a field blank.
Sample SANG-INF-05172021D is a field duplicate of SANG-INF-05172021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PQB751	PQB756	PQB757	PQB755	PQB754	PQB753	PQB752			
Sampling Date		2021/05/20 07:55	2021/05/20 08:30	2021/05/20 08:30	2021/05/20 08:22	2021/05/20 08:15	2021/05/20 08:08	2021/05/20 08:00			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-05202021**	**SANG-INF-05202021**	**SANG-INF-05202021D**	**SANG-PCG1-05202021**	**SANG-PCG2-05202021**	**SANG-PCR1-05202021**	**SANG-EFF-05202021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	33	33	1.5 J	0.81 J	15	16	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	89	86	0.61 J	1.2 U	7.6	4.8	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	70	69	1.4 U	1.4 U	0.76 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	32	31	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	34	32	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	8.5	8.4	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.6	5.5	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	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)	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)	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)	ng/L	3.2 (1)	**14 J+**	**13 J+**	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	18	18	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	97	110 (2)	1.2 U	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	5.9	5.8	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	270 (2)	260 (2)	1.2 U	1.2 U	0.81 J	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	1.0 J	0.97 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	74	72	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	13	12	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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 accuate or precise
J+ - Biased high result. A more accurate value is expected to be lower.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05202021 is a field blank.
Sample SANG-INF-05202021D is a field duplicate of SANG-INF-05202021.
Compounds highlighted in gray are the UCMR3 PFAS analytes.
(2) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Values bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PQO270	PQO275	PQO276	PQO274	PQO273	PQO272	PQO271			
Sampling Date		2021/05/24 08:30	2021/05/24 09:00	2021/05/24 09:00	2021/05/24 08:55	2021/05/24 08:49	2021/05/24 08:43	2021/05/24 08:35			
	UNITS	**SANG-FB-05242021**	**SANG-INF-05242021**	**SANG-INF-05242021D**	**SANG-PDG1-05242021**	**SANG-PDG2-05242021**	**SANG-PDR1-05242021**	**SANG-EFF-05242021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	43	39	5.6	1.9 J	16	16	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	110 (1)	100 (1)	4.2	1.1 J	10	4.8	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	93	87	1.9 J	1.4 U	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	40	37	0.62 J	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	41	38	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	11	10	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	7.9	6.8	0.74 J	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.6 U	1.6 U	0.77 J	1.6 U	1.6 U	1.6 U	0.77	1.6	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.2 U	1.2 U	5.3	1.2 U	1.2 U	1.2 U	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.2 U	1.2 U	0.69 J	1.2 U	1.2 U	1.2 U	0.48	1.2	2.0
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.2 U	1.2 U	1.2 J	1.2 U	1.2 U	1.2 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	15	15	1.2 U	1.4 J	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	18	16	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	110 (1)	110 (1)	0.73 J	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	6.2	5.4	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	320 (1)	340 (1)	4.7	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	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	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	**1.2 J**	**0.79 J**	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	96	88	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	13	12	2.4 J	1.6 U	0.92 J	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

ng/L - nanograms per liter or parts per trillion.
J - Estimated result. Associated value may not be accurate or precise.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05242021 is a field blank.
Sample SANG-INF-05242021D is a field duplicate of SANG-INF-05242021.
Compounds highlighted in gray are the UCMR3 PFAS analytes.
(1) Due to high concentrations of the associated target analytes, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PRL104	PRL109	PRL110	PRL108	PRL107	PRL106	PRL105			
Sampling Date		2021/05/27 08:00	2021/05/27 08:35	2021/05/27 08:35	2021/05/27 08:27	2021/05/27 08:20	2021/05/27 08:12	2021/05/27 08:05			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-05272021**	**SANG-INF-05272021**	**SANG-INF-05272021D**	**SANG-PAG1-05272021**	**SANG-PAG2-05272021**	**SANG-PAR1-05272021**	**SANG-EFF-05272021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	**47 J**	**32 J**	5.1	1.5 J	18	15	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	110 (1)	120 (1)	2.6	0.90 J	12	5.1	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	96 (1)	98	0.90 J	1.4 U	0.99 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	41	41	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	44	43	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	9.5	9.7	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	0.97 J	0.83 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.1 J	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	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)	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)	ng/L	1.2 U	19	18	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	27	27	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	130 (1)	130 (1)	1.2 U	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	7.4	6.2	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	380 (1)	390 (1)	0.62 J	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	1.1 J	0.88 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	97 (1)	97	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	25	24	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-05272021 is a field blank.
Sample SANG-INF-05272021D is a field duplicate of SANG-INF-05272021.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Compounds highlighted in gray are the UCMR3 PFAS analytes.
Results bolded in red text are qualfiied based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PSL583	PSL588	PSL589	PSL587	PSL586	PSL585	PSL584			
Sampling Date		2021/06/01 08:00	2021/06/01 08:31	2021/06/01 08:31	2021/06/01 08:26	2021/06/01 08:20	2021/06/01 08:13	2021/06/01 08:05			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-06012021**	**SANG-INF-06012021**	**SANG-INF-06012021D**	**SANG-PBG1-06012021**	**SANG-PBG2-06012021**	**SANG-PBR1-06012021**	**SANG-EFF-06012021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	13	13	2.9	1.3 J	21	18	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	41	40	1.4 J	0.63 J	19	7.2	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	32	33	1.4 U	1.4 U	1.7 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	19	19	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	21	20	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	6.7	6.7	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	3.7	3.7	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	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)	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)	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)	ng/L	1.2 U	6.8	6.8	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	7.9	8	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	55	54	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2.6	2.5	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	180 (1)	180 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	ng/L	2.0 U	**2.0 UJ**	**2.0 UJ**	2.0 U	2.0 U	**2.0 UJ**	2.0 U	0.81	2	4
MeFOSAA	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	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	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	ng/L	1.6 U	40	38	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	8.8	9.2	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

ng/L - nanograms per liter or parts per trillion.
U - Undetected. Comound was analyzed for, but not detected.
UJ - Not detected at an estimated limit of detection.
J - Estimated result. Associated value may not be accurate or precise.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06012021 is a field blank.
Sample SANG-INF-06012021D is a field duplicate of SANG-INF-06012021.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Compounds highlighted in gray are the UCMR3 PFAS analytes.
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PTC813	PTC818	PTC819	PTC817	PTC816	PTC815	PTC814			
Sampling Date		2021/06/03 07:55	2021/06/03 08:28	2021/06/03 08:28	2021/06/03 08:26	2021/06/03 08:15	2021/06/03 08:07	2021/06/03 08:00			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-06032021**	**SANG-INF-06032021**	**SANG-INF-06032021D**	**SANG-PCG1-06032021**	**SANG-PCG2-06032021**	**SANG-PCR1-06032021**	**SANG-EFF-06032021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	20	18	4.6	0.82 J	22	20	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	69	63	3.1	1.2 U	13	8.5	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	56	54	0.98 J	1.4 U	1.0 J	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	27	25	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	28	26	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.8	7.5	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.4	4.7	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	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	2.0
Perfluorododecanoic acid (PFDoA)	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	2.0
Perfluorotridecanoic acid (PFTRDA)	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	2.0
Perfluorotetradecanoic acid(PFTEDA)	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	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	8.2	8.4	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	9.6	9.5	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	72	69	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2.0
Perfluoroheptanesulfonic acid PFHpS	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	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	270 (1)	250 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	ng/L	**2.0 UJ**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.0 UJ**	0.81	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	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	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	73	72	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	14	14	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

ng/L - nanograms per liter or parts per trillion.
U - Undetected. Compound was anlayzed for, but not detected.
J - Estimated. Associated value may not be accurate or precise.
UJ - Not detected at an estimated limit of detection.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06032021 is a field blank.
Sample SANG-INF-06032021D is a field duplicate of SANG-INF-06032021.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PTT728	PTT733	PTT734	PTT732	PTT731	PTT730	PTT729			
Sampling Date		2021/06/07 08:40	2021/06/07 09:11	2021/06/07 09:11	2021/06/07 09:08	2021/06/07 09:00	2021/06/07 08:52	2021/06/07 08:45			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-06072021**	**SANG-INF-06072021**	**SANG-INF-06072021D**	**SANG-PDG1-06072021**	**SANG-PDG2-06072021**	**SANG-PDR1-06072021**	**SANG-EFF-06072021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	**31 J+**	28	14	2.7	18	20	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	**95 J+**	90	13	1.1 J	14	9.8	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	83	75	3.4	1.4 U	0.95 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	37	33	1.2 U	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	**37 J+**	33	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	**9.9 J+**	8.7	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	**6.2 J+**	6.3	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	**1.6 UJ**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	**1.2 UJ**	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	**1.2 UJ**	**1.2 UJ**	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	**1.2 UJ**	**1.2 UJ**	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	13	12	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	**16 J+**	13	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	98 (1)	87	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.9	4.3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	330 (1)	290 (1)	0.83 J	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	**1.4 UJ**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluorodecanesulfonic acid (PFDS)	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)	ng/L	2.0 U	**2.0 UJ**	2.0 U	**2.0 UJ**	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	ng/L	3.0 U	**3.0 UJ**	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.2	3	4
EtFOSAA	ng/L	3.0 U	**3.0 UJ**	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3	4
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	**1.6 UJ**	1.4 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	**95 J+**	92	1.6 U	1.6 U	0.76 J	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	**13 J+**	14	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	**2.0 UJ**	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	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
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	**2.0 UJ**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2	4
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	**2.0 UJ**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	2	4

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.
J+ - Estimated result with a high bias. A more accurate value is expected to be lower..
UJ - Non-detects estimated results.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06072021 is a field blank.
Sample SANG-INF-06072021D is a field duplicate of SANG-INF-06072021.
Compounds highlighted in gray are the UCMR3 PFAS analytes.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PUT774	PUT779	PUT780	PUT778	PUT777	PUT776	PUT775			
Sampling Date		2021/06/10 08:25	2021/06/10 08:50	2021/06/10 08:50	2021/06/10 08:46	2021/06/10 08:41	2021/06/10 08:36	2021/06/10 08:30			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-06102021**	**SANG-INF-06102021**	**SANG-INF-06102021D**	**SANG-PAG1-06102021**	**SANG-PAG2-06102021**	**SANG-PAR1-06102021**	**SANG-EFF-06102021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	30	30	13	2.6	22	19	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	110 (1)	10	1.4 J	19	11	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	84	84	2.3	0.72 J	1.8 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	36	36	0.55 J	1.2 U	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	36	37	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.5	10	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	7.7	7.4	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	ng/L	1.2 U	0.66 J	0.62 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	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)	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)	ng/L	1.2 U	13	13	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	14	15	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	95	95	0.60 J	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.6	4.6	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	290 (1)	290 (1)	1.3 J	0.81 J	1.1 J	0.79 J	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	1.5 J	1.4 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	98	99 (1)	0.62 J	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	15	16	1.6 U	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06102021 is a field blank.
Sample SANG-INF-06102021D is a field duplicate of SANG-INF-06102021
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x)
Compounds highlighted in gray are the UCMR PFAS analytes..

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PVK780	PVK785	PVK786	PVK784	PVK782	PVK783	PVK781			
Sampling Date		2021/06/14 07:45	2021/06/14 08:11	2021/06/14 08:11	2021/06/14 08:08	2021/06/14 07:55	2021/06/14 08:02	2021/06/14 07:50			
COC Number		na	na	na	na	na	na	na			
	UNITS	**SANG-FB-06142021**	**SANG-INF-06142021**	**SANG-INF-06142021D**	**SANG-PBG1-06142021**	**SANG-PBR1-06142021**	**SANG-PBG2-06142021**	**SANG-EFF-06142021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	43	42	17	33	4.9	24	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	140 (1)	140 (1)	11	44	3	14	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	100 (1)	97	2.5	12	1.7 J	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	43	44	1.2 U	2.7	0.57 J	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	45	44	1.2 U	1.4 J	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	12	12	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	8.5	8.9	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	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)	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)	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)	ng/L	1.2 U	17	17	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	21	21	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	130 (1)	130 (1)	1.2 U	0.91 J	0.78 J	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	6	6.1	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	380 (1)	390 (1)	1.1 J	1.7 J	1.5 J	1.1 J	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	1.4 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	ng/L	1.6 U	130 (1)	130 (1)	1.6 U	5.5	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	22	21	1.0 J	1.2 J	1.4 J	1.5 J	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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

U - Undetected. Compund was analyzed for but not detected.

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

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-06142021 is a field blank.

Sample SANG-INF-06142021D is a field duplicate of SANG-INF-06142021.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

Compounds highlighted in gray are the UCMR3 PFAS analytes.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PWJ408	PWJ413	PWJ414	PWJ412	PWJ411	PWJ410	PWJ409			
Sampling Date		2021/06/17 08:00	2021/06/17 08:40	2021/06/17 08:40	2021/06/17 08:32	2021/06/17 08:25	2021/06/17 08:17	2021/06/17 08:10			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-06172021**	**SANG-INF-06172021**	**SANG-INF-06172021D**	**SANG-PCG1-06172021**	**SANG-PCG2-06172021**	**SANG-PCR1-06172021**	**SANG-EFF-06172021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	29	30	9.0	3.3	23	20	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	64	65	5.1	2.0	18	11	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	56	55	1.6 J	1.2 J	2.2	0.73 J	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	26	26	0.87 J	0.76 J	0.88 J	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	26	25	0.67 J	0.63 J	0.70 J	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.5	9.5	1.6 U	1.6 U	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.0	7.7	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.2 J	1.1 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.2 J	1.4 J	0.67 J	0.76 J	0.74 J	0.75 J	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	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	2.0
Perfluorotetradecanoic acid(PFTEDA)	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	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	10	9.7	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	14	12	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	73	73	0.75 J	0.80 J	1.2 U	1.2 U	0.53	1.2	2.0
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.3	3.3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	220 (1)	230 (1)	1.6 J	1.7 J	1.6 J	1.7 J	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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	2.0
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	0.90 J	0.87 J	2.0 U	2.0 U	2.0 U	2.0 U	0.81	2.0	4.0
MeFOSAA	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	3.0	4.0
EtFOSAA	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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.6 J	1.4 J	1.6 U	1.6 U	0.76 J	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	71	83	1.6 U	1.6 U	0.65 J	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	16	19	1.2 J	1.1 J	1.3 J	1.4 J	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	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	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	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	4.0
9Cl-PF3ONS (F-53B Major)	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	2.0	4.0
11Cl-PF3OUdS (F-53B Minor)	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	2.0	4.0

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-06172021 is a field blank.

Sample SANG-INF-06172021D is a field duplicate of SANG-INF-06172021.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

Compounds highlighted in gray are the UCMR3 PFAS analytes.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PXA738	PXA743	PXA744	PXA742	PXA741	PXA740	PXA739			
Sampling Date		2021/06/21 07:40	2021/06/21 08:05	2021/06/21 08:05	2021/06/21 08:01	2021/06/21 07:55	2021/06/21 07:49	2021/06/21 07:44			
	UNITS	**SANG-FB-06212021**	**SANG-INF-06212021**	**SANG-INF-06212021D**	**SANG-PDG1-06212021**	**SANG-PDG2-06212021**	**SANG-PDR1-06212021**	**SANG-EFF-06212021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	38	41	26	9.7	30	28	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	110 (1)	21	4.1	27	16	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	89	92	6.2	1.6 J	2.2	0.80 J	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	40	41	1.4 J	0.63 J	1.2 U	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	39	40	0.82 J	0.51 J	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	11	11	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	9.3	9.6	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.2 J	1.4 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	2.3	2.3	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	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)	ng/L	1.2 U	1.2 U	0.60 J	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	17	17	1.1 J	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	19	20	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	120 (1)	120 (1)	1.6 J	0.68 J	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	6.4	6.3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	370 (1)	370 (1)	2.4	1.6 J	1.6 J	1.7 J	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	ng/L	1.6 U	1.8 J	1.6 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	110 (1)	110 (1)	1.1 J	1.6 U	0.68 J	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	28	30	1.6 U	1.6 U	0.91 J	1.1 J	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06212021 is a field blank.
Sample SANG-INF-06212021D is a field duplicate of SANG-INF-06212021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PXY336	PXY341	PXY342	PXY340	PXY339	PXY338	PXY337			
Sampling Date		2021/06/24 07:50	2021/06/24 08:25	2021/06/24 08:25	2021/06/24 08:20	2021/06/24 08:13	2021/06/24 08:05	2021/06/24 07:58			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	**SANG-FB-06242021**	**SANG-INF-06242021**	**SANG-INF-06242021D**	**SANG-PAG1-06242021**	**SANG-PAG2-06242021**	**SANG-PAR1-06242021**	**SANG-EFF-06242021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	28	30	17	6.6	28	22	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	86	88	13	1.8 J	27	14	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	69	70	3.2	1.4 U	2.6	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	31	32	0.91 J	1.2 U	0.76 J	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	31	32	0.51 J	1.2 U	0.59 J	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	8	8.5	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.9	7.8	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	0.96 J	1.1 J	1.6 U	1.6 U	1.6 U	1.6 U	0.77	1.6	2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.8 J	2.0 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2
Perfluorotridecanoic acid (PFTRDA)	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)	ng/L	1.2 U	0.51 J	0.55 J	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	12	13	0.59 J	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	15	15	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	83	87	0.80 J	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.8	5.3	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	290 (1)	310 (1)	1.6 J	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	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	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	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	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	ng/L	1.6 U	89	94	1.6 U	1.6 U	1.6 U	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	23	23	0.82 J	1.6 U	1.6 U	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-06242021 is a field blank.

Sample SANG-INF-06242021D is a field duplicate of SANG-INF-06242021.

(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).

Compounds highlighted in gray are the UCMR3 PFAS analytes.

RESULTS OF ANALYSES OF WATER **VALIDATED DATA**

BV Labs ID		PYS248	PYS253	PYS254	PYS252	PYS251	PYS250	PYS249			
Sampling Date		2021/06/28 08:50	2021/06/28 09:18	2021/06/28 09:18	2021/06/28 09:15	2021/06/28 09:08	2021/06/28 09:02	2021/06/28 08:55			
	UNITS	**SANG-FB-06282021**	**SANG-INF-06282021**	**SANG-INF-06282021D**	**SANG-PBG1-06282021**	**SANG-PBG2-06282021**	**SANG-PBR1-06282021**	**SANG-EFF-06282021**	**DL**	**LOD**	**LOQ**
Perfluorinated Compounds											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	32	34	15	5.7	29	27	0.67	1.4	2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	93	99	7.5	1.3 J	43	19	0.52	1.2	2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	71	75	1.1 J	1.4 U	9.3	1.4 U	0.7	1.4	2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	31	33	1.2 U	1.2 U	1.4 J	1.2 U	0.51	1.2	2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	31	33	1.2 U	1.2 U	1.2 U	1.2 U	0.49	1.2	2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.6	7.7	1.6 U	1.6 U	1.6 U	1.6 U	0.8	1.6	2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.5	6.2	1.4 U	1.4 U	1.4 U	1.4 U	0.64	1.4	2
Perfluoroundecanoic acid (PFUnA)	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)	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)	ng/L	1.2 U	**1.2 UJ**	**1.2 UJ**	1.2 U	1.2 U	1.2 U	1.2 U	0.48	1.2	2
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	**1.2 UJ**	**1.2 UJ**	1.2 U	1.2 U	1.2 U	1.2 U	0.37	1.2	2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	13	14	1.2 U	1.2 U	1.2 U	1.2 U	0.47	1.2	2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	16	17	1.6 U	1.6 U	1.6 U	1.6 U	0.73	1.6	2
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	88	92	1.2 U	1.2 U	1.2 U	1.2 U	0.53	1.2	2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.2	4.4	1.2 U	1.2 U	1.2 U	1.2 U	0.57	1.2	2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	320 (1)	330 (1)	1.2 U	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	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)	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)	ng/L	**2.0 UJ**	2.0 U	2.0 U	**2.0 UJ**	2.0 U	2.0 U	2.0 U	0.81	2	4
MeFOSAA	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	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	ng/L	1.6 U	0.89 J	0.87 J	1.6 U	1.6 U	1.6 U	1.6 U	0.69	1.6	4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	86	87	1.6 U	1.6 U	3.0 J	1.6 U	0.59	1.6	4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	16	21	1.6 U	1.6 U	0.77 J	1.6 U	0.75	1.6	4
Hexafluoropropyleneoxide dimer acid	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	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
9Cl-PF3ONS (F-53B Major)	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
11Cl-PF3OUdS (F-53B Minor)	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

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.
UJ - Non-detects estimated results.
DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
Sample SANG-FB-06282021 is a field blank.
Sample SANG-INF-06282021D is a field duplicate of SANG-INF-06282021.
Analytes highlighted in gray are the UCMR3 compounds.
(1) Due to high concentration of the target analyte, a reduced sample volume was extracted and analyzed. Detection limit was adjusted accordingly (10x).
Results bolded in red text are qualified based on validation.

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Glycols				
Sample Parameter	**Sampling Date**	**Influent (mg/L)**	**GAC2 Effluent (mg/L)**	**Effluent (mg/L)**
Diethylene glycol	4/15/2021	<52	<52	<52
Ethylene glycol		<10	<10	<10
Propylene glycol		<10	<10	<10
Triethylene Glycol		<54	<54	<54
Diethylene glycol	5/13/2021	<52	<52	<52
Ethylene glycol		<10	<10	<10
Propylene glycol		<10	<10	<10
Triethylene Glycol		<54	<54	<54
Diethylene glycol	6/10/2021	<52	<52	<52
Ethylene glycol		<10	<10	<10
Propylene glycol		<10	<10	<10
Triethylene Glycol		<54	<54	<54

Total Organic Carbon (TOC)				
Sample Parameter	**Sampling Date**	**Influent (mg/L)**	**GAC2 Effluent (mg/L)**	**Effluent (mg/L)**
TOC	4/15/2021	3.8	0.59	13.0
TOC	5/13/2021	3.9	0.90	1.2
TOC	6/10/2021	4.2	0.85	1.5

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning	Media Change Out	Resin Vessel Skimming
April 1, 2021				Coarse and Fine Sand Filters 2A/2B and 3A/3B		
April 2, 2021	25 Micron Pleated	Remove Filters				
April 5, 2021	25 Micron Pleated	Install 10 Micron Pleated				
April 6, 2021						Skimming Resin vessels A (7 gal), B (14 gal), C (14 gal) & D (14 gal)
April 7, 2021	25 Micron Pleated	10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
April 8, 2021		10 Micron Regular		Fine Sand Filters 4A/4B		
April 9, 2021	25 Micron Pleated	Remove Filters (Empty)				
April 11, 2021	25 Micron Regular	Empty				
April 12, 2021		Install 10 Micron Pleated		Fine Sand Filters 4A/4B		
April 13, 2021	25 Micron Regular	10 Micron Pleated	Secondary Carbon vessels A, B, C, & D Add 5 gals. PAA			
April 14, 2021			Primary Carbon vessel C			
April 15, 2021	25 Micron Regular	10 Micron Regular	Secondary Carbon vessels A, B, C, & D			
April 16, 2021	25 Micron Pleated	Remove Filters (Empty)				
April 19, 2021		Install 10 Micron Pleated				
April 20, 2021		10 Micron Pleated		Coarse Sand Filters 2A/2B		
April 21, 2021	25 Micron Regular	10 Micron Regular				
April 22, 2021			Primary Carbon vessels A, B, C, & D			

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning	Media Change Out	Resin Vessel Skimming
April 23, 2021	25 Micron Pleated	Remove Filters (Empty)				
April 28, 2021	25 Micron Regular	10 Micron Regular				
April 29, 2021		10 Micron Regular	Primary Carbon vessels A, B, C, & D			
April 30, 2021	25 Micron Regular	Remove Filters (Empty)				
May 3, 2021		10 Micron Pleated				
May 4, 2021	25 Micron Regular	10 Micron Regular		Fine Sand Filters 3A/3B		
May 5, 2021			Primary Carbon vessels A, B, C, & D			
May 6, 2021		10 Micron Regular				
May 7, 2021	25 Micron Pleated	Remove Filters (Empty)		Fine Sand Filters 4A/4B		
May 10, 2021			Primary Carbon vessels A, B, C, & D			
May 11, 2021		10 Micron Regular				Resin vessels A (90 gal), B (90 gal), C (75 gal) & D (75 gal).
May 12, 2021	25 Micron Regular	10 Micron Regular	Secondary Carbon vessels A, B, C, & D			
May 13, 2021			Primary Carbon vessels A, B, C, & D			
May 14, 2021	25 Micron Pleated	Remove Filters (Empty)				

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning	Media Change Out	Resin Vessel Skimming
May 17, 2021	25 Micron Regular	10 Micron Regular				
May 18, 2021				Coarse Sand Filters 1A/1B		
May 19, 2021			Primary Carbon vessels A, B, C, & D			
May 20, 2021		10 Micron Regular		Coarse Sand Filters 2A/2B		
May 21, 2021	25 Micron Pleated	Remove Filters (Empty)				
May 25, 2021	25 Micron Regular	10 Micron Regular	Primary Carbon vessels A, B, C, & D			
May 26, 2021		10 Micron Pleated				
May 27, 2021	25 Micron Regular	10 Micron Regular		Fine Sand Filters 3A/3B		
May 28, 2021	25 Micron Pleated	Remove Filters (Empty)	Primary Carbon vessels A, B, C, & D			
June 1, 2021	25 Micron Regular	10 Micron Regular				
June 2, 2021			Primary Carbon vessels A, B, C, & D			
June 3, 2021		10 Micron Pleated				Resin vessels A (3"), B (3"), C (3") & D (3").
June 4, 2021	25 Micron Pleated	Remove Filters (Empty)	Primary Carbon vessels A, B, C, & D			
June 7, 2021	25 Micron Pleated	10 Micron Pleated				
June 8, 2021	25 Micron Regular	10 Micron Regular	Primary Carbon vessels A, B, C, & D	Fine Sand Filters 4A/4B and 5A/5B		
June 9, 2021	25 Micron Regular	10 Micron Pleated	Secondary Carbon vessels A, B, C, & D	Fine Sand Filters 3A/3B		

TABLE 3 - PREVENTIVE MAINTENANCE

Date	Primary Bag Filter Change and Type of Filters Installed	Secondary Bag Filter Change and Type of Filters Installed	Treatment Process Backwashed	Sand Filter Cleaning	Media Change Out	Resin Vessel Skimming
June 10, 2021	25 Micron Regular	Remove Filters (Empty)				
June 11, 2021	25 Micron Pleated		Primary Carbon vessels A, B, C, & D			
June 12, 2021	25 Micron Pleated					
June 13, 2021	25 Micron Pleated					
June 14, 2021			Primary Carbon vessels A, B, C, & D			
June 15, 2021	25 Micron Pleated					
June 16, 2021	25 Micron Pleated					
June 17, 2021						
June 18, 2021	25 Micron Pleated		Primary Carbon vessels A, B, C, & D			
June 21, 2021		10 Micron Pleated	Primary Carbon vessels A, B, C, & D			
June 22, 2021	25 Micron Pleated			Fine Sand Filters 4A/4B and 5A/5B		
June 23, 2021						Resin vessels A (~5"), B (~4"), C (~4") & D (~4")
June 24, 2021	25 Micron Regular	10 Micron Regular				
June 25, 2021	25 Micron Pleated	Remove Filters (Empty)	Primary Carbon vessels A, B, C, & D			
June 28, 2021	25 Micron Regular	10 Micron Regular				
June 29, 2021			Primary Carbon vessels A, B, C, & D			
June 30, 2021	25 Micron Regular	10 Micron Regular				