

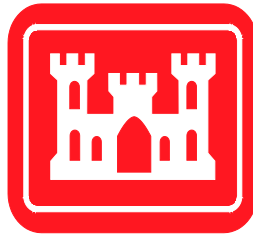
**STEWART AIR NATIONAL GUARD BASE
PFOS/PFOA – INTERIM MITIGATION PROJECT**

**INTERIM STORM WATER TREATMENT SYSTEM
OPERATIONS, MAINTENANCE & MONITORING REPORT**

**QUARTERLY OM&M REPORT NO. 1
JULY TO SEPTEMBER 2020**

Immediate Response Action, Rapid Response Program
Contract No. W9128F-14-D-0009
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ACRONYMS AND ABBREVIATIONS

ANG	Air National Guard
AFFF	Aqueous Film Forming Foam
BWS	BERS-Weston Services JVA, LLC
ft	Feet
GPM	gallons per minute
ISWTS	Interim Storm Water Treatment System
HA	lifetime Health Advisory
mg/L	milligrams per liter
NTU	Nephelometric Turbidity Units
NY	New York
OM&M	Operations, Maintenance and Monitoring
PFOA	Perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
ppt	parts per trillion
PSIG	Pounds per Square Inch Gauge
SANGB	Stewart Air National Guard Base
TOC	Total Organic Carbon
USACE	United States Army Corps of Engineers
VOC	Volatile Organic Compounds

1. INTRODUCTION

BERS-Weston Services JVA, LLC (BWS), under Contract W9128F-14-D-0009 with the United States 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 (NY). The storm water is contaminated with perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). PFOS/PFOA are two constituents of aqueous film forming foam (AFFF), that have been detected above the U.S. Environmental Protection Agency (US EPA) drinking water lifetime Health Advisory (HA) standard of 70 parts per trillion (PPT) (individually or combined) in the off-base storm water discharge into the Recreation Pond. It should be noted that perfluorooctane sulfonate and perfluorooctanesulfonic acid are interchangeable in our reporting documentation and will be seen in document text as perfluorooctane sulfonate (PFOS) and laboratory reporting as perfluorooctanesulfonic acid (PFOS).

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

This is the first quarterly report that summarizes Operations, Maintenance and Monitoring (OM&M) activities conducted by BWS at SANGB. This report summarizes ISWTS operations between July and September 2020 at SANGB.

2. GENERAL COMPLIANCE SUMMARY

The ISWTS operations resumed treatment of water on 13 July 2020 following installation and commissioning of pretreatment system improvements that occurred in June and early July 2020. This report summarizes OM&M between 13 July and 30 September. During ISWTS operations the effluent discharge was monitored for PFOS/PFOA one or two times per week. During the performance period, effluent was sampled 19 days for both PFOS/PFOA. Final PFOS/PFOA

results have been provided in **Table 1**. Based on validated analytical data, all effluent sample results were well below discharge criteria of 70 parts per trillion (ppt). The highest detection of both PFOS/PFOA combined was less than 5 ppt. No exceedances were recorded during this reporting period.

3. ISWTS CONFIGURATION DURING PERFORMANCE PERIOD

Prior to starting up the ISWTS on 13 July, the system was comprised of the following unit processes; Centrifugal Separator, Coarse Sand Filtration, Fine Sand Filtration, Primary and Secondary Bag Filtration, Granular Activated Carbon (GAC), and Primary and Secondary Ion Exchange resin. Peracetic Acid is also introduced prior to the Centrifugal Separator at low concentration to reduce biological growth in the system.

As part of system preparation, new GAC and Secondary Ion Exchange Resin were installed in early July 2020. The on-site Secondary Ion Exchange Resin was repositioned to the Primary Ion Exchange Resin location. **Figure 1** shows the system configuration between 13 July and 22 September 2020.

As further discussed in Section 4, the system configuration was altered following a media exchange in late September. The revised configuration is now Primary and Secondary GAC units followed by a polishing Ion Exchange Resin unit established between 23 and 30 September 2020 and continuing for the rest of the performance period. The updated configuration is shown in **Figure 2**.

4. GENERAL FACILITY OPERATIONS SUMMARY

During this performance period, a total of 23,089,461 gallons of storm water was treated and discharged by the ISWTS. The following table summarizes the volume of water treated (gallons), operational time (hours), run time (% of total time), and average treatment rate during each month of system operations. 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 and during periods when Recreation Pond drawdown objectives are achieved. For the three-month period, the average run time was 77.2%.

Month	Volume Treated (Gallons)	Operational Time ¹ (Hours)	Run Time ² (Percent)	Average Treatment Flow ³ (GPM)
July 2020	6,044,841	363	83.65	278
August 2020	9,396,000	603	81.07	260
September 2020	7,648,600	483	66.94	264
Total	23,089,461	1,449		
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 79 days of operation between 13 July and 30 September 2020. During this period of performance, the Recreation Pond was drawn down for 64 of the 79 days or greater than 80% of the time. During the performance period there were five storm events that caused pond level to rise above the top of the weir. The Recreation Pond level during the performance period is shown on **Figure 3**.

5. FACILITY PERFORMANCE MONITORING

5.1 INFLUENT AND EFFLUENT PFOS/PFOA MONITORING

As previously noted, PFOS/PFOA samples were collected 19 times during the performance period. Samples were collected from the influent, intra-process and effluent stages during each event. **Figure 4** shows the combined influent and effluent PFOS/PFOA concentrations based on the preliminary results. As shown in **Figure 4**, the combined PFOS/PFOA influent and effluent average concentrations during the performance period were 419 ppt and <2 ppt of validated data, respectively.

5.2 INTRA-PROCESS PFOS/PFOA MONITORING

Intra-process monitoring for PFOS/PFOA was performed after the GAC and Primary Resin to confirm media effectiveness. Based on intra-process sample results, breakthrough of both the GAC and Primary Resin were observed at approximately 50% of the HA. As a result, the ISWTS was shut down between 16 and 23 September to replace the media. All GAC and Ion Exchange Media were removed and replaced. Intra-Process sample results demonstrated acceptable PFOS/PFOA removal by the GAC. To further confirm the effectiveness of GAC, the ISWTS was modified from GAC, Primary Resin, and Secondary Resin to Primary GAC, Secondary GAC, and

Polishing Ion Exchange Resin. As discussed in Section 3, the revised regime is shown in **Figure 2**. Following the change, intra-process sampling for PFOS/PFOA resumed after the Primary and Secondary GAC to further confirm their effectiveness.

5.3 OTHER WATER QUALITY MONITORING

During the performance period, additional monitoring was performed for; total organic carbon (TOC), glycols, volatile organic compounds (VOCs), metals, and other wet chemistry parameters. All results are shown in **Table 2**. TOC impacts 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 4.4 mg/L and the GAC effluent was 2 mg/L, indicating acceptable TOC reduction of the water prior to contact with the Ion Exchange Resin. Glycol was sampled from the influent, effluent and intra-process sample ports seven days during the performance period. As shown in **Table 2**, only ethylene glycol was detected on 27 July 2020. The VOCs, metals and other wet chemistry parameters were collected to document the water quality. No detections were cause for concern or considered to negatively impact the ISWTS performance.

5.4 TURBIDITY MONITORING

Turbidity is a measurement that can estimate the level of solids present in the water. It is a field test that is beneficial in measuring influent and intra-process water quality and to confirm treatment system effectiveness in removing solids. During the performance period, influent and effluent turbidity averaged 9.41 Nephelometric Turbidity Units (NTU) and 2.04 NTU, respectively, indicating acceptable reduction of turbidity. A graph of the influent and effluent turbidity during the performance period is included in **Figure 5**.

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 18.6 gallons of Peracetic Acid were introduced and the average dose was 1.12 gallons of Peracetic Acid per million gallons of water treated.

6. SCHEDULED PREVENTIVE MAINTENANCE

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

- Coarse Sand Filter Backwashes
- Fine Sand Filter Backwashes
- Primary Bag Filter Changes
- Secondary Bag Filter Changes
- Primary Carbon Backwashing
- Secondary Resin Backwashing
- Media Exchanges

During the performance period the Coarse and Fine Sand Filters were backwashed 251 and 309 times, respectively. The number of bag filter changes and backwash events are summarized in **Table 3**. As discussed previously, one media exchange was conducted between 16 and 23 September 2020. At that time, the sand filter media was also replaced.

7. MATERIAL DISPOSAL

During the early July and September 2020 media exchanges, the following waste streams were generated. Copies of all signed manifests and disposal certifications are included in **Attachment 1**.

- Spent Bag Filters
- Sand Filter Media (sand and gravel)
- GAC and Ion Exchange Media.

All waste was disposed of by incineration at Covanta Environmental Solutions of Indianapolis, Indiana. The table below summarizes the quantity of all wastes disposed during the performance period.

Date Transported	Spent Treatment Media	Weight (lbs)	Date Disposed
06/25/20	non RCRA Spent Activated Carbon	7,060	08/11/20
06/25/20	non RCRA Spent Ion Exchange Resin	4,370	08/10/20
06/30/20	non RCRA Spent Bag Filters	1,640	08/11/20
06/30/20	non RCRA Spent Activated Carbon	5,300	08/11/20
06/30/20	non RCRA Spent Ion Exchange Resin	7,280	08/10/20
07/02/20	non RCRA Spent Ion Exchange Resin	2,920	08/10/20
Total non RCRA Spent Activated Carbon		<u>12,360</u>	
Total non RCRA Spent Ion Exchange Resin		<u>14,570</u>	
Total non RCRA Spent Bag Filters		<u>1,640</u>	
TOTAL		<u>28,570</u>	
09/23/20	non RCRA Spent Ion Exchange Resin	36,080	10/14/20
09/24/20	non RCRA Spent Bag Filters	8,920	09/25/20
09/24/20	non RCRA Spent Activated Carbon	17,540	09/25/20
TOTAL		<u>62,540</u>	

8. PROJECTED ACTIVITIES FOR NEXT PERFORMANCE PERIOD

During the next performance period, additional media exchanges are anticipated in order to meet performance objectives. No other capital improvements are anticipated.

FIGURES

FIGURE 1

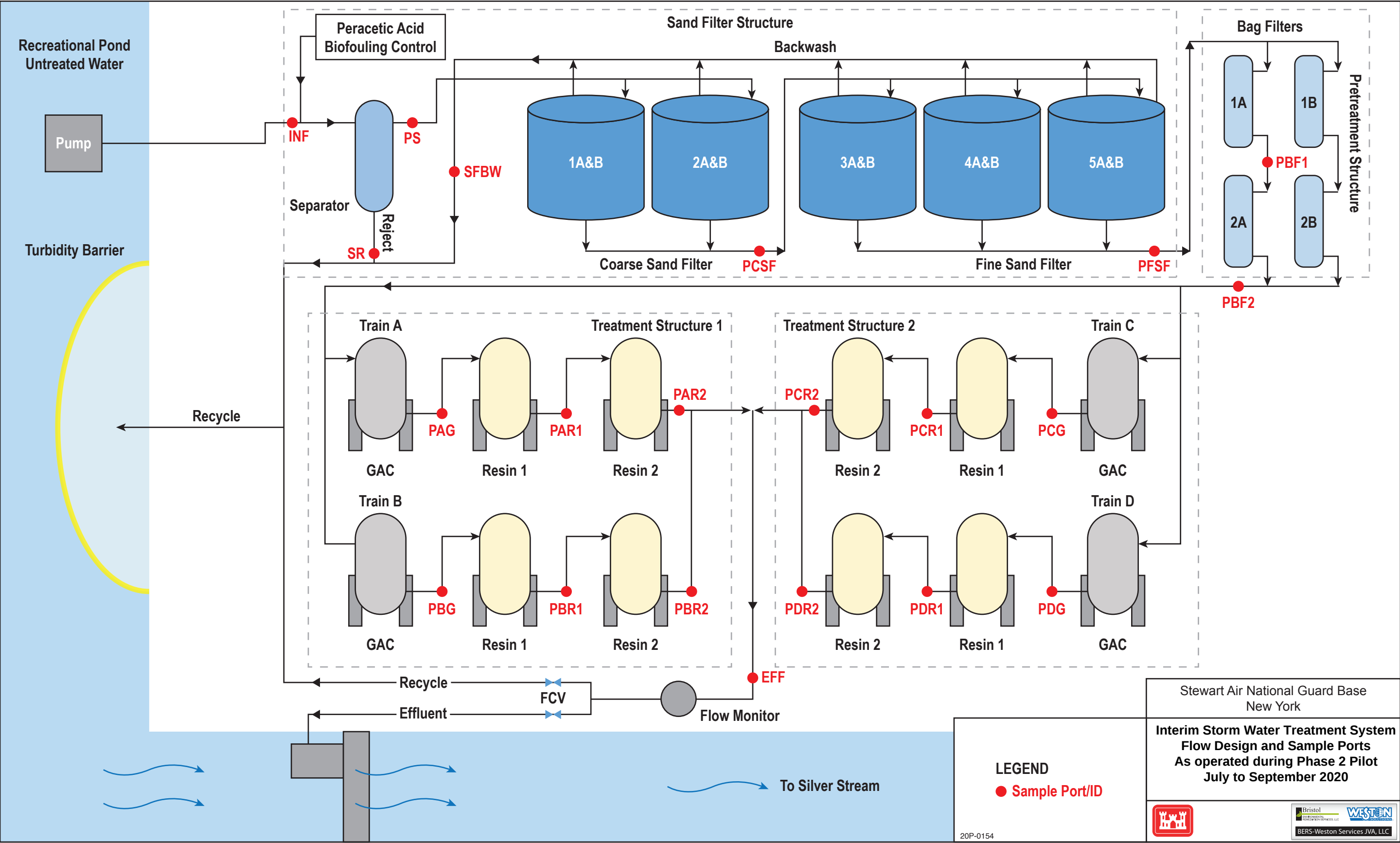


FIGURE 2

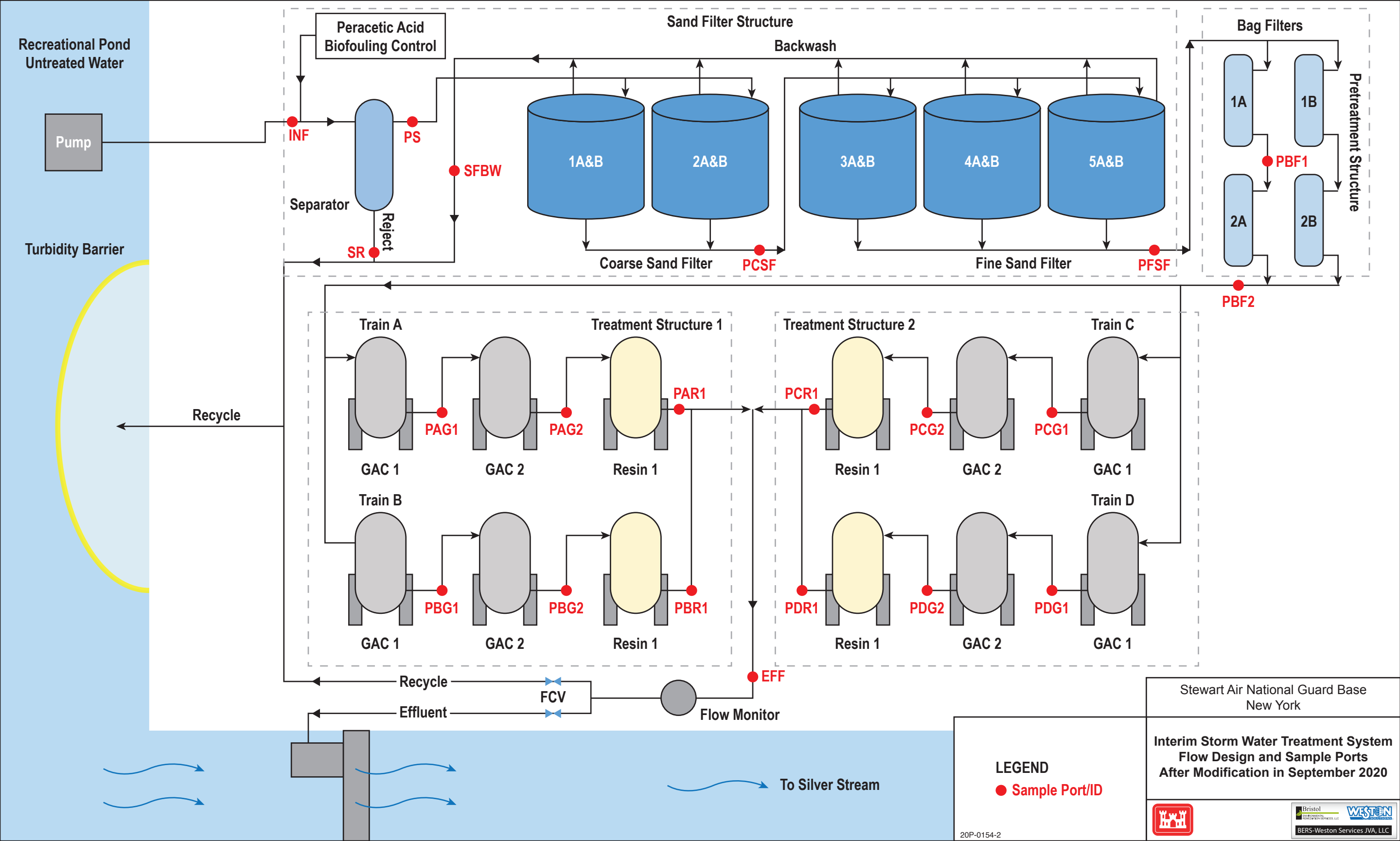


FIGURE 3 – RECREATIONAL POND LEVEL CHART

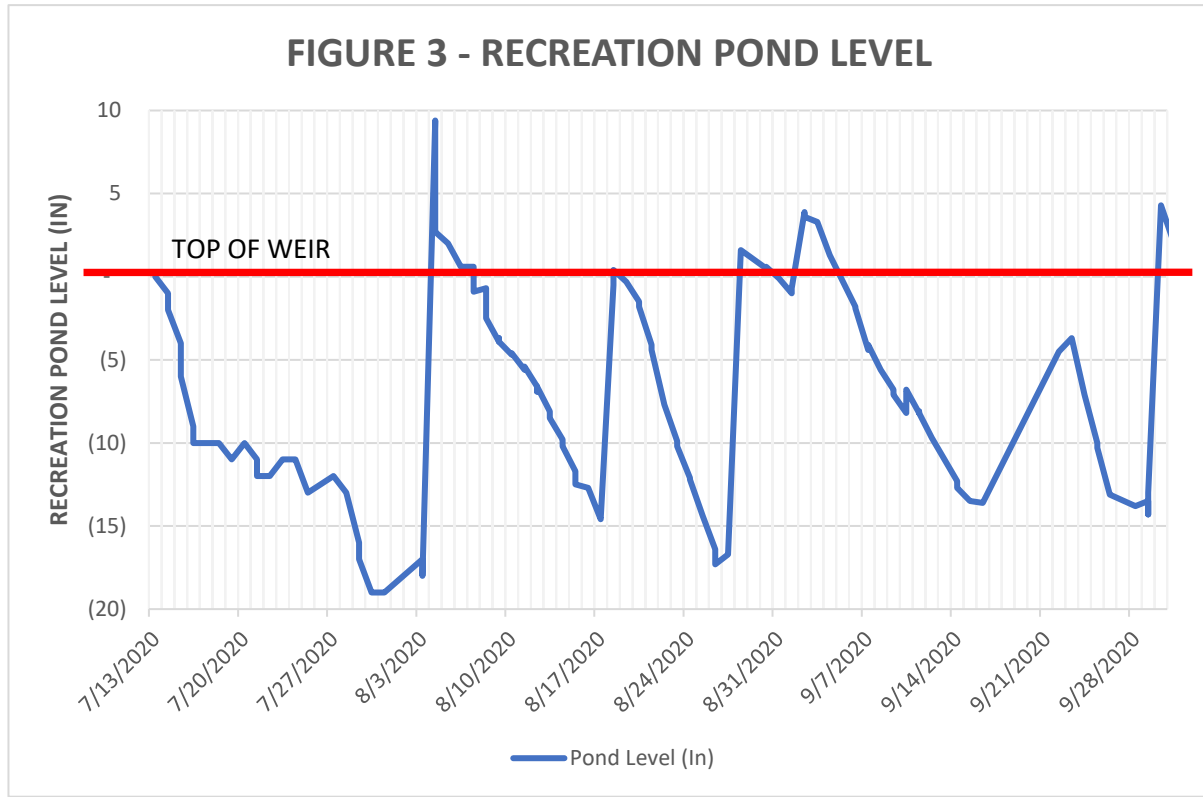


FIGURE 4 – INFLUENT AND EFFLUENT PFOS AND PFOA CHARTS

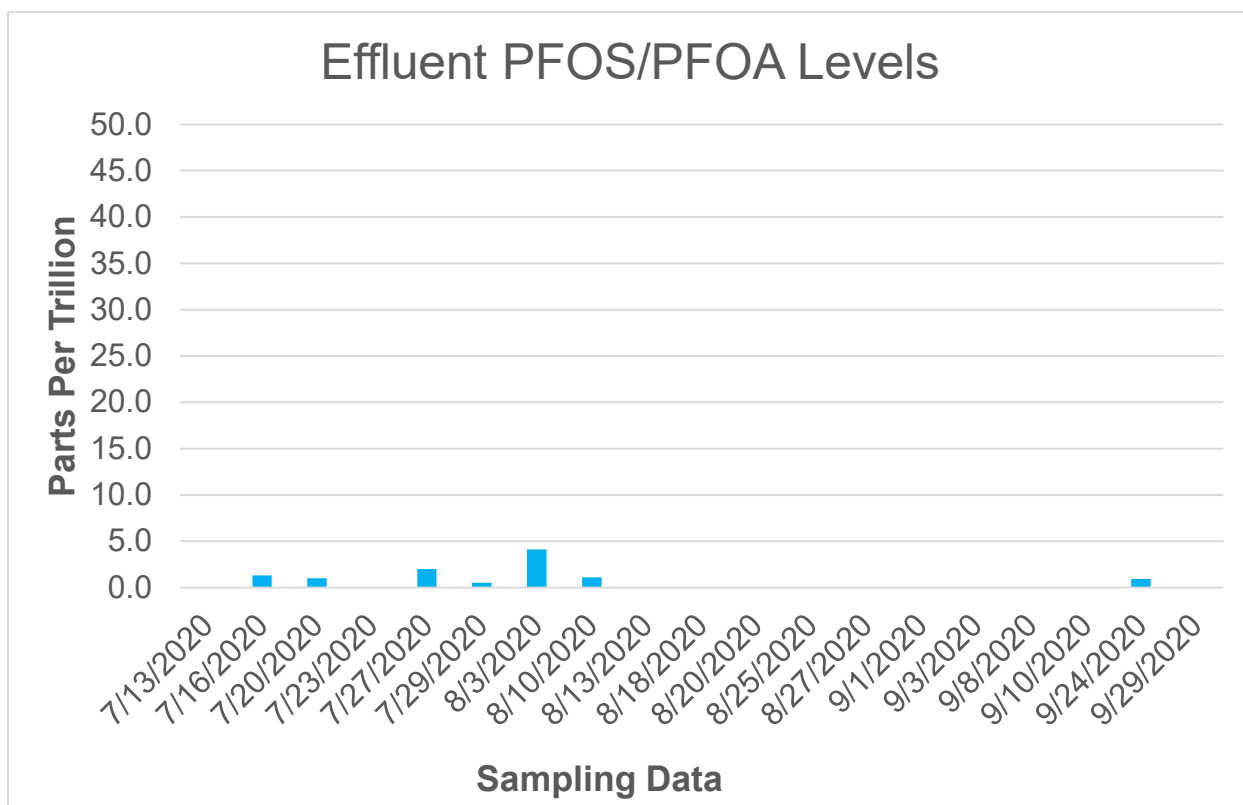
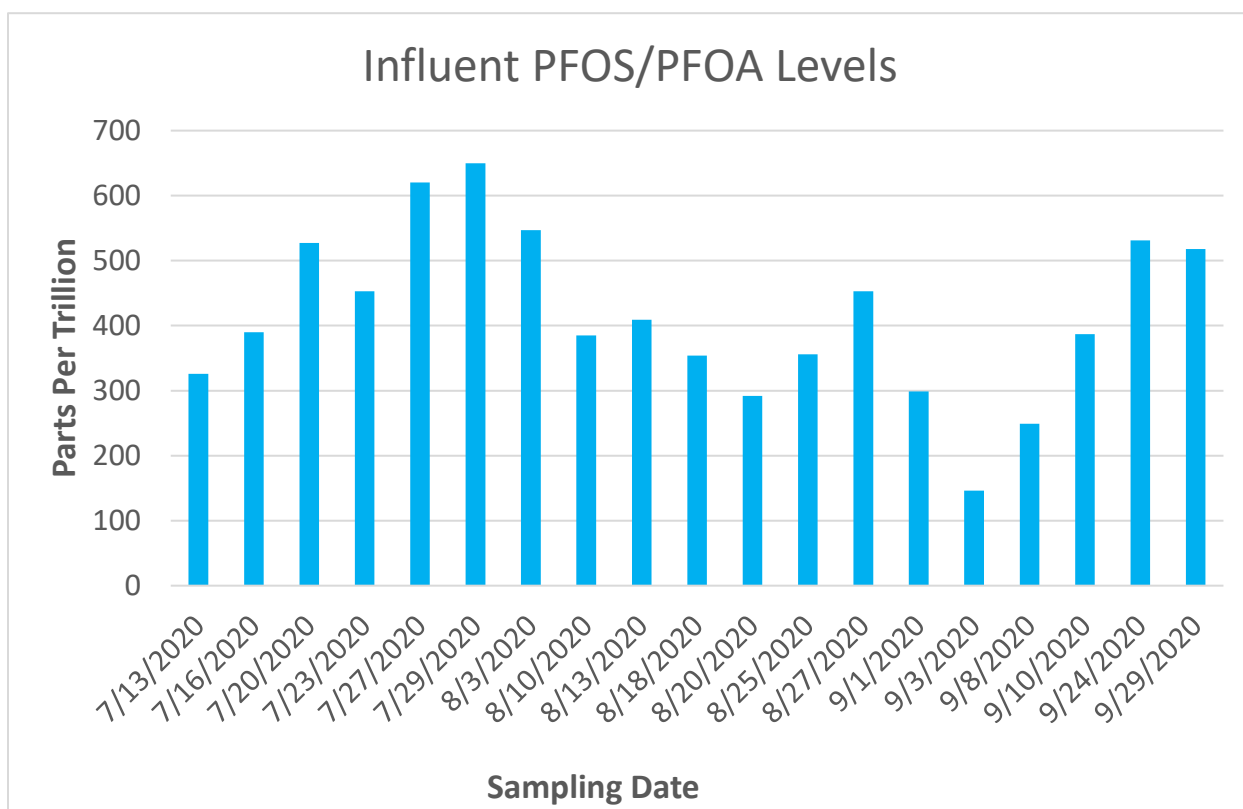
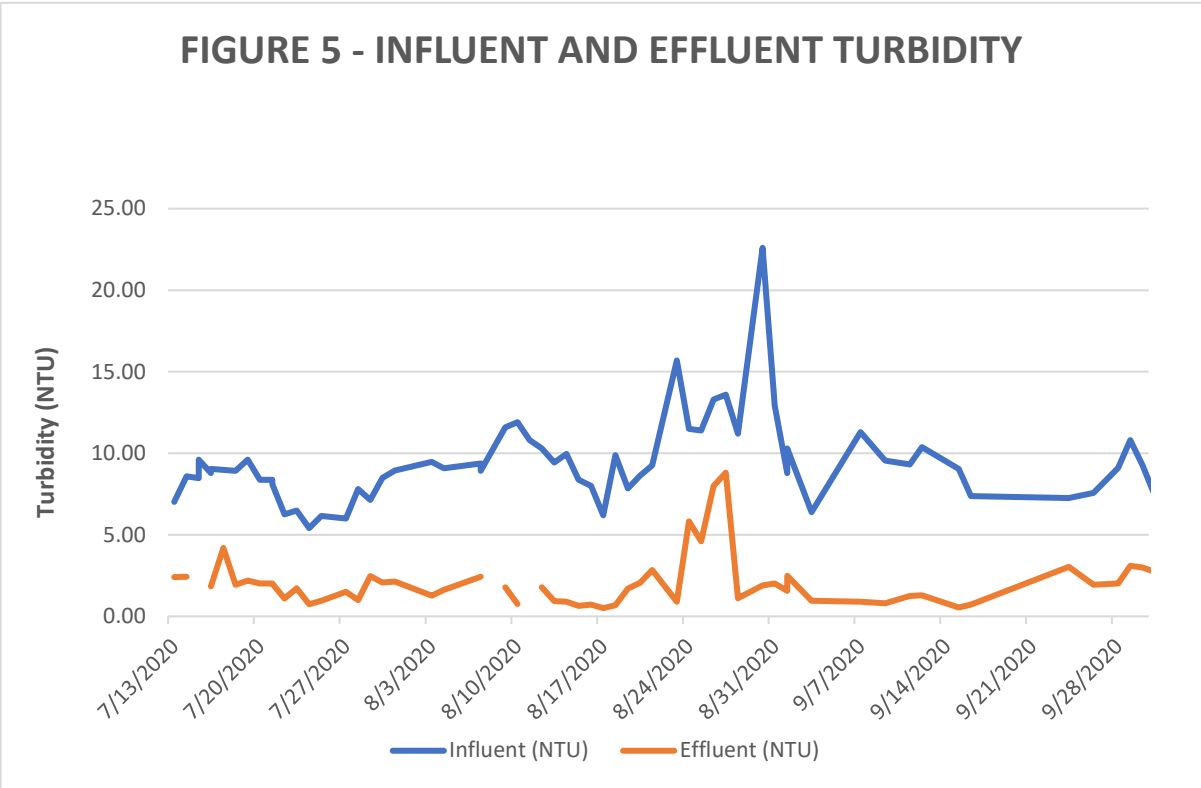


FIGURE 5 – INFLUENT AND EFFLUENT TURBIDITY CHART



TABLES

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NCK036	NCK040	NCK041	NCK039	NCK038	NCK037			
Sampling Date		2020/07/13 15:25	2020/07/13 15:55	2020/07/13 16:00	2020/07/13 15:40	2020/07/13 15:45	2020/07/13 15:30			
	UNITS	SANG-FB-07132020	SANG-INF-07132020	SANG-INF-07132020D	SANG-PAG-07132020	SANG-PAR1-07132020	SANG-EFF-07132020	DL	LOD	LOQ
Miscellaneous Parameters										
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	26	26	1.2 J	6.0	1.4 U	0.70	1.5	2.1
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	96	98	1.3 U	9.5	1.2 U	0.55	1.3	2.1
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	66	67	1.5 U	3.7	1.4 U	0.74	1.5	2.1
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	38	38	1.3 U	0.67 J	1.2 U	0.54	1.3	2.1
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	34	36	1.3 U	1.3 U	1.2 U	0.51	1.3	2.1
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.0	9.9	1.7 U	1.7 U	1.6 U	0.84	1.7	2.1
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.6	5.8	1.5 U	1.5 U	1.4 U	0.67	1.5	2.1
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U	0.81	1.7	2.1
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	0.62	1.3	2.1
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	0.50	1.3	2.1
Perfluorotetradecanoic acid (PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	0.39	1.3	2.1
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	11	12	1.3 U	1.3 U	1.2 U	0.49	1.3	2.1
Perfluoropentanesulfonic acid PFPeS	ng/L	1.6 U	12	12	1.7 U	1.7 U	1.6 U	0.77	1.7	2.1
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	120 (1)	110 (1)	1.3 U	1.3 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.9	3.6	1.3 U	1.3 U	1.2 U	0.60	1.3	2.1
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	320 (1)	290 (1)	3.2	4.1	2.9	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.4 U	0.67	1.5	2.1
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	0.56	1.3	2.1
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.1 U	2.1 U	2.1 U	2.1 U	2.0 U	0.85	2.1	4.2
MeFOSAA	ng/L	3.0 U	3.2 U	3.2 U	3.2 U	3.2 U	3.0 U	1.3	3.2	4.2
EtFOSAA	ng/L	3.0 U	3.2 U	3.2 U	3.2 U	3.2 U	3.0 U	1.5	3.2	4.2
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U	0.72	1.7	4.2
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	89	87	1.7 U	1.7 J	1.6 U	0.62	1.7	4.2
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	20	20	1.9 J	1.7 J	1.6 J	0.79	1.7	4.2
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.1 U	2.1 U	2.1 U	2.1 U	2.0 U	0.89	2.1	4.2
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	0.33	1.3	4.2
9CI-PF3ONS (F-53B Major)	ng/L	2.0 U	2.1 U	2.1 U	2.1 U	2.1 U	2.0 U	0.59	2.1	4.2
11CI-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.1 U	2.1 U	2.1 U	2.1 U	2.0 U	0.55	2.1	4.2

ng/L - nanograms per liter, or parts per trillion (ppt)

U - Compound was analyzed for, but not detected.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07132020 is a field blank.

SANG-INF-07132020 is a field duplicate of SANG-INF-07132020

Compounds highlighted in gray are UCMR 3 compounds

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

Laboratory ID		NDG539	NDG543	NDG544	NDG542	NDG540			
Sampling Date		2020/07/16 09:30	2020/07/16 10:10	2020/07/16 10:15	2020/07/16 10:00	2020/07/16 09:40			
	UNITS	SANG-FB-07162020	SANG-INF-07162020	SANG-INF-07162020D	SANG-PBG-07162020	SANG-EFF-07162020	DL	LOD	LOQ
Miscellaneous Parameters									
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	30	31	2.2	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	120 (1)	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	83	83	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	43	42	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	40	39	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	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.7	7.2	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	0.77	1.6	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.81 J	1.1 J	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	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	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	15	14	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid (PFPeS)	ng/L	1.6 U	17	17	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	130 (1)	130 (1)	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	5.4	5.5	1.2 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	350 (1)	390 (1)	0.84 J	1.3 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	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	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	0.81	2.0	4.0
MeFOSAA	ng/L	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	1.4	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.1 J	1.0 J	1.6 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	110 (1)	110 (1)	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	21	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	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	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	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	0.52	2.0	4.0

ng/L - nanograms per liter, or parts per trillion (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

UJ - Compound was analyzed for, but not detected. Associated values is an estimated LOD

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07162020 is a field blank.

SANG-INF-07162020 is a field duplicate of SANG-INF-07162020

Compounds highlighted in gray are UCMR 3 compounds

Results presented in red text are qualified based on validation.

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NDY360	NDY365	NDY366	NDY364	NDY363	NDY367	NDY362	NDY361			
Sampling Date		2020/07/20 09:50	2020/07/20 10:15	2020/07/20 10:15	2020/07/20 10:10	2020/07/20 10:05	2020/07/20 12:00	2020/07/20 10:00	2020/07/20 09:55			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-07202020	SANG-INF-07202020	SANG-INF-07202020D	SANG-PCG-07202020	SANG-PCR1-07202020	SANG-PCR2-07202020	SANG-PBR1-07202020	SANG-EFF-07202020	DL	LOD	LOQ
Miscellaneous Parameters												
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	3.8	3.7	14	7.3	1.4 U	5.2	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	170 (1)	190 (1)	9.2	11	1.2 U	6.4	1.2 U	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	110 (1)	110 (1)	1.9 J	4.2	1.4 U	2.0 J	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	49	49	1.2 U	0.94 J	1.2 U	0.51 J	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	47	47	1.2 U	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	13	12	1.6 U	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	8.4	8.4	1.4 U	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	1.1 J	1.1 J	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	1.3 J	1.4 J	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	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	1.2 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	18	18	1.2 U	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	25	25	1.6 U	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	150 (1)	150 (1)	1.2 U	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	7.1	7.4	1.2 U	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	480 (1)	500 (1)	1.5 J	1.2 J	1.2 U	1.5 J	1.0 J	0.43	1.2	2.0
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	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	1.2 U	0.53	1.2	2.0
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	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	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	3.0 U	1.4	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.6 J	1.5 J	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	140 (1)	140 (1)	1.6 U	2.8 J	1.6 U	1.6 J	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	30	31	1.6 U	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	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	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	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	2.0 U	0.52	2.0	4.0

ng/L - nanograms per liter, or parts per trillion (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

UJ - Compound was analyzed for, but not detected. Associated values is an estimated LOD

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07202020 is a field blank.

SANG-INF-07202020 is a field duplicate of SANG-INF-07202020

Compounds highlighted in gray are UCMR 3 compounds

Results presented in red text are qualified based on validation.

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NET884	NET889	NET890	NET888	NET887	NET886	NET885			
Sampling Date		2020/07/23 07:45	2020/07/23 08:20	2020/07/23 08:20	2020/07/23 08:15	2020/07/23 08:10	2020/07/23 08:05	2020/07/23 08:00			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-07232020	SANG-INF-07232020	SANG-INF-07232020D	SANG-PDG-07232020	SANG-PDR1-07232020	SANG-PDR2-07232020	SANG-EFF-07232020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.0 J	19	19	32	7.1	0.80 U	0.82 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	0.56 J	150 (1)	140 (1)	43	8.1	0.56 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	99	97	9.3	3.1	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	44	44	1.6 J	0.99 J	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	43	45	0.81 J	0.76 J	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	7.0	7.0	0.82 J	0.84 J	0.81 J	0.78 J	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.0 J	1.0 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	1.0 J	0.96 J	0.72 J	0.73 J	0.73 J	0.71 J	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	ng/L	0.61 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.60 U	0.48	1.2	2.0
Perfluorotetradecanoic acid (PFTEDA)	ng/L	0.45 J	0.51 U	0.49 U	0.48 U	0.50 U	0.49 U	0.46 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	17	18	2.7	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	23	23	0.80 J	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	150 (1)	140 (1)	1.5 J	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	6.9	6.7	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	410 (1)	420 (1)	3.4	3.4	2.6	2.8	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	0.66 J	0.68 J	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	0.96 J	0.99 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	1.7 J	1.6 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	130 (1)	120 (1)	0.84 J	2.6 J	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	17	18	2.0 J	2.2 J	1.6 J	1.8 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
9CI-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
11CI-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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

UJ - Compound was analyzed for, but not detected. Associated values is an estimated LOD

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07232020 is a field blank

SANG-INF-07232020D is a field duplicate of SANG-07232020

Compounds highlighted in gray are UCMR 3 compounds

Results presented in red text are qualified based on validation.

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NFM035	NFM040	NFM041	NFM039	NFM038	NFM037	NFM036			
Sampling Date		2020/07/27 09:00	2020/07/27 09:30	2020/07/27 09:30	2020/07/27 09:20	2020/07/27 09:15	2020/07/27 09:10	2020/07/27 09:05			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-07272020	SANG-INF-07272020	SANG-INF-07272020D	SANG-PAG-07272020	SANG-PAR1-07272020	SANG-PAR2-07272020	SANG-EFF-07272020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	53	46	12	8.2	1.4 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	160 (1)	160 (1)	6.7	12	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	130 (1)	130 (1)	2.4	4.1	1.4 U	1.4 U	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	61	52	1.1 J	1.1 J	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	60	50	0.92 J	0.69 J	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	13	13	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	8.3	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	1.4 J	1.3 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	1.3 J	1.1 J	0.62 J	0.75 J	0.68 J	0.66 J	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 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	1.3 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	25	21	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	27	27	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	170 (1)	170 (1)	1.7 J	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	8.2	8.1	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	560 (1)	550 (1)	6.2	3.8	2.5	2.0 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	1.3 J	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	1.6 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	150 (1)	150 (1)	1.3 J	2.7 J	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	26	25	2.1 J	3.6 J	2.4 J	1.8 J	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 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	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4.0
9CI-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
11CI-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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07272020 is a field blank

SANG-INF-07272020D is a field duplicate of SANG-07272020

Compounds highlighted in gray are UCMR 3 compounds

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NGB445	NGB450	NGB451	NGB449	NGB448	NGB447	NGB446			
Sampling Date		2020/07/29 08:00	2020/07/29 08:25	2020/07/29 08:25	2020/07/29 08:20	2020/07/29 08:15	2020/07/29 08:10	2020/07/29 08:05			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-07292020	SANG-INF-07292020	SANG-INF-07292020D	SANG-PBG-07292020	SANG-PBR1-07292020	SANG-PBR2-07292020	SANG-EFF-07292020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	66 (1)	62 (1)	17	6.6	0.92 J	1.4 U	6.7	14	20
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	190 (1)	200 (1)	12	6.8	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	150 (1)	160 (1)	4.7	2.1	1.4 U	1.4 U	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	59 (1)	61 (1)	1.2 J	1.2 U	1.2 U	1.2 U	5.1	12	20
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	60 (1)	60 (1)	1.3 J	1.2 U	1.2 U	1.2 U	4.9	12	20
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	14	15	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	8.9	10	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	1.1 J	1.2 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	1.7 J	2.0	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	24 (1)	24 (1)	0.74 J	1.2 U	1.2 U	1.2 U	4.7	12	20
Perfluoropentanesulfonic acid PFPeS	ng/L	1.6 U	27 (1)	28 (1)	1.6 U	1.6 U	1.6 U	1.6 U	7.3	16	20
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	210 (1)	220 (1)	3.0	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	8.9	9.0	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	590 (1)	620 (1)	7.9	0.89 J	1.2 J	0.51 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	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 J	1.8 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	160 (1)	170 (1)	1.9 J	1.5 J	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	26	28	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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-07292020 is a field blank

SANG-INF-07292020D is a field duplicate of SANG-07292020

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).

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NHC033	NHC038	NHC039	NHC037	NHC036	NHC035	NHC034			
Sampling Date		2020/08/03 09:00	2020/08/03 09:25	2020/08/03 09:25	2020/08/03 09:20	2020/08/03 09:15	2020/08/03 09:10	2020/08/03 09:05			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-08032020	SANG-INF-08032020	SANG-INF-08032020D	SANG-PCG-08032020	SANG-PCR1-08032020	SANG-PCR2-08032020	SANG-EFF-08032020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 UJ	31 J	26 J	31 J	9.1 J	1.4 UJ	1.4 UJ	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 UJ	180 J (1)	190 J (1)	23 J	11 J	1.2 UJ	1.2 UJ	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 UJ	140 J(1)	150 J (1)	4.9 J	4.1 J	1.4 UJ	1.4 UJ	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 UJ	54 J	45 J	0.87 J	0.80 J	1.2 UJ	1.2 UJ	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 UJ	57 J	49 J	0.52 J	1.2 UJ	1.2 UJ	1.2 UJ	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 UJ	12 J	11 J	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 UJ	8.9 J	7.4 J	1.4 UJ	1.4 UJ	1.4 UJ	1.4 UJ	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 UJ	1.0 J	0.84 J	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	0.77	1.6	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 UJ	1.5 J	1.4 J	1.2 UJ	1.2 UJ	1.2 UJ	1.2 UJ	0.59	1.2	2.0
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	2.0
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	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 UJ	24 J	21 J	0.66 J	1.2 UJ	1.2 UJ	1.2 UJ	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 UJ	32 J	28 J	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 UJ	180 J (1)	180 J (1)	1.8 J	1.2 UJ	1.2 UJ	1.2 UJ	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 UJ	8.4 J	7.7 J	1.2 UJ	1.2 UJ	1.2 UJ	1.2 UJ	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 UJ	490 J (1)	500 J(1)	7.3 J	4.4 J	2.2 J	4.1 J	4.3	12	20
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	2.0
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	2.0
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	2.0	4.0
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	3.0	4.0
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	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 UJ	1.6 J	1.4 J	1.6 UJ	1.6 UJ	1.6 UJ	1.6 UJ	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 UJ	130 J (1)	140 J (1)	0.77 J	3.5 J	1.6 UJ	1.6 UJ	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 UJ	23 J	21 J	1.7 J	2.3 J	0.82 J	1.4 J	0.75	1.6	4.0
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	2.0	4.0
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	4.0
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	2.0	4.0
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	2.0	4.0

ng/L - nanograms per liter, or parts per trillion (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. 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

SANG-FB-08032020 is a field blank

SANG-INF-08032020D is a field duplicate of SANG-08032020

Compounds highlighted in gray are UCMR 3 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 highlighted in red have been qualified based on validation. Temperature exceedance due to shipment delay required qualification to all data.

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NIL797	NIL802	NIL803	NIL801	NIL800	NIL799	NIL798			
Sampling Date		2020/08/10 09:30	2020/08/10 09:55	2020/08/10 09:55	2020/08/10 09:50	2020/08/10 09:45	2020/08/10 09:40	2020/08/10 09:35			
	UNITS	SANG-FB-08102020	SANG-INF-08102020	SANG-INF-08102020D	SANG-PDG-08102020	SANG-PDR1-08102020	SANG-PDR2-08102020	SANG-EFF-08102020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	31	31	28	20	1.4 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	110 (1)	110 (1)	61	24	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	77	78	19	8.6	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	39	39	2.7	2.7	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	35	35	0.87 J	2.0	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	8.9	8.5	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	6.6	6.3	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	0.92 J	0.90 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	13	13	4.2	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	15	17	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	97	110 (1)	3.0	1.0 J	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	4.5	4.6	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	350 (1)	360 (1)	3.1	4.8	0.76 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	2.0
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	0.97 J	0.92 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	98	96	0.92 J	9.4	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	22	24	1.6 U	1.8 J	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
9CI-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
11CI-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 (ppt)

U - Compound was analyzed for, but not detected.

UJ - Compound was analyzed for, but not detected. Associated values is an estimated LOD

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-08102020 is a field blank

SANG-INF-08102020D is a field duplicate of SANG-INF-08102020

Compounds highlighted in gray are UCMR 3 compounds

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NJI044	NJI049	NJI050	NJI048	NJI047	NJI046	NJI045			
Sampling Date		2020/08/13 09:45	2020/08/13 10:10	2020/08/13 10:10	2020/08/13 10:05	2020/08/13 10:00	2020/08/13 09:55	2020/08/13 09:50			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-08132020	SANG-INF-08132020	SANG-INF-08132020D	SANG-PAG-08132020	SANG-PAR1-08132020	SANG-PAR2-08132020	SANG-EFF-08132020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	35	34	19	1.3 J	22	1.4 U	0.70	1.5	2.1
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	130 (1)	120 (1)	19	1.2 U	27	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	99	98	5.5	1.4 U	8.3	1.4 U	0.74	1.5	2.1
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	42	42	1.6 J	1.2 U	2.0 J	1.2 U	0.54	1.3	2.1
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	39	39	0.97 J	1.2 U	1.3 J	1.2 U	0.51	1.3	2.1
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.5	9.3	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	8.3	8.0	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	0.88 J	0.87 J	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	1.5 J	1.3 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	1.2 UJ	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 UJ	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	16	16	0.74 J	1.2 U	1.2 U	1.2 U	0.49	1.3	2.1
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	21	20	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	120 (1)	130 (1)	2.0 J	1.2 U	0.57 J	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	5.6	5.6	1.2 U	1.2 U	1.2 U	1.2 U	0.60	1.3	2.1
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	370 (1)	380 (1)	5.8	0.60 J	2.5	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	0.67	1.5	2.1
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	0.56	1.3	2.1
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.1 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2.1	4.2
MeFOSAA	ng/L	3.0 U	3.2 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	3.2 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	1.2 J	1.2 J	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	120 (1)	110 (1)	1.4 J	1.6 U	7.0	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	23	25	1.6 U	1.6 U	1.3 J	1.6 U	0.79	1.7	4.2
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.1 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	1.3 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	2.1 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	2.1 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.55	2.1	4.2

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

LOQ = Limit of Quantitation

SANG-FB-08132020 is a field blank

SANG-INF-08132020D is a field duplicate of SANG-INF-08132020

(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 in red text are qualified based on validation.

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NKG667	NKG672	NKG673	NKG671	NKG670	NKG669	NKG668			
Sampling Date		2020/08/18 11:45	2020/08/18 12:20	2020/08/18 12:20	2020/08/18 12:05	2020/08/18 12:00	2020/08/18 11:55	2020/08/18 11:50			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-08182020	SANG-INF-08182020	SANG-INF-08182020D	SANG-PBG-08182020	SANG-PBR1-08182020	SANG-PBR2-08182020	SANG-EFF-08182020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	19	21	28	16	1.4 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	130 (1)	18	23	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	81	82	3.0	9.0	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	36	35	0.79 J	2.8	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	34	36	0.63 J	2.1	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	8.2	8.7	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	7.8	8.1	1.4 U	0.70 J	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	0.91 J	1.0 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	1.3 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	15	15	0.50 J	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
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	2.0
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	110 (1)	110 (1)	1.1 J	1.8 J	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	5.4	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)	2.4	6.3	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	1.4 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	99	110 (1)	1.6 U	8.2	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	25	25	1.6 U	1.3 J	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
9CI-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
11CI-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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-08182020 is a field blank.

SANG-INF-08182020D is a field duplicate of SANG-INF-08182020.

Compounds highlighted in gray are the UCMR3 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).

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NKW455	NKW460	NKW461	NKW459	NKW458	NKW457	NKW456			
Sampling Date		2020/08/20 09:10	2020/08/20 09:35	2020/08/20 09:35	2020/08/20 09:30	2020/08/20 09:25	2020/08/20 09:20	2020/08/20 09:15			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-08202020	SANG-INF-08202020	SANG-INF-08202020D	SANG-PCG-08202020	SANG-PCR1-08202020	SANG-PCR2-08202020	SANG-EFF-08202020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	21	22	15	22	1.4 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	100	100 (1)	32	35	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	71	72	15	15	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	32	32	5.4	4.9	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	32	31	4.4	4.0	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.3	7.9	1.2 J	0.89 J	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.8	6.8	0.88 J	0.68 J	1.4 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.6 U	0.78 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	0.75 J	0.96 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	12	13	1.9 J	0.56 J	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	14	15	1.4 J	1.6 U	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	84	89	8.4	3.7	1.2 U	1.2 U	0.53	1.2	2.0
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	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	260 (1)	270 (1)	26	9.4	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	1.5 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	97	85	7.6	14	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	17	18	1.5 J	1.3 J	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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-08202020 is a field blank

SANG-INF 08202020D is a field duplicate of SANG-INF-08202020

Compounds highlighted in gray are 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).

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NLU947	NLU952	NLU953	NLU951	NLU950	NLU949	NLU948			
Sampling Date		2020/08/25 10:30	2020/08/25 11:05	2020/08/25 11:05	2020/08/25 10:50	2020/08/25 10:45	2020/08/25 10:40	2020/08/25 10:35			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-08252020	SANG-INF-08252020	SANG-INF-08252020D	SANG-PDG-08252020	SANG-PDR1-08252020	SANG-PDR2-08252020	SANG-EFF-08252020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	35	34	31	33	1.4 U	1.4 U	0.70	1.5	2.1
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	120 (1)	73	59	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	90	90	35	28	1.4 U	1.4 U	0.74	1.5	2.1
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	37	37	8.3	8.7	1.2 U	1.2 U	0.54	1.3	2.1
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	36	37	5.0	6.6	1.2 U	1.2 U	0.51	1.3	2.1
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	8.5	8.3	1.3 J	1.7 J	1.6 U	1.6 U	0.84	1.7	2.1
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.8	6.1	1.3 J	1.4 J	1.4 U	1.4 U	0.67	1.5	2.1
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.7 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	1.2 U	0.91 J	1.2 U	0.68 J	1.2 U	1.2 U	0.62	1.3	2.1
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	0.50	1.3	2.1
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	0.39	1.3	2.1
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	18	17	4.6	1.4 J	1.2 U	1.2 U	0.49	1.3	2.1
Perfluoropentanesulfonic acid (PFPeS)	ng/L	1.6 U	18	18	2.4	1.2 J	1.6 U	1.6 U	0.77	1.7	2.1
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	120 (1)	120 (1)	13	8.8	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	5.2	5.2	0.61 J	1.2 U	1.2 U	1.2 U	0.60	1.3	2.1
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	320 (1)	340 (1)	34	32	0.46 J	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	0.67	1.5	2.1
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	0.56	1.3	2.1
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.1 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.85	2.1	4.2
MeFOSAA	ng/L	3.0 U	3.2 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	3.0 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	1.5 J	1.4 J	1.6 U	0.82 J	1.6 U	1.6 U	0.72	1.7	4.2
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	100	100	9.7	25	1.6 U	1.6 U	0.62	1.7	4.2
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	17	3.4 J	5.6	1.6 U	1.6 U	0.79	1.7	4.2
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.1 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	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	0.33	1.3	4.2
9CI-PF3ONS (F-53B Major)	ng/L	2.0 U	2.1 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	0.59	2.1	4.2
11CI-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.1 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 (ppt)

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-08252020 is a field blank.

SANG-INF-08252020D is a field duplicate of SANG-INF-08252020

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).

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NMK624	NMK629	NMK630	NMK628	NMK627	NMK626	NMK625			
Sampling Date		2020/08/27 13:30	2020/08/27 14:05	2020/08/27 14:05	2020/08/27 13:50	2020/08/27 13:45	2020/08/27 13:40	2020/08/27 13:35			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-08272020	SANG-INF-08272020	SANG-INF-08272020D	SANG-PAG-08272020	SANG-PAR1-08272020	SANG-PAR2-08272020	SANG-EFF-08272020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	95	90	19	34	1.5 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	160 (1)	160 (1)	21	59	1.3 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	110 (1)	110 (1)	6.2	26	1.5 U	1.4 U	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	44	45	1.3 J	7.3	1.3 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	43	43	0.67 J	5.0	1.3 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.6	9.3	1.6 U	1.6 U	1.7 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.7	6.8	1.4 U	1.4 U	1.5 U	1.4 U	0.64	1.4	2.0
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	0.77	1.6	2.0
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.74 J	0.79 J	1.2 U	1.2 U	1.3 U	1.2 U	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	0.48	1.2	2.0
Perfluorotetradecanoic acid (PFTEDA)	ng/L	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	21	22	0.74 J	1.3 J	1.3 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid (PFPeS)	ng/L	1.6 U	27	28	1.6 U	1.1 J	1.7 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	150 (1)	140 (1)	2.0	8.5	1.3 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	6.7	6.6	1.2 U	1.2 U	1.3 U	1.2 U	0.57	1.2	2.0
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	410 (1)	390 (1)	4.4	22	1.3 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	0.64	1.4	2.0
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	0.53	1.2	2.0
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	2.0 U	0.81	2.0	4.0
MeFOSAA	ng/L	3.0 U	3.2 U	3.0 U	3.0 U	3.0 U	3.2 U	3.0 U	1.2	3.0	4.0
EtFOSAA	ng/L	3.0 U	3.2 U	3.0 U	3.0 U	3.0 U	3.2 U	3.0 U	1.4	3.0	4.0
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.5 J	1.3 J	1.6 U	1.6 U	1.7 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	110 (1)	120 (1)	1.1 J	19	1.7 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	18	1.6 U	1.6 J	1.7 U	1.6 U	0.75	1.6	4.0
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	2.0 U	0.85	2.0	4.0
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	0.31	1.2	4.0
9CI-PF3ONS (F-53B Major)	ng/L	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	2.0 U	0.56	2.0	4.0
11CI-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	2.0 U	0.52	2.0	4.0

ng/L - nanograms per liter

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-FB-08272020 is a field blank.

SANG-INF-08272020D is a field duplicate of SANG-INF-08272020

(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.

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NNJ429	NNJ434	NNJ435	NNJ433	NNJ432	NNJ431	NNJ430			
Sampling Date		2020/09/01 09:25	2020/09/01 10:00	2020/09/01 10:00	2020/09/01 09:45	2020/09/01 09:40	2020/09/01 09:35	2020/09/01 09:30			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-09012020	SANG-INF-09012020	SANG-INF-09012020D	SANG-PBG-09012020	SANG-PBR1-09012020	SANG-PBR2-09012020	SANG-EFF-09012020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	20	21	25	23	1.4 U	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	91	88	46	57	1.2 U	1.2 U	0.52	1.2	2.0
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	66	66	26	30	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	33	33	11	12	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	29	29	10	8.7	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	6.7	6.8	2.1	1.3 J	1.6 U	1.6 U	0.80	1.6	2.0
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.0	5.9	1.0 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	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	1.1 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	12	12	4.4	2.1	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	16	15	4.2	2.5	1.6 U	1.6 U	0.73	1.6	2.0
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	82	79	26	16	1.2 U	1.2 U	0.53	1.2	2.0
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.9	3.7	1.2 J	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)	83	38	0.50 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	2.0
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	0.93 J	0.87 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	92	89	25	25	1.6 U	1.6 U	0.59	1.6	4.0
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	19	19	4.1	1.5 J	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
9CI-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
11CI-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 - Compound was analyzed for, but not detected. Associated value is the LOD.

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

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

(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.

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NNZ831	NNZ836	NNZ837	NNZ835	NNZ834	NNZ833	NNZ832			
Sampling Date		2020/09/03 11:25	2020/09/03 12:05	2020/09/03 12:05	2020/09/03 11:45	2020/09/03 11:40	2020/09/03 11:35	2020/09/03 11:30			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-09032020	SANG-INF-09032020	SANG-INF-09032020D	SANG-PCG-09032020	SANG-PCR1-09032020	SANG-PCR2-09032020	SANG-EFF-09032020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	6.1	5.5	16	1.4 U	19	1.4 U	0.77	1.6	2.3
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	50	50	28	1.2 U	28	1.2 U	0.60	1.4	2.3
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	31	32	11	1.4 U	11	1.4 U	0.81	1.6	2.3
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	17	17	3.2	1.2 U	2.9	1.2 U	0.59	1.4	2.3
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	16	16	2.1	1.2 U	1.6 J	1.2 U	0.56	1.4	2.3
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	4.2	4.0	1.6 U	1.6 U	1.6 U	1.6 U	0.92	1.8	2.3
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	4.0	3.7	1.4 U	1.4 U	1.4 U	1.4 U	0.74	1.6	2.3
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	0.89	1.8	2.3
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.0 J	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U	0.68	1.4	2.3
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.4 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	0.55	1.4	2.3
Perfluorotetradecanoic acid(PFTEDA)	ng/L	1.2 U	1.4 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	0.43	1.4	2.3
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	4.7	4.6	1.0 J	1.2 U	1.2 U	1.2 U	0.54	1.4	2.3
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	5.8	5.9	0.82 J	1.6 U	1.6 U	1.6 U	0.84	1.8	2.3
Perfluorohexanesulfonic acid(PFHxS)	ng/L	1.2 U	40	40	3.9	1.2 U	1.7 J	1.2 U	0.61	1.4	2.3
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	2.0 J	1.8 J	1.2 U	1.2 U	1.2 U	1.2 U	0.66	1.4	2.3
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	130 (1)	120 (1)	8.9	1.2 U	5.8	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.6 U	1.6 U	1.4 U	1.4 U	1.4 U	1.4 U	0.74	1.6	2.3
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.4 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	0.61	1.4	2.3
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.3 U	2.3 U	2.0 U	2.0 U	2.0 U	2.0 U	0.93	2.3	4.5
MeFOSAA	ng/L	3.0 U	3.5 U	3.5 U	3.0 U	3.0 U	3.0 U	3.0 U	1.4	3.5	4.5
EtFOSAA	ng/L	3.0 U	3.5 U	3.5 U	3.0 U	3.0 U	3.0 U	3.0 U	1.6	3.5	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	0.79	1.8	4.5
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	41	42	3.0 J	1.6 U	5.6	1.6 U	0.68	1.8	4.5
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	10	11	1.6 U	1.6 U	1.4 J	1.6 U	0.86	1.8	4.5
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.3 U	2.3 U	2.0 U	2.0 U	2.0 U	2.0 U	0.98	2.3	4.5
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.4 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	0.36	1.4	4.5
9CI-PF3ONS (F-53B Major)	ng/L	2.0 U	2.3 U	2.3 U	2.0 U	2.0 U	2.0 U	2.0 U	0.64	2.3	4.5
11CI-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.3 U	2.3 U	2.0 U	2.0 U	2.0 U	2.0 U	0.60	2.3	4.5

ng/L - nanograms per liter, or parts per trillion, ppt.

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

Sample SANG-FB-09032020 is a field blank. SANG-INF-09032020D is a field duplicate.

Compounds highlighted in grey 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).

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NOQ495	NOQ500	NOQ501	NOQ499	NOQ498	NOQ497	NOQ496			
Sampling Date		2020/09/08 09:30	2020/09/08 09:55	2020/09/08 09:55	2020/09/08 09:50	2020/09/08 09:45	2020/09/08 09:40	2020/09/08 09:35			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a			
	UNITS	SANG-FB-09082020	SANG-INF-09082020	SANG-INF-09082020D	SANG-PDG-09082020	SANG-PDR1-09082020	SANG-PDR2-09082020	SANG-EFF-09082020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	23	22	22	28	1.8 J	1.3 J	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	89	84	55	69	1.3 U	1.3 U	0.57	1.3	2.2
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	67	65	27	37	1.5 U	1.5 U	0.77	1.5	2.2
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	34	32	7.6	14	1.3 U	1.3 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	29	27	4.0	11	1.3 U	1.3 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.0	6.5	1.8 U	2.2	1.8 U	1.8 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	6.2	5.9	0.78 J	1.4 J	1.5 U	1.5 U	0.70	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	0.83 J	0.79 J	1.3 U	1.3 U	1.3 U	1.3 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.53	1.3	2.2
Perfluorotetradecanoic acid (PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	11	11	4.0	2.6	1.3 U	1.3 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid PFPes	ng/L	1.6 U	14	13	2.4	3.0	1.8 U	1.8 U	0.80	1.8	2.2
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	78	74	9.5	16	1.3 U	1.3 U	0.58	1.3	2.2
Perfluoroheptanesulfonic acid PFHpS	ng/L	1.2 U	3.9	4.1	1.3 U	1.3 J	1.3 U	1.3 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	220 (1)	220 (1)	16	45	1.3 U	1.3 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.70	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.89	2.2	4.4
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.3	3.3	4.4
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	1.2 J	1.3 J	1.8 U	0.90 J	1.8 U	1.8 U	0.76	1.8	4.4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	93	89	7.0	34	1.8 U	1.8 U	0.65	1.8	4.4
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	18	15	1.0 J	2.9 J	1.8 U	1.8 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34	1.3	4.4
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62	2.2	4.4
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.57	2.2	4.4

ng/L - nanograms per liter, or parts per trillion

U - Compound was analyzed for, but not detected.

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

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

QC Batch = Quality Control Batch

Sample SANG-FB-09082020 is a field blank.

Sample SANG-INF-09082020 is a field duplicate of SANG-INF-09082020.

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NPH067	NPH072	NPH073	NPH071	NPH070	NPH069	NPH068			
Sampling Date		2020/09/10 09:00	2020/09/10 09:30	2020/09/10 09:30	2020/09/10 09:20	2020/09/10 09:15	2020/09/10 09:10	2020/09/10 09:05			
	UNITS	SANG-FB-09102020	SANG-INF-09102020	SANG-INF-09102020D	SANG-PAG-09102020	SANG-PAR1-09102020	SANG-PAR2-09102020	SANG-EFF-09102020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	32	33	23	3.5	3.4	1.8 J	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	120 (1)	120 (1)	35	1.2 U	1.2 U	1.2 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	89	92	14	1.4 U	1.4 U	1.4 U	0.70	1.4	2.0
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	42	43	4.2	1.2 U	1.2 U	1.2 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	37	38	2.9	1.2 U	1.2 U	1.2 U	0.49	1.2	2.0
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	7.7	8.2	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	6.6	6.8	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	1.7 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	1.3 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	1.3 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	1.3 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	15	15	0.98 J	1.2 U	1.2 U	1.2 U	0.47	1.2	2.0
Perfluoropentanesulfonic acid (PFPeS)	ng/L	1.6 U	19	18	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	120 (1)	110 (1)	5.9	1.2 U	1.2 U	1.2 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	4.5	4.9	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	350 (1)	330 (1)	14	1.2 U	1.2 U	1.2 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.4 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	1.3 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	2.1 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	3.2 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	3.2 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	1.6 U	1.6 U	0.69	1.6	4.0
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	120 (1)	120 (1)	5.1	1.6 U	1.6 U	1.6 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	25	26	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	2.1 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	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.31	1.2	4.0
9CI-PF3ONS (F-53B Major)	ng/L	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.56	2.0	4.0
11CI-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.1 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

QC Batch = Quality Control Batch

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

SANG-FB-09102020 is a field blank

SANG-INF-09102020D is a field duplicate of SANG-INF-09102020.

Compounds highlighted in gray represent the UCMR3 compounds.

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NSM762	NSM767	NSM768	NSM766	NSM765	NSM764	NSM763			
Sampling Date		2020/09/24 11:20	2020/09/24 11:50	2020/09/24 11:50	2020/09/24 11:45	2020/09/24 11:40	2020/09/24 11:35	2020/09/24 11:30			
COC Number		na	na	na	na	na	na	na			
	UNITS	SANG-FB-09242020	SANG-INF-09242020	SANG-INF-09242020D	SANG-PAG1-09242020	SANG-PAG2-09242020	SANG-PAR1-09242020	SANG-EFF-09242020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	49 J	45	4.0	2.4 J	1.3 J	1.4 U	0.67	1.4	2.0
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	180 (1)	180 (1)	1.0 U	0.72 U	2.6 J+	0.63 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	150 (1)	140 (1)	1.4 U	1.4 U	1.5 J	1.4 U	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	0.54 J	58	55	0.60 U	0.54 U	0.84 U	0.59 U	0.51	1.2	2.0
Perfluorooctanoic acid (PFOA)	ng/L	0.59 J	51	50	0.62 U	0.57 U	0.68 U	0.58 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	6.7	6.5	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	0.93 J	0.94 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	0.76 J	0.86 J	1.2 U	1.2 U	1.2 U	1.2 U	0.59	1.2	2.0
Perfluorotridecanoic acid (PFTRDA)	ng/L	0.50 J	1.2 U	0.67 U	1.2 U	1.2 U	1.1 UJ	1.2 U	0.48	1.2	2.0
Perfluorotetradecanoic acid (PFTEDA)	ng/L	0.72 J	0.88 U	0.93 U	1.1 U	1.0 U	1.1 UJ	0.80 U	0.37	1.2	2.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	27	25	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	34	32	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	200 (1)	180 (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	9.8	8.6	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	480 (1)	460 (1)	1.2 U	1.2 U	1.6 J	0.93 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	2.0 U	0.83 J	2.0 U	2.0 UJ	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	2.9 J	3.0 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	1.4 J	190 (1)	180 (1)	1.6 U	1.6 U	1.3 U	1.1 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	21	19	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 (ppt)

U - Compound was analyzed for, but not detected. If presented in red it is based on validation.

J - Estimated value. Result may fall between the DL and the LOD, or if presented in red, is estimated due to a QC failure.

J+ - Estimated result, which is considered biased high. More accurate result is expected to be lower.

UJ - Not detected at an estimated LOD, due to a QC failure.

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

SANG-INF-09242020D is a field duplicate of SANG-INF-09242020

Compounds highlighted in gray represent the UCMR3 analytes.

Results presented in red text are qualified based on validation.

Sample SANG-FB-09242020 is a field blank.

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

TABLE 1 - PFOS/PFOA SAMPLING RESULTS

RESULTS OF ANALYSES OF WATER

VALIDATED DATA

BV Labs ID		NT0087	NT0093	NT0094	NT0091	NT0090	NT0089	NT0088			
Sampling Date		2020/09/29 10:30	2020/09/29 10:55	2020/09/29 10:55	2020/09/29 10:50	2020/09/29 10:45	2020/09/29 10:40	2020/09/29 10:35			
COC Number		NA	NA	NA	NA	NA	NA	NA			
	UNITS	SANG-FB-09292020	SANG-INF-09292020	SANG-INF-09292020D	SANG-PBG1-09292020	SANG-PBG2-09292020	SANG-PBR1-09292020	SANG-EFF-09292020	DL	LOD	LOQ
Miscellaneous Parameters											
Perfluorobutanoic acid (PFBA)	ng/L	1.4 U	41	47	8.4	14	1.0 J	1.5 U	0.74	1.5	2.2
Perfluoropentanoic acid (PFPeA)	ng/L	1.2 U	180 (1)	200 (1)	3.3	4.5	1.9 J+	1.3 U	5.2	12	20
Perfluorohexanoic acid (PFHxA)	ng/L	1.4 U	140 (1)	150 (1)	0.88 J	1.5 U	1.0 J	1.5 U	7.0	14	20
Perfluoroheptanoic acid (PFHpA)	ng/L	1.2 U	51	62	1.3 U	1.3 U	1.3 U	1.3 U	0.56	1.3	2.2
Perfluorooctanoic acid (PFOA)	ng/L	1.2 U	48	58	1.3 U	1.3 U	1.3 U	1.3 U	0.54	1.3	2.2
Perfluorononanoic acid (PFNA)	ng/L	1.6 U	9.8	12	1.8 U	1.8 U	1.8 U	1.8 U	0.88	1.8	2.2
Perfluorodecanoic acid (PFDA)	ng/L	1.4 U	5.9	7.7	1.5 U	1.5 U	1.5 U	1.5 U	0.70	1.5	2.2
Perfluoroundecanoic acid (PFUnA)	ng/L	1.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.85	1.8	2.2
Perfluorododecanoic acid (PFDoA)	ng/L	1.2 U	1.3 U	0.71 U	1.3 U	1.3 U	1.3 U	1.3 U	0.65	1.3	2.2
Perfluorotridecanoic acid (PFTRDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.53	1.3	2.2
Perfluorotetradecanoic acid (PFTEDA)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.41	1.3	2.2
Perfluorobutanesulfonic acid (PFBS)	ng/L	1.2 U	26	30	1.3 U	1.3 U	1.3 U	1.3 U	0.52	1.3	2.2
Perfluoropentanesulfonic acid (PFPeS)	ng/L	1.6 U	30	34	1.8 U	1.8 U	1.8 U	1.8 U	0.80	1.8	2.2
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.2 U	190 (1)	200 (1)	1.3 U	1.3 U	1.3 U	1.3 U	5.3	12	20
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	1.2 U	7.9	9.4	1.3 U	1.3 U	1.3 U	1.3 U	0.63	1.3	2.2
Perfluorooctanesulfonic acid (PFOS)	ng/L	1.2 U	470 (1)	520 (1)	1.3 U	1.3 U	0.77 J	1.3 U	4.3	12	20
Perfluorononanesulfonic acid (PFNS)	ng/L	1.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.70	1.5	2.2
Perfluorodecanesulfonic acid (PFDS)	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.58	1.3	2.2
Perfluorooctane Sulfonamide (PFOSA)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.89	2.2	4.4
MeFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.3	3.3	4.4
EtFOSAA	ng/L	3.0 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	1.5	3.3	4.4
4:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	2.6 J	2.9 J	1.8 U	1.8 U	1.8 U	1.8 U	0.76	1.8	4.4
6:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	180 (1)	190 (1)	1.8 U	1.8 U	0.73 J	1.8 U	5.9	16	40
8:2 Fluorotelomer sulfonic acid	ng/L	1.6 U	16 J	23 J	1.8 U	1.8 U	1.8 U	1.8 U	0.83	1.8	4.4
Hexafluoropropyleneoxide dimer acid	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.94	2.2	4.4
4,8-Dioxa-3H-perfluorononanoic acid	ng/L	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.34	1.3	4.4
9Cl-PF3ONS (F-53B Major)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62	2.2	4.4
11Cl-PF3OUdS (F-53B Minor)	ng/L	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.57	2.2	4.4

ng/L Nanograms per Liter or parts per trillion.

U - undetected. Compound was analyzed for, but not detected. Associated value is the LOD.

J - Estimated value. Result may fall between the DL and the LOD, or if presented in red, is estimated due to a QC failure.

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

DL = Detection Limit

LOD = Limit of Detection

LOQ = Limit of Quantitation

Compounds highlighted in gray represent the UCMR3 PFAS analytes

Results highlighted in red are qualified based on validation.

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

Sample SANG-FB-09292020 is a field blank.

Sample SANG-INF-09292020D is a field duplicate of SANG-INF-09292020.

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Sample ID	SANG-INF07132020	SANG-INF-08132020	SANG-INF-09032020	SANG-PAG-08132020	SANG-PCG-09032020
Lab Sample Number	410-7610-5	410-10717-6	410-13006-8	410-10717-5	410-13006-5
Sampling Date	07/13/2020 15:55:00	08/13/2020 10:10:00	9/3/2020 12:05	08/13/2020 10:05:00	9/3/2020 23:45
Volatiles - 8260C DOD	Result ug/L Q	Result ug/L Q	Result ug/L Q	Result ug/L Q	Result ug/L Q
cis-1,3-Dichloropropene		0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene		0.50 U	0.50 U	0.50 U	0.50 U
Ethylbenzene	0.8 U	0.80 U	0.80 U	0.80 U	0.80 U
Styrene		0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dichlorobenzene		0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromoethane		0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloroethane		0.50 U	0.50 U	0.50 U	0.50 U
4-Methyl-2-pentanone		1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane		1.0 U	1.0 U	1.0 U	1.0 U
Toluene	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U
Chlorobenzene		0.50 U	0.50 U	0.50 U	0.50 U
Cyclohexane		2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene		1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane		0.50 U	0.50 U	0.50 U	0.50 U
Xylenes, Total	2 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene		0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene		0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene		0.50 U	0.50 U	0.50 U	0.50 U
Methyl tertiary butyl ether		0.50 U	0.50 U	0.50 U	0.50 U
1,3-Dichlorobenzene		0.50 U	0.50 U	0.50 U	0.50 U
Carbon tetrachloride		0.50 U	0.50 U	0.50 U	0.50 U
2-Hexanone		1.0 U	1.0 U	1.0 U	1.0 U
Acetone		2.4 J	9.5 J	2.0 U	4.1 J
Chloroform		0.50 U	0.50 U	0.50 U	0.50 U
Benzene	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane		0.50 U	0.50 U	0.50 U	0.50 U
Bromomethane		0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane		0.50 U	0.50 U	0.50 U	0.50 U
Chloroethane		0.50 U	0.50 U	0.50 U	0.50 U
Vinyl chloride		0.50 U	0.50 U	0.50 U	0.50 U
Methylene Chloride		0.50 U	0.50 U	0.50 U	0.50 U
Carbon disulfide		0.50 U	0.50 U	0.50 U	0.50 U
Bromoform		2.0 U	2.0 U	2.0 U	2.0 U

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Sample ID	SANG-INF07132020	SANG-INF-08132020	SANG-INF-09032020	SANG-PAG-08132020	SANG-PCG-09032020
Lab Sample Number	410-7610-5	410-10717-6	410-13006-8	410-10717-5	410-13006-5
Sampling Date	07/13/2020 15:55:00	08/13/2020 10:10:00	9/3/2020 12:05	08/13/2020 10:05:00	9/3/2020 23:45
Volatiles - 8260C DOD (Continued)		Result ug/L Q	Result ug/L Q	Result ug/L Q	Result ug/L Q
Bromodichloromethane		0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane		0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene		0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane		0.50 U	0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane		0.50 U	0.50 U	0.50 U	0.50 U
Freon 113		0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane		0.50 U	0.50 U	0.50 U	0.50 U
2-Butanone		1.0 U	1.7 J	1.0 U	0.91 J
1,1,2-Trichloroethane		0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene		0.50 U	0.50 U	0.50 U	0.50 U
Methyl acetate		0.50 U	0.50 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane		0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichlorobenzene		0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-Chloropropane		1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene		0.50 U	0.50 U	0.50 U	0.50 U
Total Conc		2.4	11.2	ND	5.01

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Sample ID	SANG-INF07132020		SANG-INF-08132020		SANG-INF-09032020		SANG-PAG-08132020		SANG-PCG-09032020	
Lab Sample Number	410-7610-5		410-10717-6		410-13006-8		410-10717-5		410-13006-5	
Sampling Date	07/13/2020 15:55:00		08/13/2020 10:10:00		9/3/2020 12:05		08/13/2020 10:05:00		9/3/2020 23:45	
Metals	Result ug/L	Q	Result ug/L	Q	Result ug/L	Q	Result	Q	Result ug/L	Q
Aluminum	36		23	J	69		20	U	20	U
Antimony	0.44	J	1.0	U	0.49	J	0.43	J	0.43	J
Sulfur	5700									
Arsenic	1.4	J	1.7	J	0.73	J	1.6	J	1.6	U
Barium	21		14		10		15		8.1	
Beryllium	0.25U	U	0.25	U	0.25	U	0.25	U	0.25	U
Cadmium	0.50U	U	0.50	U	0.5	U	0.50	U	0.5	U
Calcium	40000		47000		22000		NR		22000	
Chromium	0.69	J	3.3		0.88	J	3.2		0.89	J
Cobalt	0.23	J	0.50	U	0.5	U	0.50	U	0.5	U
Copper	1.4	J	0.42	J	0.83	J	0.80	U	0.8	U
Iron	380		200		270		70		25	
Lead	0.25	U	0.25	U	0.22	J	0.25	U	0.25	U
Magnesium	6000		9100		3500		8900		3600	
Manganese	550		640		270		40		26	
Nickel	0.71	J	0.69	J	1	U	1.0	U	1	U
Potassium	3400		3600		2000		3400		1900	
Selenium	0.8	U	0.80	U	0.8	U	0.80	U	0.8	U
Silver	0.4	U	0.40	U	0.4	U	0.40	U	0.4	U
Sodium	33000		39000	B	20000		38000	B	21000	
Thallium	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Zinc	10	U	10	U	7.9	J	44		24	
Vanadium	0.65		1.0		0.5	U	2.6		0.5	U

TABLE 2 - OTHER WATER QUALITY MONITORING RESULTS

Sample ID	SANG-INF07132020		SANG-INF-08132020		SANG-INF-09032020		SANG-PAG-08132020		SANG-PCG-09032020	
Lab Sample Number	410-7610-5		410-10717-6		410-13006-8		410-10717-5		410-13006-5	
Sampling Date	07/13/2020 15:55:00		08/13/2020 10:10:00		9/3/2020 12:05		08/13/2020 10:05:00		9/3/2020 23:45	
Wet Chemistry	Result mg/L	Q	Result mg/L		Result mg/L	Q	Result	Q	Result mg/L	Q
Carbonate Alkalinity as CaCO3 - mg/L	6	U	6.0	U	6.0	U	6.0	U	6.0	U
HEM (Oil & Grease) - mg/L	4.4	U	3.1	J Q	1.5	J	2.2	J Q	4.3	U
Total Kjeldahl Nitrogen					0.90	U			0.90	U
Nitrate as N - mg/L			0.090	U	0.042	J	0.090	U	0.09	U
Nitrate Nitrite as N - mg/L			0.090	U	0.042	J	0.090	U	0.09	U
Nitrite as N - mg/L			0.040	U	0.040	U	0.040	U	0.040	U
Total Dissolved Solids - mg/L	240		280		120		270		120	
Total Organic Carbon - mg/L	5.0		3.7		4.0		1.4		2.2	
Ortho Phosphate					0.01	U			0.01	U
Bicarbonate Alkalinity as CaCO3 - mg/L	120		130		64		140		67	
Total Alkalinity as CaCO3 to pH 4.5 - mg/L	120	J1	130		64		140		67	
HPLC/IC - EPA 300.0 R2.1	Result mg/L	Q	Result	Q	Result mg/L	Q	Result	Q	Result mg/L	Q
Sulfate	16	D	24	D	9.9	D	25	D	10	D
Chloride			58	D E	26	D E	60	D	27	D

Note:

ug/L - micrograms per liter, or parts per billion (ppb).

mg/L - milligrams per liter, or parts per million (ppm).

U - Compound was analyzed for, but not detected.

J - Estimated result. Value may not be accurate or precise.

D - The reported value is taken from a dilution.

E - Reported value exceeds the calibration range of the instrument

Q - one or more quality control criteria was not met.

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

ISWTS - Total Organic Carbon Sampling Summary



Sample ID	Sampling Date	Total Organic Carbon - mg/L
SANG-INF-07132020	7/13/2020	5.0
SANG-INF-07162020	7/16/2020	4.8
SANG-INF-08132020	8/13/2020	3.7
SANG-INF-08182020	8/18/2020	3.9
SANG-INF-08252020	8/25/2020	4.1
SANG-INF-08272020	8/27/2020	5.2
SANG-INF-09012020	9/1/2020	4.7
SANG-INF-09032020	9/3/2020	4.0
SANG-INF-09082020	9/8/2020	4.1
SANG-INF-09102020	9/10/2020	4.6
SANG-PFSF-08182020	8/18/2020	4.1
SANG-PFSF-08252020	8/25/2020	3.9
SANG-PFSF-08272020	8/27/2020	3.9
SANG-PFSF-09012020	9/1/2020	4.5
SANG-PFSF-09032020	9/3/2020	3.7
SANG-PFSF-09082020	9/8/2020	3.8
SANG-PFSF-09102020	9/10/2020	4.4
SANG-PBF2-07272020	7/27/2020	3.4
SANG-PBF2-08182020	8/18/2020	4.0
SANG-PBF2-08252020	8/25/2020	3.9
SANG-PBF2-08272020	8/27/2020	4.8
SANG-PBF2-09012020	9/1/2020	4.4
SANG-PBF2-09032020	9/3/2020	3.7
SANG-PBF2-09082020	9/8/2020	3.7
SANG-PBF2-09102020	9/10/2020	4.5
SANG-PAG-07132020	7/13/2020	1.3
SANG-PGB-07162020	7/16/2020	0.90U
SANG-PAG-07272020	7/27/2020	2.5
SANG-PAG-08132020	8/13/2020	1.4
SANG-PBG-08182020	8/18/2020	1.7
SANG-PDG-08252020	8/25/2020	1.9
SANG-PAG-08272020	8/27/2020	2.4
SANG-PBG-09012020	9/1/2020	2.8
SANG-PCG-09032020	9/3/2020	2.2
SANG-PDG-09082020	9/8/2020	1.6
SANG-PAG-09102020	9/10/2020	2.3

ISWTS - Total Organic Carbon Sampling Summary



Sample ID	Sampling Date	Total Organic Carbon - mg/L
SANG-PAR1-07132020	7/13/2020	1.5
SANG-PBR1-07202020	7/20/2020	0.9
SANG-PBR1-07272020	7/27/2020	1.7
SANG-PAR1-08132020	8/13/2020	0.98
SANG-PBR1-08182020	8/18/2020	2.6
SANG-PDR1-08252020	8/25/2020	2.2
SANG-PAR1-08272020	8/27/2020	2.6
SANG-PBR1-09012020	9/1/2020	3.1
SANG-PCR1-09032020	9/3/2020	1.2
SANG-PDR1-09082020	9/8/2020	2.4
SANG-PAR1-09102020	9/10/2020	2.6
SANG-PAR2-08132020	8/13/2020	1.3
SANG-PCR2-09032020	9/3/2020	1.8
SANG-EFF-07132020	7/13/2020	4.2
SANG-EFF-07162020	7/16/2020	0.65
SANG-EFF-07272020	7/27/2020	1.3
SANG-EFF-08132020	8/13/2020	0.79
SANG-EFF-08182020	8/18/2020	<0.90
SANG-EFF-08252020	8/25/2020	1.4
SANG-EFF-08272020	8/27/2020	1.8
SANG-EFF-09012020	9/1/2020	1.8
SANG-EFF-09032020	9/3/2020	1.3
SANG-EFF-09082020	9/8/2020	1.2
SANG-EFF-09102020	9/10/2020	2.1
TOC Result Summary (parts per million)	Influent Average	4.4
	Sand Filter Effluent Avg.	4.0
	Bag Filter Effluent Avg.	4.1
	GAC Effluent Avg.	2.0
	Pri. Resin Effluent Avg.	2.0
	Sec. Resin Effluent Avg	1.6
	Effluent Avg.	1.7

Note:

mg/L - milligrams per liter, or parts per million (ppm).

U - Compound was analyzed for, but not detected.

< (less than)

ISWTS - Glycol Sampling Summary



Sample ID	Sampling Date	Glycol Concentration - mg/L			
Sample ID	Dated	Diethylene glycol	Ethylene glycol	Propylene glycol	Triethylene Glycol
SANG-INF07132020	7/13/2020	52U	10U	10U	54U
SANG-INF-07162020	7/16/2020	52U	10U	10U	54U
SANG-INF-08132020	8/13/2020	52U	10U	10U	54U
SANG-INF-08182020	8/18/2020	52U	10U	10U	54U
SANG-INF-08252020	8/25/2020	52U	10U	10U	54U
SANG-PGB-07162020	7/16/2020	52U	10U	10U	54U
SANG-PAG-07272020	7/27/2020	52U	8.4	10U	54U
SANG-PAG-08132020	8/13/2020	52U	10U	10U	54U
SANG-PBR1-07202020	7/20/2020	52U	10U	10U	56UJ
SANG-PAR1-07272020	7/27/2020	52U	13	10U	54U
SANG-PAR1-08132020	8/13/2020	52U	10U	10U	54U
SANG-EFF-07162020	7/16/2020	52U	10U	10U	54U
SANG-EFF-07272020	7/27/2020	52U	30	10U	54U
SANG-EFF-08132020	8/13/2020	52U	10U	10U	54U

Note:

mg/L - milligrams per liter, or parts per million (ppm).

U - Compound was analyzed for, but not detected.

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
7/15/2020	25 Micron Regular	10 Micron Regular	
7/16/2020		10 Micron Regular	
7/17/2020	25 Micron Regular	5 Micron Pleated	Carbon Vessels
7/20/2020	25 Micron Pleated	10 Micron Pleated	
7/21/2020		5 Micron Pleated	
7/22/2020	25 Micron Regular	5 Micron Pleated	
7/23/2020			Carbon Vessels
7/24/2020	25 Micron Regular	5 Micron Pleated	
7/28/2020			Carbon Vessels
7/29/2020	25 Micron Pleated	10 Micron Pleated	
7/31/2020	25 Micron Regular	10 Micron Regular	
8/4/2020	25 Micron Pleated	10 Micron Pleated	Carbon Vessels
8/7/2020	25 Micron Regular	5 Micron Pleated	
8/9/2020	25 Micron Pleated	10 Micron Pleated	Primary Resin
8/10/2020	25 Micron Regular	10 Micron Regular	Carbon Vessels
8/11/2020		5 Micron Pleated	
8/12/2020	25 Micron Pleated	5 Micron Pleated	Carbon Vessels
8/13/2020		5 Micron Pleated	
8/14/2020	25 Micron Pleated	5 Micron Pleated	Carbon Vessels
8/15/2020	25 Micron Regular	5 Micron Pleated	
8/16/2020	25 Micron Regular	5 Micron Pleated	
8/17/2020	25 Micron Regular	5 Micron Pleated	
8/18/2020			Carbon Vessels
8/21/2020		5 Micron Pleated	
8/23/2020	25 Micron Regular	10 Micron Pleated	
8/24/2020		5 Micron Pleated	Carbon Vessels
8/25/2020	25 Micron Pleated	5 Micron Pleated	
8/26/2020			Carbon Vessels
8/28/2020	25 Micron Regular	10 Micron Regular	Carbon Vessels
8/30/2020		10 Micron Regular	
8/31/2020	25 Micron Regular		Carbon Vessels
9/1/2020		10 Micron Regular	
9/2/2020			Carbon Vessels
9/3/2020		10 Micron Regular	
9/4/2020	25 Micron Regular	10 Micron Regular	Carbon Vessels
9/6/2020	25 Micron Regular	10 Micron Pleated	
9/7/2020			Carbon Vessels
9/9/2020	25 Micron Regular	10 Micron Regular	
9/10/2020			Carbon Vessels
9/11/2020	25 Micron Regular	10 Micron Regular	
9/12/2020	25 Micron Regular	10 Micron Regular	
9/14/2020		10 Micron Pleated	
9/16/2020	25 Micron Pleated	10 Micron Regular	
9/28/2020	25 Micron Pleated	10 Micron Pleated	
9/29/2020		10 Micron Regular	
9/29/2020		10 Micron Regular	
9/30/2020			Primary Carbon Vessels

ATTACHMENT 1

WASTE MANIFESTS & DISPOSAL CERTIFICATIONS

November 6, 2020

Re: Stewart ANG June 25th Media Exchange Event

To whom it may concern,

Attached are the manifests and disposal certificates for the waste generated on the service event which occurred on and or prior to June 25, 2020. The overall count of material that we transported to Covanta increased by (2) bulk bags. This is because in handling out our facility it was determined that 3 bags had punctured during transit, no material was lost but the bags were not suitable for re-transport. We repacked these into small bulk sacks so the (3) which are 1.5yd sacks became (5) 1yd sacks.

Our profile with Covanta required that the waste be manifested from Onion Equipment, therefore you will find the associated manifests and disposal certificates from OEC and the associated manifests from SANG.

Thank you,



Eric Patterson

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number 1100044866	Waste Tracking (Manifest) Number 20-03-1		
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278		Generator's Site Address 1 Maguire Way Newburgh, NY 12550			
Customer Billing Phone: (317) 694-7576		Generator's Phone: 845-283-0059			
Transporter 1 Company Name Onion Equipment Company				US EPA ID Number	
Transporter 2 Company Name				US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221				US EPA ID Number	
Facility's Phone: (317) 378-8173					
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
1 non RCRA Spent Activated Carbon (OEC128C-1)	4	BB	6,000	LB	Fuel
2 non RCRA Spent Ion Exchange Resin (OEC128C-2)	3	BB	6,000	LB	Fuel
3 NON RCRA spent bag FILTERS (OEC128C-3)	—	BB	—	LB	FUEL
4					
Special Handling Instructions and Additional Information				24 Hour Emergency Response Phone	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name Michael Oettinger	Signature 	Month 6	Day 25	Year 2020	
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Steve McPheerson	Signature 	Month 6	Day 25	Year 6/25/2020	
Transporter 2 Printed / Typed Name	Signature	Month	Day	Year	
DISCREPANCY SECTION					
Discrepancy					
Discrepancy/Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator) Facility's Phone:	Transhipped to TSDP Onion Equipment to Covanta under OEC Profile 5001074				US EPA ID Number
Signature of Alternate Facility (or Generator)	Manifest tracking # 08112020 ZPI				Day 11 Year 2020
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name Eric Patterson	Signature 	Month Aug	Day 11	Year 2020	

Non-Hazardous Waste Manifest

Non-Hazardous Waste Manifest		Generator ID Number		Waste Profile Number 1100044866		Waste Tracking (Manifest) Number 20-03- <i>PR</i>	
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7676				Generator's Site Address 1 Maguire Way Newburgh, NY 12550 Generator's Phone: 845-283-0059			
Transporter 1 Company Name Onion Equipment Company						US EPA ID Number	
Transporter 2 Company Name						US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 378-8173						US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt. / Vol.	Disposal Method		
	No.	Type					
1 non RCRA Spent Activated Carbon (OEC128C-1)	3	BB	6,000	LB	Fuel		
2 non RCRA Spent Ion Exchange Resin (OEC128C-2)	3	BB	6,000	LB	Fuel		
3 non RCRA spent bag filters (OEC128C-3)	3	BB	1,500	LB	FUEL		
4							
Special Handling Instructions and Additional Information						24 Hour Emergency Response Phone	
						Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.							
Generator's Offeror's Printed / Typed Name Michael Oettinger		Signature <i>[Signature]</i>		Month 6	Day 25	Year 2020	
Transporter's Acknowledgement of Receipt of Materials							
Transporter 1 Printed / Typed Name Steve McPherson		Signature <i>[Signature]</i>		Month 6	Day 30	Year 6/25/2020	
Transporter 2 Printed / Typed Name		Signature		Month	Day	Year	
Discrepancy							
Discrepancy Indication Space		☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection	
Alternate Facility (or Generator) Transhipped to TSDF Onion Equipment to Covanta Under OEC profile 5001074, Manifest tracking # 08102020203						US EPA ID Number	
Facility's Phone:							
Signature of Alternate Facility (or Generator)				Month	Day	Year	
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section							
Printed / Typed Name Eric Peterson		Signature <i>[Signature]</i>		Month Aug	Day 10	Year 2020	

Non-Hazardous Waste Manifest

GENERATOR SECTION						
Non-Hazardous Waste Manifest		Generator ID Number		Waste Profile Number 1100044866		Waste Tracking (Manifest) Number 20-03-3
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576				Generator's Site Address Stewart Air National Guard Base 1 Maguire Way - Newburgh, NY 12550 Generator's Phone: (845) 283-0059		
Transporter 1 Company Name Onion Equipment Company					US EPA ID Number	
Transporter 2 Company Name					US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 378-8173					US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method	
	No.	Type				
1 non RCRA Spent Activated Carbon (OEC128C-1)		BB		LB	Fuel	
2 non RCRA Spent Ion Exchange Resin (OEC128C-2)	2	BB	2,500	LB	Fuel	
3 non RCRA Spent Bag Filters (OEC128C-3)		BB		LB	Fuel	
4						
Special Handling Instructions and Additional Information					24 Hour Emergency Response Phone	
					Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.						
Generator's Offeror's Printed / Typed Name Michael Oettinger		Signature OETTINGER.MICH AEL.J.1470725288		Month 07	Day 02	Year 2020
TRANSPORTER SECTION						
Transporter's Acknowledgement of Receipt of Materials						
Transporter 1 Printed / Typed Name Steve McPherson		Signature 		Month 7	Day 2	Year 6/25/2020
Transporter 2 Printed / Typed Name		Signature		Month	Day	Year
DESIGNATED FACILITY SECTION						
Discrepancy						
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection	
Alternate Facility (or Generator) Transhipper to ISDP Orion Equipment to Covanta Under OEC Profile 5001074, manifest tracking # 08112020201					US EPA ID Number	
Facility's Phone:						
Signature of Alternate Facility (or Generator)				Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section						
Printed / Typed Name Eric Patterson		Signature 		Month Aug	Day 11	Year 2020



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

Shipping Document # 141977

SO #: Sales Order #SO141977

Service Date: 8/10/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	10	CF - Fiber or plastic boxes, cartons, cases	14,570	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number 08102020ZP3
5. Generator's Name and Mailing Address ONION EQUIPMENT COMANY			Generator's Site Address (if different than mailing address) 5705 W 73rd ST INDIANAPOLIS, IN 46278		
Generator's Phone			U.S. EPA ID Number		
6. Transporter 1 Company Name			U.S. EPA ID Number		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Covanta Environmental Solutions			U.S. EPA ID Number INR000144303		
Facility's Phone: (317) 559-5694			Indianapolis, IN 46241		
9. Waste Shipping Name and Description			10. Containers		11. Total Quantity
			No.	Type	
1. Non RCRA; Non DOT Regulated			10	CW	1200 15
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information Profile: 5001074 SPENT IRRIGATION MIX TREATMENT MATERIAL <i>could not scale</i> <i>SO# 141977</i>					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's Officer's Printed/Typed Name <i>X Tech Peterson</i>			Signature <i>X [Signature]</i>		Month Day Year 8 10 20
15. International Shipments ☐ Import to U.S.			☐ Export from U.S.		Port of entry/exit Date leaving U.S.:
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <i>X Tech Peterson</i>			Signature <i>X [Signature]</i>		Month Day Year 8 10 20
Transporter 2 Printed/Typed Name			Signature		Month Day Year
17. Discrepancy					
17a. Discrepancy Indication on Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Estimated weight corrected to 12,000 lbs not 1,200 lbs					
17b. Alternate Facility (or Generator)			Manifest Reference Number:		
Facility's Phone:			U.S. EPA ID Number		
17c. Signature of Alternate Facility (or Generator)			Month Day Year		
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a					
Printed/Typed Name <i>Mandy Walker</i>			Signature <i>[Signature]</i>		Month Day Year 8 10 20



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

Shipping Document # 08112020zp1

SO #: Sales Order #SO144034

Service Date: 8/11/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	10	CF - Fiber or plastic boxes, cartons, cases	14,000	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number 1	2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number 081120202P1
5. Generator's Name and Mailing Address ONION EQUIPMENT COMANY			Generator's Site Address (if different than mailing address) 5705 W 73rd ST INDIANAPOLIS, IN 46278		
6. Transporter 1 Company Name ↑.			U.S. EPA ID Number		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Covanta Environmental Solutions			U.S. EPA ID Number		
Facility's Phone: (317) 559-5694			2515 South Holt Rd Indianapolis, IN 46241		INR000144303
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt/Vol
		No.	Type		
1. Non RCRA; Non DOT Regulated		10	CW	14000	P
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information Profile: 5001074 SPENT IRRIGATION MIX TREATMENT MATERIAL					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offor's Printed/Typed Name Zach Peterson		Signature 		Month 8	Day 11
15. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:		Year 2020	
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Zach Peterson		Signature 		Month 8	Day 11
Transporter 2 Printed/Typed Name		Signature		Year 2020	
17. Discrepancy					
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection					
17b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number:					
17c. Signature of Alternate Facility (or Generator) Month: Day: Year:					
18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a.					
Printed/Typed Name Rene Long		Signature 		Month 8	Day 11
				Year 20	

November 6, 2020

Re: Stewart ANG September 23rd Media Exchange Event

To whom it may concern,

Attached are the manifests and disposal certificates for the waste generated on the service event which occurred on and or prior to September 23, 2020. Please note that the (5) bulk sacks are still at our facility as Covanta wanted them profiled separately do to low btu value and high density.

Our profile with Covanta required that the waste be manifested from Onion Equipment, therefore you will find the associated manifests and disposal certificates from OEC and the associated manifests from SANG.

Thank you,



Eric Patterson

Non-Hazardous Waste Manifest

GENERATOR SECTION

Non-Hazardous Waste Manifest	Generator ID Number	Waste Pile Number 1100044866	Waste Tracking Manifest Number 20-13-1		
Customer Billing Name and Address Onion Equipment Company 5705 W 72nd Street - Indianapolis, IN 46278		Generator's Site Address Stuart ANG Base, 1 McGuire Way, Newburgh, NY 12550			
Customer Billing Phone: (317) 694-7576		Generator's Phone: (845) 283-0059			
Transporter 1 Company Name Onion Equipment Company					US EPA ID Number
Transporter 2 Company Name					US EPA ID Number
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221					US EPA ID Number
Facility's Phone: (317) 378-8173					
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol	Disposal Method
	No.	Type			
¹ non RCRA Spent Activated Carbon (OEC128C-1)	--	--	--	--	--
² non RCRA Spent Ion Exchange Resin (OEC128C-2)	16	BB	35,000	LB	Fuel
³ non RCRA Spent Bag Filters (OEC128C-3)	--	--	--	--	--
⁴ non RCRA Spent Sand and Gravel (OEC128C-4)	--	--	--	--	--
Special Handling Instructions and Additional Information Weights are estimated, actual weights to be scaled on disposal					24 Hour Emergency Response Phone 317-694-7576
					Emergency Response Guide Number

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

Generator's Officer's Printed / Typed Name <i>Michael Oettinger</i>	Signature <i>Michael Oettinger</i>	Month 09	Day 23	Year 2020
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TRANSPORTER SECTION

Transporter's Acknowledgment of Receipt of Materials

Transporter 1 Printed / Typed Name Onion Equipment Company	Signature Eric Patterson	Month September	Day 23	Year 2020
Transporter 2 Printed / Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY SECTION

Discrepancy					
Discrepancy Indication Source	Q Quantity	Q Type	Q Reuse	Q Partial Rejection	Q Full Rejection
Alternate Facility (if Generator) Material transferred to Onion Equipment for consolidation to Covanta on OEC Manifest.					US EPA ID Number
Facility's Phone:					
Signature of Alternate Facility (if Generator)				Month	Day
				Year	
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name Eric Patterson	Signature <i>Eric Patterson</i>	Month 9	Day 25	Year 2020	

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number 1100044866	Waste Tracking (Manifest) Number 20-13-2		
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576		Generator's Site Address Stuart ANG Base, 1 Macguire Way, Newburgh, NY 12550 Generator's Phone: (845) 283-0059			
Transporter 1 Company Name Onion Equipment Company			US EPA ID Number		
Transporter 2 Company Name			US EPA ID Number		
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 378-8173			US EPA ID Number		
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
¹ non RCRA Spent Activated Carbon (OEC128C-1)	8	BB	16,000	LB	Fuel
² non RCRA Spent Ion Exchange Resin (OEC128C-2)	—	—	—	—	—
³ non RCRA Spent Bag Filters (OEC128C-3)	5	BB	1,500	LB	Fuel
⁴ non RCRA Spent Sand and Gravel (OEC128C-4)	5	BB	10,000	LB	Fuel
Special Handling Instructions and Additional Information Weights are estimated, actual weights to be scaled on disposal				24 Hour Emergency Response Phone 317-694-7576	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name <i>Michael Oettinger</i>	Signature <i>Michael Oettinger</i>	Month 09	Day 23	Year 2020	
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Onion Equipment Company	Signature Eric Patterson Digitally signed by Eric Patterson Date: 2020.09.23 09:53:07 -0400	Month September	Day 23	Year 2020	
Transporter 2 Printed / Typed Name	Signature	Month	Day	Year	
DESIGNATED FACILITY SECTION					
Discrepancy					
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator) Material transferred to Onion Equipment for consolidation to Covanta on OEC Manifest. Sand and gravel has will be disposed on a later manifest as it was not profiled at this time due to low btu Facility's Phone:				US EPA ID Number	
Signature of Alternate Facility (or Generator)		Month	Day	Year	
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name Eric Patterson	Signature <i>Eric Patterson</i>	Month 9	Day 25	Year 2020	



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

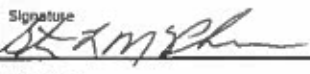
Shipping Document # PO00340-1

SO #: Sales Order #SO151631

Service Date: 9/25/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	8	CF - Fiber or plastic boxes, cartons, cases	17,540	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number 5001074	Waste Tracking (Manifest) Number PO-00340-1		
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576		Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:			
Transporter 1 Company Name Onion Equipment Company				US EPA ID Number	
Transporter 2 Company Name				US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694				US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	8	1 CYD BAG	20,000	LB	Fuel
2					
3					
4					
Special Handling Instructions and Additional Information Profile 5001074 SCH151UB1				24 Hour Emergency Response Phone	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name Eric Patterson		Signature 	Month September	Day 25	Year 2020
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Steve McPhearson		Signature 	Month September	Day 25	Year 2020
Transporter 2 Printed / Typed Name		Signature	Month	Day	Year
DESIGNATED FACILITY SECTION					
Discrepancy					
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator)				US EPA ID Number	
Facility's Phone:					
Signature of Alternate Facility (or Generator)			Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name		Signature		Month	Day

Ticket

Ticket Number: 0 In Date: 9/25/2020

Truck ID: ONION EQUIP
COMPANY PO
00340 1
Tons: 0
Is Active

Customer: COVANTA

Product: INBOUND NON
BULK

Hauler: N/A

Out Date:

In Weight: 29,240

Out Weight: 0

Tare: 0

Gross: 0

Net: 0



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

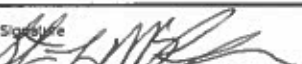
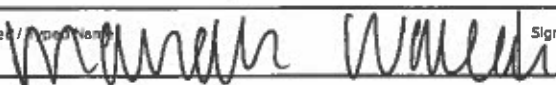
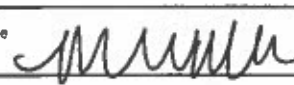
Shipping Document # PO00340-2

SO #: Sales Order #SO151630

Service Date: 9/25/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	10	CF - Fiber or plastic boxes, cartons, cases	20,200	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest	Generator ID Number	Waste Profile Number 5001074	Waste Tracking (Manifest) Number PO-00340-2		
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576		Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:			
Transporter 1 Company Name Onion Equipment Company				US EPA ID Number	
Transporter 2 Company Name				US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694				US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	10	1 CYD BAG	20,000	LB	Fuel
2					
3					
4					
Special Handling Instructions and Additional Information Profile 5001074 80#151030				24 Hour Emergency Response Phone	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name Eric Patterson		Signature 	Month September	Day 25	Year 2020
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Steve McPhearson		Signature 	Month September	Day 25	Year 2020
Transporter 2 Printed / Typed Name		Signature	Month	Day	Year
DESIGNATED FACILITY SECTION					
Discrepancy					
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator)				US EPA ID Number	
Facility's Phone:					
Signature of Alternate Facility (or Generator)			Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name 	Signature 		Month 9	Day 25	Year 20

Ticket

Ticket Number:0 In Date: 9/25/2020

Truck ID: ONION EQUIP
COMPANY PO
00340 2 Tons: 0

Is Active

Customer: COVANTAProduct: INBOUND BULKHauler: N/A

Out Date:

In Weight: 33,520

Out Weight:0

Tare: 0

Gross: 0

Net: 0



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

Shipping Document # PO00340-3

SO #: Sales Order #SO151630

Service Date: 10/14/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	11	CF - Fiber or plastic boxes, cartons, cases	24,800	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest		Generator ID Number		Waste Profile Number 5001074	Waste Tracking (Manifest) Number PO-00340-3
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576			Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:		
Transporter 1 Company Name Onion Equipment Company				US EPA ID Number	
Transporter 2 Company Name				US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694				US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	11 10	1 CYD BAG	14,000	LB	Fuel
2					
3					
4					
Special Handling Instructions and Additional Information Profile 5001074 50155889				24 Hour Emergency Response Phone	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name Eric Patterson		Signature 	Month October	Day 14	Year 2020
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Steve McPhearson		Signature	Month October	Day 14	Year 2020
Transporter 2 Printed / Typed Name		Signature	Month	Day	Year
DESIGNATED FACILITY SECTION					
Discrepancy					
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator)				US EPA ID Number	
Facility's Phone:					
Signature of Alternate Facility (or Generator)			Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name J. Stump		Signature 	Month 10	Day 15	Year 20

November 29, 2020

Re: Stewart ANG November 5th Media Exchange Event

To whom it may concern,

Attached are the manifests and disposal certificates for the waste generated on the service event which occurred on and after November 5, 2020.

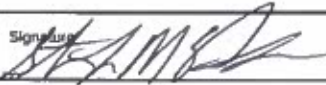
Our profile with Covanta required that the waste be manifested from Onion Equipment, therefore you will find the associated manifests and disposal certificates from OEC and the associated manifests from SANG.

Thank you,



Eric Patterson

Non-Hazardous Waste Manifest

GENERATOR SECTION					
Non-Hazardous Waste Manifest 20-18-2		Generator ID Number		Waste Profile Number 5001074	Waste Tracking (Manifest) Number PO-00340-5
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576			Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:		
Transporter 1 Company Name Onion Equipment Company				US EPA ID Number	
Transporter 2 Company Name				US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694				US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method
	No.	Type			
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	6	1 CYD BAG	18,500	LB	Fuel
2					
3					
4					
Special Handling Instructions and Additional Information Profile 5001074, Origin Stuart ANG, REC Pond 50161799				24 Hour Emergency Response Phone	
				Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator's Offeror's Printed / Typed Name Eric Patterson		Signature 	Month November	Day 10	Year 2020
TRANSPORTER SECTION					
Transporter's Acknowledgement of Receipt of Materials					
Transporter 1 Printed / Typed Name Steve McPhearson		Signature 	Month November	Day 10	Year 2020
Transporter 2 Printed / Typed Name		Signature	Month	Day	Year
DESIGNATED FACILITY SECTION					
Discrepancy					
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator) Facility's Phone:				US EPA ID Number	
Signature of Alternate Facility (or Generator)			Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section					
Printed / Typed Name S. Stumpi		Signature 	Month 11	Day 11	Year 20

Ticket

Ticket Number:	0	In Date:	11/11/2020
Truck ID:	ONION EQUIPMER	Tons:	0
Customer:	<u>COVANTA</u>	Is Active	
Product:	<u>INBOUND NON BULK</u>		
Hauler:	<u>N/A</u>		
Out Date:			
In Weight:	26,160		
Out Weight:	0		
Tare:	0		
Gross:	0		
Net:	0		



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

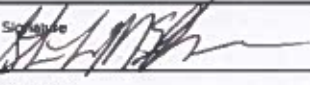
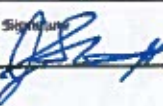
Shipping Document # PO-00340-5

SO #: Sales Order #SO161799

Service Date: 11/11/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	6	CF - Fiber or plastic boxes, cartons, cases	18,500	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

Non-Hazardous Waste Manifest

GENERATOR SECTION						
Non-Hazardous Waste Manifest 20-18-1	Generator ID Number	Waste Profile Number 5001074	Waste Tracking (Manifest) Number PO-00340-4			
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576		Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:				
Transporter 1 Company Name Onion Equipment Company					US EPA ID Number	
Transporter 2 Company Name					US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694					US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol	Disposal Method	
	No.	Type				
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	6	1 CYD BAG	18,500	LB	Fuel	
2						
3						
4						
Special Handling Instructions and Additional Information Profile 5001074, Origin Stuart ANG, REC Pond 50162584					24 Hour Emergency Response Phone	
					Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.						
Generator's Offeror's Printed / Typed Name Eric Patterson		Signature 	Month November	Day 7	Year 2020	
TRANSPORTER SECTION						
Transporter's Acknowledgement of Receipt of Materials						
Transporter 1 Printed / Typed Name Steve McPhearson		Signature 	Month November	Day 7	Year 2020	
Transporter 2 Printed / Typed Name		Signature	Month	Day	Year	
DESIGNATED FACILITY SECTION						
Discrepancy						
Discrepancy Indication Space	☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection	
Alternate Facility (or Generator)					US EPA ID Number	
Facility's Phone:						
Signature of Alternate Facility (or Generator)			Month	Day	Year	
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section						
Printed / Typed Name J-Stump	Signature 	Month 11	Day 14	Year 20		

Ticket

Ticket Number: 0 In Date: 11/16/2020

Truck ID: ONION
EQUIPMENT
20-18-1
Tons: 0
Is Active

Customer: COVANTA

Product: INBOUND NON
BULK

Hauler: N/A

Out Date:

In Weight: 26,080

Out Weight: 0

Tare: 0

Gross: 0

Net: 0



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

Shipping Document # PO-00340-4

SO #: Sales Order #SO162584

Service Date: 11/16/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	6	CF - Fiber or plastic boxes, cartons, cases	18,500	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN

Non-Hazardous Waste Manifest

GENERATOR SECTION						
Non-Hazardous Waste Manifest 20-18-3		Generator ID Number		Waste Profile Number 5001074		Waste Tracking (Manifest) Number PO-00340-6
Customer Billing Name and Mailing Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Customer Billing Phone: (317) 694-7576				Generator's Site Address Onion Equipment Company 5705 W 73rd Street - Indianapolis, IN 46278 Generator's Phone:		
Transporter 1 Company Name Onion Equipment Company					US EPA ID Number	
Transporter 2 Company Name					US EPA ID Number	
Designated Facility Name and Site Address Covanta Environmental Solutions 2330 South Harding Street - Indianapolis, IN 46221 Facility's Phone: (317) 559-5694					US EPA ID Number	
Waste Shipping Name and Description	Containers		Total Quantity	Unit Wt / Vol.	Disposal Method	
	No.	Type				
1 non RCRA Spent Irrigation Mix; Non DOT Regulated	5	1 CYD BAG	15,000	LB	Fuel	
2 non RCRA Poly Filter Bags; Non DOT Regulated	2	1 CYD BAG	1,000	LB	Fuel	
3						
4						
Special Handling Instructions and Additional Information Profile 5001074, Origin Stuart ANG, REC Pond 50 162878					24 Hour Emergency Response Phone	
					Emergency Response Guide Number	
GENERATOR'S / OFFEROR'S CERTIFICATION: I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.						
Generator's Offeror's Printed / Typed Name Eric Patterson			Signature 	Month November	Day 12	Year 2020
TRANSPORTER SECTION						
Transporter's Acknowledgement of Receipt of Materials						
Transporter 1 Printed / Typed Name Steve McPhearson			Signature 	Month November	Day 12	Year 2020
Transporter 2 Printed / Typed Name			Signature	Month	Day	Year
DESIGNATED FACILITY SECTION						
Discrepancy						
Discrepancy Indication Space		☐ Quantity	☐ Type	☐ Residue	☐ Partial Rejection	☐ Full Rejection
Alternate Facility (or Generator)					US EPA ID Number	
Facility's Phone:						
Signature of Alternate Facility (or Generator)				Month	Day	Year
Designated Facility Owner or Operator: Certification of Receipt of materials covered by the manifest except as noted in Discrepancy section						
Printed / Typed Name J. Stumpi-			Signature 	Month 11	Day 16	Year 20

Ticket

Ticket Number: 0 In Date: 11/16/2020

Truck ID: ONION
EQUIPMENT
20-18-3
Tons: 0
Is Active

Customer: COVANTA

Product: INBOUND NON
BULK

Hauler: N/A

Out Date:

In Weight: 25,540

Out Weight: 0

Tare: 0

Gross: 0

Net: 0



Certificate of Materials Management

Generator

Onion Equipment Company LLC

5705 W 73rd Street

Indianapolis Indiana 46278

Shipping Document # PO-00340-6

SO #: Sales Order #SO162578

Service Date: 11/16/2020

Line #	Profile ID	Waste Description	Cont. No.	Container Type	Total Quantity	Unit Wt./Vol.	Management Method	Disposal Site
1	5001074	Spent Irrigation Mix Treatment Material	7	CF - Fiber or plastic boxes, cartons, cases	16,000	Pounds	Energy-From-Waste	CES - Indianapolis 2515 Holt Rd, Indianapolis, IN