

**MONTHLY PROGRESS REPORT #298
FOR JANUARY 2022**

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

**JOINT BASE CAPE COD (JBCC)
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from 1 to 31 January 2022.

1. SUMMARY OF REMEDIATION ACTIONS

Remediation Actions (RA) Underway at Camp Edwards as of 28 January 2022:

Demolition Area 1 Comprehensive Groundwater RA

The Demolition Area 1 Comprehensive Groundwater RA consists of the removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. Extraction, treatment, and recharge (ETR) systems at Frank Perkins Road, Base Boundary, and the Leading Edge include extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and injection wells to return treated water to the aquifer.

The Frank Perkins Road Treatment Facility has been optimized as part of the Environmental and System Performance Monitoring (ESPM) program at Demolition Area 1. The treatment facility continues to operate at a flow rate of 175 gallons per minute (gpm), with over 2.889 billion gallons of water treated and re-injected as of 28 January 2022. The following Frank Perkins Road Treatment Facility shutdowns occurred in January.

- 0815 on 27 January 2022 due to a power supply interruption without an alarm and was restarted at 0950 on 27 January 2022.

The Base Boundary MTU continues to operate at a flow rate of 65 gpm. As of 28 January 2022, over 322.1 million gallons of water were treated and re-injected. No Base Boundary MTU shutdowns occurred in January.

The Leading Edge system continues to operate at a flow rate of 100 gpm. As of 28 January 2022, over 285.8 million gallons of water were treated and re-injected. The following Leading Edge system shutdowns occurred in January.

- 1502 on 05 January 2022 due to a due to a "VFD fault" alarm caused by a power supply interruption and was restarted at 0740 on 06 January 2022.
- 0658 on 09 January 2022 due to a power supply interruption and was restarted at 0738 on 10 January 2022.
- 2131 on 18 January 2022 due to a power supply interruption and was restarted at 0825 on 19 January 2022.
- 0815 on 27 January 2022 due to a power supply interruption without an alarm and was restarted at 1020 on 27 January 2022.

The Pew Road Mobile Treatment Unit (MTU) was turned off on 08 March 2021 (formerly operated at a flow rate of 65 GPM). Over 672.9 million gallons of water were treated and re-injected during the RA.

J-2 Range Groundwater RA

Northern Plant

The J-2 Range Northern Treatment facility consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The Extraction, Treatment, and Re-infiltration system includes three extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and an infiltration basin to return treated water to the aquifer.

The Northern MTUs E and F continue to operate at a flow rate of 250 gpm. As of 28 January 2022, over 1.916 billion gallons of water have been treated and re-injected. The following MTU E and F shutdowns occurred in January.

- 2139 on 18 January 2022 due to a power supply interruption and was restarted at 0750 on 19 January 2022.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 28 January 2022, over 1.444 billion gallons of water have been treated and re-injected. No Northern MTU G shutdowns occurred in January.

Eastern Plant

The J-2 Range Eastern Treatment facility consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETI system includes the following components: three extraction wells in an axial array, an ex-situ treatment process consisting of an ion exchange (IX) resin and granular activated carbon (GAC) media to treat perchlorate and explosives compounds, and three infiltration trenches located along the lateral boundaries of the plume where treated water enters the vadose zone and infiltrates into the aquifer. The J-2 Range Eastern system is running at a combined total flow rate of 495 gpm.

The MTUs H and I continue to operate at a flow rate of 250 gpm. As of 28 January 2022, over 1.557 billion gallons of water have been treated and re-injected. The following MTU H and I shutdowns occurred in January.

- 1234 on 05 January 2022 due to a "VFD fault" alarm caused by a power supply interruption and was restarted at 1336 on 05 January 2022.

MTU J continues to operate at a flow rate of 120 gpm. As of 28 January 2022, over 725.4 million gallons of water have been treated and re-injected. No MTU J shutdowns occurred in January.

MTU K continues to operate at a flow rate of 125 gpm. As of 28 January 2022, over 849.2 million gallons of water have been treated and re-injected. No MTU K shutdowns occurred in January.

J-3 Range Groundwater RA

The J-3 Range Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The ETR system includes four extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and utilizes the existing Fuel Spill-12 (FS-12) infiltration gallery to return treated water to the aquifer.

The J-3 system is currently operating at 255 gpm. As of 28 January 2022, over 1.567 billion gallons of water have been treated and re-injected. The following J-3 Range system shutdowns occurred in January.

- 1140 on 13 January 2022 due to a high effluent tank alarm caused by an FS-12 shutdown and was restarted at 1354 on 13 January 2022.
- 0730 on 17 January 2022 due to a high effluent tank alarm caused by an FS-12 shutdown and was restarted at 0920 on 18 January 2022.

J-1 Range Groundwater RA

Southern Plant

The J-1 Range Southern Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds. The ETR system includes two extraction wells, an ex-situ treatment process to remove explosives compounds from the groundwater, and an infiltration trench to return treated water to the aquifer.

The Southern MTU continues to operate at a flow rate of 125 gpm. As of 28 January 2022, over 704.9 million gallons of water have been treated and re-injected. No J-1 Range Southern system shutdowns occurred in January.

Northern Plant

The J-1 Range Northern Groundwater RA consists of removal and treatment of contaminated groundwater to control further migration of explosives compounds and perchlorate. The ETR system includes two extraction wells, an ex-situ treatment process to remove explosives compounds and perchlorate from the groundwater, and an infiltration trench to return treated water to the aquifer.

The Northern MTU continues to operate at a total system flow rate of 250 gpm. As of 28 January 2022, over 1.054 billion gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shutdowns occurred in January.

- 0915 on 12 January 2022 to perform a carbon media exchange and was restarted at 0915 on 14 January 2022.
- 1230 on 18 January 2022 to replace a leaking valve on the GAC Vessel #5 effluent and was restarted at 1240 on 18 January 2022.

Central Impact Area RA

The Central Impact Area (CIA) Groundwater treatment facility consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETR system includes the following components: three extraction wells, an ex-situ treatment process consisting of an ion exchange resin and granular activated carbon media to treat explosives compounds, and three infiltration galleries to return treated water to the aquifer. The CIA systems 1, 2, and 3 continue to run at a combined total flow rate of 750 gpm. As of 28 January 2022, over 2.729 billion gallons of water have been treated and re-injected. The following CIA system shutdowns occurred in January.

- 0920 on 11 January 2022 to perform a carbon media exchange and was restarted at 0800 on 13 January 2022.

- 0930 on 26 January 2022 to perform a carbon media exchange and to resolve a power fault alarm due to a faulty phase monitor and was restarted at 1300 on 28 January 2022.
- 0815 on 27 January 2022 due to a power supply interruption without an alarm and was restarted at 0855 on 27 January 2022.

2. SUMMARY OF ACTIONS TAKEN

Operable Unit (OU) Activity as of 28 January 2022:

CIA

- Performed intrusive investigations
- Routine processing of MD
- Routine check of CSS cover

Demolition Area 1

- Groundwater sampling within Demo 1 SPM

Demolition Area 2

- No activity

J-1 Range

- No activity

J-2 Range

- Groundwater sampling for PFAS within J-2 North SPM
- Bag filters exchanged

J-3 Range

- Groundwater sampling within J-3 SPM
- Bag filters exchanged

L Range

- No activity

Small Arms Ranges

- No activity

Northwest Corner

- No activity

Training Areas

- Inspected staged soil at H Range

Impact Area Roads

- No activity

Other

- Collected process water samples from Central Impact Area, Demolition Area 1, J-1 Range Northern, J-1 Range Southern, J-2 Range Eastern, J-2 Range Northern, and J-3 Range treatment systems.
- Groundwater samples were collected from Demolition Area 1 and J-1 Range Northern.

JBCC Impact Area Groundwater Study Program (IAGWSP) Tech Update Meeting Minutes for 13 January 2022

Project and Fieldwork Update

There were two breakthroughs in November at CIA 2 and J-1 North. The CIA 2 carbon was changed yesterday (12 January 2022), and the J-1 North carbon will be changed out today (13 January 2022). CIA 2 will be brought back online today; J-1 North, tomorrow (14 January 2022). All other systems are up and running. The LTM crews are sampling the Upper Cape Water Supply Cooperative sentry wells today. All the other PFAS sampling has been completed with data pending. Now that the PFAS sampling is completed, crews will resume sampling in Demolition Area 1 (originally scheduled for December) and will make up schedule by working Fridays.

The roads are finished, and the only item pending is disposal of the 50 cubic yards of soil currently staged at H Range. USACE has been checking on the pile weekly to ensure it stays covered.

Weston has four teams in the CIA. All cued surveys are complete and intrusive is ongoing; they are primarily working Survey Units (SU) 2, 3, and 5. Survey Unit 1 is complete; SU2 is approximately 70% complete; SU3-1 (priority) is 55%; and SU5 is about 95% complete. They are 100% complete in Parsons SU8 and approximately 10% complete in Parsons SU9. USACE is working on a revised project note and responses for the Consolidated Shot Structure (CSS), waiting for the Ordnance and Explosives (OE) staff from Huntsville to provide input.

Central Impact Area 100% Verification Grid Presentation

A presentation was provided on the results of the CIA Phase IV 100% dig validation. A figure showing the validation grids (38_37 and 44_27) was displayed and discussed. The group was reminded of the goals set in the Decision Document: (1) remove 75-95% of UXO while maximizing removal of net explosive weight and (2) correctly classify 95% of the targets of interest (TOI) while reducing clutter digs by greater than 70%.

A figure showing the Metal Mapper data collected for all EM61 anomalies for the grid 38_37 was displayed. There were 1121 EM61 anomaly locations with Metal Mapper cued data collection. Of those, there were 252 dig locations, and one EM61 target produced two digs. This resulted in a recommended dig rate of 22.47%.

The remaining 870 anomalies were dug for quality assurance (QA). Forty-one TOI (UXO or UXO-like items) were recovered. For the classification results, 870 clutter items were correctly classified with 19.4% of clutter incorrectly classified as "likely-TOI," thereby meeting the goal of reducing clutter digs by 70%.

A figure showing the Metal Mapper data collected for all EM61 anomalies for grid 44_27 was displayed. There were 796 EM61 anomaly locations identified. Of those, 265 were dig locations. This resulted in a recommended dig rate of 34.5%. The remaining 503 anomalies were dug for QA. Eighty-two TOI (UXO or UXO-like items) were recovered. For the classification results, 503 clutter items were correctly classified with 27% of clutter incorrectly classified as “likely-TOI,” thereby meeting the goal of reducing clutter digs by 70%.

In both 38_37 and 44_27, large pieces of frag and/or large quantities of frag were classified as digs in some cases due to limitations of inversion algorithms. 100% of TOI were correctly classified.

The status and path forward were reviewed. The dynamic and cued geophysics are complete for all 2021 Phase V Area 1. Intrusive investigations are complete for SU 1 and 1,927 TOI have been completed. Intrusive investigations are ongoing for SU2, SU3-1, and SU5: SU2 has 1,785 TOI complete with 825 remaining, SU3-1 has 1,709 TOI complete with 1,451 remaining, and SU5 has 1,897 TOI complete with 101 remaining. The SU3-2 and SU4 intrusive work will be complete in 2022. Currently, SU3-2 has 478 TOI complete with 2,433 remaining, and SU4 has 1,772 TOI remaining. In addition, there are 23 blow-in-place (BIP) actions left to be completed, however demolition activities at the consolidated shot structure are currently suspended. Future BIP activity will be rescheduled upon receipt of USACE direction. The sampling, transportation, and disposal of Consolidated Shot Structure (CSS) soil needs to be completed, and the annual report is being prepared for submittal to USACE. In Phase III, all TOI and polygon digs are complete in SU8, while in SU9, all polygon digs and 21 TOI are complete. A status map as of 31 December 2021 was displayed.

Action Items

The action items were discussed and updated.

JBCC IAGWSP Tech Update Meeting Minutes for 27 January 2022

Project and Fieldwork Update

There was one breakthrough in December at CIA 1. The changeout is occurring today (27 January 2022), so the system is off and will be started back up tomorrow (28 January 2022). All other systems are up and running. The LTM crews are finishing up in Demolition Area 1 and will next move to perform the semi-annual sampling rounds for the Small Arms Ranges and Southeast Ranges. The first batch of PFAS data from the J-2 North sampling was received yesterday and will be forwarded out to the team today. In general, the data look good. There was one new detection in a well that hadn't been seen previously. Detections were found in most wells that had prior detections above the MassDEP PFAS6 maximum contaminant level (MCL) of 20 ng/L, however the concentrations were consistently half of what they were during the last sampling round. Eighteen additional well sample results, including the Co-op wells, are still pending. Of note, MW-63, which is a five-screen location next to sentry well C7, was non-detect. MassDEP asked if it was the same suite of contaminants that was seen with the last round of sampling; IAGWSP explained that it is and oftentimes sampling detects contaminants that are not on the PFAS6 list.

The disposal of the 50 cubic yards of soil currently staged at H Range is still pending. USACE has been checking on the piles weekly to ensure it stays covered.

Weston has four teams in the CIA digging, and they expect to be finished by the end of February. All cued surveys are complete and intrusive is ongoing; they are primarily working Survey Units (SU) 2, 3, and 5. Survey Unit 1 is complete, SU2 is approximately 80% complete, SU3-1 (priority) is 65% complete, and SU5 is complete. The Weston teams are 100% complete in Parsons SU8 and approximately 20% complete in Parsons SU9. USACE has sent the revised project note and responses for the Consolidated Shot Structure (CSS), and once the document is approved, demolition operations will be scheduled.

Central Impact Area Plume Shell Update Presentation

A presentation was provided on the Central Impact Area RDX Plume Shell update. It was explained that RDX plume shells for IAGWSP sites are updated every five years. To update the plume shell, the following steps were taken:

1. The JBCC Environmental Data Management System (EDMS) was queried for RDX data in the CIA.
2. An existing steady-state MODFLOW groundwater model was run for “average” conditions.
3. The simulation was started at the earliest date of groundwater sample collection and was ended at the present time with representative groundwater extraction rates used for the simulation period.
4. Particles were initiated in MODPATH at locations and times of each sample collection point and migrated using results of the MODFLOW groundwater flow model.
5. MODPATH simulations were run to migrate particles (x, y, and z) to the present time.
6. The model-predicted x, y, z, and c values were imported to Excel and matched to their respective measured concentrations. It was noted that the RDX concentrations were decayed using the new sensitivity attenuation curve developed for the L Range Plume Shell update. As such, the RDX concentrations are decayed using an exponential function with a maximum decay of 98% after 20 years vs. a maximum decay of 55% after five years using the Jacobs-developed quadratic function.
7. The values were then input into ESRI ArcView software and used as a guide to manually develop the plume into contours representing 10-foot layers.

The plume shell start date was 22 July 1997, and all RDX concentrations ranged from non-detect (ND) to 88 µg/L. The number of points migrated was 9,649 with 806 used for the plume shell contouring. The plume contour values were 0.25 µg/L, 0.60 µg/L, 2 µg/L, and 6 µg/L. The maximum elevation was 65 feet msl and the minimum plume elevation was -155 feet msl. The layer-by-layer depictions were shown and discussed. Graphs illustrating the extraction well predicted vs. measured concentrations and mass removals were displayed and discussed. The predicted cleanup times were discussed. The group was reminded that the Decision Document listed a cleanup time of 2047 for <2.0 µg/L and 2055 to reach 0.60 µg/L. The model is predicting 2038 for <2.0 µg/L and 2054 to reach 0.60 µg/L. MassDEP asked if an evaluation as to when various extraction wells might be shut off has been done. USACE explained that it hadn't yet. A project note will be provided summarizing the plume shell development.

Action Items

The action items were discussed and updated.

JBCC Cleanup Team Meeting

The next JBCC Cleanup Team (JBCCCT) is scheduled for 13 April 2022 at 6:00 PM (1800 EST) via Microsoft Teams. Additional meeting details will be provided at a later date. Presentation materials from previous meetings can be found on the IAGWSP web site at <http://jbcc-iaqwsp.org/community/impact/presentations/>. The Cleanup Team meeting discusses late breaking news and responses to action items, as well as updates from the IAGWSP and the Installation Restoration Program (IRP). The JBCCCT meetings provide a forum for community input regarding issues related to both the IRP and the IAGWSP.

3. SUMMARY OF DATA RECEIVED

Table 1 summarizes sampling for all media from 1 to 31 January 2022. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 to 31 January 2022. These results are compared to the Maximum Contaminant Levels/Health Advisory (MCL/HA) values for respective analytes. Explosives and perchlorate are the primary contaminants of concern (COC) at Camp Edwards. Table 3 summarizes sampling of influent and groundwater samples for per- and polyfluoroalkyl substances (PFAS) from 1 June 2019 to present.

The OUs under investigation and cleanup at Camp Edwards are the Central Impact Area, Demolition Area 1, Demolition Area 2, J-1 Range, J-2 Range, J-3 Range, L Range, Northwest Corner, Small Arms Ranges, and Training Areas. Environmental monitoring reports for each OU are generated each year to evaluate the current year groundwater results. These reports are available on the site Environmental Data Management System (EDMS) and at the project document repositories (IAGWSP office and Jonathan Bourne Library).

4. SUBMITTED DELIVERABLES

Deliverables submitted during the reporting period include the following:

- | | |
|---|-----------------|
| • Monthly Progress Report No. 297 for December 2021 | 10 January 2022 |
| • Immediate Response Action Status Report Number 3 for the Disposal of RCRA Solid Waste Munitions Using a Buried Explosive Module Structure | 6 January 2022 |
| • Replacement of Consolidated Shot Structure Material and Future Monitoring Draft Project Note | 13 January 2022 |
| • Demolition Area 1 Draft Extraction System Well Field Design Project Note MW-533 | 28 January 2022 |
| • J1 Range Northern 2021 Final Environmental Monitoring Report | 28 January 2022 |
| • J1 Range Northern Final Optimized Chemical Monitoring Network Project Note | 28 January 2022 |
| • J3 Range 2021 Draft Environmental Monitoring Report | 28 January 2022 |

5. SCHEDULED ACTIONS

The following actions and/or documents are being prepared in February 2022.

- Demolition Area 1 Annual Environmental Monitoring Report Response to Comments
- Central Impact Area Draft Annual Environmental Monitoring Report Response to Comments
- J-1 Range Southern Annual Environmental Monitoring Report Response to Comments
- J-3 Range Draft Annual Environmental Monitoring Report
- J-3 Range Additional PFAS Sampling Project Note
- J-2 Range Eastern Draft Annual Environmental Monitoring Report
- J-2 Range Northern Draft Annual Environmental Monitoring Report
- J-2 Range Eastern & Northern Draft Plume Shell Update Project Note
- J-1 Range Northern Draft Plume Shell Update Project Note
- Central Impact Area Draft Plume Shell Update Project Note
- Northwest Corner Draft Sampling Discontinuation Project Note
- Draft Five Year Review
- IRA Completion Report
- Small Arms Ranges Revised Draft Completion of Work Report
- Northwest Corner Demonstration of Compliance Report Response to Comments
- J-2 Range, Phase-2, Addendum to Post-DD Confirmation Geophysical and Soil Investigation Findings Technical Memorandum and Response to Comments on Draft Project Note
- KD Range Confirmatory Geophysical and Soil Investigation Technical Memorandum
- Demolition Area 1 Extraction Well Project Note

TABLE 1
Sampling Progress: 1 to 31 January 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Demolition Area 1	MW-544M3	MW-544M3_F21	N	01-20-2022	Ground Water	77.5	87.5
Demolition Area 1	MW-544M2	MW-544M2_F21	N	01-20-2022	Ground Water	112	122
Demolition Area 1	MW-544M1	MW-544M1_F21	N	01-20-2022	Ground Water	162	172
Demolition Area 1	MW-545M4	MW-545M4_F21	N	01-19-2022	Ground Water	72	82
Demolition Area 1	MW-545M3	MW-545M3_F21	N	01-19-2022	Ground Water	101.5	111.5
Demolition Area 1	MW-545M2	MW-545M2_F21	N	01-19-2022	Ground Water	142	152
Demolition Area 1	MW-545M1	MW-545M1_F21	N	01-19-2022	Ground Water	162	172
Demolition Area 1	XX9514	XX9514_F21	N	01-19-2022	Ground Water	102	112
Demolition Area 1	MW-648M1	MW-648M1_F21	N	01-18-2022	Ground Water	112	122
Demolition Area 1	MW-31S	MW-31S_F21	N	01-18-2022	Ground Water	98	103
Demolition Area 1	MW-31S	MW-31S_F21D	FD	01-18-2022	Ground Water	98	103
Demolition Area 1	MW-31M	MW-31M_F21	N	01-18-2022	Ground Water	113	123
Demolition Area 1	MW-73S	MW-73S_F21	N	01-18-2022	Ground Water	52.2	61.7
Demolition Area 1	MW-19S	MW-19S_F21	N	01-18-2022	Ground Water	52.7	62.7
Demolition Area 1	MW-19S	MW-19S_F21D	FD	01-18-2022	Ground Water	52.7	62.7
Demolition Area 1	MW-76M2	MW-76M2_F21	N	01-14-2022	Ground Water	105	115
Demolition Area 1	MW-77M2	MW-77M2_F21	N	01-14-2022	Ground Water	120	130
Demolition Area 1	MW-341M3	MW-341M3_F21	N	01-14-2022	Ground Water	209.5	219.5
Demolition Area 1	MW-341M2	MW-341M2_F21	N	01-14-2022	Ground Water	264.5	269.5
Demolition Area 1	MW-663D	MW-663D_F21	N	01-14-2022	Ground Water	240.6	250.6
Demolition Area 1	MW-231M1	MW-231M1_F21	N	01-14-2022	Ground Water	210.5	220.5
J1 Range Southern	J1S-EFF	J1S-EFF-170A	N	01-06-2022	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-170A	N	01-06-2022	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-170A	N	01-06-2022	Process Water	0	0
J3 Range	J3-EFF	J3-EFF-184A	N	01-06-2022	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-184A	N	01-06-2022	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-184A	N	01-06-2022	Process Water	0	0
J3 Range	J3-INF	J3-INF-184A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-160A	N	01-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-160A	N	01-06-2022	Process Water	0	0
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-184A	N	01-05-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-184A	N	01-05-2022	Process Water	0	0
J1 Range Northern	J1N-EFF	J1N-EFF-99A	N	01-05-2022	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-99A	N	01-05-2022	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-99A	N	01-05-2022	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-99A	N	01-05-2022	Process Water	0	0
Central Impact Area	CIA2-EFF	CIA2-EFF-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-96A	N	01-04-2022	Process Water	0	0

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 to 31 January 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Central Impact Area	CIA2-INF	CIA2-INF-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA1-EFF	CIA1-EFF-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-96A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA3-EFF	CIA3-EFF-67A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-67A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA3-MID1	CIA3-MID1-67A	N	01-04-2022	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-67A	N	01-04-2022	Process Water	0	0
Demolition Area 1	D1LE-EFF	D1LE-EFF-66A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-66A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-66A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-66A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1-EFF	D1-EFF-138A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-138A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-138A	N	01-03-2022	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-138A	N	01-03-2022	Process Water	0	0
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-190A	N	01-03-2022	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-190A	N	01-03-2022	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-190A	N	01-03-2022	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-190A	N	01-03-2022	Process Water	0	0

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received January 2022

Area of Concern	Location ID	Field Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Date Sampled	Test Method	Analyte	Result Value	Qualifier	Units	MCL/HA	> MCL/HA	MDL	RL
J1 Range Northern	MW-590M2	MW-590M2_F21	238	248	12-02-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.38		µg/L	0.60		0.062	0.20
J1 Range Northern	MW-590M2	MW-590M2_F21	238	248	12-02-2021	SW6850	Perchlorate	2.1		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-590M2	MW-590M2_F21D	238	248	12-02-2021	SW6850	Perchlorate	2.0		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-584M1	MW-584M1_F21	248	258	12-02-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.073	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-584M1	MW-584M1_F21	248	258	12-02-2021	SW6850	Perchlorate	0.99		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-541M1	MW-541M1_F21	210	220	12-01-2021	SW6850	Perchlorate	0.27		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-541M1	MW-541M1_F21	210	220	12-01-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.14	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-430M2	MW-430M2_F21	188.41	198.41	12-01-2021	SW6850	Perchlorate	0.14	J	µg/L	2.0		0.086	0.20
J1 Range Northern	MW-606M1	MW-606M1_F21	233.3	243.3	11-30-2021	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.086	0.20
J1 Range Northern	MW-369M1	MW-369M1_F21	254.07	264.07	11-29-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.12	J	µg/L	400		0.037	0.20
J1 Range Northern	MW-369M1	MW-369M1_F21	254.07	264.07	11-29-2021	SW6850	Perchlorate	0.15	J	µg/L	2.0		0.086	0.20
J1 Range Northern	MW-369M1	MW-369M1_F21	254.07	264.07	11-29-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.25		µg/L	0.60		0.062	0.20
J1 Range Northern	MW-164M2	MW-164M2_F21	157	167	11-29-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.11	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-164M2	MW-164M2_F21	157	167	11-29-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	3.8		µg/L	400		0.037	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21	125	135	11-29-2021	SW8330	4-Amino-2,6-dinitrotoluene	0.28		µg/L	7.3		0.072	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21	125	135	11-29-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.11	J	µg/L	400		0.037	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21	125	135	11-29-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.17	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21D	125	135	11-29-2021	SW8330	4-Amino-2,6-dinitrotoluene	0.29		µg/L	7.3		0.072	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21D	125	135	11-29-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.11	J	µg/L	400		0.037	0.20
J1 Range Northern	MW-166M3	MW-166M3_F21D	125	135	11-29-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.17	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21	227	237	11-22-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.95		µg/L	0.60	X	0.062	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21	227	237	11-22-2021	SW6850	Perchlorate	1.7		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21	227	237	11-22-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.39		µg/L	400		0.037	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21D	227	237	11-22-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.38		µg/L	400		0.037	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21D	227	237	11-22-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.94		µg/L	0.60	X	0.062	0.20
J1 Range Northern	MW-564M1	MW-564M1_F21D	227	237	11-22-2021	SW6850	Perchlorate	1.8		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-547M1	MW-547M1_F21	237	247	11-22-2021	SW6850	Perchlorate	3.8		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-549M1	MW-549M1_F21	227.4	237.4	11-18-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.081	J	µg/L	0.60		0.062	0.20
J1 Range Northern	MW-549M1	MW-549M1_F21	227.4	237.4	11-18-2021	SW6850	Perchlorate	3.3		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-265M3	MW-265M3_F21	200	210	11-17-2021	SW6850	Perchlorate	0.090	J	µg/L	2.0		0.086	0.20
J1 Range Northern	MW-265M2	MW-265M2_F21	225	235	11-17-2021	SW8330	Cyclotrimethylenetrinitramine (RDX)	0.60		µg/L	0.60		0.062	0.20
J1 Range Northern	MW-265M2	MW-265M2_F21	225	235	11-17-2021	SW6850	Perchlorate	8.6		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-265M2	MW-265M2_F21	225	235	11-17-2021	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.17	J	µg/L	400		0.037	0.20
J1 Range Northern	MW-265M2	MW-265M2_F21D	225	235	11-17-2021	SW6850	Perchlorate	8.8		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-265M1	MW-265M1_F21	265	275	11-17-2021	SW6850	Perchlorate	3.5		µg/L	2.0	X	0.086	0.20
J1 Range Northern	MW-315M1	MW-315M1_F21	245.49	255.49	11-17-2021	SW6850	Perchlorate	1.5		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-566M1	MW-566M1_F21	232	242	11-16-2021	SW6850	Perchlorate	1.1		µg/L	2.0		0.086	0.20
J1 Range Northern	MW-689M1	MW-689M1_F21	253.5	263.5	11-16-2021	SW6850	Perchlorate	0.19	J	µg/L	2.0		0.086	0.20
J1 Range Northern	MW-567M1	MW-567M1_F21	215.5	225.5	11-15-2021	SW6850	Perchlorate	0.95		µg/L	2.0		0.086	0.20

J = Estimated Result
MDL = Method Detection Limit
RL = Reporting Limit

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 KGS 2019 PFAS MW&INF
 Demolition Area 1

Location	D1-INF	FPR-2-INF	MW-258M1	MW-663D	PR-INF
Field Sample ID	D1-INF_PFAS19	FPR-2-INF_PFAS19	MW-258M1_PFAS19	MW-663D_PFAS19	PR-INF_PFAS19
Sampling Depth	0.00 - 0.00	0.00 - 0.00	109.00 - 119.00	240.60 - 250.60	0.00 - 0.00
Sampling Date	06/24/2019	06/25/2019	06/19/2019	06/24/2019	06/25/2019
SDG	320517141	320517141	320515981	320517141	320517141
Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	20.0 U	20.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
Perfluorobutanesulfonic acid (PFBS)	0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)	0.910 U	0.950 U	0.980 U	2.20	0.980 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)	0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorohexane sulfonate (PFHxS)	0.910 U	0.950 U	0.980 U	0.980 U	2.00 U
Perfluorohexanoic acid (PFHxA)	0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.50 U	1.00 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorooctanesulfonate (PFOS)	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)	0.910 U	0.950 U	0.980 U	0.460 J	0.980 U
Perfluorotetradecanoic acid (PFTeDA)	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.50 U	1.20 J	1.50 U
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	3.20	0.00
§Sum of All Compounds Collected	0.00	0.00	0.00	4.86	0.00

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 J1 Range Northern

Location	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
Field Sample ID	J1N-INF2_PFA19	J1N-INF2_PFA19R	MW-136S_PFA19	MW-564M1_PFA19	MW-590M2_PFA19
Sampling Depth	0.00 - 0.00	0.00 - 0.00	107.00 - 117.00	227.00 - 237.00	238.00 - 248.00
Sampling Date	06/17/2019	07/30/2019	06/24/2019	06/24/2019	06/24/2019
SDG	320514661	320528231	320517141	320517141	320517141
Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	20.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
Perfluorobutanesulfonic acid (PFBS)	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorobutanoic acid (PFBA)	1.90 U	1.40 U	0.990 J	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.930 U	1.90 U	2.00 U	1.80 U	0.960 U
Perfluorohexanoic acid (PFHxA)	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	1.80 J	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorooctanesulfonate (PFOS)	4.90	2.90 U	1.40 J	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	2.40	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
†PFOS + PFOA (EPA)	4.90	0.00	3.80	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.90	0.00	3.80	0.00	0.00
§Sum of All Compounds Collected	6.70	0.00	4.79	0.00	0.00

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 J2 Range Eastern

Location	J2E-INF-I	J2E-INF-J	J2E-INF-K	MW-307M3	MW-307M3	MW-368M1
Field Sample ID	J2E-INF-I_PFAS19	J2E-INF-J_PFAS19	J2E-INF-K_PFAS19	MW-307M3_PFAS19	MW-307M3_PFAS19D	MW-368M1_PFAS19
Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	125.80 - 135.82	125.80 - 135.82	237.35 - 247.35
Sampling Date	06/20/2019	06/20/2019	06/20/2019	06/18/2019	06/18/2019	06/18/2019
SDG	320515981	320515981	320515981	320514662	320514662	320514662
Sample Type	Normal	Normal	Normal	Normal	Field Duplicate	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	20.0 U	18.0 U	19.0 U	17.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
Perfluorobutanesulfonic acid (PFBS)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorobutanoic acid (PFBA)	1.50 U	1.40 U	1.50 U	1.80 U	1.90 U	1.70 U
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluorodecanoic acid (PFDA)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	1.40 J
Perfluorododecanoic acid (PFDoA)	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	0.450 J
Perfluoroheptanesulfonic acid (PFHpS)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluoroheptanoic acid (PFHpA)	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluorohexane sulfonate (PFHxS)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorohexanoic acid (PFHxA)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorononanoic acid (PFNA)	1.50 U	1.40 U	1.50 U	0.880 J	0.730 J	0.650 J
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorooctanesulfonate (PFOS)	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorooctanoic acid (PFOA)	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluoropentanoic acid (PFPeA)	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorotridecanoic acid (PFTTrDA)	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluoroundecanoic acid (PFUnA)	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	4.90
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.880	0.730	2.05
§Sum of All Compounds Collected	0.00	0.00	0.00	0.880	0.730	7.40

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 J2 Range Eastern

	Location	MW-368M2	MW-667M1
	Field Sample ID	MW-368M2_PFAS19	MW-667M1_PFAS19
	Sampling Depth	202.73 - 212.73	302.30 - 312.30
	Sampling Date	06/18/2019	06/17/2019
	SDG	320514662	320514661
	Sample Type	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		8.80 U	9.00 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		8.80 U	9.00 U
Perfluorobutanesulfonic acid (PFBS)		0.880 U	0.900 U
Perfluorobutanoic acid (PFBA)		1.30 U	1.80 U
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.800 J	4.30
Perfluorododecanoic acid (PFDoA)		1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.880 U	0.900 U
Perfluoroheptanoic acid (PFHpA)		1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.880 U	0.900 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.900 U
Perfluorononanoic acid (PFNA)		1.30 U	2.80
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.70 U
Perfluorooctanesulfonate (PFOS)		2.60 U	2.70 U
Perfluorooctanoic acid (PFOA)		1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.880 U	0.900 U
Perfluorotetradecanoic acid (PFTeDA)		2.60 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.60 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		2.40	1.60 J
	†PFOS + PFOA (EPA)	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.800	7.10
	§Sum of All Compounds Collected	3.20	8.70

PFAS Summary Report – Groundwater
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 KGS 2019 PFAS MW&INF
 J2 Range Northern

Location	J2EW0001	J2EW0002	J2N-INF-E	J2N-INF-F	J2N-INF-F	J2N-INF-G
Field Sample ID	J2EW0001_PFAS19	J2EW0002_PFAS19	J2N-INF-E_PFAS19	J2N-INF-F_PFAS19	J2N-INF-F_PFAS19R	J2N-INF-G_PFAS19
Sampling Depth	179.00 - 234.00	198.00 - 233.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sampling Date	11/20/2019	11/20/2019	06/18/2019	06/18/2019	07/30/2019	07/30/2019
SDG	320565491	320565491	320514662	320514662	320528231	320528231
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	40.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	19.0 U	20.0 U	9.30 U	9.30 U	9.60 U	9.70 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
Perfluorobutanesulfonic acid (PFBS)	0.960 U	1.00 U	0.930 U	0.930 U	0.960 U	1.40 J
Perfluorobutanoic acid (PFBA)	1.40 U	1.50 U	1.40 U	1.90 U	1.40 U	1.50 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)	0.960 U	1.00 U	0.930 U	0.930 U	0.960 U	0.970 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)	0.960 U	0.370 J	0.930 U	0.400 J	0.500 J	0.970 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.00 J	1.40 U	0.940 J	1.00 J	1.50 U
Perfluorohexane sulfonate (PFHxS)	0.960 U	11.0	0.930 U	9.90	9.00	1.90 U
Perfluorohexanoic acid (PFHxA)	0.960 U	1.30 J	0.930 U	1.20 J	1.30 J	2.30
Perfluorononanoic acid (PFNA)	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)	2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluorooctanesulfonate (PFOS)	2.90 U	1.30 J	2.80 U	2.80 U	1.10 J	2.90 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.50 J	1.40 U	1.70 J	1.50 J	1.50 U
Perfluoropentanoic acid (PFPeA)	0.960 U	0.910 J	0.930 U	0.840 J	1.00 J	1.20 J
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)	2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
†PFOS + PFOA (EPA)	0.00	2.80	0.00	1.70	2.60	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	14.8	0.00	12.5	12.6	0.00
§Sum of All Compounds Collected	0.00	17.4	0.00	15.0	15.4	4.90

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 J2 Range Northern

	Location	MW-234M2	MW-313M1	MW-587M2
	Field Sample ID	MW-234M2_PFAS19	MW-313M1_PFAS19	MW-587M2_PFAS19
	Sampling Depth	110.00 - 120.00	255.40 - 265.40	220.00 - 230.00
	Sampling Date	06/17/2019	06/19/2019	06/19/2019
	SDG	320514661	320515981	320515981
	Sample Type	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	20.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		8.80 U	9.80 U	9.70 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.80 U	9.70 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		8.80 U	9.80 U	9.70 U
Perfluorobutanesulfonic acid (PFBS)		0.880 U	0.980 U	0.970 U
Perfluorobutanoic acid (PFBA)		1.80 U	0.700 J	1.50 U
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.880 U	1.20 J	0.970 U
Perfluorododecanoic acid (PFDoA)		1.30 U	1.50 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		0.880 U	0.980 U	0.970 U
Perfluoroheptanoic acid (PFHpA)		1.30 U	1.50 U	1.50 U
Perfluorohexane sulfonate (PFHxS)		0.600 J	0.980 U	0.970 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.980 U	0.970 U
Perfluorononanoic acid (PFNA)		1.30 U	1.10 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.90 U	2.90 U
Perfluorooctanesulfonate (PFOS)		1.90 J	2.90 U	2.90 U
Perfluorooctanoic acid (PFOA)		0.550 J	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.880 U	0.680 J	0.970 U
Perfluorotetradecanoic acid (PFTeDA)		2.60 U	2.90 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.60 U	2.90 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.30 U	1.40 J	1.50 U
	†PFOS + PFOA (EPA)	2.45	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	3.05	2.30	0.00
	§Sum of All Compounds Collected	3.05	5.08	0.00

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 J3 Range

Location	J3-INF	J3-INF	MW-163S	MW-163S	MW-163S	MW-227M2
Field Sample ID	J3-INF_PFAS19	J3-INF_PFAS19D	MW-163S_PFAS19	MW-163S_PFAS19D	MW-163S_PFAS19R	MW-227M2_PFAS19
Sampling Depth	0.00 - 0.00	0.00 - 0.00	38.00 - 48.00	38.00 - 48.00	38.00 - 48.00	110.00 - 120.00
Sampling Date	06/17/2019	06/17/2019	06/18/2019	06/18/2019	07/30/2019	06/19/2019
SDG	320514661	320514661	320514662	320514662	320528231	320515981
Sample Type	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	18.0 U	17.0 U	17.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
Perfluorobutanesulfonic acid (PFBS)	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorobutanoic acid (PFBA)	1.90 U	1.80 U	1.70 U	1.70 U	0.560 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorododecanoic acid (PFDoA)	1.70 J	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	1.50 J	1.50 J	0.690 J	0.610 J	1.90 U	0.540 J
Perfluorohexanoic acid (PFHxA)	0.940 U	0.920 U	0.410 J	0.860 U	0.930 U	0.960 U
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluorooctanesulfonate (PFOS)	2.80 U	2.80 U	12.0	12.0	12.0	2.90 U
Perfluorooctanoic acid (PFOA)	0.520 J	1.40 U	1.70	1.60 J	1.30 J	1.40 U
Perfluoropentanoic acid (PFPeA)	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTTrDA)	1.40 J	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
†PFOS + PFOA (EPA)	0.520	0.00	13.7	13.6	13.3	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.02	1.50	14.4	14.2	13.3	0.540
§Sum of All Compounds Collected	5.12	1.50	14.8	14.2	13.9	0.540

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 J3 Range

Location	MW-250M2
Field Sample ID	MW-250M2_PFAS19
Sampling Depth	145.00 - 155.00
Sampling Date	06/20/2019
SDG	320515981
Sample Type	Normal
PFAS 21 Cmps	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.70 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.70 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.70 U
Perfluorobutanesulfonic acid (PFBS)	0.970 U
Perfluorobutanoic acid (PFBA)	0.710 J
Perfluorodecanesulfonic acid (PFDS)	1.40 U
Perfluorodecanoic acid (PFDA)	0.970 U
Perfluorododecanoic acid (PFDoA)	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.970 U
Perfluoroheptanoic acid (PFHpA)	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.970 U
Perfluorohexanoic acid (PFHxA)	0.970 U
Perfluorononanoic acid (PFNA)	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.90 U
Perfluorooctanesulfonate (PFOS)	2.90 U
Perfluorooctanoic acid (PFOA)	1.40 U
Perfluoropentanoic acid (PFPeA)	0.970 U
Perfluorotetradecanoic acid (PFTeDA)	2.90 U
Perfluorotridecanoic acid (PFTrDA)	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U
†PFOS + PFOA (EPA)	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
§Sum of All Compounds Collected	0.710

PFAS Summary Report – Groundwater
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 KGS 2020 J1 Ranges SPM Fall
 J1 Range Northern

	Location	MW-136M1	MW-136M1	MW-191M2	MW-245M1	MW-245M2	MW-303M2
	Field Sample ID	MW-136M1_F20	MW-136M1_F20D	MW-191M2_F20	MW-245M1_F20	MW-245M2_F20	MW-303M2_F20
	Sampling Depth	124.00 - 134.00	124.00 - 134.00	120.00 - 130.00	244.00 - 254.00	204.00 - 214.00	235.09 - 245.10
	Sampling Date	12/07/2020	12/07/2020	12/07/2020	12/07/2020	11/10/2020	12/08/2020
	SDG	320677691	320677691	320677691	320677691	320665921	320677701
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.60 U	9.20 U	9.70 U	9.30 U	9.30 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	9.20 U	15.0 J	9.30 U	9.30 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	9.20 U	2.90 J	9.30 U	9.30 U	9.50 U
Perfluorobutanesulfonic acid (PFBS)		0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluorobutanoic acid (PFBA)		0.920 J	0.670 J	1.50 U	1.40 U	4.00	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.700 J
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.70 J
Perfluoroheptanesulfonic acid (PFHpS)		0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.40 U	0.700 J	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.360 J	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		0.960 U	0.920 U	0.970 U	0.930 U	0.850 J	0.950 U
Perfluorononanoic acid (PFNA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanesulfonate (PFOS)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.960 U	0.920 U	0.970 U	0.930 U	4.00	0.410 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTTrDA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	2.80
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.360	0.00	0.00	0.00	0.700	0.700
	§Sum of All Compounds Collected	1.28	0.670	17.9	0.00	9.55	5.61

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 J1 Range Northern

	Location	MW-303M3	MW-326M1	MW-326M2	MW-326M3	MW-346M1	MW-346M2
	Field Sample ID	MW-303M3_F20	MW-326M1_F20	MW-326M2_F20	MW-326M3_F20	MW-346M1_F20	MW-346M2_F20
	Sampling Depth	139.74 - 149.69	250.01 - 260.01	196.27 - 206.28	165.24 - 175.26	0.00 - 0.00	0.00 - 0.00
	Sampling Date	12/08/2020	12/09/2020	12/09/2020	12/09/2020	12/02/2020	12/02/2020
	SDG	320677701	320678771	320678771	320678771	320675551	320675551
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	20.0 U	20.0 U	19.0 U	19.0 U	19.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U	
Perfluorobutanesulfonic acid (PFBS)	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U	
Perfluorobutanoic acid (PFBA)	0.920 J	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	1.60 J	0.950 J	5.40	3.50	2.50	2.40	
Perfluorododecanoic acid (PFDoA)	1.30 U	1.50 U	1.20 J	0.600 J	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U	
Perfluoroheptanoic acid (PFHpA)	1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U	
Perfluorohexanoic acid (PFHxA)	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U	
Perfluorononanoic acid (PFNA)	2.60	1.50 J	1.40 J	2.70	3.40	3.50	
Perfluorooctanesulfonamide (PFOSA)	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U	
Perfluorooctanesulfonate (PFOS)	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U	
Perfluorooctanoic acid (PFOA)	1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.890 U	0.440 J	1.00 U	0.950 U	0.620 J	0.870 J	
Perfluorotetradecanoic acid (PFTeDA)	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U	
Perfluorotridecanoic acid (PFTTrDA)	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U	
Perfluoroundecanoic acid (PFUnA)	1.30 U	1.00 J	13.0	6.90	5.90	2.50	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.20	2.45	6.80	6.20	5.90	5.90
	§Sum of All Compounds Collected	5.12	3.89	21.0	13.7	12.4	9.27

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 J1 Range Northern

	Location	MW-346M3	MW-346M4	MW-58S
	Field Sample ID	MW-346M3_F20	MW-346M4_F20	MW-58S_F20
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	100.00 - 110.00
	Sampling Date	12/02/2020	12/02/2020	12/07/2020
	SDG	320675551	320675551	320677691
	Sample Type	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.80 U	9.20 U	9.30 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.80 U	9.20 U	9.30 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.80 U	9.20 U	9.30 U
Perfluorobutanesulfonic acid (PFBS)		0.980 U	0.920 U	0.930 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.730 J	1.70 J	0.930 U
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.980 U	0.920 U	0.930 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.980 U	0.920 U	0.930 U
Perfluorohexanoic acid (PFHxA)		0.980 U	0.920 U	0.930 U
Perfluorononanoic acid (PFNA)		2.20	0.650 J	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.80 U
Perfluorooctanesulfonate (PFOS)		2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.750 J	0.410 J	0.930 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTTrDA)		2.90 U	2.80 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.00 J	6.00	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.93	2.35	0.00
	§Sum of All Compounds Collected	4.68	8.76	0.00

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Location	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
Field Sample ID	J2EW0002_F20	J2EW0002_F20D	J2EW2-MW2-B_F20	J2EW2-MW2-C_F20	MW-293M2_F20	MW-293M2_F20D
Sampling Depth	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	196.42 - 206.42	196.42 - 206.42
Sampling Date	09/10/2020	09/10/2020	09/09/2020	09/09/2020	08/27/2020	08/27/2020
SDG	320645641	320645641	320645661	320645661	320641331	320641331
Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	20.0 U	19.0 U	19.0 U	19.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
Perfluorobutanesulfonic acid (PFBS)	0.990 U	0.950 U	0.940 U	0.970 U	3.40	3.60
Perfluorobutanoic acid (PFBA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.990 U	0.950 U	0.940 U	0.970 U	4.90	4.50
Perfluorododecanoic acid (PFDoA)	1.50 U	1.40 U	1.40 U	1.50 U	3.50	3.60
Perfluoroheptanesulfonic acid (PFHpS)	0.990 U	0.950 U	0.940 U	0.970 U	0.920 U	0.950 U
Perfluoroheptanoic acid (PFHpA)	0.930 J	0.910 J	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	9.80	9.30	0.940 U	0.970 U	0.920 U	0.950 U
Perfluorohexanoic acid (PFHxA)	1.10 J	1.10 J	0.940 U	0.970 U	0.920 U	0.950 U
Perfluorononanoic acid (PFNA)	1.50 U	1.40 U	1.40 U	1.50 U	2.00	1.50 J
Perfluorooctanesulfonamide (PFOSA)	3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorooctanesulfonate (PFOS)	3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	1.70 J	1.70 J	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)	1.10 J	1.20 J	0.940 U	0.970 U	0.460 J	0.410 J
Perfluorotetradecanoic acid (PFTeDA)	3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTTrDA)	3.00 U	2.80 U	2.80 U	2.90 U	1.50 J	1.90 J
Perfluoroundecanoic acid (PFUnA)	1.50 U	1.40 U	1.40 U	1.50 U	25.0	28.0
†PFOS + PFOA (EPA)	1.70	1.70	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	12.4	11.9	0.00	0.00	6.90	6.00
§Sum of All Compounds Collected	14.6	14.2	0.00	0.00	40.8	43.5

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	Location	MW-300M1	MW-300M2	MW-300M3	MW-302M2	MW-305M1	MW-348M2
	Field Sample ID	MW-300M1_F20	MW-300M2_F20	MW-300M3_F20	MW-302M2_F20	MW-305M1_F20	MW-348M2_F20
	Sampling Depth	293.03 - 303.02	197.23 - 207.23	135.31 - 145.31	194.35 - 204.43	202.82 - 212.82	206.54 - 216.54
	Sampling Date	09/08/2020	09/08/2020	09/08/2020	08/27/2020	08/31/2020	08/31/2020
	SDG	320644781	320644781	320644781	320641331	320642421	320642421
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	18.0 U	19.0 U	18.0 U	18.0 U	20.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U	
Perfluorobutanesulfonic acid (PFBS)	0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	0.550 J	1.40 U	1.40 U	1.00 J	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorodecanoic acid (PFDA)	3.10	3.60	1.50 J	2.80	2.40	2.50	
Perfluorododecanoic acid (PFDoA)	0.800 J	1.10 J	0.610 J	1.70 J	1.40 U	2.20	
Perfluoroheptanesulfonic acid (PFHpS)	0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorohexane sulfonate (PFHxS)	1.90 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U	
Perfluorohexanoic acid (PFHxA)	0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U	
Perfluorononanoic acid (PFNA)	3.90	2.30	0.960 J	1.00 J	1.40 J	1.50 U	
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U	
Perfluorooctanesulfonate (PFOS)	2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluoropentanoic acid (PFPeA)	0.580 J	0.430 J	0.940 U	1.40 J	0.910 U	1.20 J	
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U	
Perfluorotridecanoic acid (PFTTrDA)	2.90 U	0.880 J	2.80 U	2.80 U	2.70 U	2.90 U	
Perfluoroundecanoic acid (PFUnA)	8.50	9.20	4.80	22.0	1.40 J	8.10	
	+PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	7.00	5.90	2.46	3.80	3.80	2.50
	§Sum of All Compounds Collected	16.9	17.5	8.42	28.9	5.20	15.0

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	Location	MW-586M1	MW-586M2	MW-587M1	MW-588M1	MW-588M2	MW-589M1
	Field Sample ID	MW-586M1_F20	MW-586M2_F20	MW-587M1_F20	MW-588M1_F20	MW-588M2_F20	MW-589M1_F20
	Sampling Depth	237.00 - 247.00	211.00 - 221.00	250.00 - 260.00	238.00 - 248.00	198.00 - 208.00	240.00 - 250.00
	Sampling Date	09/02/2020	09/02/2020	09/10/2020	08/27/2020	08/27/2020	09/02/2020
	SDG	320643521	320643521	320645641	320641331	320641331	320643521
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	19.0 U	19.0 U	18.0 U	18.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U	
Perfluorobutanesulfonic acid (PFBS)	0.920 U	0.960 U	0.940 U	0.930 U	3.60	0.900 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U	
Perfluorohexanoic acid (PFHxA)	0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	0.600 J	
Perfluoropentanoic acid (PFPeA)	0.490 J	0.490 J	0.940 U	0.420 J	0.920 U	0.600 J	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.600
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.600
	§Sum of All Compounds Collected	0.490	0.490	0.00	0.420	3.60	1.20

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	Location	MW-589M2	MW-621M1	MW-621M2	MW-622M1	MW-622M2	MW-631M1
	Field Sample ID	MW-589M2_F20	MW-621M1_F20	MW-621M2_F20	MW-622M1_F20	MW-622M2_F20	MW-631M1_F20
	Sampling Depth	211.00 - 221.00	249.40 - 259.40	219.40 - 229.40	245.40 - 255.40	220.40 - 230.40	233.10 - 243.10
	Sampling Date	09/02/2020	08/26/2020	08/26/2020	09/01/2020	09/01/2020	08/26/2020
	SDG	320643521	320641331	320641331	320642411	320642411	320641331
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U	
Perfluorobutanesulfonic acid (PFBS)	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U	
Perfluorohexanoic acid (PFHxA)	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.940 U	0.440 J	0.940 U	0.400 J	0.940 U	0.420 J	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.440	0.00	0.400	0.00	0.420

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	Location	MW-631M2	MW-632M1	MW-632M2	MW-632M2	MW-640M1	MW-640M2
	Field Sample ID	MW-631M2_F20	MW-632M1_F20	MW-632M2_F20	MW-632M2_F20D	MW-640M1_F20	MW-640M2_F20
	Sampling Depth	200.10 - 210.10	254.50 - 264.50	229.50 - 239.50	229.50 - 239.50	246.00 - 256.00	216.00 - 226.00
	Sampling Date	08/26/2020	09/03/2020	09/03/2020	09/03/2020	09/03/2020	09/03/2020
	SDG	320641331	320643511	320643511	320643511	320643511	320643511
	Sample Type	Normal	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	18.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U	
Perfluorobutanesulfonic acid (PFBS)	8.50	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U	
Perfluorobutanoic acid (PFBA)	1.70 J	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.920 U	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	1.80 U	0.940 U	0.900 U	0.960 U	0.360 J	0.930 U	
Perfluorohexanoic acid (PFHxA)	5.40	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	1.90	0.450 J	0.900 U	0.960 U	0.630 J	0.930 U	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U	
Perfluorotridecanoic acid (PFTrDA)	2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.360	0.00
	§Sum of All Compounds Collected	17.5	0.450	0.00	0.00	0.990	0.00

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J2 Range Northern

	Location	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	Field Sample ID	MW-703M1_F20	MW-703M2_F20	MW-704M1_F20	MW-704M2_F20
	Sampling Depth	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	Sampling Date	08/31/2020	08/31/2020	09/01/2020	09/01/2020
	SDG	320642421	320642421	320642411	320642411
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.20 U	9.70 U	9.20 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
Perfluorobutanesulfonic acid (PFBS)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		3.20	1.60 J	1.50 J	1.90
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluorohexanoic acid (PFHxA)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluorononanoic acid (PFNA)		1.80	0.900 J	1.50 U	0.890 J
Perfluorooctanesulfonamide (PFOSA)		1.30 J	2.20 J	2.90 U	2.80 U
Perfluorooctanesulfonate (PFOS)		2.70 U	2.70 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.650 J	0.830 J	1.10 J	0.400 J
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.70 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.70 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		0.650 J	1.40 U	1.00 J	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	5.00	2.50	1.50	2.79
	§Sum of All Compounds Collected	7.60	5.53	5.00	3.19

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 J3 Range

	Location	MW-143M2	MW-143M3	MW-163S	MW-163S	MW-181S	MW-193M1
	Field Sample ID	MW-143M2_F20	MW-143M3_F20	MW-163S_F20	MW-163S_F20D	MW-181S_F20	MW-193M1_F20
	Sampling Depth	117.00 - 122.00	107.00 - 112.00	38.00 - 48.00	38.00 - 48.00	32.25 - 42.25	57.50 - 62.50
	Sampling Date	07/20/2020	07/21/2020	07/16/2020	07/16/2020	07/21/2020	07/16/2020
	SDG	320629171	320629171	320627321	320627321	320629171	320627321
	Sample Type	Normal	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U	
Perfluorobutanesulfonic acid (PFBS)	1.20 J	0.620 J	0.970 U	0.980 U	0.940 U	0.960 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.00 J	1.00 J	1.40 U	0.570 J	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	26.0	4.20	1.90 U	2.00 U	1.90 U	1.90 U	
Perfluorohexanoic acid (PFHxA)	0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.80 U	4.90	5.00	16.0	2.90 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	0.840 J	0.940 J	0.510 J	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.940 U	0.950 U	0.970 U	0.460 J	0.940 U	0.490 J	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	5.74	5.94	16.5	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	26.0	4.20	5.74	5.94	16.5	0.00
	§Sum of All Compounds Collected	27.2	4.82	6.74	7.40	16.5	1.06

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	Location	MW-193S	MW-196M1	MW-196S	MW-197M1	MW-197M2	MW-197M3
	Field Sample ID	MW-193S_F20	MW-196M1_F20	MW-196S_F20	MW-197M1_F20	MW-197M2_F20	MW-197M3_F20D
	Sampling Depth	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	120.00 - 125.00	80.20 - 85.20	60.20 - 65.20
	Sampling Date	07/16/2020	07/23/2020	07/23/2020	07/20/2020	07/20/2020	07/20/2020
	SDG	320627321	320630121	320630121	320629171	320629171	320629171
	Sample Type	Normal	Normal	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	18.0 U	18.0 U	19.0 U	19.0 U	18.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U	
Perfluorobutanesulfonic acid (PFBS)	2.20	0.920 U	0.900 U	0.940 U	1.80 J	0.920 U	
Perfluorobutanoic acid (PFBA)	1.20 J	1.80 U	1.80 U	1.40 U	4.90	1.40 J	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.920 U	0.550 J	0.900 U	0.940 U	0.930 U	0.920 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.920 U	0.900 U	0.940 U	0.930 U	0.920 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.30 U	1.40 U	4.00	1.40 U	
Perfluorohexane sulfonate (PFHxS)	19.0	1.00 J	0.900 U	1.90 U	37.0	1.80 U	
Perfluorohexanoic acid (PFHxA)	0.830 J	0.950 J	0.510 J	0.940 U	8.40	0.450 J	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	1.10 J	3.80	2.80 U	10.0	2.80 U	
Perfluorooctanoic acid (PFOA)	1.40 U	2.10	1.10 J	0.550 J	3.10	1.10 J	
Perfluoropentanoic acid (PFPeA)	1.30 J	0.660 J	0.440 J	0.400 J	6.50	0.440 J	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U	
Perfluorotridecanoic acid (PFTrDA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	3.20	4.90	0.550	13.1	1.10
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	19.0	4.75	4.90	0.550	54.1	1.10
	§Sum of All Compounds Collected	24.5	6.36	5.85	0.950	75.7	3.39

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	Location	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	Field Sample ID	MW-197M3_F20	MW-198M1_F20	MW-198M2_F20	MW-198M3_F20	MW-198M4_F20	MW-232M1_F20
	Sampling Depth	60.20 - 65.20	150.00 - 155.00	120.00 - 125.00	100.00 - 105.00	70.00 - 75.00	77.50 - 82.50
	Sampling Date	07/20/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/16/2020
	SDG	320629171	320627321	320627321	320627321	320627321	320627321
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
Perfluorobutanesulfonic acid (PFBS)	0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluorobutanoic acid (PFBA)	1.50 J	1.40 U	0.740 J	0.740 J	6.50	2.20	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.80 J	1.40 U	
Perfluorohexane sulfonate (PFHxS)	1.80 U	0.950 U	0.950 U	1.90 U	4.40	0.950 U	
Perfluorohexanoic acid (PFHxA)	0.920 U	0.950 U	0.950 U	0.950 U	3.70	0.950 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U	
Perfluorooctanesulfonate (PFOS)	1.00 J	2.80 U	2.90 U	2.80 U	2.30 J	2.90 U	
Perfluorooctanoic acid (PFOA)	0.990 J	1.40 U	1.40 U	1.40 U	2.30	0.640 J	
Perfluoropentanoic acid (PFPeA)	0.430 J	0.460 J	0.950 U	0.950 U	2.80	0.420 J	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U	
Perfluorotridecanoic acid (PFTrDA)	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	1.99	0.00	0.00	0.00	4.60	0.640
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	1.99	0.00	0.00	0.00	10.8	0.640
	§Sum of All Compounds Collected	3.92	0.460	0.740	0.740	23.8	3.26

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 J3 Range

	Location	MW-232M2	MW-30
	Field Sample ID	MW-232M2_F20	MW-30_F20
	Sampling Depth	61.00 - 66.00	26.00 - 36.00
	Sampling Date	07/16/2020	07/21/2020
	SDG	320627321	320629171
	Sample Type	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		10.0 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		10.0 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		10.0 U	9.40 U
Perfluorobutanesulfonic acid (PFBS)		1.00 U	0.940 U
Perfluorobutanoic acid (PFBA)		3.20	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.00 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		1.00 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		1.00 U	0.940 U
Perfluorohexanoic acid (PFHxA)		1.00 U	0.940 U
Perfluorononanoic acid (PFNA)		1.50 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		3.00 U	2.80 U
Perfluorooctanesulfonate (PFOS)		3.00 U	15.0
Perfluorooctanoic acid (PFOA)		1.10 J	0.790 J
Perfluoropentanoic acid (PFPeA)		0.520 J	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		3.00 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		3.00 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.40 U
	†PFOS + PFOA (EPA)	1.10	15.8
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	1.10	15.8
	§Sum of All Compounds Collected	4.82	15.8

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 KGS 2021 J2 North SPM Fall
 J2 Range Northern

Location	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
Field Sample ID	J2EW0002_F21	J2EW0002_F21D	J2EW2-MW2-B_F21	J2EW2-MW2-C_F21	MW-293M2_F21	MW-293M2_F21D
Sampling Depth	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	0.00 - 0.00	0.00 - 0.00
Sampling Date	09/27/2021	09/27/2021	09/15/2021	09/15/2021	09/08/2021	09/08/2021
SDG	320796651	320796651	320791141	320791141	320787611	320787611
Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	6.70 J	6.70 J	19.0 U	20.0 U	18.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U
Perfluorobutanesulfonic acid (PFBS)	0.940 U	0.900 U	0.950 U	1.00 U	3.90	3.80
Perfluorobutanoic acid (PFBA)	1.40 U	1.30 U	1.40 U	1.50 U	0.840 J	1.10 J
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.30 U	1.40 U	1.50 U	1.40 U	1.30 U
Perfluorodecanoic acid (PFDA)	0.940 U	0.900 U	0.950 U	1.00 U	3.20	2.80
Perfluorododecanoic acid (PFDoA)	1.40 U	1.30 U	1.40 U	1.50 U	2.40	2.30
Perfluoroheptanesulfonic acid (PFHpS)	0.940 U	0.900 U	0.950 U	1.00 U	0.920 U	0.890 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	0.550 J	1.40 U	1.50 U	1.40 U	1.30 U
Perfluorohexane sulfonate (PFHxS)	8.10	7.70	0.950 U	1.00 U	0.920 U	0.890 U
Perfluorohexanoic acid (PFHxA)	0.820 J	0.770 J	0.950 U	1.00 U	1.30 J	1.10 J
Perfluorononanoic acid (PFNA)	1.40 U	1.30 U	1.40 U	1.50 U	1.30 J	1.10 J
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.70 U	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanesulfonate (PFOS)	1.30 J	1.10 J	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	1.80 J	1.20 J	1.40 U	1.50 U	1.40 U	1.30 U
Perfluoropentanoic acid (PFPeA)	0.680 J	0.640 J	0.950 U	1.00 U	1.10 J	1.00 J
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.70 U	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.70 U	2.90 U	3.10 U	0.760 J	2.70 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.30 U	1.40 U	1.50 U	23.0	22.0
†PFOS + PFOA (EPA)	3.10	2.30	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	11.2	10.6	0.00	0.00	4.50	3.90
§Sum of All Compounds Collected	19.4	18.7	0.00	0.00	37.8	35.2

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 J2 Range Northern

Location	MW-300M1	MW-300M1	MW-300M2	MW-300M3	MW-302M2	MW-302M2
Field Sample ID	MW-300M1_F21	MW-300M1_F21D	MW-300M2_F21	MW-300M3_F21	MW-302M2_F21	MW-302M2_F21D
Sampling Depth	293.03 - 303.02	293.03 - 303.02	197.23 - 207.23	135.31 - 145.31	194.35 - 204.43	194.35 - 204.43
Sampling Date	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/13/2021	09/13/2021
SDG	320793351	320793351	320793351	320793351	320790821	320790821
Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
Perfluorobutanesulfonic acid (PFBS)	0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorobutanoic acid (PFBA)	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	3.40	3.60	4.00	1.70 J	2.60	2.50
Perfluorododecanoic acid (PFDoA)	0.520 J	0.680 J	1.10 J	0.710 J	2.80	3.00
Perfluoroheptanesulfonic acid (PFHpS)	0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluoroheptanoic acid (PFHpA)	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.970 U	0.960 U	0.930 U	0.440 J	0.960 U	0.940 U
Perfluorohexanoic acid (PFHxA)	0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorononanoic acid (PFNA)	4.80	4.80	3.60	2.10	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorooctanesulfonate (PFOS)	2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)	2.90 U	2.90 U	0.700 J	0.840 J	1.10 J	1.20 J
Perfluoroundecanoic acid (PFUnA)	8.30	8.60	7.80	4.40	27.0	27.0
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	8.20	8.40	7.60	4.24	2.60	2.50
§Sum of All Compounds Collected	17.0	17.7	17.2	10.2	33.5	33.7

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	Location	MW-305M1	MW-330M1	MW-330M2	MW-330M3	MW-340D	MW-340M1
	Field Sample ID	MW-305M1_F21	MW-330M1_F21	MW-330M2_F21	MW-330M3_F21	MW-340D_F21	MW-340M1_F21
	Sampling Depth	202.82 - 212.82	313.10 - 323.13	238.01 - 248.04	154.97 - 164.99	0.00 - 0.00	0.00 - 0.00
	Sampling Date	09/14/2021	09/17/2021	09/17/2021	09/17/2021	09/23/2021	09/23/2021
	SDG	320790821	320791141	320791141	320791141	320793861	320793861
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U	
Perfluorobutanesulfonic acid (PFBS)	0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U	
Perfluorobutanoic acid (PFBA)	1.50 U	1.60 J	0.890 J	1.50 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	3.60	38.0	8.90	19.0	18.0	2.30	
Perfluorododecanoic acid (PFDoA)	1.50 U	2.50	2.20	0.810 J	1.80 J	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U	
Perfluoroheptanoic acid (PFHpA)	1.50 U	1.10 J	1.50 U	1.50 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U	
Perfluorohexanoic acid (PFHxA)	0.970 U	0.770 J	0.970 U	0.990 U	0.950 U	0.960 U	
Perfluorononanoic acid (PFNA)	2.20	16.0	12.0	25.0	14.0	1.60 J	
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.90 U	2.90 U	3.00 U	2.80 U	2.90 U	
Perfluorooctanesulfonate (PFOS)	2.90 U	2.90 U	2.90 U	3.00 U	2.80 U	2.90 U	
Perfluorooctanoic acid (PFOA)	1.50 U	0.660 J	0.650 J	1.50 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.970 U	2.50	1.20 J	0.990 U	0.950 U	0.960 U	
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	1.10 J	2.90 U	3.00 U	0.840 J	2.90 U	
Perfluorotridecanoic acid (PFTTrDA)	2.90 U	1.60 J	2.10 J	3.00 U	1.20 J	2.90 U	
Perfluoroundecanoic acid (PFUnA)	3.30	23.0	9.60	8.90	18.0	1.50 J	
+PFOS + PFOA (EPA)	0.00	0.660	0.650	0.00	0.00	0.00	
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	5.80	55.8	21.6	44.0	32.0	3.90	
§Sum of All Compounds Collected	9.10	88.8	37.5	53.7	53.8	5.40	

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	Location	MW-340M2	MW-345M1	MW-345M2	MW-348M2	MW-586M1	MW-586M2
	Field Sample ID	MW-340M2_F21	MW-345M1_F21	MW-345M2_F21	MW-348M2_F21	MW-586M1_F21	MW-586M2_F21
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	206.54 - 216.54	237.00 - 247.00	211.00 - 221.00
	Sampling Date	09/23/2021	09/20/2021	09/20/2021	09/07/2021	09/09/2021	09/09/2021
	SDG	320793861	320793351	320793351	320787611	320787751	320787751
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	18.0 U	20.0 U	18.0 U	19.0 U	18.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U	
Perfluorobutanesulfonic acid (PFBS)	0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	0.790 J	1.30 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.50 U	1.30 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	1.60 J	56.0	2.90	2.40	0.930 U	0.910 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	3.40	0.760 J	2.40	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	0.910 J	1.50 U	1.30 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.950 U	0.410 J	0.810 J	0.890 U	0.930 U	0.910 U	
Perfluorohexanoic acid (PFHxA)	0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U	
Perfluorononanoic acid (PFNA)	4.00	14.0	6.80	1.30 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.70 U	3.00 U	2.70 U	2.80 U	2.70 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.70 U	1.20 J	2.70 U	2.80 U	2.70 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.10 J	0.580 J	1.30 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.950 U	0.480 J	0.960 J	0.890 U	0.930 U	0.910 U	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	0.930 J	3.00 U	2.70 U	2.80 U	2.70 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	1.80 J	0.840 J	0.740 J	2.80 U	2.70 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	32.0	3.60	8.70	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	1.10	1.78	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	5.60	72.4	12.3	2.40	0.00	0.00
	§Sum of All Compounds Collected	5.60	111	19.2	14.2	0.00	0.00

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	Location	MW-587M1	MW-588M1	MW-588M2	MW-589M1	MW-589M2	MW-612M1
	Field Sample ID	MW-587M1_F21	MW-588M1_F21	MW-588M2_F21	MW-589M1_F21	MW-589M2_F21	MW-612M1_F21
	Sampling Depth	250.00 - 260.00	238.00 - 248.00	198.00 - 208.00	240.00 - 250.00	211.00 - 221.00	297.00 - 307.00
	Sampling Date	08/24/2021	09/08/2021	09/08/2021	09/09/2021	09/09/2021	09/14/2021
	SDG	320781081	320787611	320787611	320787751	320787751	320790821
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	18.0 U	19.0 U	19.0 U	20.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U	
Perfluorobutanesulfonic acid (PFBS)	0.920 U	0.930 U	1.70 J	0.940 U	0.940 U	0.980 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorodecanoic acid (PFDA)	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorohexane sulfonate (PFHxS)	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U	
Perfluorohexanoic acid (PFHxA)	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	0.570 J	1.40 U	1.50 U	
Perfluoropentanoic acid (PFPeA)	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.570	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.570	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00	1.70	0.570	0.00	0.00

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	Location	MW-612M2	MW-613M1	MW-613M2	MW-621M1	MW-621M2	MW-622M1
	Field Sample ID	MW-612M2_F21	MW-613M1_F21	MW-613M2_F21	MW-621M1_F21	MW-621M2_F21	MW-622M1_F21
	Sampling Depth	267.00 - 277.00	267.10 - 277.10	246.10 - 256.10	249.40 - 259.40	219.40 - 229.40	245.40 - 255.40
	Sampling Date	09/14/2021	09/17/2021	09/17/2021	09/08/2021	09/08/2021	09/13/2021
	SDG	320790821	320791141	320791141	320787611	320787611	320790821
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	19.0 U	19.0 U	18.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U	9.40 U
Perfluorobutanesulfonic acid (PFBS)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluorohexanoic acid (PFHxA)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U
Perfluorooctanesulfonate (PFOS)	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00	0.00	0.00	0.00	0.00

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	Location	MW-622M2	MW-631M1	MW-631M2	MW-632M1	MW-632M2	MW-640M1
	Field Sample ID	MW-622M2_F21	MW-631M1_F21	MW-631M2_F21	MW-632M1_F21	MW-632M2_F21	MW-640M1_F21
	Sampling Depth	220.40 - 230.40	233.10 - 243.10	200.10 - 210.10	254.50 - 264.50	229.50 - 239.50	246.00 - 256.00
	Sampling Date	09/13/2021	08/23/2021	08/23/2021	09/07/2021	09/07/2021	09/07/2021
	SDG	320790821	320781081	320781081	320787611	320787611	320787611
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	18.0 U	18.0 U	18.0 U	18.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.00 U	9.60 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.00 U	9.60 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.00 U	9.60 U
Perfluorobutanesulfonic acid (PFBS)	0.960 U	0.880 U	12.0	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorobutanoic acid (PFBA)	1.40 U	1.30 U	2.80	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorohexanoic acid (PFHxA)	0.960 U	0.880 U	23.0	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorononanoic acid (PFNA)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanesulfonate (PFOS)	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.960 U	0.880 U	11.0	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorotridecanoic acid (PFTTrDA)	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00	48.8	0.00	0.00	0.00

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	Location	MW-640M2	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	Field Sample ID	MW-640M2_F21	MW-703M1_F21	MW-703M2_F21	MW-704M1_F21	MW-704M2_F21
	Sampling Depth	216.00 - 226.00	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	Sampling Date	09/07/2021	09/14/2021	09/14/2021	09/13/2021	09/13/2021
	SDG	320787611	320790821	320790821	320790821	320790821
	Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	20.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
Perfluorobutanesulfonic acid (PFBS)		0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U	1.50 U	3.30	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.910 U	3.90	2.00	2.00	2.20
Perfluorododecanoic acid (PFDoA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluorohexanoic acid (PFHxA)		0.910 U	0.980 U	0.970 U	0.900 J	0.940 U
Perfluorononanoic acid (PFNA)		1.40 U	1.60 J	0.640 J	1.10 J	0.830 J
Perfluorooctanesulfonamide (PFOSA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanesulfonate (PFOS)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.910 U	0.700 J	0.970 U	3.20	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	5.50	2.64	3.10	3.03
	§Sum of All Compounds Collected	0.00	6.20	2.64	10.5	3.03

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2021 J2 Ranges SPM Spring
 J2 Range Northern

	Location	J2EW0002
	Field Sample ID	J2EW0002_521
	Sampling Depth	198.00 - 233.00
	Sampling Date	01/13/2021
	SDG	320689351
	Sample Type	Normal
PFAS 21 Cmps		Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		7.40 J
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U
Perfluorobutanesulfonic acid (PFBS)		0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.430 J
Perfluoroheptanoic acid (PFHpA)		0.860 J
Perfluorohexane sulfonate (PFHxS)		11.0
Perfluorohexanoic acid (PFHxA)		0.900 J
Perfluorononanoic acid (PFNA)		1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.80 J
Perfluorooctanesulfonate (PFOS)		1.00 J
Perfluorooctanoic acid (PFOA)		1.80 J
Perfluoropentanoic acid (PFPeA)		1.90 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
	†PFOS + PFOA (EPA)	2.80
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	14.7
	§Sum of All Compounds Collected	25.2

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2021 J3 Range SPM Fall
 J3 Range

	Location	90EW0001	90WT0004	J3-EFF	J3-EFF	J3-INF	J3-INF
	Field Sample ID	90EW0001_F21	90WT0004_F21	J3-EFF_4Q21	J3-EFF_F21	J3-INF_4Q21	J3-INF_F21
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sampling Date	07/13/2021	08/10/2021	10/20/2021	07/13/2021	10/20/2021	07/13/2021
	SDG	320762631	320775331	320807451	320762631	320807451	320762631
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	18.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.20 U	9.20 U	9.60 U	9.50 U	9.70 U	9.50 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.20 U	9.20 U	9.60 U	9.50 U	9.70 U	9.50 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.20 U	9.20 U	9.60 U	9.50 U	9.70 U	9.50 U	9.50 U
Perfluorobutanesulfonic acid (PFBS)	0.920 U	0.920 U	0.960 U	0.950 U	0.970 U	0.950 U	0.950 U
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)	0.920 U	0.920 U	0.960 U	0.950 U	0.970 U	0.950 U	0.950 U
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)	0.920 U	0.920 U	0.960 U	0.950 U	0.970 U	0.950 U	0.950 U
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	0.500 J	0.920 U	0.960 U	0.950 U	1.00 J	1.20 J	1.20 J
Perfluorohexanoic acid (PFHxA)	0.920 U	0.920 U	0.960 U	0.950 U	0.970 U	0.950 U	0.950 U
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U	2.80 U
Perfluorooctanesulfonate (PFOS)	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.920 U	0.920 U	0.960 U	0.950 U	0.970 U	0.950 U	0.950 U
Perfluorotetradecanoic acid (PFTeDA)	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTTrDA)	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U	2.80 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.500	0.00	0.00	0.00	1.00	1.20
	§Sum of All Compounds Collected	0.500	0.00	0.00	0.00	1.00	1.20

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2021 J3 Range SPM Fall
 J3 Range

	Location	J3EW0032	J3EWIP1	J3EWIP2	MW-142M2	MW-142S	MW-143M1
	Field Sample ID	J3EW0032_F21	J3EWIP1_F21	J3EWIP2_F21	MW-142M2_F21	MW-142S_F21	MW-143M1_F21
	Sampling Depth	102.00 - 152.00	153.00 - 193.00	150.50 - 170.50	140.00 - 150.00	42.00 - 52.00	144.00 - 154.00
	Sampling Date	07/13/2021	07/13/2021	07/13/2021	07/27/2021	07/27/2021	07/26/2021
	SDG	320762631	320762631	320762631	320769671	320769671	320769671
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	20.0 U	19.0 U	20.0 U	19.0 UJ	19.0 UJ	19.0 UJ	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.80 U	9.40 U	9.80 U	9.70 UJ	9.30 UJ	9.60 UJ	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.80 U	9.40 U	9.80 U	9.70 UJ	9.30 UJ	9.60 UJ	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.80 U	9.40 U	9.80 U	9.70 UJ	9.30 UJ	9.60 UJ	
Perfluorobutanesulfonic acid (PFBS)	0.980 U	0.940 U	0.980 U	0.970 UJ	0.930 UJ	0.960 UJ	
Perfluorobutanoic acid (PFBA)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
Perfluorodecanoic acid (PFDA)	0.980 U	0.940 U	0.980 U	0.970 UJ	0.930 UJ	0.960 UJ	
Perfluorododecanoic acid (PFDoA)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
Perfluoroheptanesulfonic acid (PFHpS)	0.980 U	0.940 U	0.980 U	0.970 UJ	0.930 UJ	0.960 UJ	
Perfluoroheptanoic acid (PFHpA)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
Perfluorohexane sulfonate (PFHxS)	0.720 J	0.520 J	2.80	2.80 J	0.930 UJ	0.960 UJ	
Perfluorohexanoic acid (PFHxA)	0.980 U	0.940 U	0.980 U	0.970 UJ	0.930 UJ	0.960 UJ	
Perfluorononanoic acid (PFNA)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
Perfluorooctanesulfonamide (PFOSA)	2.90 U	2.80 U	2.90 U	2.90 UJ	2.80 UJ	2.90 UJ	
Perfluorooctanesulfonate (PFOS)	2.90 U	2.80 U	2.90 U	2.90 UJ	2.80 UJ	2.90 UJ	
Perfluorooctanoic acid (PFOA)	1.50 U	1.40 U	1.50 U	1.50 UJ	0.510 J	1.40 UJ	
Perfluoropentanoic acid (PFPeA)	0.980 U	0.940 U	0.980 U	0.970 UJ	0.930 UJ	0.960 UJ	
Perfluorotetradecanoic acid (PFTeDA)	2.90 U	2.80 U	2.90 U	2.90 UJ	2.80 UJ	2.90 UJ	
Perfluorotridecanoic acid (PFTrDA)	2.90 U	2.80 U	2.90 U	2.90 UJ	2.80 UJ	2.90 UJ	
Perfluoroundecanoic acid (PFUnA)	1.50 U	1.40 U	1.50 U	1.50 UJ	1.40 UJ	1.40 UJ	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.510	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.720	0.520	2.80	2.80	0.510	0.00
	§Sum of All Compounds Collected	0.720	0.520	2.80	2.80	0.510	0.00

PFAS Summary Report – Groundwater
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 KGS 2021 J3 Range SPM Fall
 J3 Range

	Location	MW-143M2	MW-143M2	MW-144M2	MW-144S	MW-145M1	MW-145S
	Field Sample ID	MW-143M2_F21DR	MW-143M2_F21R	MW-144M2_F21	MW-144S_F21R	MW-145M1_F21	MW-145S_F21
	Sampling Depth	117.00 - 122.00	117.00 - 122.00	130.00 - 140.00	26.00 - 36.00	125.00 - 135.00	30.00 - 40.00
	Sampling Date	09/16/2021	09/16/2021	07/27/2021	09/16/2021	08/11/2021	08/11/2021
	SDG	320791142	320791142	320769671	320791142	320776031	320776031
	Sample Type	Field Duplicate	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 UJ	20.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
Perfluorobutanesulfonic acid (PFBS)		0.640 J	0.700 J	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)		4.10	4.00	0.940 UJ	0.990 U	0.950 U	1.50 J
Perfluorohexanoic acid (PFHxA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.630 J
Perfluorononanoic acid (PFNA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluorooctanesulfonate (PFOS)		2.80 U	2.80 U	2.80 UJ	3.60 J	2.90 U	3.90
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.40 UJ	0.570 J	1.40 U	0.760 J
Perfluoropentanoic acid (PFPeA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTTrDA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	4.17	0.00	4.66
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.10	4.00	0.00	4.17	0.00	6.16
	§Sum of All Compounds Collected	4.74	4.70	0.00	4.17	0.00	6.79

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 KGS 2021 J3 Range SPM Fall
 J3 Range

	Location	MW-157M1	MW-157M2	MW-157M3	MW-163S	MW-181S	MW-181S
	Field Sample ID	MW-157M1_F21	MW-157M2_F21	MW-157M3_F21	MW-163S_F21	MW-181S_F21	MW-181S_F21D
	Sampling Depth	154.00 - 164.00	110.00 - 120.00	70.00 - 80.00	38.00 - 48.00	32.25 - 42.25	32.25 - 42.25
	Sampling Date	07/14/2021	07/14/2021	07/14/2021	07/14/2021	08/02/2021	08/02/2021
	SDG	320763871	320763871	320763871	320763871	320772471	320772471
	Sample Type	Normal	Normal	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U	18.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U	
Perfluorobutanesulfonic acid (PFBS)	0.930 U	9.40	1.00 U	0.940 U	0.950 U	0.900 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.930 U	0.720 J	1.50 J	0.450 J	0.950 U	0.900 U	
Perfluorohexanoic acid (PFHxA)	0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U	
Perfluorooctanesulfonate (PFOS)	2.80 U	2.90 U	3.00 U	4.80	15.0	15.0	
Perfluorooctanoic acid (PFOA)	1.40 U	1.50 U	0.730 J	1.10 J	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U	
Perfluorotetradecanoic acid (PFTeDA)	2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U	
Perfluorotridecanoic acid (PFTTrDA)	2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.730	5.90	15.0	15.0
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.720	2.23	6.35	15.0	15.0
	§Sum of All Compounds Collected	0.00	10.1	2.23	6.35	15.0	15.0

PFAS Summary Report – Groundwater
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 KGS 2021 J3 Range SPM Fall
 J3 Range

	Location	MW-193S	MW-193S	MW-196M1	MW-196S	MW-197M2	MW-197M2
	Field Sample ID	MW-193S_F21	MW-193S_F21D	MW-196M1_F21	MW-196S_F21	MW-197M2_F21	MW-197M2_F21D
	Sampling Depth	32.50 - 37.50	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	80.20 - 85.20	80.20 - 85.20
	Sampling Date	08/04/2021	08/04/2021	08/11/2021	08/11/2021	08/02/2021	08/02/2021
	SDG	320772871	320772871	320776031	320776031	320772471	320772471
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
Perfluorobutanesulfonic acid (PFBS)		0.940 U	0.940 U	0.960 U	1.00 U	0.450 J	0.460 J
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	0.900 J	1.50 U	2.60	2.60
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.940 U	0.960 U	1.00 U	0.960 U	0.920 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.940 U	0.960 U	1.00 U	0.960 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.50 U	3.00	3.00
Perfluorohexane sulfonate (PFHxS)		2.80	2.60	0.960 U	0.440 J	15.0	15.0
Perfluorohexanoic acid (PFHxA)		0.940 U	0.940 U	0.760 J	0.480 J	5.00	5.50
Perfluorononanoic acid (PFNA)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluorooctanesulfonate (PFOS)		2.80 U	2.80 U	2.90 U	5.30 J	4.90	4.80
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.40 J	0.700 J	2.70	2.90
Perfluoropentanoic acid (PFPeA)		0.940 U	0.940 U	0.960 U	1.00 U	4.20	4.20
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	1.40	6.00	7.60	7.70
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.80	2.60	1.40	6.44	25.6	25.7
	§Sum of All Compounds Collected	2.80	2.60	3.06	6.92	37.9	38.5

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 J3 Range

	Location	MW-197M3	MW-198M4	MW-218M1	MW-218M1	MW-218M2	MW-218M2
	Field Sample ID	MW-197M3_F21	MW-198M4_F21	MW-218M1_F21	MW-218M1_F21R	MW-218M2_F21	MW-218M2_F21R
	Sampling Depth	60.20 - 65.20	70.00 - 75.00	128.00 - 133.00	128.00 - 133.00	98.00 - 103.00	98.00 - 103.00
	Sampling Date	08/02/2021	08/05/2021	08/16/2021	09/30/2021	08/16/2021	09/30/2021
	SDG	320772471	320773351	320778561	320797671	320778561	320797671
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	18.0 U	19.0 U	19.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
Perfluorobutanesulfonic acid (PFBS)		0.940 U	0.930 U	0.420 J	0.950 U	0.940 U	1.00 U
Perfluorobutanoic acid (PFBA)		1.30 J	1.40 J	400	1.40 U	64.0	3.00
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.930 U	42.0	5.60	10.0	5.10
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	32.0	1.40 U	2.30	0.600 J
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.930 U	0.910 U	0.950 U	0.940 U	1.00 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	360	1.40 U	100	2.10
Perfluorohexane sulfonate (PFHxS)		2.40	8.50	0.910 U	0.950 U	0.940 U	1.00 U
Perfluorohexanoic acid (PFHxA)		0.590 J	0.930 U	350	0.950 U	57.0	1.90 J
Perfluorononanoic acid (PFNA)		1.40 U	1.40 U	75.0	6.20	35.0	6.20
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanesulfonate (PFOS)		2.80 U	1.70 J	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)		1.00 J	0.870 J	120	5.70	49.0	2.10
Perfluoropentanoic acid (PFPeA)		0.940 U	0.930 U	770	0.950 U	110	5.00
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	35.0	2.80 U	2.00 J	3.00 U
Perfluorotridecanoic acid (PFTTrDA)		2.80 U	2.80 U	49.0	2.80 U	2.60 J	3.00 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	48.0	3.60	6.80	3.50
	†PFOS + PFOA (EPA)	1.00	2.57	120	5.70	49.0	2.10
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	3.40	11.1	597	17.5	194	15.5
	§Sum of All Compounds Collected	5.29	12.5	2280	21.1	439	29.5

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 J3 Range

	Location	MW-218M3	MW-218M3	MW-250M1	MW-250M3	MW-30	MW-576M2
	Field Sample ID	MW-218M3_F21	MW-218M3_F21R	MW-250M1_F21	MW-250M3_F21	MW-30_F21	MW-576M2_F21
	Sampling Depth	78.00 - 83.00	78.00 - 83.00	185.00 - 195.00	95.00 - 105.00	26.00 - 36.00	133.90 - 143.90
	Sampling Date	08/16/2021	09/30/2021	07/15/2021	07/15/2021	08/02/2021	08/10/2021
	SDG	320778561	320797671	320763871	320763871	320772471	320775331
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	18.0 U	19.0 U	18.0 U	18.0 U	18.0 U	19.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U	
Perfluorobutanesulfonic acid (PFBS)	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U	
Perfluorobutanoic acid (PFBA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U	
Perfluorododecanoic acid (PFDoA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluoroheptanesulfonic acid (PFHpS)	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U	
Perfluoroheptanoic acid (PFHpA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluorohexane sulfonate (PFHxS)	0.910 U	0.930 U	0.550 J	1.90	0.900 U	0.470 J	
Perfluorohexanoic acid (PFHxA)	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U	
Perfluorooctanesulfonate (PFOS)	2.70 U	2.80 U	2.70 U	1.00 J	7.00	2.80 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U	
Perfluorotetradecanoic acid (PFTeDA)	2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U	
Perfluorotridecanoic acid (PFTTrDA)	2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	1.00	7.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.550	2.90	7.00	0.470
	§Sum of All Compounds Collected	0.00	0.00	0.550	2.90	7.00	0.470

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	Location	MW-636M1	MW-636M2	MW-653M1	MW-653M2
	Field Sample ID	MW-636M1_F21	MW-636M2_F21	MW-653M1_F21	MW-653M2_F21
	Sampling Depth	141.60 - 151.60	110.50 - 120.50	147.50 - 157.50	59.30 - 69.30
	Sampling Date	07/29/2021	07/29/2021	07/29/2021	07/29/2021
	SDG	320769861	320769861	320769861	320769861
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	20.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.30 U	9.80 U	9.10 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
Perfluorobutanesulfonic acid (PFBS)		0.950 U	1.20 J	3.50	0.910 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.20 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U	0.930 U	0.980 U	0.910 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.930 U	0.980 U	0.910 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	2.50	1.40 U
Perfluorohexane sulfonate (PFHxS)		0.950 U	4.80	83.0	0.910 U
Perfluorohexanoic acid (PFHxA)		0.460 J	0.570 J	5.80	0.910 U
Perfluorononanoic acid (PFNA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluorooctanesulfonate (PFOS)		2.90 U	1.60 J	5.30	2.70 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.80 J	1.40 U
Perfluoropentanoic acid (PFPeA)		0.950 U	0.930 U	3.30	0.910 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	1.60	7.10	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	6.40	92.6	0.00
	§Sum of All Compounds Collected	0.460	8.17	106	0.00

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 J2 Range Eastern

	Location	MW-128S	MW-18D	MW-18M1	MW-18M2	MW-18S	MW-48D
	Field Sample ID	MW-128S_S22	MW-18D_S22	MW-18M1_S22	MW-18M2_S22	MW-18S_S22	MW-48D_S22
	Sampling Depth	87.00 - 97.00	265.00 - 275.00	171.00 - 176.00	107.00 - 112.00	35.00 - 45.00	221.00 - 231.00
	Sampling Date	01/11/2022	12/27/2021	12/27/2021	12/27/2021	12/27/2021	01/04/2022
	SDG	320838001	320834481	320834481	320834481	320834481	320836321
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluorobutanesulfonic acid (PFBS)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluorobutanoic acid (PFBA)	0.480 U	0.500 U	0.500 U	0.500 U	0.490 U	0.470 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluorododecanoic acid (PFDoA)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoroheptanoic acid (PFHpA)	0.960 U	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluorohexane sulfonate (PFHxS)	4.30	1.00 U	0.990 U	1.00 U	0.980 U	0.950 U	
Perfluorohexanoic acid (PFHxA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanesulfonate (PFOS)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.480 U	0.500 U	0.500 U	0.500 U	0.490 U	0.470 U	
Perfluorotetradecanoic acid (PFTeDA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorotridecanoic acid (PFTrDA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.30	0.00	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	4.30	0.00	0.00	0.00	0.00	0.00

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J2 Range Eastern

	Location	MW-48M1	MW-48M2	MW-48M3	MW-48S	MW-49D	MW-49M1
	Field Sample ID	MW-48M1_S22	MW-48M2_S22	MW-48M3_S22	MW-48S_S22	MW-49D_S22	MW-49M1_S22
	Sampling Depth	191.00 - 201.00	161.00 - 171.00	131.50 - 142.00	99.00 - 109.00	185.00 - 195.00	160.00 - 170.00
	Sampling Date	01/04/2022	01/04/2022	01/04/2022	01/05/2022	01/03/2022	01/03/2022
	SDG	320836321	320836321	320836321	320837121	320836321	320836321
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
Perfluorobutanesulfonic acid (PFBS)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
Perfluorobutanoic acid (PFBA)	0.490 U	0.490 U	0.490 U	0.500 U	0.500 U	0.480 U	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorodecanoic acid (PFDA)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
Perfluorododecanoic acid (PFDoA)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoroheptanoic acid (PFHpA)	0.980 U	0.990 U	0.990 U	1.00 U	1.00 U	0.960 U	
Perfluorohexane sulfonate (PFHxS)	0.980 U	0.990 U	0.990 U	0.600 J	1.00 U	0.960 U	
Perfluorohexanoic acid (PFHxA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorononanoic acid (PFNA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanesulfonamide (PFOSA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanesulfonate (PFOS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorooctanoic acid (PFOA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoropentanoic acid (PFPeA)	0.490 U	0.490 U	0.490 U	0.500 U	0.500 U	0.480 U	
Perfluorotetradecanoic acid (PFTeDA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluorotridecanoic acid (PFTTrDA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
Perfluoroundecanoic acid (PFUnA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.600	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00	0.00	0.600	0.00	0.00

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 J2 Range Eastern

	Location	MW-18M1	MW-49M2	MW-49M3	MW-49S
	Field Sample ID	MW-18M1_S22	MW-49M2_S22	MW-49M3_S22	MW-49S_S22
	Sampling Depth	171.00 - 176.00	130.00 - 140.00	100.50 - 110.50	68.50 - 78.00
	Sampling Date	12/27/2021	01/03/2022	01/03/2022	01/03/2022
	SDG	320834481	320836321	320836321	320836321
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U	0.980 U	0.960 U	0.960 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.40 U	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.990 U	0.980 U	0.960 U	0.960 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluorobutanesulfonic acid (PFBS)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluorobutanoic acid (PFBA)		0.500 U	0.490 U	0.480 U	0.480 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluorododecanoic acid (PFDoA)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluorohexane sulfonate (PFHxS)		0.990 U	0.980 U	0.960 U	0.960 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.490 U	0.480 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U	1.40 U	1.40 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U	1.40 U	1.40 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Eastern

	Location	MW-18M2
	Field Sample ID	MW-18M2_S22
	Sampling Depth	107.00 - 112.00
	Sampling Date	12/27/2021
	SDG	320834481
	Sample Type	Normal
PFAS 21 Cmps		Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U
Perfluorobutanesulfonic acid (PFBS)		1.00 U
Perfluorobutanoic acid (PFBA)		0.500 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U
Perfluorodecanoic acid (PFDA)		1.00 U
Perfluorododecanoic acid (PFDoA)		1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U
Perfluoroheptanoic acid (PFHpA)		1.00 U
Perfluorohexane sulfonate (PFHxS)		1.00 U
Perfluorohexanoic acid (PFHxA)		1.50 U
Perfluorononanoic acid (PFNA)		1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U
Perfluorooctanesulfonate (PFOS)		1.50 U
Perfluorooctanoic acid (PFOA)		1.50 U
Perfluoropentanoic acid (PFPeA)		0.500 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U
	†PFOS + PFOA (EPA)	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
	§Sum of All Compounds Collected	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Eastern

	Location	MW-48M1	MW-48M3
	Field Sample ID	MW-48M1_S22	MW-48M3_S22
	Sampling Depth	191.00 - 201.00	131.50 - 142.00
	Sampling Date	01/04/2022	01/04/2022
	SDG	320836321	320836321
	Sample Type	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.980 U	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.980 U	0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.980 U	0.990 U
Perfluorobutanesulfonic acid (PFBS)		0.980 U	0.990 U
Perfluorobutanoic acid (PFBA)		0.490 U	0.490 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.980 U	0.990 U
Perfluorododecanoic acid (PFDoA)		0.980 U	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.980 U	0.990 U
Perfluorohexane sulfonate (PFHxS)		0.980 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U
Perfluorononanoic acid (PFNA)		1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.490 U	0.490 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U
	†PFOS + PFOA (EPA)	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Northern

	Location	C-4D	C-4D	C-4M	C-4S	C-7D	C-7M
	Field Sample ID	C-4D_S22	C-4D_S22D	C-4M_S22	C-4S_S22	C-7D_S22	C-7M_S22
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sampling Date	01/13/2022	01/13/2022	01/13/2022	01/13/2022	01/12/2022	01/12/2022
	SDG	320838831	320838831	320838831	320838831	320838831	320838831
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorobutanesulfonic acid (PFBS)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorobutanoic acid (PFBA)		0.480 U	0.470 U	0.460 U	0.480 U	0.470 U	0.480 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		4.30	4.50	5.90	5.30	4.80	4.20
Perfluorododecanoic acid (PFDoA)		0.760 J	1.00 J	1.60 J	1.10 J	1.70 J	0.960 J
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorohexane sulfonate (PFHxS)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)		0.900 J	0.930 J	1.30 J	1.90	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonate (PFOS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.480 U	0.470 U	0.460 U	0.480 U	0.470 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.40 U	1.40 U	0.970 J	0.940 J	1.40 U
Perfluoroundecanoic acid (PFUnA)		4.60	4.30	13.0	14.0	12.0	5.80
	+PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	5.20	5.43	7.20	7.20	4.80	4.20
	§Sum of All Compounds Collected	10.6	10.7	21.8	23.3	19.4	11.0

**PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP**

	Location	MW-18M1	MW-18M2
	Field Sample ID	MW-18M1_S22	MW-18M2_S22
	Sampling Depth	171.00 - 176.00	107.00 - 112.00
	Sampling Date	12/27/2021	12/27/2021
	SDG	320834481	320834481
	Sample Type	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U	1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.990 U	1.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.990 U	1.00 U
Perfluorobutanesulfonic acid (PFBS)		0.990 U	1.00 U
Perfluorobutanoic acid (PFBA)		0.500 U	0.500 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.990 U	1.00 U
Perfluorododecanoic acid (PFDoA)		0.990 U	1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.990 U	1.00 U
Perfluorohexane sulfonate (PFHxS)		0.990 U	1.00 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U
Perfluorononanoic acid (PFNA)		1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.500 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U
	†PFOS + PFOA (EPA)	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Northern

Location	C-7S	J2EW3-MW1-A	J2EW3-MW1-B	J2EW3-MW-2-A	J2EW3-MW-2-B	J2EW3-MW-2-C
Field Sample ID	C-7S_S22	J2EW3-MW1-A_S22	J2EW3-MW1-B_S22	J2EW3-MW-2-A_S22	J2EW3-MW-2-B_S22	J2EW3-MW-2-C_S22
Sampling Depth	0.00 - 0.00	145.66 - 155.66	210.66 - 220.66	151.16 - 161.16	216.16 - 226.16	251.13 - 261.13
Sampling Date	01/12/2022	01/05/2022	01/05/2022	01/06/2022	01/06/2022	01/06/2022
SDG	320838831	320837121	320837121	320836691	320836691	320836691
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
Perfluorobutanesulfonic acid (PFBS)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	1.30 J
Perfluorobutanoic acid (PFBA)	0.490 U	0.490 U	0.490 U	0.500 U	0.510 U	0.380 J
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)	2.20	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
Perfluorododecanoic acid (PFDoA)	1.70 J	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoroheptanoic acid (PFHpA)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	0.950 U
Perfluorohexane sulfonate (PFHxS)	0.990 U	0.990 U	0.990 U	1.00 U	1.00 U	1.20 J
Perfluorohexanoic acid (PFHxA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.70 J
Perfluorononanoic acid (PFNA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorooctanesulfonate (PFOS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorooctanoic acid (PFOA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)	0.490 U	0.490 U	0.490 U	0.500 U	0.510 U	0.900 J
Perfluorotetradecanoic acid (PFTeDA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorotridecanoic acid (PFTTrDA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoroundecanoic acid (PFUnA)	13.0	1.50 U	1.50 U	1.50 U	1.50 U	1.40 U
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.20	0.00	0.00	0.00	0.00	1.20
§Sum of All Compounds Collected	16.9	0.00	0.00	0.00	0.00	5.48

**PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP**

	Location	MW-48M1	MW-48M3
	Field Sample ID	MW-48M1_S22	MW-48M3_S22
	Sampling Depth	191.00 - 201.00	131.50 - 142.00
	Sampling Date	01/04/2022	01/04/2022
	SDG	320836321	320836321
	Sample Type	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.980 U	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.980 U	0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.980 U	0.990 U
Perfluorobutanesulfonic acid (PFBS)		0.980 U	0.990 U
Perfluorobutanoic acid (PFBA)		0.490 U	0.490 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.980 U	0.990 U
Perfluorododecanoic acid (PFDoA)		0.980 U	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.980 U	0.990 U
Perfluorohexane sulfonate (PFHxS)		0.980 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U
Perfluorononanoic acid (PFNA)		1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.490 U	0.490 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U
	†PFOS + PFOA (EPA)	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00
	§Sum of All Compounds Collected	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Northern

Location	J2EW3-MW1-C	J2N-EFF-E	J2N-EFF-F	J2N-EFF-G	MW-130D	MW-18M1
Field Sample ID	J2EW3-MW1-C_S22	J2N-EFF-E_S22	J2N-EFF-F_S22	J2N-EFF-G_S22	MW-130D_S22	MW-18M1_S22
Sampling Depth	245.66 - 255.66	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	320.00 - 330.00	171.00 - 176.00
Sampling Date	01/05/2022	01/10/2022	01/10/2022	01/10/2022	12/29/2021	12/27/2021
SDG	320837121	320838001	320838001	320838001	320835011	320834481
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.930 U	0.970 U	1.20 J	0.950 U	1.00 U	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanesulfonic acid (PFBS)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanoic acid (PFBA)	0.460 U	0.490 U	0.250 J	0.290 J	0.510 U	0.500 U
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorododecanoic acid (PFDoA)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexane sulfonate (PFHxS)	0.930 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexanoic acid (PFHxA)	1.40 U	1.50 U	1.00 J	1.60 J	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonate (PFOS)	1.40 U	1.50 U	1.40 U	1.40 U	1.00 J	1.50 U
Perfluorooctanoic acid (PFOA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)	0.460 U	0.490 U	0.620 J	0.510 J	0.510 U	0.500 U
Perfluorotetradecanoic acid (PFTeDA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorotridecanoic acid (PFTTrDA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	1.00	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	1.00	0.00
§Sum of All Compounds Collected	0.00	0.00	3.07	2.40	1.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
KGS 2022 J2 North PFAS Spring
J2 Range Northern

	Location	MW-18M2	MW-289M1	MW-293M1	MW-296M1	MW-296M2	MW-318M1
	Field Sample ID	MW-18M2_S22	MW-289M1_S22	MW-293M1_S22	MW-296M1_S22	MW-296M2_S22	MW-318M1_S22
	Sampling Depth	107.00 - 112.00	0.00 - 0.00	0.00 - 0.00	255.08 - 265.08	214.98 - 224.98	305.79 - 315.81
	Sampling Date	12/27/2021	12/22/2021	01/11/2022	01/10/2022	01/10/2022	12/22/2021
	SDG	320834481	320833751	320838001	320838001	320838001	320833751
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	5.30
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U	0.970 U	0.590 J	0.940 U	0.930 U	0.950 U
Perfluorobutanesulfonic acid (PFBS)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorobutanoic acid (PFBA)		0.500 U	1.90 U	0.480 U	0.310 J	0.460 U	1.90 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.00 U	2.00	14.0	0.940 U	1.20 J	3.50
Perfluorododecanoic acid (PFDoA)		1.00 U	1.10 J	1.30 J	0.780 J	0.490 J	0.950 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorohexane sulfonate (PFHxS)		1.00 U	0.700 J	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)		1.50 U	1.50 U	20.0	0.570 J	1.10 J	1.70 J
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.490 U	0.480 U	0.470 U	0.460 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTTrDA)		1.50 U	1.50 U	0.990 J	1.40 U	1.40 U	1.40 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	10.0	15.0	3.20	1.20 J	6.50
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	2.70	34.0	0.570	2.30	5.20
	§Sum of All Compounds Collected	0.00	13.8	51.9	4.86	3.99	17.0

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	Location	MW-318M2	MW-318M2	MW-327M1	MW-327M2	MW-327M3	MW-330M1
	Field Sample ID	MW-318M2_S22	MW-318M2_S22D	MW-327M1_S22	MW-327M2_S22	MW-327M3_S22	MW-330M1_S22D
	Sampling Depth	205.80 - 215.82	205.80 - 215.82	296.06 - 306.04	265.01 - 275.01	220.16 - 230.15	313.10 - 323.13
	Sampling Date	12/22/2021	12/22/2021	12/28/2021	12/28/2021	12/28/2021	12/16/2021
	SDG	320833751	320833751	320834481	320834481	320834481	320831661
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.970 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.970 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.970 U
Perfluorobutanesulfonic acid (PFBS)		0.920 U	0.960 U	0.910 U	0.450 J	0.960 U	0.970 U
Perfluorobutanoic acid (PFBA)		1.80 U	1.90 U	0.460 U	1.80 J	0.480 U	1.30 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)		1.60 J	1.40 J	2.00	1.40 J	2.10	18.0
Perfluorododecanoic acid (PFDoA)		0.920 U	0.960 U	3.20	8.80	0.820 J	0.800 J
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.920 U	0.960 U	0.910 U	0.470 J	0.960 U	0.870 J
Perfluorohexane sulfonate (PFHxS)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.970 U
Perfluorohexanoic acid (PFHxA)		1.30 J	1.20 J	1.40 U	0.560 J	1.40 U	0.580 J
Perfluorononanoic acid (PFNA)		0.560 J	0.630 J	1.40 U	1.40 U	1.40 U	3.50
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorooctanesulfonate (PFOS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorooctanoic acid (PFOA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluoropentanoic acid (PFPeA)		1.10 J	1.00 J	0.240 J	0.900 J	0.480 U	1.60 J
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.40 U	0.650 J	1.70 J	1.40 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		5.80	5.80	17.0	17.0	4.70	16.0
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.16	2.03	2.00	1.87	2.10	22.4
	§Sum of All Compounds Collected	10.4	10.0	23.1	33.1	7.62	42.7

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	Location	MW-330M1	MW-330M2	MW-330M3	MW-330M3	MW-337D	MW-337M1
	Field Sample ID	MW-330M1_S22	MW-330M2_S22	MW-330M3_S22	MW-330M3_S22D	MW-337D_S22	MW-337M1_S22
	Sampling Depth	313.10 - 323.13	238.01 - 248.04	154.97 - 164.99	154.97 - 164.99	0.00 - 0.00	0.00 - 0.00
	Sampling Date	12/16/2021	12/16/2021	12/16/2021	12/16/2021	12/20/2021	12/20/2021
	SDG	320831661	320831661	320831661	320831661	320833421	320833421
	Sample Type	Normal	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.990 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.990 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.990 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
Perfluorobutanesulfonic acid (PFBS)	0.990 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
Perfluorobutanoic acid (PFBA)	1.40 J	0.400 J	0.510 J	0.490 U	2.10 U	2.10 U	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorodecanoic acid (PFDA)	23.0	5.10	14.0	11.0	23.0	1.00 J	
Perfluorododecanoic acid (PFDoA)	1.40 J	0.650 J	0.560 J	0.980 U	0.640 J	1.00 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoroheptanoic acid (PFHpA)	0.910 J	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
Perfluorohexane sulfonate (PFHxS)	0.990 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U	
Perfluorohexanoic acid (PFHxA)	0.680 J	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorononanoic acid (PFNA)	4.20	4.70	6.50	6.00	19.0	5.80	
Perfluorooctanesulfonamide (PFOSA)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorooctanesulfonate (PFOS)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorooctanoic acid (PFOA)	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoropentanoic acid (PFPeA)	1.70 J	0.250 J	0.500 U	0.490 U	0.520 U	0.510 U	
Perfluorotetradecanoic acid (PFTeDA)	1.50 U	1.50 U	1.50 U	1.50 U	0.530 J	1.50 U	
Perfluorotridecanoic acid (PFTTrDA)	0.880 J	0.820 J	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoroundecanoic acid (PFUnA)	18.0	5.20	6.50	5.70	16.0	1.90 J	
†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00	
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	28.1	9.80	20.5	17.0	42.0	6.80	
§Sum of All Compounds Collected	52.2	17.1	28.1	22.7	59.2	8.70	

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	Location	MW-340D	MW-340D	MW-345M1	MW-345M1	MW-48M1	MW-48M3
	Field Sample ID	MW-340D_S22	MW-340D_S22D	MW-345M1_S22	MW-345M1_S22D	MW-48M1_S22	MW-48M3_S22
	Sampling Depth	329.60 - 339.60	329.60 - 339.60	0.00 - 0.00	0.00 - 0.00	191.00 - 201.00	131.50 - 142.00
	Sampling Date	12/29/2021	12/29/2021	12/16/2021	12/16/2021	01/04/2022	01/04/2022
	SDG	320835011	320835011	320831661	320831661	320836321	320836321
	Sample Type	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps		Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		6.50 J	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorobutanesulfonic acid (PFBS)		1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorobutanoic acid (PFBA)		0.310 J	0.490 U	0.440 J	0.280 J	0.490 U	0.490 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		13.0	14.0	21.0	28.0	0.980 U	0.990 U
Perfluorododecanoic acid (PFDoA)		0.830 J	0.990 J	0.960 J	1.70 J	0.980 U	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorohexane sulfonate (PFHxS)		1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)		3.50	3.60	3.00	4.50	1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorooctanesulfonate (PFOS)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.490 U	0.490 U	0.490 U	0.490 U	0.490 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorotridecanoic acid (PFTTrDA)		1.50 U	1.50 U	1.50 U	1.30 J	1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		19.0	20.0	20.0	23.0	1.50 U	1.50 U
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	16.5	17.6	24.0	32.5	0.00	0.00
	§Sum of All Compounds Collected	43.1	38.6	45.4	58.8	0.00	0.00

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	Location	MW-55D	MW-55M1	MW-55M2	MW-55M3	MW-619M1	MW-619M2
	Field Sample ID	MW-55D_S22	MW-55M1_S22	MW-55M2_S22	MW-55M3_S22	MW-619M1_S22	MW-619M2_S22
	Sampling Depth	255.00 - 265.00	225.00 - 235.00	195.00 - 205.00	164.50 - 174.00	255.10 - 265.10	234.10 - 244.10
	Sampling Date	12/21/2021	12/21/2021	12/21/2021	12/21/2021	12/20/2021	12/20/2021
	SDG	320833421	320833421	320833421	320833421	320833421	320833421
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluorobutanesulfonic acid (PFBS)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluorobutanoic acid (PFBA)	1.90 U	1.90 U	1.90 U	2.00 U	1.90 U	1.90 U	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluorodecanoic acid (PFDA)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluorododecanoic acid (PFDoA)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluoroheptanoic acid (PFHpA)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluorohexane sulfonate (PFHxS)	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U	
Perfluorohexanoic acid (PFHxA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluorononanoic acid (PFNA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluorooctanesulfonamide (PFOSA)	0.590 J	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluorooctanesulfonate (PFOS)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluorooctanoic acid (PFOA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluoropentanoic acid (PFPeA)	0.480 U	0.480 U	0.470 U	0.500 U	0.480 U	0.480 U	
Perfluorotetradecanoic acid (PFTeDA)	0.620 J	0.540 J	1.40 U	1.50 U	1.40 U	0.620 J	
Perfluorotridecanoic acid (PFTrDA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
Perfluoroundecanoic acid (PFUnA)	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
	§Sum of All Compounds Collected	1.21	0.540	0.00	0.00	0.00	0.620

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	Location	MW-620M1	MW-634M1	MW-63D	MW-63M1	MW-63M2	MW-63M3
	Field Sample ID	MW-620M1_S22	MW-634M1_S22	MW-63D_S22	MW-63M1_S22	MW-63M2_S22	MW-63M3_S22
	Sampling Depth	268.60 - 278.60	305.60 - 315.60	375.00 - 380.00	244.00 - 254.00	214.00 - 224.00	182.00 - 192.00
	Sampling Date	12/20/2021	12/22/2021	12/15/2021	12/15/2021	12/15/2021	12/15/2021
	SDG	320833421	320833751	320831661	320831661	320831661	320831661
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
Perfluorobutanesulfonic acid (PFBS)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
Perfluorobutanoic acid (PFBA)	0.480 U	2.00 U	2.00 U	0.490 U	0.290 J	0.490 U	
Perfluorodecanesulfonic acid (PFDS)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorodecanoic acid (PFDA)	0.960 U	0.980 U	0.990 U	0.980 U	2.20	0.970 U	
Perfluorododecanoic acid (PFDoA)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoroheptanoic acid (PFHpA)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
Perfluorohexane sulfonate (PFHxS)	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U	
Perfluorohexanoic acid (PFHxA)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorononanoic acid (PFNA)	1.40 U	1.50 U	1.50 U	1.50 U	1.20 J	1.50 U	
Perfluorooctanesulfonamide (PFOSA)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorooctanesulfonate (PFOS)	1.40 U	1.50 U	0.790 J	0.590 J	1.60 U	1.50 U	
Perfluorooctanoic acid (PFOA)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoropentanoic acid (PFPeA)	0.480 U	0.490 U	0.490 U	0.490 U	0.520 U	0.490 U	
Perfluorotetradecanoic acid (PFTeDA)	0.610 J	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluorotridecanoic acid (PFTrDA)	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U	
Perfluoroundecanoic acid (PFUnA)	1.40 U	1.50 U	1.50 U	1.50 U	1.40 J	1.50 U	
	†PFOS + PFOA (EPA)	0.00	0.00	0.790	0.590	0.00	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.790	0.590	3.40	0.00
	§Sum of All Compounds Collected	0.610	0.00	0.790	0.590	5.09	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J2 Range Northern

	Location	MW-63S
	Field Sample ID	MW-63S_S22
	Sampling Depth	153.00 - 163.00
	Sampling Date	12/15/2021
	SDG	320831661
	Sample Type	Normal
PFAS 21 Cmps		Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.950 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.950 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.950 U
Perfluorobutanesulfonic acid (PFBS)		0.950 U
Perfluorobutanoic acid (PFBA)		0.470 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U
Perfluorododecanoic acid (PFDoA)		0.950 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U
Perfluoroheptanoic acid (PFHpA)		0.950 U
Perfluorohexane sulfonate (PFHxS)		0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U
Perfluorononanoic acid (PFNA)		1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonate (PFOS)		1.40 U
Perfluorooctanoic acid (PFOA)		1.40 U
Perfluoropentanoic acid (PFPeA)		0.470 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
	†PFOS + PFOA (EPA)	0.00
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
	§Sum of All Compounds Collected	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 J3 Range

Location	MW-237S
Field Sample ID	MW-237S_S22
Sampling Depth	49.00 - 59.00
Sampling Date	12/29/2021
SDG	320835011
Sample Type	Normal
PFAS 21 Cmps	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.990 U
Perfluorobutanesulfonic acid (PFBS)	0.990 U
Perfluorobutanoic acid (PFBA)	0.500 U
Perfluorodecanesulfonic acid (PFDS)	1.50 U
Perfluorodecanoic acid (PFDA)	0.990 U
Perfluorododecanoic acid (PFDoA)	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U
Perfluoroheptanoic acid (PFHpA)	0.990 U
Perfluorohexane sulfonate (PFHxS)	0.990 U
Perfluorohexanoic acid (PFHxA)	1.50 U
Perfluorononanoic acid (PFNA)	1.50 U
Perfluorooctanesulfonamide (PFOSA)	1.50 U
Perfluorooctanesulfonate (PFOS)	1.50 U
Perfluorooctanoic acid (PFOA)	1.50 U
Perfluoropentanoic acid (PFPeA)	0.500 U
Perfluorotetradecanoic acid (PFTeDA)	1.50 U
Perfluorotridecanoic acid (PFTrDA)	1.50 U
Perfluoroundecanoic acid (PFUnA)	1.50 U
†PFOS + PFOA (EPA)	0.00
‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
§Sum of All Compounds Collected	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP
 KGS 2022 J2 North PFAS Spring
 Lima Range

	Location	MW-236S
	Field Sample ID	MW-236S_S22
	Sampling Depth	96.00 - 106.00
	Sampling Date	01/11/2022
	SDG	320838001
	Sample Type	Normal
PFAS 21 Cmps		Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.960 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U
Perfluorobutanesulfonic acid (PFBS)		0.960 U
Perfluorobutanoic acid (PFBA)		1.50 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.960 U
Perfluorododecanoic acid (PFDoA)		0.960 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U
Perfluoroheptanoic acid (PFHpA)		1.20 J
Perfluorohexane sulfonate (PFHxS)		0.960 U
Perfluorohexanoic acid (PFHxA)		1.20 J
Perfluorononanoic acid (PFNA)		1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonate (PFOS)		2.30
Perfluorooctanoic acid (PFOA)		1.30 J
Perfluoropentanoic acid (PFPeA)		0.640 J
Perfluorotetradecanoic acid (PFTeDA)		1.40 U
Perfluorotridecanoic acid (PFTTrDA)		1.40 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
	†PFOS + PFOA (EPA)	3.60
	‡PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.80
	§Sum of All Compounds Collected	8.14

PFAS Summary Report – Groundwater Joint Base Cape Cod, IAGWSP

Notes:

ng/L = nanograms per liter; ug/kg = micrograms per kilogram; U = not detected; J = estimated; UJ = estimated non detect

The LOQ value will be used to report non-detects when blank contamination occurs

Bolded results indicate detections of PFAS

Bolded and highlighted results indicate detection of PFAS above the EPA Lifetime Health Advisory: PFOS + PFOA > 70 ng/L.

Bolded and highlighted results indicate detection of PFAS6 above the MassDEP MCL: PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA > 20 ng/L

† Lifetime Health Advisory, US Environmental Protection Agency, May 2016

‡ PFAS Maximum Contaminant Level (MCL) Final Amendments ("MCL", 310 CMR 22.00 PFAS MCL Amendments), Massachusetts Department of Environmental Protection, October 2, 2020

§ PFAS compounds used in the summation of all analytes are listed in the above table