

**MONTHLY PROGRESS REPORT #307
FOR OCTOBER 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 October 2022.

1. SUMMARY OF REMEDIATION ACTIONS

Remediation Actions (RA) Underway at Camp Edwards as of 28 October 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 2.957 billion gallons of water treated and re-injected as of 28 October 2022. The following Frank Perkins Road Treatment Facility shutdowns occurred in October.

- 0650 on 05 October 2022 due to a power outage and was restarted at 0740 on 13 October 2022.

The Base Boundary Mobile Treatment Unit (MTU) continues to operate at a flow rate of 65 gpm. As of 28 October 2022, over 347.6 million gallons of water were treated and re-injected. No Base Boundary MTU shutdowns occurred in October.

The Leading Edge system continues to operate at a flow rate of 100 gpm. As of 28 October 2022, over 324.5 million gallons of water were treated and re-injected. No Leading Edge system shutdowns occurred in October.

The Pew Road MTU was turned off with regulatory approval on 8 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 October 2022, over 2.013 billion gallons of water have been treated and re-injected. The following MTU E and F shutdowns occurred in October.

- 1130 on 03 October 2022 to perform a resin exchange was restarted at 1200 on 05 October 2022.
- 1835 on 05 October 2022 due to a power outage caused by thunderstorms and was restarted at 0806 on 06 October 2022.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 28 October 2022, over 1.532 billion gallons of water have been treated and re-injected. The following Northern MTU G shutdowns occurred in October.

- 1841 on 05 October 2022 due to a power outage caused by thunderstorms and was restarted at 0849 on 06 October 2022.
- 0755 on 14 October 2022 due to a power interruption and was restarted at 1305 on 14 October 2022.

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 October 2022, over 1.653 billion gallons of water have been treated and re-injected. No MTU H and I shutdowns occurred in October.

MTU J continues to operate at a flow rate of 120 gpm. As of 28 October 2022, over 771.5 million gallons of water have been treated and re-injected. The following MTU J shutdowns occurred in October.

- 2309 on 29 October 2022 due to a power interruption and was restarted at 0739 on 31 October 2022.

MTU K continues to operate at a flow rate of 125 gpm. As of 28 October 2022, over 894.8 million gallons of water have been treated and re-injected. No MTU K shutdowns occurred in October.

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 a flow rate of 255 gpm. As of 28 October 2022, over 1.663 billion gallons of water have been treated and re-injected. The following J-3 Range system shutdowns occurred in October.

- 1750 on 04 October 2022 due to a power outage caused by thunderstorms and was restarted at 0836 on 06 October 2022.
- 2220 on 29 October 2022 due to a power interruption and was restarted at 0850 on 31 October 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 October 2022, over 745.0 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shutdowns occurred in October.

- 1248 on 14 September 2022 due to a leak at the infiltration gallery and was restarted at 0740 on 19 October 2022.

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 October 2022, over 1.153 billion gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shutdowns occurred in October.

- 1841 on 05 October 2022 due to a power outage caused by thunderstorms and was restarted at 0750 on 06 October 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 October 2022, over 3.017 billion gallons of water have been treated and re-injected. The following CIA system shutdowns occurred in October.

- CIA-2 at 0650 on 05 October 2022 due to a power outage and was restarted at 0856 on 13 October 2022.

- CIA-1 at 0650 on 05 October 2022 due to a power outage and to perform a carbon exchange and was restarted at 0815 on 14 October 2022.

2. SUMMARY OF ACTIONS TAKEN

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

CIA

- Intrusive investigations
- Completed demo operations
- Routine processing of Munitions Debris
- Routine check of consolidated shot structure (CSS) cover and surface area around perimeter of CSS

Demolition Area 1

- Bag filters exchanged

Demolition Area 2

- No activity

J-1 Range

- Groundwater sampling within J-1 South SPM
- Hydraulic groundwater monitoring within J-1 South SPM
- Excavation and continuing investigation of infiltration gallery

J-2 Range

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

J-3 Range

- PFAS sampling within SPM

L Range

- No activity

Small Arms Ranges

- No activity

Northwest Corner

- No activity

Training Areas

- No activity

Impact Area Roads

- UXO clearance on Barlow Rd

Other

- UXO clearance on J-2 North #2 well pad

- 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

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

Joint Base Cape Cod Cleanup Team Meeting Planning

A discussion was held regarding potential new team members and agenda planning for the Joint Base Cape Cod Cleanup Team. The next meeting is 7 December 2022 and six citizens have expressed interest in joining the team. It was decided that an orientation meeting and tour would be provided to the new members and any existing members who would like to participate, prior to the meeting. A draft agenda was provided to the group and discussed. Topics included new member introductions; PFAS sampling update from IAGWSP; and from the Air Force Civil Engineer Center (AFCEC) an Old K Range Proposed Plan Presentation and Public Hearing, Emerging Contaminants update, and Community Involvement Plan update. EPA and MassDEP approved the topics. The orientation and tour are tentatively scheduled for mid to late November and details will be provided to the group when they become available.

Project and Fieldwork Update

The KGS groundwater sampling crew continues sampling the J-2 North annual system performance monitoring (SPM) wells. There are 85 locations, and that effort should be completed by the end of next week. Included with the J-2 North sampling event will be the 11 PFAS locations. The crew will move to the J-1 South annual SPM wells (52 locations) and hydraulic round (72 locations), then move to the Central Impact Area (CIA) semi-annual SPM (11 locations). The J-3 treatment system influent and effluent quarterly PFAS sampling was performed on Tuesday, 11 October. The October monthly process water samples have been collected from all systems except for Demolition Area 1 Frank Perkins Road and J-1 South. KGS is waiting for both systems to come back online. Based on the September monthly process water samples, ion exchange was changed out at J-2 North Unit F on 4 October as the mid-sample showed perchlorate breakthrough (0.37 µg/L). Carbon changeout is scheduled for today (13 October) at CIA-1, as the mid-sample showed RDX breakthrough (0.27 µg/L).

Notable system shutdowns since the last tech meeting: J-1 South system is currently down as of ~1300 on 14 September due to a leak at the infiltration gallery; observed to be from the beginning of the perforated pipe. It was initially excavated on 3 October to find the source of the leak. Investigations are ongoing and the contractor is procuring a camera to investigate further. Demolition Area 1 Frank Perkins Road, CIA-1, and CIA-2 tripped on 5 October due to a storm. Base power was restored late yesterday (12 October), and systems will restart today with the exception of CIA-1, which will be restarted tomorrow due to carbon changeout. The J-3 Range system tripped on 4 October due to a storm and was restarted on 6 October. J-2 North units E, F, and G tripped on 5 October due to a storm. All were restarted on 6 October. J-1 North (EW-2 only) tripped on 5 October due to a storm and was restarted on 6 October. UXO clearance of Barlow Road and J-2 North Well Pad #2 are scheduled to begin on 24 October; vegetation clearance of the well pad is scheduled for 21 October. Improvement of Barlow Road from Jefferson to Gibbs (3,750 LF) is pending UXO clearance by Dawson.

In the CIA, Weston continues to operate with five teams; one team is performing demolition operations and the other four are doing intrusive work. They have completed all the polygons in Survey Unit (SU) 3-2 and SU4, which were the carryovers from last year. Phase IV Area 1 is now completed. It is being reported as 99% done as the team wants to complete the BIPs and any other demolition associated with the 2021 field season. Weston will then amend the 2021 document to include all the data from the 2021 field season. Currently SU-7 is about 78% complete, SU-8 is 100%, SU-9 is 93%, SU-10 is 90%, and SU-11 is 100%. Teams have not begun any digs in SU-6 because it is the area around SU3-2, and due to separation distances teams were unable to work there yet. Therefore, they are done with all targets of interest (TOI) except for SU-6 and are still addressing polygons throughout. BIPs are being performed this week and will continue into next week. Data validation is complete for the consolidated shot and BIP soil samples, Weston is submitting final data tables. The schedule is to get the soil off-site in the November timeframe. Once the validated data reports are available, they will be shared with the team.

PFAS Update

IAGWSP provided an update on their responses to EPA's request for information on PFAS. IAGWSP has performed searches in the document repository section of EDMS for instances of the 18 keywords. The second and final batch of results of searches was submitted to EPA on 4 October. IAGWSP explained that as a next step, they would review how each keyword appears in the documents identified in the search results. IAGWSP explained that while they have tried to perform the keyword searches in the MIDAS database, as requested by EPA, the database does not have the functionality required to provide the results in a useable format. IAGWSP noted that they felt they could use the draft Chemical Composition of Munitions Report to better define what munitions were used at Camp Edwards and then perform searches on what components in that subset of items contain any of the keywords. A meeting was set up for 18 October to show EPA and MassDEP the database and to review a proposed work around.

Action Items

The action items were discussed and updated.

JBCC Impact Area Groundwater Study Program (IAGWSP) Tech Update Meeting Minutes for 27 October 2022

Project and Fieldwork Update

The project and fieldwork updates below were provided to the group via email on 27 October.

Groundwater:

Sampling crews are performing J-1 Range South Annual System Performance Monitoring (SPM) sampling (52 locations), including hydro event (72 locations). After completion, crews will move to the Central Impact Area (CIA) to perform semi-annual SPM sampling (11 locations). J-1 Range North Annual SPM (71 locations) and hydro event (84 locations) will be after CIA.

Operations and Maintenance:

October monthly process water samples were collected from all systems from 3 to 20 October 2022; awaiting results. Demolition Area 1 Frank Perkins Road Extraction Well-502 (no longer

used for treatment) was pulled on 25 October, so it can be sampled during the December 2022 sampling event. All treatment systems are operating at normal flow rates. Notable system shutdowns since last tech meeting: The J-1 Range South system was shut off on 14 September due to an infiltration gallery leak (observed to be from the beginning of the perforated pipe). Initially excavated on 3 October to find source of leak. System turned on at on 19 October (total down time ~835 hours or 21 days) and no significant ponding is being observed, but still team is procuring camera to investigate further. Infiltration gallery is being inspected daily for ponding.

Range Maintenance, UXO, and Soil:

Unexploded Ordnance (UXO) clearance of Barlow Rd from Jefferson Rd to Gibbs Rd began on 25 October, expected completion is 27 October. UXO clearance of J-2 North New Well #2 well pad is scheduled for 28 October. Improvement (grading and gravel installation) of Barlow Rd from Jefferson Rd to Gibbs Rd is schedule for week of 31 October pending UXO clearance by Dawson.

Central Impact Area Update:

There are five teams conducting intrusive investigations, reacquiring targets, and performing demolition operations. Targets of Interest (TOI) investigations in Survey Units (SU) 7 through 11 are complete. SU6 TOIs are 0% complete. Polygon investigations SU3-2 polygons are complete. SU3 TOIs are ~99% complete. Phase IV Area 2 polygon investigations are underway. SU8, 10 and 11 are complete. SU6 is ~50% complete, SU7 ~0% and SU9 ~17%. BIP demolition operations continue.

PFAS Update

Keyword search results from MIDAS are ongoing and will be forwarded to EPA on or before 31 October. In depth review of the results of the EDMS keyword searches continues.

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 grid (53_54) was displayed and discussed. The group was reminded of the goals set in the Decision Document (remove 75-95% of unexploded ordnance [UXO] while maximizing removal of net explosive weight) as well as the goals of the classification (to 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 grid 53_54 was displayed. There were 694 EM61 anomaly locations with Metal Mapper cued data collection. Of those there, 210 anomalies met the dig criteria. There was one quality control (QC) seed that was not classified correctly but was added as a TOI dig. This resulted in a recommended dig rate of 30.47%. Twenty-one of the TOI digs produced 18 UXO or UXO-like items and three seeds.

The remaining 483 anomalies were dug for quality assurance (QA). One verification dig (EM61 target not classified as TOI) produced an 81mm at a depth of 60cm, beyond the classification limits of the Metal Mapper. For the classification results, 27.7% of the clutter was incorrectly classified as likely-TOI (189 digs that could have been safely left in the ground). Therefore, meeting the goal of reduction of clutter digs by 70%. It was noted that large pieces of frag and/or large quantities of frag were classified as digs in some cases due to limitations of inversion

algorithms. A photograph and the decay curve of one of the misclassified QC seeds was displayed and discussed. It was noted that the misclassified QC seed was a medium industry standard object (ISO) at 20cm, buried in an area with dense electromagnetic signal, and beyond the classification limits of the Metal Mapper in dense areas. The decay curves did not resemble a TOI or an ISO. The second incorrectly classified TOI was an 81mm recovered during verification digs at a depth of 60cm, beyond the classification limit of the Metal Mapper. The decay curve did not resemble a TOI.

The verification grid results for 2021-2022 were discussed. There were 3453 items correctly classified clutter, 1008 incorrectly classified clutter, 192 correctly classified TOI, and two incorrectly classified TOI. This passes the advanced geophysical classification detection goal of 95% and the clutter rejection goal of 70%. It was noted that 99% of TOI were correctly classified.

The status and path forward were reviewed. Intrusive investigations are complete for all Phase IV Area 1 survey units. The surface clearance, vegetation removal, dynamic (EM-61) surveys, and AGC cued (MM2x2) surveys are complete for all Phase IV Area 2 survey units. Intrusive investigation of Phase IV Area 2 survey units is ongoing, and Phase IV Area 2 TOIs are 76% complete as of 12 October 2022. Consolidated Shot Structure demolition operations are ongoing. Items disposed as of 12 October 2022 include: 256 CDC bunker items; 448 items from Phase IV Area 1 and Parsons SU8 & SU9; and 112 items from Phase IV Area 2. There are 17 items from Phase IV Area 1 and 65 items from Phase IV Area 2 remaining.

BIP demolition operations resumed on 11 October 2022 and disposed of 49 BIP items (including 1 Parson's BIP). There are 49 BIP items from Phase IV Area 1 and 26 BIP items from Phase IV Area 2 remaining.

The document and report status were reviewed. The 2021 Final Annual Report was distributed 30 September 2022. A draft addendum is being prepared to include Phase IV Area 1 intrusive results and final disposition of MEC items destroyed in 2022. The 2022 QAPP Update: a meeting with EPA and MassDEP to discuss responses to EPA and MassDEP comments will be scheduled after Army has completed their review of the responses.

A status map as of 12 October 2022 was displayed.

EPA asked about an update to the Explosives Safety Submission. USACE reminded EPA that during a recent site visit where EPA observed a shot, it was noted that there were some 81mm mortars in the MEC staging area that needed to be pulled to a BIP or shot location for demolition. EPA asked if the items would be disposed of as a BIP. It was explained that they would be conducted similar to a BIP but would be considered a consolidated shot. EPA requested a meeting to discuss this approach and noted that consolidated shots weren't conducted properly in the past and they wanted to ensure that all appropriate controls were in place. USACE asked EPA to provide their questions and concerns in an email prior to any meeting so that they could respond. EPA agreed to send an email.

Action Items

An updated action item list was sent to the group via email.

JBCC Cleanup Team Meeting

The next JBCC Cleanup Team (JBCCCT) will be held virtually via Microsoft Teams on 7 December 2022 (previous meeting was 3 August 2022). Meeting details and presentation materials from previous meetings can be found on the IAGWSP web site at <http://bcc-iagwsp.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 October 2022. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 to 31 October 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. Table 3 PFAS results are compared to the new Regional Screening Levels (RSL) published by EPA on 17 May 2022 as well as the EPA Lifetime Health Advisory for PFOS+PFOA and the MassDEP MCL for PFAS6.

The operable units (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:

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|---|-----------------|
| • Monthly Progress Report No. 306 for September 2022 | 10 October 2022 |
| • J-2 Range, Phase-2, Addendum to the Post-DD Confirmation Geophysical and Soil Investigation Findings Revised Technical Memorandum | 6 October 2022 |
| • Final J-2 Range Eastern 2021 Environmental Monitoring Report, dated October 2022 | 6 October 2022 |
| • Final J-2 Range Northern 2021 Environmental Monitoring Report, dated October 2022 | 21 October 2022 |
| • Draft Demolition Area 1 2022 Environmental Monitoring Report | 26 October 2022 |

5. SCHEDULED ACTIONS

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

- Small Arms Ranges Annual Environmental Monitoring Report Work Plan Addendum
- Revised Draft Final Central Impact Area Source 2022 Quality Assurance Project Plan Update and Responses to Comments
- Memorandum of Resolution on the Northwest Corner Demonstration of Compliance Report (*on hold pending resolution of PFAS issues*)
- Former E Range Completion of Work Report
- Draft Former KD Range Completion of Work Report
- Demolition Area 2 Final 2022 Environmental Monitoring Report
- Central Impact Area Draft 2022 Environmental Monitoring Report
- J3 Draft 2022 Environmental Monitoring Report
- J1S Draft 2022 Environmental Monitoring Report
- J2E Draft 2022 Environmental Monitoring Report
- J3 Responses to Comments on the Draft Final PFAS Work Plan
- J2N Responses to Comments on the Draft Final PFAS Work Plan

TABLE 1
Sampling Progress: 1 to 31 October 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J1 Range Southern	MW-483M1	MW-483M1_F22	N	10-27-2022	Ground Water	139.52	149.52
J1 Range Southern	MW-488M1	MW-488M1_F22	N	10-27-2022	Ground Water	149.62	159.62
J1 Range Southern	DP-379	DP-379_F22	N	10-27-2022	Ground Water	0	0
J1 Range Southern	MW-526M1	MW-526M1_F22	N	10-26-2022	Ground Water	164	174
J1 Range Southern	MW-403M2	MW-403M2_F22	N	10-26-2022	Ground Water	127.26	137.36
J1 Range Southern	MW-403M1	MW-403M1_F22	N	10-26-2022	Ground Water	159.9	169.89
J1 Range Southern	MW-669M2	MW-669M2_F22	N	10-26-2022	Ground Water	201.7	211.7
J1 Range Southern	MW-669M1	MW-669M1_F22	N	10-26-2022	Ground Water	223.7	233.7
J1 Range Southern	MW-669M1	MW-669M1_F22D	FD	10-26-2022	Ground Water	223.7	233.7
J1 Range Southern	MW-521M1	MW-521M1_F22	N	10-25-2022	Ground Water	158	168
J1 Range Southern	MW-402M2	MW-402M2_F22	N	10-25-2022	Ground Water	155.24	165.27
J1 Range Southern	MW-402M1	MW-402M1_F22	N	10-25-2022	Ground Water	190.14	200.13
J1 Range Southern	MW-400M2	MW-400M2_F22	N	10-25-2022	Ground Water	138.9	148.9
J1 Range Southern	MW-400M1	MW-400M1_F22	N	10-25-2022	Ground Water	192.76	202.75
J1 Range Southern	MW-524M1	MW-524M1_F22	N	10-24-2022	Ground Water	148	158
J1 Range Southern	MW-524M1	MW-524M1_F22D	FD	10-24-2022	Ground Water	148	158
J1 Range Southern	MW-670M2	MW-670M2_F22	N	10-24-2022	Ground Water	198.5	208.5
J1 Range Southern	MW-670M1	MW-670M1_F22	N	10-24-2022	Ground Water	220.5	230.5
J1 Range Southern	MW-647M2	MW-647M2_F22	N	10-24-2022	Ground Water	189.3	199.3
J1 Range Southern	MW-647M1	MW-647M1_F22	N	10-24-2022	Ground Water	211.3	221.3
J1 Range Southern	MW-591M2	MW-591M2_F22	MS	10-21-2022	Ground Water	165	175
J1 Range Southern	MW-591M2	MW-591M2_F22	N	10-21-2022	Ground Water	165	175
J1 Range Southern	MW-591M2	MW-591M2_F22	SD	10-21-2022	Ground Water	165	175
J1 Range Southern	MW-591M1	MW-591M1_F22	N	10-21-2022	Ground Water	200	210
J1 Range Southern	MW-646M2	MW-646M2_F22	N	10-21-2022	Ground Water	168	178
J1 Range Southern	MW-646M1	MW-646M1_F22	N	10-21-2022	Ground Water	198	208
J1 Range Southern	MW-592M2	MW-592M2_F22	N	10-21-2022	Ground Water	158	168
J1 Range Southern	MW-592M1	MW-592M1_F22	N	10-20-2022	Ground Water	201	211
J1 Range Southern	J1S-EFF	J1S-EFF-179A	N	10-20-2022	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-179A	N	10-20-2022	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-179A	N	10-20-2022	Process Water	0	0
J1 Range Southern	MW-481M2	MW-481M2_F22	N	10-20-2022	Ground Water	146.28	156.28
J1 Range Southern	MW-481M1	MW-481M1_F22	N	10-20-2022	Ground Water	189.74	199.74
J1 Range Southern	MW-645M2	MW-645M2_F22	N	10-20-2022	Ground Water	143.5	153.5
J1 Range Southern	MW-645M1	MW-645M1_F22	N	10-20-2022	Ground Water	183.5	193.5
J1 Range Southern	MW-131S	MW-131S_F22	N	10-19-2022	Ground Water	96	106
J1 Range Southern	MW-720M2	MW-720M2_F22	N	10-19-2022	Ground Water	126.2	136.2
J1 Range Southern	MW-720M1	MW-720M1_F22	N	10-19-2022	Ground Water	146.6	156.6
J1 Range Southern	MW-721M2	MW-721M2_F22	N	10-19-2022	Ground Water	138.5	148.5
J1 Range Southern	MW-721M1	MW-721M1_F22	N	10-19-2022	Ground Water	168.1	178.1
J1 Range Southern	MW-360M2	MW-360M2_F22	N	10-18-2022	Ground Water	102	112
J1 Range Southern	MW-360M2	MW-360M2_F22D	FD	10-18-2022	Ground Water	102	112
J1 Range Southern	MW-722M2	MW-722M2_F22	N	10-18-2022	Ground Water	93.9	103.9
J1 Range Southern	MW-722M1	MW-722M1_F22	N	10-18-2022	Ground Water	114.2	124.2
J1 Range Southern	MW-722M1	MW-722M1_F22D	FD	10-18-2022	Ground Water	114.2	124.2
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-199A	N	10-18-2022	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-199A	N	10-18-2022	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-199A	N	10-18-2022	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-199A	N	10-18-2022	Process Water	0	0
J2 Range Northern	MW-327M3	MW-327M3_F22	N	10-13-2022	Ground Water	220.16	230.15
J2 Range Northern	MW-327M2	MW-327M2_F22	N	10-13-2022	Ground Water	265.01	275.01
J2 Range Northern	MW-327M1	MW-327M1_F22	N	10-12-2022	Ground Water	296.06	306.04
J2 Range Northern	MW-337M1	MW-337M1_F22	N	10-12-2022	Ground Water	243.71	253.71
J2 Range Northern	MW-337D	MW-337D_P22	N	10-12-2022	Ground Water	310	320
J2 Range Northern	J2EW0001	J2EW0001_F22	N	10-11-2022	Ground Water	179	234
J3 Range	J3-EFF	J3-EFF-193A	N	10-11-2022	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-193A	N	10-11-2022	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-193A	N	10-11-2022	Process Water	0	0
J3 Range	J3-INF	J3-INF-193A	N	10-11-2022	Process Water	0	0

N = Normal Sample

FD = Field Duplicate

TABLE 1
Sampling Progress: 1 to 31 October 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J2 Range Northern	J2EW0003	J2EW0003_F22	N	10-11-2022	Ground Water	202	232
J2 Range Northern	J2EW0002	J2EW0002_F22	N	10-11-2022	Ground Water	198	233
J2 Range Northern	J2EW0002	J2EW0002_F22D	FD	10-11-2022	Ground Water	198	233
J2 Range Northern	J2EW0002	J2EW0002_P22	N	10-11-2022	Ground Water	198	233
Demolition Area 1	D1LE-EFF	D1LE-EFF-75A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-75A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-75A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-75A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1-EFF	D1-EFF-147A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-147A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-147A	N	10-11-2022	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-147A	N	10-11-2022	Process Water	0	0
J2 Range Northern	J2N-EFF-F	J2N-EFF-F_P22	N	10-11-2022	Process Water	0	0
J2 Range Northern	J2N-INF-F	J2N-INF-F_P22	N	10-11-2022	Process Water	0	0
J3 Range	J3-EFF	J3-EFF_4Q22	N	10-11-2022	Ground Water	0	0
J3 Range	J3-INF	J3-INF_4Q22	N	10-11-2022	Ground Water	0	0
J2 Range Northern	MW-293M2	MW-293M2_F22	N	10-06-2022	Ground Water	0	0
J2 Range Northern	MW-293M1	MW-293M1_P22	N	10-06-2022	Ground Water	296.26	306.27
J2 Range Northern	MW-330M3	MW-330M3_P22	N	10-06-2022	Ground Water	154.97	164.99
J2 Range Northern	MW-330M2	MW-330M2_F22	N	10-06-2022	Ground Water	238.01	248.04
J2 Range Northern	MW-330M2	MW-330M2_P22	N	10-06-2022	Ground Water	238.01	248.04
J2 Range Northern	MW-330M1	MW-330M1_F22	N	10-06-2022	Ground Water	313.1	323.13
J2 Range Northern	MW-330M1	MW-330M1_P22	N	10-06-2022	Ground Water	313.1	323.13
J2 Range Northern	MW-330M1	MW-330M1_P22D	FD	10-06-2022	Ground Water	313.1	323.13
J2 Range Northern	MW-340M2	MW-340M2_F22	N	10-05-2022	Ground Water	215.83	225.08
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-169A	N	10-05-2022	Process Water	0	0
J2 Range Northern	MW-340M1	MW-340M1_F22	N	10-05-2022	Ground Water	255.85	265.85
J2 Range Northern	MW-340D	MW-340D_P22	N	10-05-2022	Ground Water	329.6	339.6
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-169A	N	10-05-2022	Process Water	0	0
J2 Range Northern	MW-345M2	MW-345M2_F22	N	10-05-2022	Ground Water	236.62	246.62
J2 Range Northern	MW-345M2	MW-345M2_P22	MS	10-05-2022	Ground Water	236.62	246.62
J2 Range Northern	MW-345M2	MW-345M2_P22	N	10-05-2022	Ground Water	236.62	246.62
J2 Range Northern	MW-345M2	MW-345M2_P22	SD	10-05-2022	Ground Water	236.62	246.62
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-169A	N	10-05-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-169A	N	10-05-2022	Process Water	0	0
J2 Range Northern	MW-345M1	MW-345M1_P22	N	10-05-2022	Ground Water	311.5	321.5
J2 Range Eastern	J2E-INF-I	J2E-INF-I-169A	N	10-05-2022	Process Water	0	0
J2 Range Northern	MW-612M2	MW-612M2_F22	N	10-04-2022	Ground Water	267	277
Central Impact Area	CIA2-EFF	CIA2-EFF-105A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-105A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-105A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-105A	N	10-04-2022	Process Water	0	0
J2 Range Northern	MW-612M1	MW-612M1_F22	MS	10-04-2022	Ground Water	297	307
J2 Range Northern	MW-612M1	MW-612M1_F22	N	10-04-2022	Ground Water	297	307
J2 Range Northern	MW-612M1	MW-612M1_F22	SD	10-04-2022	Ground Water	297	307
Central Impact Area	CIA1-EFF	CIA1-EFF-105A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-105A	N	10-04-2022	Process Water	0	0
J2 Range Northern	MW-613M2	MW-613M2_F22	N	10-04-2022	Ground Water	246.1	256.1
Central Impact Area	CIA1-MID1	CIA1-MID1-105A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-105A	N	10-04-2022	Process Water	0	0

TABLE 1
Sampling Progress: 1 to 31 October 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J2 Range Northern	MW-613M1	MW-613M1_F22	N	10-04-2022	Ground Water	267.1	277.1
Central Impact Area	CIA3-EFF	CIA3-EFF-76A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-76A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA3-MID1	CIA3-MID1-76A	N	10-04-2022	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-76A	N	10-04-2022	Process Water	0	0
J2 Range Northern	MW-620M1	MW-620M1_F22	N	10-04-2022	Ground Water	268.6	278.6
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2EW3-MW-2-B	J2EW3-MW-2-B_F22	N	10-03-2022	Ground Water	216.16	226.16
J2 Range Northern	J2EW3-MW-2-C	J2EW3-MW-2-C_F22	N	10-03-2022	Ground Water	251.13	261.13
J2 Range Northern	J2EW2-MW2-B	J2EW2-MW2-B_F22	N	10-03-2022	Ground Water	209.79	219.79
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-193A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-193A	N	10-03-2022	Process Water	0	0
J1 Range Northern	J1N-EFF	J1N-EFF-108A	N	10-03-2022	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-108A	N	10-03-2022	Process Water	0	0
J2 Range Northern	J2EW2-MW2-C	J2EW2-MW2-C_F22	N	10-03-2022	Ground Water	243.83	253.81
J1 Range Northern	J1N-MID1	J1N-MID1-108A	N	10-03-2022	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-108A	N	10-03-2022	Process Water	0	0

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received October 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
J2 Range Northern	MW-586M2	MW-586M2_F22	211	221	09-15-2022	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-586M1	MW-586M1_F22	237	247	09-15-2022	SW6850	Perchlorate	0.65		µg/L	2.0		0.058	0.20
J2 Range Northern	J2EW1-MW1-B	J2EW1-MW1-B_F22	205.82	215.82	09-15-2022	SW6850	Perchlorate	0.093	J	µg/L	2.0		0.058	0.20
J2 Range Northern	J2EW1-MW1-C	J2EW1-MW1-C_F22	240.8	250.8	09-15-2022	SW6850	Perchlorate	3.1		µg/L	2.0	X	0.058	0.20
J2 Range Northern	J2EW1-MW1-C	J2EW1-MW1-C_F22D	240.8	250.8	09-15-2022	SW6850	Perchlorate	3.0		µg/L	2.0	X	0.058	0.20
J2 Range Northern	MW-589M2	MW-589M2_F22	211	221	09-15-2022	SW6850	Perchlorate	2.2		µg/L	2.0	X	0.058	0.20
J2 Range Northern	MW-589M1	MW-589M1_F22	240	250	09-15-2022	SW6850	Perchlorate	0.69		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-631M2	MW-631M2_F22	200.1	210.1	09-14-2022	SW6850	Perchlorate	0.11	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-631M1	MW-631M1_F22	233.1	243.1	09-14-2022	SW6850	Perchlorate	0.11	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-634M3	MW-634M3_F22	170.6	180.6	09-14-2022	SW6850	Perchlorate	0.14	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-634M2	MW-634M2_F22	200.6	210.6	09-14-2022	SW6850	Perchlorate	1.3		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-634M1	MW-634M1_F22	305.6	315.6	09-14-2022	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-588M2	MW-588M2_F22	198	208	09-13-2022	SW6850	Perchlorate	2.0		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-588M2	MW-588M2_F22	198	208	09-13-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.077	J	µg/L	0.60		0.037	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22	198.5	208.5	09-13-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.13	J	µg/L	0.60		0.037	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22	198.5	208.5	09-13-2022	SW6850	Perchlorate	0.49		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22	198.5	208.5	09-13-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.46		µg/L	400		0.11	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22D	198.5	208.5	09-13-2022	SW6850	Perchlorate	0.50		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22D	198.5	208.5	09-13-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.47		µg/L	400		0.11	0.20
J2 Range Northern	MW-585M3	MW-585M3_F22D	198.5	208.5	09-13-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.15	J	µg/L	0.60		0.037	0.20
J2 Range Northern	MW-585M2	MW-585M2_F22	218.5	228.5	09-13-2022	SW6850	Perchlorate	0.23		µg/L	2.0		0.058	0.20
J2 Range Northern	MW-234M2	MW-234M2_F22	110	120	09-08-2022	SW8330	2,4,6-Trinitrotoluene	1.5		µg/L	2.0		0.028	0.20
J2 Range Northern	MW-234M2	MW-234M2_F22	110	120	09-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	1.4		µg/L	7.3		0.036	0.20
J2 Range Northern	MW-234M2	MW-234M2_F22	110	120	09-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	2.5		µg/L	7.3		0.031	0.20
J2 Range Northern	MW-234M2	MW-234M2_F22	110	120	09-08-2022	SW8330	2,4-Dinitrotoluene	0.20		µg/L	5.0		0.020	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22	130	140	09-08-2022	SW8330	2,4,6-Trinitrotoluene	0.74	J	µg/L	2.0		0.028	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22	130	140	09-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.23		µg/L	7.3		0.036	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22	130	140	09-08-2022	SW6850	Perchlorate	0.16	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22	130	140	09-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.23		µg/L	7.3		0.031	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22D	130	140	09-08-2022	SW8330	2,4-Dinitrotoluene	0.086	J	µg/L	5.0		0.020	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22D	130	140	09-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.22		µg/L	7.3		0.036	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22D	130	140	09-08-2022	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.058	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22D	130	140	09-08-2022	SW8330	2,4,6-Trinitrotoluene	0.69		µg/L	2.0		0.028	0.20
J2 Range Northern	MW-234M1	MW-234M1_F22D	130	140	09-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.22		µg/L	7.3		0.031	0.20
J2 Range Eastern	MW-228S	MW-228S_F22	104	114	09-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.52		µg/L	400		0.11	0.20
J2 Range Eastern	MW-228S	MW-228S_F22D	104	114	09-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.54		µg/L	400		0.11	0.20
J2 Range Eastern	MW-324M2	MW-324M2_F22	203.74	214.74	09-07-2022	SW6850	Perchlorate	0.77		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-324M2	MW-324M2_F22	203.74	214.74	09-07-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.049	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-324M1	MW-324M1_F22	234.85	244.85	09-07-2022	SW6850	Perchlorate	0.28		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-121S	MW-121S_F22	87.95	97.95	09-06-2022	SW6850	Perchlorate	0.094	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-154S	MW-154S_F22	98	108	09-06-2022	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-116S	MW-116S_F22	103	113.7	09-06-2022	SW6850	Perchlorate	0.19	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-116S	MW-116S_F22D	103	113.7	09-06-2022	SW6850	Perchlorate	0.19	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-307M3	MW-307M3_F22	125.8	135.82	09-06-2022	SW6850	Perchlorate	1.2		µg/L	2.0		0.058	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received October 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
J2 Range Eastern	MW-307M3	MW-307M3_F22	125.8	135.82	09-06-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.19	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-307M3	MW-307M3_F22D	125.8	135.82	09-06-2022	SW6850	Perchlorate	1.2		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-307M3	MW-307M3_F22D	125.8	135.82	09-06-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.24	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-706S	MW-706S_F22	112.7	122.7	09-06-2022	SW6850	Perchlorate	0.52		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-707S	MW-707S_F22	110.3	120.3	09-01-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.18	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-707S	MW-707S_F22	110.3	120.3	09-01-2022	SW6850	Perchlorate	0.077	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-708S	MW-708S_F22	107.7	117.7	09-01-2022	SW6850	Perchlorate	0.069	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-02PZ	J2MW-02PZ_F22	191	201	09-01-2022	SW6850	Perchlorate	0.082	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-02M2	J2MW-02M2_F22	236	246	09-01-2022	SW6850	Perchlorate	0.40		µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-02M1	J2MW-02M1_F22	271	281	09-01-2022	SW6850	Perchlorate	1.3		µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-02M1	J2MW-02M1_F22D	271	281	09-01-2022	SW6850	Perchlorate	1.2		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-365M2	MW-365M2_F22	0	0	08-31-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.043	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-667M2	MW-667M2_F22	277.3	287.3	08-31-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.46		µg/L	400		0.11	0.20
J2 Range Eastern	MW-667M2	MW-667M2_F22	277.3	287.3	08-31-2022	SW6850	Perchlorate	0.50		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-667M2	MW-667M2_F22	277.3	287.3	08-31-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.46		µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-667M1	MW-667M1_F22	302.3	312.3	08-31-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.5		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-667M1	MW-667M1_F22	302.3	312.3	08-31-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.77		µg/L	400		0.11	0.20
J2 Range Eastern	MW-667M1	MW-667M1_F22	302.3	312.3	08-31-2022	SW6850	Perchlorate	0.64		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-709S	MW-709S_F22	106.2	116.2	08-30-2022	SW6850	Perchlorate	0.26		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-321M2	MW-321M2_F22	155.67	165.67	08-30-2022	SW6850	Perchlorate	0.12	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-321M1	MW-321M1_F22	174.61	184.61	08-30-2022	SW6850	Perchlorate	0.13	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-01M2	J2MW-01M2_F22	245	255	08-29-2022	SW6850	Perchlorate	0.73		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-170M1	MW-170M1_F22	265	275	08-29-2022	SW6850	Perchlorate	0.15	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-215M2	MW-215M2_F22	205	215	08-29-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.25	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-215M2	MW-215M2_F22	205	215	08-29-2022	SW6850	Perchlorate	0.86		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-215M2	MW-215M2_F22D	205	215	08-29-2022	SW6850	Perchlorate	0.85		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-215M2	MW-215M2_F22D	205	215	08-29-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.24	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-215M1	MW-215M1_F22	240	250	08-29-2022	SW6850	Perchlorate	2.4		µg/L	2.0	X	0.058	0.20
J2 Range Eastern	MW-319M1	MW-319M1_F22	200.25	210.25	08-25-2022	SW6850	Perchlorate	0.064	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-627M1	MW-627M1_F22	269.5	279.5	08-25-2022	SW6850	Perchlorate	0.081	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-57D	MW-57D_F22	213	223	08-25-2022	SW6850	Perchlorate	0.12	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-334M1	MW-334M1_F22	0	0	08-25-2022	SW6850	Perchlorate	0.072	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-357M1	MW-357M1_F22	0	0	08-24-2022	SW6850	Perchlorate	0.26		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-436M1	MW-436M1_F22	295.47	305.47	08-24-2022	SW6850	Perchlorate	0.080	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-351M2	MW-351M2_F22	233.67	243.67	08-24-2022	SW6850	Perchlorate	0.077	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-04M1	J2MW-04M1_F22	257	267	08-23-2022	SW6850	Perchlorate	0.063	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-685M1	MW-685M1_F22	166.2	176.2	08-18-2022	SW6850	Perchlorate	0.24		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-705M2	MW-705M2_F22	185.9	195.9	08-18-2022	SW6850	Perchlorate	1.8		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-705M1	MW-705M1_F22	209.7	219.7	08-18-2022	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	J2MW-05M2	J2MW-05M2_F22	185	195	08-18-2022	SW6850	Perchlorate	0.060	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-339M2	MW-339M2_F22	0	0	08-17-2022	SW6850	Perchlorate	0.063	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-339M1	MW-339M1_F22	0	0	08-17-2022	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-666M3	MW-666M3_F22	199.8	209.8	08-17-2022	SW6850	Perchlorate	0.93		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-666M2	MW-666M2_F22	219.8	229.8	08-17-2022	SW6850	Perchlorate	0.79		µg/L	2.0		0.058	0.20

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

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received October 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
J2 Range Eastern	MW-666M1	MW-666M1_F22	244.8	254.8	08-17-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.039	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-666M1	MW-666M1_F22	244.8	254.8	08-17-2022	SW6850	Perchlorate	1.3		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-366M2	MW-366M2_F22	0	0	08-16-2022	SW6850	Perchlorate	0.11	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-366M1	MW-366M1_F22	0	0	08-16-2022	SW6850	Perchlorate	1.7		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-366M1	MW-366M1_F22	0	0	08-16-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.14	J	µg/L	0.60		0.037	0.20
J2 Range Eastern	MW-368M3	MW-368M3_F22	0	0	08-16-2022	SW6850	Perchlorate	0.071	J	µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-368M2	MW-368M2_F22	0	0	08-16-2022	SW6850	Perchlorate	7.2		µg/L	2.0	X	0.058	0.20
J2 Range Eastern	MW-368M2	MW-368M2_F22	0	0	08-16-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.6		µg/L	400		0.11	0.20
J2 Range Eastern	MW-368M2	MW-368M2_F22	0	0	08-16-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	3.5		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-368M1	MW-368M1_F22	0	0	08-16-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.6		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-368M1	MW-368M1_F22	0	0	08-16-2022	SW6850	Perchlorate	49.0		µg/L	2.0	X	0.29	1.0
J2 Range Eastern	MW-368M1	MW-368M1_F22D	0	0	08-16-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	7.7		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-368M1	MW-368M1_F22D	0	0	08-16-2022	SW6850	Perchlorate	49.0		µg/L	2.0	X	0.29	1.0
J2 Range Eastern	MW-668M1	MW-668M1_F22	168.7	178.7	08-15-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.6		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-668M1	MW-668M1_F22	168.7	178.7	08-15-2022	SW6850	Perchlorate	22.0		µg/L	2.0	X	0.12	0.40
J2 Range Eastern	MW-668M1	MW-668M1_F22D	168.7	178.7	08-15-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.5		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-668M1	MW-668M1_F22D	168.7	178.7	08-15-2022	SW6850	Perchlorate	23.0		µg/L	2.0	X	0.12	0.40
J2 Range Eastern	MW-665M3	MW-665M3_F22	175.2	185.2	08-15-2022	SW6850	Perchlorate	0.32		µg/L	2.0		0.058	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22	205.2	215.2	08-15-2022	SW6850	Perchlorate	2.7		µg/L	2.0	X	0.058	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22	205.2	215.2	08-15-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.8		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22	205.2	215.2	08-15-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.23		µg/L	400		0.11	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22D	205.2	215.2	08-15-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.8		µg/L	0.60	X	0.037	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22D	205.2	215.2	08-15-2022	SW6850	Perchlorate	2.6		µg/L	2.0	X	0.058	0.20
J2 Range Eastern	MW-665M2	MW-665M2_F22D	205.2	215.2	08-15-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.28		µg/L	400		0.11	0.20
J2 Range Eastern	MW-310M1	MW-310M1_F22	0	0	08-11-2022	SW6850	Perchlorate	0.061	J	µg/L	2.0		0.058	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	2.20
§Sum of All Compounds Detected		0.00	0.00	0.00	4.86
					0.00

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KGS 2019 PFAS MW&INF - J1 Range Northern

	Location	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
	Field Sample ID	J1N-INF2_PFAS19	J1N-INF2_PFAS19R	MW-136S_PFAS19	MW-564M1_PFAS19	MW-590M2_PFAS19
	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	4.90	2.90 U	1.40 J	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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

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	Location	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
	Field Sample ID	J1N-INF2_PFAS19	J1N-INF2_PFAS19R	MW-136S_PFAS19	MW-564M1_PFAS19	MW-590M2_PFAS19
	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		4.90	0.00	2.40	0.00	0.00
§Sum of All Compounds Detected		6.70	0.00	4.79	0.00	0.00

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KGS 2019 PFAS MW&INF - 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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

PFAS Summary Report – Groundwater
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	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	Screening Limit	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	600	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)	39	0.880 U	0.900 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.900 U
Perfluorononanoic acid (PFNA)	5.9	1.30 U	2.80
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.70 U
Perfluorooctanesulfonic acid (PFOS)	4	2.60 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	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

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected	0.00	0.00	0.00	0.880	0.730	7.40

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00 7.10
§Sum of All Compounds Detected	3.20	8.70

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	1.30 J	2.80 U	2.80 U	1.10 J	2.90 U
Perfluorooctanoic acid (PFOA)	6	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

PFAS Summary Report – Groundwater
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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.80 U	9.70 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		8.80 U	9.80 U	9.70 U
Perfluorobutanesulfonic acid	600	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)	39	0.600 J	0.980 U	0.970 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.980 U	0.970 U
Perfluorononanoic acid (PFNA)	5.9	1.30 U	1.10 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.90 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	1.90 J	2.90 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	11.0	0.00	9.90	9.00
§Sum of All Compounds Detected		0.00	17.4	0.00	15.0	15.4
						4.90

PFAS Summary Report – Groundwater
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	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00
§Sum of All Compounds Detected		3.05	5.08	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2019 PFAS MW&INF - 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	Screening Limit	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
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U
Perfluorobutanesulfonic acid	600	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U
Perfluorobutanoic acid (PFBA)		1.90 U	1.80 U	1.70 U	1.70 U	0.560 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U
Perfluorododecanoic acid (PFDoA)		1.70 J	1.40 U	1.30 U	1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	1.50 J	1.50 J	0.690 J	0.610 J	1.90 U
Perfluorohexanoic acid (PFHxA)		0.940 U	0.920 U	0.410 J	0.860 U	0.930 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.60 U	2.60 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	12.0	12.0	12.0
Perfluorooctanoic acid (PFOA)	6	0.520 J	1.40 U	1.70	1.60 J	1.30 J
Perfluoropentanoic acid (PFPeA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.60 U	2.60 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		1.40 J	2.80 U	2.60 U	2.60 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U
+PFOS + PFOA (EPA)		0.520	0.00	13.7	13.6	13.3
						0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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	Screening Limit	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	600	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)	39	0.970 U
Perfluorohexanoic acid (PFHxA)		0.970 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U
Perfluorooctanoic acid (PFOA)	6	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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	13.7	12.0	12.0
§Sum of All Compounds Detected		5.12	1.50	14.8	14.2	13.9
						0.540

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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	Screening Limit Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
§Sum of All Compounds Detected	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	Screening Limit	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	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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)		0.00	0.00	0.00	0.00	0.00	0.00

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	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	Screening Limit	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	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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)		2.60	0.00	5.40	6.20	5.90	5.90

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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			
	Screening Limit	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.80 U	9.20 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.80 U	9.20 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.80 U	9.20 U
Perfluorobutanesulfonic acid	600	0.980 U	0.920 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.730 J	1.70 J
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.980 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.980 U	0.920 U
Perfluorohexanoic acid (PFHxA)		0.980 U	0.920 U
Perfluorononanoic acid (PFNA)	5.9	2.20	0.650 J
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.750 J	0.410 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.00 J	6.00
+PFOS + PFOA (EPA)	0.00	0.00	0.00
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.20	0.00	0.00

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	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
Sum of All Compounds Detected		1.28	0.670	17.9	0.00	9.55	5.61

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
\$Sum of All Compounds Detected	5.12	3.89	21.0	13.7	12.4	9.27

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	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)
\$Sum of All Compounds Detected		4.68	8.76	0.00

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KGS 2020 J2 Ranges SPM Fall - J2 Range Northern

	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	1.50 U	1.40 U	1.40 U	1.50 U	2.00	1.50 J
Perfluoroctanesulfonamide (PFOSA)		3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U
Perfluorobutanesulfonic acid	600	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	1.50 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	1.50 U				
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U
Perfluorobutanesulfonic acid	600	0.920 U	0.960 U	0.940 U	0.930 U	3.60	0.900 U
Perfluorobutanoic acid (PFBA)		1.40 U					
Perfluorodecanesulfonic acid (PFDS)		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					
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					
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	1.40 U					
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.600

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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	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U
Perfluorobutanesulfonic acid	600	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U					
Perfluorodecanesulfonic acid (PFDS)		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					
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					
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	1.40 U					
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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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	Screening Limit	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
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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U
Perfluorobutanesulfonic acid	600	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				
Perfluorodecanesulfonic acid (PFDS)		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					
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					
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	1.40 U					
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	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					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.70 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	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

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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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		9.80	9.30	0.00	0.00	6.90
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		7.00	5.90	0.00	2.80	2.40
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		17.5	0.450	0.00	0.00	0.990
						0.00

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	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		5.00	0.00	0.00	1.90
§Sum of All Compounds Detected		7.60	5.53	5.00	3.19

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KGS 2020 J3 Range SPM Fall - 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	Screening Limit	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	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	4.90	5.00	16.0	2.90 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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	4.90	5.00	16.0	0.00

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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_F20
	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	Normal
PFAS 21 Cmps	Screening Limit	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	600	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	1.50 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)	39	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	0.920 U
Perfluorononanoic acid (PFNA)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	1.10 J	3.80	2.80 U	10.0	1.00 J
Perfluorooctanoic acid (PFOA)	6	1.40 U	2.10	1.10 J	0.550 J	3.10	0.990 J
Perfluoropentanoic acid (PFPeA)		1.30 J	0.660 J	0.440 J	0.400 J	6.50	0.430 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	1.99
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		19.0	2.10	3.80	0.00	54.1	0.00

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	Location	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	Field Sample ID	MW-197M3_F20D	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	Field Duplicate	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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
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
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.20 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
Perfluorobutanesulfonic acid	600	0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluorobutanoic acid (PFBA)		1.40 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
Perfluorodecanoic acid (PFDA)		0.920 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
Perfluoroheptanesulfonic acid (PFHps)		0.920 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)	39	1.80 U	0.950 U	0.950 U	1.90 U	4.40	0.950 U
Perfluorohexanoic acid (PFHxA)		0.450 J	0.950 U	0.950 U	0.950 U	3.70	0.950 U
Perfluorononanoic acid (PFNA)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.90 U	2.80 U	2.30 J	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.10 J	1.40 U	1.40 U	1.40 U	2.30	0.640 J
Perfluoropentanoic acid (PFPeA)		0.440 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)		1.10	0.00	0.00	0.00	4.60	0.640
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	6.70	0.00

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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	Screening Limit	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	600	1.00 U
Perfluorobutanoic acid (PFBA)		3.20
Perfluorodecanesulfonic acid (PFDS)		1.50 U
Perfluorodecanoic acid (PFDA)		1.00 U
Perfluorododecanoic acid (PFDoA)		1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		1.00 U
Perfluoroheptanoic acid (PFHpA)		1.50 U
Perfluorohexane sulfonate (PFHxS)	39	1.00 U
Perfluorohexanoic acid (PFHxA)		1.00 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U
Perfluorooctanesulfonamide (PFOSA)		3.00 U
Perfluorooctanesulfonic acid (PFOS)	4	3.00 U
Perfluorooctanoic acid (PFOA)	6	1.10 J
Perfluoropentanoic acid (PFPeA)		0.520 J
Perfluorotetradecanoic acid (PFTeDA)		3.00 U
Perfluorotridecanoic acid (PFTrDA)		3.00 U
Perfluoroundecanoic acid (PFUnA)		1.50 U
+PFOS + PFOA (EPA)	1.10	15.8
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	15.0

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	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
\$Sum of All Compounds Detected		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_F20
	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	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
\$Sum of All Compounds Detected		24.5	6.36	5.85	0.950	75.7	3.92

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	Location	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	Field Sample ID	MW-197M3_F20D	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	Field Duplicate	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
\$Sum of All Compounds Detected		3.39	0.460	0.740	0.740	23.8	3.26

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	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	Screening Limit	Results (ng/L)	Results (ng/L)
§Sum of All Compounds Detected		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	Screening Limit	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	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	1.30 J	1.10 J	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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	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	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
Perfluorobutanesulfonic acid	600	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				
Perfluorodecanesulfonic acid (PFDS)		1.50 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				
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.50 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

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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	329.60 - 339.60	255.85 - 265.85
	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.90 U	3.00 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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	215.83 - 225.08	311.50 - 321.50	236.62 - 246.62	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.70 U	1.20 J	2.70 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U
Perfluorobutanesulfonic acid	600	0.920 U	0.930 U	1.70 J	0.940 U	0.940 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U				
Perfluorodecanesulfonic acid (PFDS)		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	1.50 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	1.50 U				
Perfluorohexane sulfonate (PFHxS)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U				
+PFOS + PFOA (EPA)		0.00	0.00	0.00	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	Screening Limit	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
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
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U
Perfluorobutanesulfonic acid	600	0.930 U	0.940 U	0.940 U	0.930 U	0.890 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
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 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
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 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
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.930 U	0.940 U	0.940 U	0.930 U	0.890 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
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.40 U	1.30 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
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 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
+PFOS + PFOA (EPA)		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	Screening Limit	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	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	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.60 U
Perfluorobutanesulfonic acid	600	0.960 U	0.880 U	12.0	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	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.30 U	1.40 U	1.40 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	0.960 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.30 U	1.40 U	1.40 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	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	0.880 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	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.960 U	0.880 U	11.0	0.900 U	0.900 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.60 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	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	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

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		8.10	7.70	0.00	0.00	3.20
§Sum of All Compounds Detected		19.4	18.7	0.00	0.00	37.8
						35.2

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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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		8.20	8.40	7.60	2.10	2.60
§Sum of All Compounds Detected		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	329.60 - 339.60	255.85 - 265.85
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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	5.80	54.0	20.9	44.0	32.0	2.30
§Sum of All Compounds Detected	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	215.83 - 225.08	311.50 - 321.50	236.62 - 246.62	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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.00	70.0	9.70	2.40	0.00	0.00
§Sum of All Compounds Detected	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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected	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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		0.00	0.00	48.8	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	3.90	2.00	2.00
§Sum of All Compounds Detected		0.00	6.20	2.64	10.5
					3.03

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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	Screening Limit	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	600	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)	39	11.0
Perfluorohexanoic acid (PFHxA)		0.900 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.80 J
Perfluorooctanesulfonic acid (PFOS)	4	1.00 J
Perfluorooctanoic acid (PFOA)	6	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)		11.0

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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	Screening Limit Results (ng/L)
§Sum of All Compounds Detected	25.2

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KGS 2021 J3 Range SPM Fall - J3 Range

	Location	90EW0001	90WT0004	J3-EFF	J3-EFF	J3EW0032	J3EWIP1
	Field Sample ID	90EW0001_F21	90WT0004_F21	J3-EFF_4Q21	J3-EFF_F21	J3EW0032_F21	J3EWIP1_F21
	Sampling Depth	83.10 - 143.80	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	102.00 - 152.00	153.00 - 193.00
	Sampling Date	07/13/2021	08/10/2021	10/20/2021	07/13/2021	07/13/2021	07/13/2021
	SDG	320762631	320775331	320807451	320762631	320762631	320762631
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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	20.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
Perfluorobutanesulfonic acid	600	0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 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
Perfluorodecanoic acid (PFDA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.500 J	0.920 U	0.960 U	0.950 U	0.720 J	0.520 J
Perfluorohexanoic acid (PFHxA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 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
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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	Location	J3EWIP2	J3-INF	J3-INF	MW-142M2	MW-142S	MW-143M1
	Field Sample ID	J3EWIP2_F21	J3-INF_4Q21	J3-INF_F21	MW-142M2_F21	MW-142S_F21	MW-143M1_F21
	Sampling Depth	150.50 - 170.50	0.00 - 0.00	0.00 - 0.00	140.00 - 150.00	42.00 - 52.00	144.00 - 154.00
	Sampling Date	07/13/2021	10/20/2021	07/13/2021	07/27/2021	07/27/2021	07/26/2021
	SDG	320762631	320807451	320762631	320769671	320769671	320769671
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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 UJ	19.0 UJ	19.0 UJ
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
Perfluorobutanesulfonic acid	600	0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorobutanoic acid (PFBA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorodecanoic acid (PFDA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorododecanoic acid (PFDoA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluoroheptanesulfonic acid (PFHpS)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorohexane sulfonate (PFHxS)	39	2.80	1.00 J	1.20 J	2.80 J	0.930 UJ	0.960 UJ
Perfluorohexanoic acid (PFHxA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluoroctanesulfonamide (PFOSA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluoroctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.40 U	1.50 UJ	0.510 J	1.40 UJ
Perfluoropentanoic acid (PFPeA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U	1.40 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

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.80 UJ	3.60 J	2.90 U	3.90
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	3.00 U	4.80	15.0	15.0
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.90 U	5.30 J	4.90	4.80
Perfluorooctanoic acid (PFOA)	6	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

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	1.70 J	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)	6	1.00 J	0.870 J	120	5.70	49.0	2.10
Perfluoropentanoic acid (PPPeA)		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 (PFTrDA)		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

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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.70 U	1.00 J	7.00	2.80 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.90 U	1.60 J	5.30	2.70 U
Perfluorooctanoic acid (PFOA)	6	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

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Location	90EW0001	90WT0004	J3-EFF	J3-EFF	J3EW0032	J3EWIP1
Field Sample ID	90EW0001_F21	90WT0004_F21	J3-EFF_4Q21	J3-EFF_F21	J3EW0032_F21	J3EWIP1_F21
Sampling Depth	83.10 - 143.80	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	102.00 - 152.00	153.00 - 193.00
Sampling Date	07/13/2021	08/10/2021	10/20/2021	07/13/2021	07/13/2021	07/13/2021
SDG	320762631	320775331	320807451	320762631	320762631	320762631
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		0.500	0.00	0.00	0.720	0.520

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Location	J3EWIP2	J3-INF	J3-INF	MW-142M2	MW-142S	MW-143M1
Field Sample ID	J3EWIP2_F21	J3-INF_4Q21	J3-INF_F21	MW-142M2_F21	MW-142S_F21	MW-143M1_F21
Sampling Depth	150.50 - 170.50	0.00 - 0.00	0.00 - 0.00	140.00 - 150.00	42.00 - 52.00	144.00 - 154.00
Sampling Date	07/13/2021	10/20/2021	07/13/2021	07/27/2021	07/27/2021	07/26/2021
SDG	320762631	320807451	320762631	320769671	320769671	320769671
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		2.80	0.00	0.00	2.80	0.00
§Sum of All Compounds Detected		2.80	1.00	1.20	2.80	0.510
						0.00

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.10	4.00	0.00	0.00	0.00	3.90
§Sum of All Compounds Detected	4.74	4.70	0.00	4.17	0.00	6.79

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	4.80	15.0
§Sum of All Compounds Detected		0.00	10.1	2.23	6.35	15.0
						15.0

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		2.80	2.60	0.00	5.30	25.6
§Sum of All Compounds Detected		2.80	2.60	3.06	6.92	37.9
						38.5

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.40	8.50	597	17.5	194	15.5
§Sum of All Compounds Detected	5.29	12.5	2280	21.1	439	29.5

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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	1.90	7.00
§Sum of All Compounds Detected		0.00	0.00	0.550	2.90	7.00
						0.470

PFAS Summary Report – Groundwater
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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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	4.80	90.8	0.00
§Sum of All Compounds Detected		0.460	8.17	106	0.00

PFAS Summary Report – Groundwater
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KGS 2022 J MID PFAS - J2 Range Northern

Location	J2N-MID-1F	
Field Sample ID	J2N-MID-1F-P01	
Sampling Depth	0.00 - 0.00	
Sampling Date	08/08/2022	
SDG	320909141	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		2.00 J
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.930 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.930 U
Perfluorobutanesulfonic acid	600	0.930 U
Perfluorobutanoic acid (PFBA)		0.220 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.930 U
Perfluorododecanoic acid (PFDoA)		0.930 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U
Perfluoroheptanoic acid (PFHpA)		0.930 U
Perfluorohexane sulfonate (PFHxS)	39	0.930 U
Perfluorohexanoic acid (PFHxA)		1.00 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.40 U
Perfluoropentanoic acid (PFPeA)		0.790 J
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

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Location	J2N-MID-1F
Field Sample ID	J2N-MID-1F-P01
Sampling Depth	0.00 - 0.00
Sampling Date	08/08/2022
SDG	320909141
Sample Type	Normal
PFAS 21 Cmps	Screening Limit Results (ng/L)
§Sum of All Compounds Detected	4.01

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KGS 2022 J MID PFAS - J3 Range

Location	J3-MID-1	
Field Sample ID	J3-MID-1-P01	
Sampling Depth	0.00 - 0.00	
Sampling Date	08/08/2022	
SDG	320909141	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	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	600	0.950 U
Perfluorobutanoic acid (PFBA)		0.480 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)	39	0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.40 U
Perfluoropentanoic acid (PFPeA)		0.480 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	

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Location	J3-MID-1
Field Sample ID	J3-MID-1-P01
Sampling Depth	0.00 - 0.00
Sampling Date	08/08/2022
SDG	320909141
Sample Type	Normal
PFAS 21 Cmps	Screening Limit Results (ng/L)
§Sum of All Compounds Detected	0.00

PFAS Summary Report – Groundwater
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KGS 2022 J2 North PFAS Spring - J2 Range Eastern

	Location	MW-128S	MW-18D	MW-18S	MW-48D	MW-48M2	MW-48S
	Field Sample ID	MW-128S_S22	MW-18D_S22	MW-18S_S22	MW-48D_S22	MW-48M2_S22	MW-48S_S22
	Sampling Depth	87.00 - 97.00	265.00 - 275.00	35.00 - 45.00	221.00 - 231.00	161.00 - 171.00	99.00 - 109.00
	Sampling Date	01/11/2022	12/27/2021	12/27/2021	01/04/2022	01/04/2022	01/05/2022
	SDG	320838001	320834481	320834481	320836321	320836321	320837121
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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	0.980 U	0.950 U	0.990 U	1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
Perfluorobutanesulfonic acid	600	0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
Perfluorobutanoic acid (PFBA)		0.480 U	0.500 U	0.490 U	0.470 U	0.490 U	0.500 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
Perfluorododecanoic acid (PFDoA)		0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.960 U	1.00 U	0.980 U	0.950 U	0.990 U	1.00 U
Perfluorohexane sulfonate (PFHxS)	39	4.30	1.00 U	0.980 U	0.950 U	0.990 U	0.600 J
Perfluorohexanoic acid (PFHxA)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.480 U	0.500 U	0.490 U	0.470 U	0.490 U	0.500 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.50 U	1.40 U	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)		4.30	0.00	0.00	0.00	0.00	0.00

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	Location	MW-49D	MW-49M1	MW-49M2	MW-49M3	MW-49S
	Field Sample ID	MW-49D_S22	MW-49M1_S22	MW-49M2_S22	MW-49M3_S22	MW-49S_S22
	Sampling Depth	185.00 - 195.00	160.00 - 170.00	130.00 - 140.00	100.50 - 110.50	68.50 - 78.00
	Sampling Date	01/03/2022	01/03/2022	01/03/2022	01/03/2022	01/03/2022
	SDG	320836321	320836321	320836321	320836321	320836321
	Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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	0.960 U	0.980 U	0.960 U	0.960 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluorobutanesulfonic acid	600	1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluorobutanoic acid (PFBA)		0.500 U	0.480 U	0.490 U	0.480 U	0.480 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluorohexane sulfonate (PFHxS)	39	1.00 U	0.960 U	0.980 U	0.960 U	0.960 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.480 U	0.490 U	0.480 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroundecanoic acid (PFUnA)		1.50 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
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00

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Location	MW-128S	MW-18D	MW-18S	MW-48D	MW-48M2	MW-48S
Field Sample ID	MW-128S_S22	MW-18D_S22	MW-18S_S22	MW-48D_S22	MW-48M2_S22	MW-48S_S22
Sampling Depth	87.00 - 97.00	265.00 - 275.00	35.00 - 45.00	221.00 - 231.00	161.00 - 171.00	99.00 - 109.00
Sampling Date	01/11/2022	12/27/2021	12/27/2021	01/04/2022	01/04/2022	01/05/2022
SDG	320838001	320834481	320834481	320836321	320836321	320837121
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
§Sum of All Compounds Detected	4.30	0.00	0.00	0.00	0.00	0.600

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	Location	MW-49D	MW-49M1	MW-49M2	MW-49M3	MW-49S
	Field Sample ID	MW-49D_S22	MW-49M1_S22	MW-49M2_S22	MW-49M3_S22	MW-49S_S22
	Sampling Depth	185.00 - 195.00	160.00 - 170.00	130.00 - 140.00	100.50 - 110.50	68.50 - 78.00
	Sampling Date	01/03/2022	01/03/2022	01/03/2022	01/03/2022	01/03/2022
	SDG	320836321	320836321	320836321	320836321	320836321
	Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
	\$Sum of All Compounds Detected	0.00	0.00	0.00	0.00	0.00

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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	310.00 - 350.00	310.00 - 350.00	260.00 - 300.00	200.00 - 250.00	295.00 - 335.00	247.00 - 287.00
	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	Screening Limit	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					
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorobutanesulfonic acid	600	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					
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					
Perfluoroheptanoic acid (PFHpA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U					
Perfluorononanoic acid (PFNA)	5.9	0.900 J	0.930 J	1.30 J	1.90	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U					
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U					
Perfluorooctanoic acid (PFOA)	6	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					
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

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	Location	C-7S	J2EW3-MW1-A	J2EW3-MW1-B	J2EW3-MW1-C	J2EW3-MW-2-A	J2EW3-MW-2-B
	Field Sample ID	C-7S_S22	J2EW3-MW1-A_S22	J2EW3-MW1-B_S22	J2EW3-MW1-C_S22	J2EW3-MW-2-A_S22	J2EW3-MW-2-B_S22
	Sampling Depth	199.00 - 239.00	145.66 - 155.66	210.66 - 220.66	245.66 - 255.66	151.16 - 161.16	216.16 - 226.16
	Sampling Date	01/12/2022	01/05/2022	01/05/2022	01/05/2022	01/06/2022	01/06/2022
	SDG	320838831	320837121	320837121	320837121	320836691	320836691
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)				
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorobutanesulfonic acid	600	0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorobutanoic acid (PFBA)		0.490 U	0.490 U	0.490 U	0.460 U	0.500 U	0.510 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		2.20	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorododecanoic acid (PFDoA)		1.70 J	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorohexane sulfonate (PFHxS)	39	0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.490 U	0.490 U	0.490 U	0.460 U	0.500 U	0.510 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		13.0	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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	Location	J2EW3-MW-2-C	J2N-EFF-E	J2N-EFF-F	J2N-EFF-G	MW-130D	MW-18M1
	Field Sample ID	J2EW3-MW-2-C_S22	J2N-EFF-E_S22	J2N-EFF-F_S22	J2N-EFF-G_S22	MW-130D_S22	MW-18M1_S22
	Sampling Depth	251.13 - 261.13	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	320.00 - 330.00	171.00 - 176.00
	Sampling Date	01/06/2022	01/10/2022	01/10/2022	01/10/2022	12/29/2021	12/27/2021
	SDG	320836691	320838001	320838001	320838001	320835011	320834481
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	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)		0.950 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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanesulfonic acid	600	1.30 J	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanoic acid (PFBA)		0.380 J	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)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorododecanoic acid (PFDoA)		0.950 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)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexane sulfonate (PFHxS)	39	1.20 J	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.70 J	1.50 U	1.00 J	1.60 J	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroctanesulfonamide (PFOSA)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	1.40 U	1.40 U	1.00 J	1.50 U
Perfluoroctanoic acid (PFOA)	6	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.900 J	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 (PFTrDA)		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

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	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	296.26 - 306.27	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U	0.970 U	0.590 J	0.940 U	0.930 U	0.950 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)	6	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 (PFTrDA)		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

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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_S22
	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	Normal
PFAS 21 Cmps	Screening Limit	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	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.50 U				
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.990 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.990 U
Perfluorobutanesulfonic acid	600	0.920 U	0.960 U	0.910 U	0.450 J	0.960 U	0.990 U
Perfluorobutanoic acid (PFBA)		1.80 U	1.90 U	0.460 U	1.80 J	0.480 U	1.40 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U				
Perfluorodecanoic acid (PFDA)		1.60 J	1.40 J	2.00	1.40 J	2.10	23.0
Perfluorododecanoic acid (PFDoA)		0.920 U	0.960 U	3.20	8.80	0.820 J	1.40 J
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.50 U				
Perfluoroheptanoic acid (PFHpA)		0.920 U	0.960 U	0.910 U	0.470 J	0.960 U	0.910 J
Perfluorohexane sulfonate (PFHxS)	39	0.920 U	0.960 U	0.910 U	0.950 U	0.960 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.30 J	1.20 J	1.40 U	0.560 J	1.40 U	0.680 J
Perfluorononanoic acid (PFNA)	5.9	0.560 J	0.630 J	1.40 U	1.40 U	1.40 U	4.20
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.50 U				
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U	1.50 U				
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U				
Perfluoropentanoic acid (PFPeA)		1.10 J	1.00 J	0.240 J	0.900 J	0.480 U	1.70 J
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.50 U				
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.40 U	0.650 J	1.70 J	1.40 U	0.880 J
Perfluoroundecanoic acid (PFUnA)		5.80	5.80	17.0	17.0	4.70	18.0
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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	Location	MW-330M1	MW-330M2	MW-330M3	MW-330M3	MW-337D	MW-337M1
	Field Sample ID	MW-330M1_S22D	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	310.00 - 320.00	243.71 - 253.71
	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	Field Duplicate	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.970 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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorobutanesulfonic acid	600	0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorobutanoic acid (PFBA)		1.30 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)		18.0	5.10	14.0	11.0	23.0	1.00 J
Perfluorododecanoic acid (PFDoA)		0.800 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)		0.870 J	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorohexanoic acid (PFHxA)		0.580 J	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	3.50	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
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoropentanoic acid (PFPeA)		1.60 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 (PFTrDA)		1.50 U	0.820 J	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		16.0	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

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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	311.50 - 321.50	311.50 - 321.50	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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	
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U					
Perfluorooctanoic acid (PFOA)	6	1.50 U					
Perfluoropentanoic acid (PFPeA)	0.500 U	0.490 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 (PFTrDA)	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	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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluorobutanesulfonic acid	600	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)	39	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)	5.9	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
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	0.790 J	0.590 J	1.60 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	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

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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	Screening Limit	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.950 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.950 U
Perfluorobutanesulfonic acid	600	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)	39	0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U
Perfluorooctanoic acid (PFOA)	6	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	

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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	310.00 - 350.00	310.00 - 350.00	260.00 - 300.00	200.00 - 250.00	295.00 - 335.00	247.00 - 287.00
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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		4.30	4.50	5.90	7.20	4.80
§Sum of All Compounds Detected		10.6	10.7	21.8	23.3	19.4
						11.0

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Location	C-7S	J2EW3-MW1-A	J2EW3-MW1-B	J2EW3-MW1-C	J2EW3-MW-2-A	J2EW3-MW-2-B
Field Sample ID	C-7S_S22	J2EW3-MW1-A_S22	J2EW3-MW1-B_S22	J2EW3-MW1-C_S22	J2EW3-MW-2-A_S22	J2EW3-MW-2-B_S22
Sampling Depth	199.00 - 239.00	145.66 - 155.66	210.66 - 220.66	245.66 - 255.66	151.16 - 161.16	216.16 - 226.16
Sampling Date	01/12/2022	01/05/2022	01/05/2022	01/05/2022	01/06/2022	01/06/2022
SDG	320838831	320837121	320837121	320837121	320836691	320836691
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.20	0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected	16.9	0.00	0.00	0.00	0.00	0.00

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Location	J2EW3-MW-2-C	J2N-EFF-E	J2N-EFF-F	J2N-EFF-G	MW-130D	MW-18M1
Field Sample ID	J2EW3-MW-2-C_S22	J2N-EFF-E_S22	J2N-EFF-F_S22	J2N-EFF-G_S22	MW-130D_S22	MW-18M1_S22
Sampling Depth	251.13 - 261.13	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	320.00 - 330.00	171.00 - 176.00
Sampling Date	01/06/2022	01/10/2022	01/10/2022	01/10/2022	12/29/2021	12/27/2021
SDG	320836691	320838001	320838001	320838001	320835011	320834481
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		5.48	0.00	3.07	2.40	1.00
						0.00

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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	296.26 - 306.27	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	2.00	34.0	0.00	0.00
§Sum of All Compounds Detected		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_S22
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	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	2.00	0.00	2.10
§Sum of All Compounds Detected		10.4	10.0	23.1	33.1	7.62
						52.2

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Location	MW-330M1	MW-330M2	MW-330M3	MW-330M3	MW-337D	MW-337M1
Field Sample ID	MW-330M1_S22D	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	310.00 - 320.00	243.71 - 253.71
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	Field Duplicate	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	21.5	9.80	20.5	17.0	42.0	5.80
§Sum of All Compounds Detected	42.7	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	311.50 - 321.50	311.50 - 321.50	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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		16.5	17.6	24.0	32.5	0.00
§Sum of All Compounds Detected		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	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00
§Sum of All Compounds Detected		1.21	0.540	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	Screening Limit	Results (ng/L)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	2.20
§Sum of All Compounds Detected		0.610	0.00	0.790	0.590	5.09
						0.00

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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	Screening Limit Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00
§Sum of All Compounds Detected	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	Screening Limit	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	600	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)	39	0.990 U
Perfluorohexanoic acid (PFHxA)		1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U
Perfluorooctanoic acid (PFOA)	6	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	

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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	Screening Limit Results (ng/L)
§Sum of All Compounds Detected	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	Screening Limit
	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	600
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)	39
Perfluorohexanoic acid (PFHxA)	1.20 J
Perfluorononanoic acid (PFNA)	5.9
Perfluorooctanesulfonamide (PFOSA)	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4
Perfluorooctanoic acid (PFOA)	6
Perfluoropentanoic acid (PFPeA)	0.640 J
Perfluorotetradecanoic acid (PFTeDA)	1.40 U
Perfluorotridecanoic acid (PFTrDA)	1.40 U
Perfluoroundecanoic acid (PFUnA)	1.40 U
+PFOS + PFOA (EPA)	3.60
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.30

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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	Screening Limit Results (ng/L)
§Sum of All Compounds Detected	8.14

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KGS 2022 J3 Range SPM Spring - J3 Range

Location	J3-EFF	J3-EFF	J3-EFF	J3-INF	J3-INF	J3-INF
Field Sample ID	J3-EFF_1Q22	J3-EFF_2Q22	J3-EFF_3Q22	J3-INF_1Q22	J3-INF_2Q22	J3-INF_3Q22
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	01/24/2022	04/28/2022	07/11/2022	01/24/2022	04/28/2022	07/11/2022
SDG	320842111	320873411	320899771	320842111	320873411	320899771
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)				
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U				
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
Perfluorobutanesulfonic acid	600	0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
Perfluorobutanoic acid (PFBA)		0.240 J	0.480 U	0.470 U	0.250 J	0.480 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U				
Perfluorodecanoic acid (PFDA)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
Perfluorododecanoic acid (PFDoA)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
Perfluoroheptanesulfonic acid (PFHps)		1.40 U				
Perfluoroheptanoic acid (PFHpA)		0.940 U	0.960 U	0.930 U	0.950 U	0.960 U
Perfluorohexane sulfonate (PFHxS)	39	0.940 U	0.960 U	0.930 U	1.10 J	0.480 J
Perfluorohexanoic acid (PFHxA)		1.40 U				
Perfluorononanoic acid (PFNA)	5.9	1.40 U				
Perfluorooctanesulfonamide (PFOSA)		1.40 U				
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U				
Perfluorooctanoic acid (PFOA)	6	1.40 U				
Perfluoropentanoic acid (PFPeA)		0.470 U	0.480 U	0.470 U	0.470 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U				
Perfluorotridecanoic acid (PFTrDA)		1.40 U				
Perfluoroundecanoic acid (PFUnA)		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	0.00	0.00	0.00	0.00

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Location	J3-EFF	J3-EFF	J3-EFF	J3-INF	J3-INF	J3-INF
Field Sample ID	J3-EFF_1Q22	J3-EFF_2Q22	J3-EFF_3Q22	J3-INF_1Q22	J3-INF_2Q22	J3-INF_3Q22
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	01/24/2022	04/28/2022	07/11/2022	01/24/2022	04/28/2022	07/11/2022
SDG	320842111	320873411	320899771	320842111	320873411	320899771
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
§Sum of All Compounds Detected	0.240	0.00	0.00	1.35	0.480	1.10

Notes:

na/L = nanograms per liter; ua/ka = micrograms per kilogram; U = not detected; J = estimated; UJ = estimated non detect

Non detects are calculated as zero in the summations.

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

Bolded and highlighted results indicate detection of PFAS above the 2022 May EPA Tapwater (THQ 0.1)

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

The PFOS and PFOA summation includes all detections at and above the DL.

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

The MassDEP PFAS summation includes all quantifiable results reported at and above the LOQ.

§ Sum of All Compounds Detected includes all detections at and above the DL.