

**MONTHLY PROGRESS REPORT #306  
FOR SEPTEMBER 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 30 September 2022.

**1. SUMMARY OF REMEDIATION ACTIONS**

**Remediation Actions (RA) Underway at Camp Edwards as of 30 September 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 2.950 billion gallons of water treated and re-injected as of 30 September 2022. No Frank Perkins Road Treatment Facility shutdowns occurred in September.

The Base Boundary MTU continues to operate at a flow rate of 65 gpm. As of 30 September 2022, over 344.9 million gallons of water were treated and re-injected. No Base Boundary MTU shutdowns occurred in September.

The Leading Edge system continues to operate at a flow rate of 100 gpm. As of 30 September 2022, over 320.5 million gallons of water were treated and re-injected. No Leading Edge system shutdowns occurred in September.

The Pew Road Mobile Treatment Unit (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 30 September 2022, over 2.003 billion gallons of water have been treated and re-injected. No MTU E and F shutdowns occurred in September.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 30 September 2022, over 1.523 billion gallons of water have been treated and re-injected. No Northern MTU G shutdowns occurred in September.

#### 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 30 September 2022, over 1.643 billion gallons of water have been treated and re-injected. No MTU H and I shutdowns occurred in September.

MTU J continues to operate at a flow rate of 120 gpm. As of 30 September 2022, over 766.7 million gallons of water have been treated and re-injected. No MTU J shutdowns occurred in September.

MTU K continues to operate at a flow rate of 125 gpm. As of 30 September 2022, over 889.8 million gallons of water have been treated and re-injected. No MTU K shutdowns occurred in September.

#### 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 30 September 2022, over 1.653 billion gallons of water have been treated and re-injected. No J-3 Range system shutdowns occurred in September.

#### 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 30 September 2022, over 745.8 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shutdowns occurred in September.

- Shut down at 1248 on 14 September 2022 due to a leak at the injection gallery. The injection gallery will be excavated on Monday, 3 October to make necessary repairs before the system is restarted.

#### 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 30 September 2022, over 1.143 billion gallons of water have been treated and re-injected. No J-1 Range Northern MTU shutdowns occurred in September.

#### 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 30 September 2022, over 2.987 billion gallons of water have been treated and re-injected. The following CIA system shutdowns occurred in September.

- Shut down at 1040 on 27 September 2022 to inspect the carbon in GAC vessel #2 (MID2) and was restarted at 1135 on 27 September 2022.

## 2. SUMMARY OF ACTIONS TAKEN

### Operable Unit (OU) Activity as of 30 September 2022:

#### CIA

- Intrusive investigations
- Completed demo operations
- Cued data collection
- Routine processing of MD
- Routine check of CSS cover
- Bag filters changed at CIA-2

#### Demolition Area 1

- No activity

#### Demolition Area 2

- No activity

J-1 Range

- No activity

J-2 Range

- Groundwater sampling within J-2 East SPM and J-2 North SPM
- Hydraulic groundwater monitoring within J-2 East SPM and J-2 North SPM

J-3 Range

- No activity

L Range

- No activity

Small Arms Ranges

- No activity

Northwest Corner

- No activity

Training Areas

- Inspected staged soil at H Range
- Load out and T&D of excavated soil from KD, Former E, and J-2 Ranges staged at H Range

Impact Area Roads

- No activity

Other

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

**JBCC Impact Area Groundwater Study Program (IAGWSP) Tech Update Meeting Minutes for 15 September 2022**

Introduction/Welcome New Program Manager

Ms. Jodi Cutler was introduced as the new Program Manager for the IAGWSP. Ms. Cutler most recently worked at the University of Massachusetts Amherst as a contractor to MassDEP Drinking Water Program as the coordinator of the PFAS private well sampling program. Ms. Cutler previously was a Section Chief at MassDEP in the Western Regional Office and had joint oversight of the General Electric Pittsfield Housatonic River Site with Bryan Olsen from EPA. Her background is a geologist/hydrogeochemist.

Project and Fieldwork Update

The KGS groundwater sampling crew is currently sampling the J-2 North annual system performance monitoring (SPM) wells. There are 85 locations and that should be completed by the end of September. The hydro event was completed on September 12. Included with the J-2

North sampling event will be the eleven PFAS locations. The monthly process water samples were collected September 1 through September 8. The next J-3 treatment system influent and effluent quarterly PFAS sampling is scheduled for October. All the treatment plants are currently operating at normal flow rates. Notable system shutdowns since the last tech meeting: J-1 South is currently down as of September 14 due to the infiltration gallery leak. It was observed to be from the beginning of the perforated pipe. It will need to be excavated to troubleshoot and make the necessary repairs. We were alerted to the leak by a Coast Guard employee, who happens to live in a home off base adjacent to the infiltration gallery. The offsite disposal of the ~50 CY of soil staged at H Range was taken offsite to Bourne Landfill on September 8. The improvement of Barlow Rd from Jefferson to Gibbs (3,750 LF) pending UXO clearance by Dawson, is tentatively scheduled for the first week in October.

In the CIA, we are still awaiting validation of the sampling results of the BIP cover material and Consolidated Shot Structure sampling. Results will be provided as soon as we get them. There are five UXO teams working. One team is in SU3-2 where they are investigating polygons. They finished the targets of interest (TOI) on September 12 and started the polygons on September 13. There is one team in SU-8 also investigating polygons and one team each in SUs-7, 9 and 10 investigating TOIs. There was one cracked and leaking 155mm HE M107 (unfuzed) uncovered in SU-3 grid 44-26 on September 8. A 5x5x1 foot excavation was performed on September 13. Demolition operations at the CSS of 163 MEC items is scheduled for next week. The agencies should be receiving their 72-hour notification paperwork soon.

#### Action Items

The action items were discussed and updated.

#### PFAS Update

IAGWSP provided an update on their responses to EPA's request for information on PFAS. IAGWSP has been performing searches in the document repository section of EDMS for instances of the eighteen keywords. Results of searches completed to date will be submitted to EPA before the end of the week. It was noted that the results will include the name of the document where the keyword appears, the document's creation date (whenever available), and the EDMS document ID#, which can be used to quickly retrieve the file from the database. It was also explained that in the interest of providing these results in a timely manner, no in-depth review was done on each of the results (i.e., not every document was reviewed to search for how the keyword appears/is used). IAGWSP explained they would be doing that as a next step in the process once all the initial results are provided. IAGWSP also noted that they had spent a lot of time reviewing the draft Chemical Composition of Munitions Report, which was written in July 1997 and then incorporated into the Archives Search Report. That is the best information that we have regarding the munitions that were used on Camp Edwards for training. We do not have better information on what was used at the contractor test ranges but are continuing to review IAGWSP archives including witness interviews to gather as much information as possible.

MassDEP asked Ms. Cutler if, during her extensive sampling for PFAS in Massachusetts, she had come across a situation where PFOS exceedances were seen that were dominated by the longer chain PFOS (PFNA and PFDA) and, if so, what potential sources there might be. Ms. Cutler explained her sampling effort was really focused on the PFAS6 and while there were some instances where some odd analytes were seen, no in-depth evaluation had been done. She noted while it was strictly anecdotal, there did appear to be an odd correlation with orchards

and noted that while the pesticides that are normally used in orchards don't contain PFAS there was a question whether dispersants used during the spraying of herbicides might have caused some of these detections. MassDEP said there was a powerline in the area and there might have been spraying in the area for vegetation management. Ms. Cutler said she would give it some more thought and get back to the group. EPA asked about the status of the response to their request for a search of the MIDAS database for PFAS containing munitions. IAGWSP explained that while they felt that the Chemical Composition of Munitions report would be the best representation of munitions used at Camp Edwards, they would follow up with the team at the Department of Army to see if they have additional more current information.

**JBCC Impact Area Groundwater Study Program (IAGWSP) Tech Update (Email Update)  
29 September 2022**

Project and Fieldwork Update

Groundwater:

Sampling crews are performing J-2 Range North Annual System Performance Monitoring (SPM) sampling (explosives and perchlorate); J-2 Range North PFAS sampling is scheduled for the week of October 10th.

After completion of J-2 Range North, crews will move to the Central Impact Area (CIA) to perform semi-annual SPM sampling.

Operations and Maintenance:

All treatment systems operating at normal flow rates with the exception of J-1 Range South, which was turned off on 9/14/22 due to failing infiltration trench. Repair work is scheduled for this week.

J-2 North Unit F 9/7/22 post lead ion exchange (IX) vessel sample (mid-sample) showed perchlorate breakthrough (0.37 µg/L). IX changeout is scheduled.

CIA-1 9/1/22 post-lead vessel sample (mid-sample) showed RDX breakthrough (0.27 µg/L), resampled on 9/20 (0.32 ug/Kg) to confirm, as granular activated carbon (GAC) was last changed out on 8/11/22. The vessel was inspected on 9/27/22 to check for channeling: There was no channeling observed, so carbon changeout is scheduled for 10/13/22.

Soil/Geo/Site Maintenance & Restoration (outside CIA)

Unexploded Ordnance (UXO) clearance of Barlow Rd from Jefferson Rd to Gibbs Rd, along with UXO clearance of J-2 North New Well #2 well pad, scheduled for mid-October  
Improvement (grading and stone) of Barlow Rd from Jefferson Rd to Gibbs Rd pending UXO clearance.

Central Impact Area Update

There are 5 teams conducting intrusive investigations and demolition operations.  
Survey Unit (SU) 8 and 11 are complete.  
SU7 ~45% complete; SU9 ~76% complete; SU10 ~ 47% complete.  
Investigation resumed in the 100% verification grid 53\_54.

Demolition operations resumed on September 20 and are scheduled to continue through September 30. Agency comments received on both CIA QAPP and 2021 Source Annual Report and Final reports are underway.

### PFAS Update

First batch of keyword search results from EDMS forwarded to EPA on September 15. Second set of results will be transmitted no later than October 4 (delay due to EDMS access issues because of a recent Mass Guard network update). We continue to coordinate with HQ Army. The issue of whether munitions have significant amounts of PFAS compounds is being evaluated at the OSD level and we are waiting for direction.

### **JBCC Cleanup Team Meeting**

The next JBCC Cleanup Team (JBCCCT) is tentatively scheduled for 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 30 September 2022. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 to 30 September 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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|---|---|
| <ul style="list-style-type: none"><li>• Monthly Progress Report No. 305 for August 2022</li><li>• Memorandum of Resolution on the Draft J-3 Range 2021 Annual Environmental Monitoring Report</li><li>• Draft Final J-2 Range Northern PFAS Work Plan</li></ul> | <p>10 September 2022<br/>6 September 2022<br/>16 September 2022</p> |
|---|---|

- |  |                   |
|--|-------------------|
| • Draft Final J-3 Range PFAS Work Plan   | 16 September 2022 |
| • Draft Former E Range Post-DD Confirmatory Geophysical and Soil Investigation Findings Phase 2 Technical Memorandum | 28 September 2022 |
| • Central Impact Area 2021 Final Source Removal Annual Report  | 30 September 2022 |

## 5. SCHEDULED ACTIONS

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

- Small Arms Ranges Annual Environmental Monitoring Report Work Plan Addendum
- Draft Final Central Impact Area 2022 Source Quality Assurance Project Plan Update
- J-3 Range Additional PFAS Sampling Technical Memorandum
- Memorandum of Resolution on the Draft Demolition Area 2 2022 Environmental Monitoring Report
- Final J-2 Range Northern and J-2 Range Eastern 2021 Environmental Monitoring Reports
- Memorandum of Resolution on the Northwest Corner Demonstration of Compliance Report (*on hold pending resolution of PFAS issues*)
- Response to Comments on the J-2 Range, Phase-2, Addendum to the Post-DD Confirmation Geophysical and Soil Investigation Findings Revised Technical Memorandum
- Former E Range Completion of Work Report
- Former KD Range Completion of Work Report
- Five Year Review Report

**TABLE 1**  
**Sampling Progress: 1 to 30 September 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-619M2	MW-619M2_F22	N	09-29-2022	Ground Water	234.1	244.1
J2 Range Northern	MW-619M1	MW-619M1_F22	N	09-29-2022	Ground Water	255.1	265.1
J2 Range Northern	MW-296M2	MW-296M2_F22	MS	09-29-2022	Ground Water	214.98	224.98
J2 Range Northern	MW-296M2	MW-296M2_F22	N	09-29-2022	Ground Water	214.98	224.98
J2 Range Northern	MW-296M2	MW-296M2_F22	SD	09-29-2022	Ground Water	214.98	224.98
J2 Range Northern	MW-296M1	MW-296M1_F22	N	09-29-2022	Ground Water	255.08	265.08
J2 Range Northern	MW-348M2	MW-348M2_F22	N	09-29-2022	Ground Water	206.54	216.54
J2 Range Northern	J2EW3-MW1-B	J2EW3-MW1-B_F22	N	09-28-2022	Ground Water	210.66	220.66
J2 Range Northern	J2EW3-MW1-C	J2EW3-MW1-C_F22	N	09-28-2022	Ground Water	245.66	255.66
J2 Range Northern	MW-302M2	MW-302M2_F22	N	09-28-2022	Ground Water	194.35	204.43
J2 Range Northern	MW-331M2	MW-331M2_F22	N	09-28-2022	Ground Water	0	0
J2 Range Northern	MW-331M1	MW-331M1_F22	N	09-28-2022	Ground Water	0	0
J2 Range Northern	MW-630M1	MW-630M1_F22	MS	09-27-2022	Ground Water	217	227
J2 Range Northern	MW-630M1	MW-630M1_F22	N	09-27-2022	Ground Water	217	227
J2 Range Northern	MW-630M1	MW-630M1_F22	SD	09-27-2022	Ground Water	217	227
J2 Range Northern	J2EW2-MW3-B	J2EW2-MW3-B_F22	N	09-27-2022	Ground Water	212.65	222.65
J2 Range Northern	J2EW2-MW3-C	J2EW2-MW3-C_F22	N	09-27-2022	Ground Water	246	256
J2 Range Northern	MW-313M3	MW-313M3_F22	N	09-27-2022	Ground Water	195.07	205.57
J2 Range Northern	MW-313M2	MW-313M2_F22	N	09-27-2022	Ground Water	215.46	225.49
J2 Range Northern	MW-313M1	MW-313M1_F22	N	09-27-2022	Ground Water	255.42	265.42
J2 Range Northern	MW-313M1	MW-313M1_F22D	FD	09-27-2022	Ground Water	255.42	265.42
J2 Range Northern	MW-632M2	MW-632M2_F22	N	09-26-2022	Ground Water	229.5	239.5
J2 Range Northern	MW-632M1	MW-632M1_F22	N	09-26-2022	Ground Water	254.5	264.5
J2 Range Northern	MW-318M2	MW-318M2_F22	N	09-26-2022	Ground Water	205.8	215.82
J2 Range Northern	MW-318M1	MW-318M1_F22	N	09-26-2022	Ground Water	305.79	315.81
J2 Range Northern	MW-587M2	MW-587M2_F22	N	09-26-2022	Ground Water	220	230
J2 Range Northern	MW-587M2	MW-587M2_F22D	FD	09-26-2022	Ground Water	220	230
J2 Range Northern	MW-587M1	MW-587M1_F22	N	09-26-2022	Ground Water	250	260
J2 Range Northern	MW-635M1	MW-635M1_F22	N	09-22-2022	Ground Water	265.4	275.4
J2 Range Northern	MW-621M2	MW-621M2_F22	N	09-22-2022	Ground Water	219.4	229.4
J2 Range Northern	MW-621M2	MW-621M2_F22D	FD	09-22-2022	Ground Water	219.4	229.4
J2 Range Northern	MW-621M1	MW-621M1_F22	N	09-22-2022	Ground Water	249.4	259.4
J2 Range Northern	MW-702M2	MW-702M2_F22	N	09-22-2022	Ground Water	208.1	218.1
J2 Range Northern	MW-289S	MW-289S_F22	N	09-21-2022	Ground Water	0	0
J2 Range Northern	MW-289M2	MW-289M2_F22	N	09-21-2022	Ground Water	0	0
J2 Range Northern	MW-289M2	MW-289M2_F22D	FD	09-21-2022	Ground Water	0	0
J2 Range Northern	MW-289M1	MW-289M1_F22	N	09-21-2022	Ground Water	0	0
J2 Range Northern	MW-300M3	MW-300M3_F22	MS	09-21-2022	Ground Water	135.31	145.31
J2 Range Northern	MW-300M3	MW-300M3_F22	N	09-21-2022	Ground Water	135.31	145.31
J2 Range Northern	MW-300M3	MW-300M3_F22	SD	09-21-2022	Ground Water	135.31	145.31
J2 Range Northern	MW-300M2	MW-300M2_F22	N	09-21-2022	Ground Water	197.23	207.23
J2 Range Northern	MW-300M1	MW-300M1_F22	N	09-21-2022	Ground Water	293.03	303.02
J2 Range Northern	MW-702M1	MW-702M1_F22	N	09-21-2022	Ground Water	277.5	287.5
Central Impact Area	CIA1-MID2	CIA1-MID2-104A-RE	N	09-20-2022	Process Water	0	0
J2 Range Northern	MW-130S	MW-130S_F22	N	09-20-2022	Ground Water	103	113
J2 Range Northern	MW-703M2	MW-703M2_F22	N	09-20-2022	Ground Water	224.1	234.1
J2 Range Northern	MW-703M2	MW-703M2_F22D	FD	09-20-2022	Ground Water	224.1	234.1
J2 Range Northern	MW-703M1	MW-703M1_F22	N	09-20-2022	Ground Water	248	258
J2 Range Northern	MW-305M1	MW-305M1_F22	N	09-20-2022	Ground Water	202.82	212.82
J2 Range Northern	MW-322M1	MW-322M1_F22	N	09-20-2022	Ground Water	245.77	255.77
J2 Range Northern	MW-640M2	MW-640M2_F22	N	09-19-2022	Ground Water	216	226
J2 Range Northern	MW-640M1	MW-640M1_F22	N	09-19-2022	Ground Water	246	256
J2 Range Northern	MW-622M2	MW-622M2_F22	N	09-19-2022	Ground Water	220.4	230.4
J2 Range Northern	MW-622M1	MW-622M1_F22	N	09-19-2022	Ground Water	245.4	255.4
J2 Range Northern	MW-704M2	MW-704M2_F22	N	09-19-2022	Ground Water	217.8	227.8
J2 Range Northern	MW-704M1	MW-704M1_F22	N	09-19-2022	Ground Water	244	254
J2 Range Northern	MW-586M2	MW-586M2_F22	N	09-15-2022	Ground Water	211	221
J2 Range Northern	MW-586M1	MW-586M1_F22	N	09-15-2022	Ground Water	237	247
J2 Range Northern	J2EW1-MW1-B	J2EW1-MW1-B_F22	N	09-15-2022	Ground Water	205.82	215.82

N = Normal Sample  
FD = Field Duplicate

**TABLE 1**  
**Sampling Progress: 1 to 30 September 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	J2EW1-MW1-C	J2EW1-MW1-C_F22	N	09-15-2022	Ground Water	240.8	250.8
J2 Range Northern	J2EW1-MW1-C	J2EW1-MW1-C_F22D	FD	09-15-2022	Ground Water	240.8	250.8
J2 Range Northern	MW-589M2	MW-589M2_F22	N	09-15-2022	Ground Water	211	221
J2 Range Northern	MW-589M1	MW-589M1_F22	N	09-15-2022	Ground Water	240	250
J2 Range Northern	MW-230M1	MW-230M1_F22	N	09-14-2022	Ground Water	130	140
J2 Range Northern	MW-631M2	MW-631M2_F22	N	09-14-2022	Ground Water	200.1	210.1
J2 Range Northern	MW-631M1	MW-631M1_F22	N	09-14-2022	Ground Water	233.1	243.1
J2 Range Northern	MW-634M3	MW-634M3_F22	N	09-14-2022	Ground Water	170.6	180.6
J2 Range Northern	MW-634M2	MW-634M2_F22	N	09-14-2022	Ground Water	200.6	210.6
J2 Range Northern	MW-634M1	MW-634M1_F22	N	09-14-2022	Ground Water	305.6	315.6
J2 Range Northern	MW-588M2	MW-588M2_F22	N	09-13-2022	Ground Water	198	208
J2 Range Northern	MW-588M1	MW-588M1_F22	N	09-13-2022	Ground Water	238	248
J2 Range Northern	MW-585M3	MW-585M3_F22	N	09-13-2022	Ground Water	198.5	208.5
J2 Range Northern	MW-585M3	MW-585M3_F22D	FD	09-13-2022	Ground Water	198.5	208.5
J2 Range Northern	MW-585M2	MW-585M2_F22	N	09-13-2022	Ground Water	218.5	228.5
J2 Range Northern	MW-585M1	MW-585M1_F22	MS	09-13-2022	Ground Water	240	250
J2 Range Northern	MW-585M1	MW-585M1_F22	N	09-13-2022	Ground Water	240	250
J2 Range Northern	MW-585M1	MW-585M1_F22	SD	09-13-2022	Ground Water	240	250
J2 Range Northern	MW-234M2	MW-234M2_F22	N	09-08-2022	Ground Water	110	120
J3 Range	J3-EFF	J3-EFF-192A	N	09-08-2022	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-192A	N	09-08-2022	Process Water	0	0
J3 Range	J3-MID-1	J3-MID-1-192A	N	09-08-2022	Process Water	0	0
J3 Range	J3-INF	J3-INF-192A	N	09-08-2022	Process Water	0	0
J2 Range Northern	MW-234M1	MW-234M1_F22	N	09-08-2022	Ground Water	130	140
J2 Range Northern	MW-234M1	MW-234M1_F22D	FD	09-08-2022	Ground Water	130	140
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-198A	N	09-08-2022	Process Water	0	0
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-198A	N	09-08-2022	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-198A	N	09-08-2022	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-198A	N	09-08-2022	Process Water	0	0
J2 Range Eastern	MW-228S	MW-228S_F22	N	09-08-2022	Ground Water	104	114
J2 Range Eastern	MW-228S	MW-228S_F22D	FD	09-08-2022	Ground Water	104	114
Demolition Area 1	D1LE-EFF	D1LE-EFF-74A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-74A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-74A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-74A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1-EFF	D1-EFF-146A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-146A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-146A	N	09-08-2022	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-146A	N	09-08-2022	Process Water	0	0
J2 Range Eastern	MW-122S	MW-122S_F22	N	09-08-2022	Ground Water	88	98
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1G	J2N-MID-1G-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-192A	N	09-07-2022	Process Water	0	0
J2 Range Eastern	MW-324M2	MW-324M2_F22	N	09-07-2022	Ground Water	203.74	214.74
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-192A	N	09-07-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-192A	N	09-07-2022	Process Water	0	0
J2 Range Eastern	MW-324M1	MW-324M1_F22	N	09-07-2022	Ground Water	234.85	244.85
J1 Range Northern	J1N-EFF	J1N-EFF-107A	N	09-07-2022	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-107A	N	09-07-2022	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-107A	N	09-07-2022	Process Water	0	0
J1 Range Northern	J1N-INF2	J1N-INF2-107A	N	09-07-2022	Process Water	0	0
J1 Range Southern	J1S-EFF	J1S-EFF-178A	N	09-06-2022	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-178A	N	09-06-2022	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-178A	N	09-06-2022	Process Water	0	0

N = Normal Sample  
FD = Field Duplicate

**TABLE 1**  
**Sampling Progress: 1 to 30 September 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 Eastern	MW-121S	MW-121S_F22	N	09-06-2022	Ground Water	87.95	97.95
J2 Range Eastern	MW-154S	MW-154S_F22	N	09-06-2022	Ground Water	98	108
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	MW-116S	MW-116S_F22	N	09-06-2022	Ground Water	103	113.7
J2 Range Eastern	MW-116S	MW-116S_F22D	FD	09-06-2022	Ground Water	103	113.7
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	MW-307M3	MW-307M3_F22	N	09-06-2022	Ground Water	125.8	135.82
J2 Range Eastern	MW-307M3	MW-307M3_F22D	FD	09-06-2022	Ground Water	125.8	135.82
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	MW-706S	MW-706S_F22	N	09-06-2022	Ground Water	112.7	122.7
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-168A	N	09-06-2022	Process Water	0	0
J2 Range Eastern	MW-707S	MW-707S_F22	N	09-01-2022	Ground Water	110.3	120.3
J2 Range Eastern	MW-708S	MW-708S_F22	MS	09-01-2022	Ground Water	107.7	117.7
J2 Range Eastern	MW-708S	MW-708S_F22	N	09-01-2022	Ground Water	107.7	117.7
J2 Range Eastern	MW-708S	MW-708S_F22	SD	09-01-2022	Ground Water	107.7	117.7
Central Impact Area	CIA2-EFF	CIA2-EFF-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA1-EFF	CIA1-EFF-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-104A	N	09-01-2022	Process Water	0	0
J2 Range Eastern	J2MW-02PZ	J2MW-02PZ_F22	N	09-01-2022	Ground Water	191	201
Central Impact Area	CIA1-MID1	CIA1-MID1-104A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-104A	N	09-01-2022	Process Water	0	0
J2 Range Eastern	J2MW-02M2	J2MW-02M2_F22	N	09-01-2022	Ground Water	236	246
Central Impact Area	CIA3-EFF	CIA3-EFF-75A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-75A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA3-MID1	CIA3-MID1-75A	N	09-01-2022	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-75A	N	09-01-2022	Process Water	0	0
J2 Range Eastern	J2MW-02M1	J2MW-02M1_F22	N	09-01-2022	Ground Water	271	281
J2 Range Eastern	J2MW-02M1	J2MW-02M1_F22D	FD	09-01-2022	Ground Water	271	281

**TABLE 2**  
**VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS**  
Data Received September 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
J3 Range	MW-197M3	MW-197M3_F22	60.2	65.2	08-11-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.062	J	µg/L	7.3		0.031	0.20
J3 Range	MW-197M3	MW-197M3_F22	60.2	65.2	08-11-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.085	J	µg/L	7.3		0.036	0.20
J3 Range	MW-197M3	MW-197M3_F22	60.2	65.2	08-11-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.40		µg/L	0.60		0.037	0.20
J3 Range	MW-197M3	MW-197M3_F22	60.2	65.2	08-11-2022	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.058	0.20
J3 Range	MW-197M2	MW-197M2_F22	80.2	85.2	08-11-2022	SW6850	Perchlorate	0.060	J	µg/L	2.0		0.058	0.20
J3 Range	MW-197M2	MW-197M2_F22	80.2	85.2	08-11-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.40		µg/L	400		0.11	0.20
J3 Range	MW-197M2	MW-197M2_F22D	80.2	85.2	08-11-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.40		µg/L	400		0.11	0.20
J3 Range	MW-197M1	MW-197M1_F22	120	125	08-11-2022	SW6850	Perchlorate	0.083	J	µg/L	2.0		0.058	0.20
J3 Range	LKSNK0006	LKSNK0006_F22	0	0	08-10-2022	SW6850	Perchlorate	0.35		µg/L	2.0		0.058	0.20
J3 Range	LKSNK0007	LKSNK0007_F22	0	0	08-10-2022	SW6850	Perchlorate	0.13	J	µg/L	2.0		0.058	0.20
J3 Range	LKSNK0005	LKSNK0005_F22	0	0	08-10-2022	SW6850	Perchlorate	0.12	J	µg/L	2.0		0.058	0.20
J3 Range	MW-343M2	MW-343M2_F22	0	0	08-08-2022	SW6850	Perchlorate	0.065	J	µg/L	2.0		0.058	0.20
J3 Range	MW-343M1	MW-343M1_F22	0	0	08-08-2022	SW6850	Perchlorate	0.15	J	µg/L	2.0		0.058	0.20
J3 Range	MW-576M2	MW-576M2_F22	133.9	143.9	08-04-2022	SW6850	Perchlorate	0.37		µg/L	2.0		0.058	0.20
J3 Range	MW-576M1	MW-576M1_F22	173.9	183.9	08-04-2022	SW6850	Perchlorate	0.093	J	µg/L	2.0		0.058	0.20
J3 Range	MW-163S	MW-163S_F22	38	48	08-03-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		µg/L	0.60	X	0.037	0.20
J3 Range	MW-163S	MW-163S_F22	38	48	08-03-2022	SW6850	Perchlorate	1.4		µg/L	2.0		0.058	0.20
J3 Range	MW-163S	MW-163S_F22	38	48	08-03-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.31		µg/L	400		0.11	0.20
J3 Range	MW-163S	MW-163S_F22D	38	48	08-03-2022	SW6850	Perchlorate	1.2		µg/L	2.0		0.058	0.20
J3 Range	MW-163S	MW-163S_F22D	38	48	08-03-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.4		µg/L	0.60	X	0.037	0.20
J3 Range	MW-163S	MW-163S_F22D	38	48	08-03-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.26		µg/L	400		0.11	0.20
J3 Range	J3EWIP1	J3EWIP1_F22	153	193	08-03-2022	SW6850	Perchlorate	0.16	J	µg/L	2.0		0.058	0.20
J3 Range	90MP0059B	90MP0059B_F22	0	0	08-03-2022	SW6850	Perchlorate	0.20		µg/L	2.0		0.058	0.20
J3 Range	J3EW0032	J3EW0032_F22	102	152	08-03-2022	SW6850	Perchlorate	0.45		µg/L	2.0		0.058	0.20
J3 Range	J3EW0032	J3EW0032_F22	102	152	08-03-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.34		µg/L	0.60		0.037	0.20
J3 Range	J3EW0032	J3EW0032_F22	102	152	08-03-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.27		µg/L	400		0.11	0.20
J3 Range	90EW0001	90EW0001_F22	0	0	08-03-2022	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.058	0.20
J3 Range	MW-193S	MW-193S_F22	32.5	37.5	08-02-2022	SW6850	Perchlorate	0.093	J	µg/L	2.0		0.058	0.20
J3 Range	MW-193S	MW-193S_F22	32.5	37.5	08-02-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.30		µg/L	0.60		0.037	0.20
J3 Range	MW-243M1	MW-243M1_F22	114.5	124.5	08-02-2022	SW6850	Perchlorate	0.22		µg/L	2.0		0.058	0.20
J3 Range	MW-198M4	MW-198M4_F22	70	75	08-01-2022	SW6850	Perchlorate	0.16	J	µg/L	2.0		0.058	0.20
J3 Range	MW-198M4	MW-198M4_F22	70	75	08-01-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.16	J	µg/L	400		0.11	0.20
J3 Range	MW-198M3	MW-198M3_F22	100	105	08-01-2022	SW6850	Perchlorate	0.37		µg/L	2.0		0.058	0.20
J3 Range	MW-198M2	MW-198M2_F22	120	125	08-01-2022	SW6850	Perchlorate	1.1		µg/L	2.0		0.058	0.20
J3 Range	90MW0054	90MW0054_F22	0	0	07-27-2022	SW6850	Perchlorate	0.12	J	µg/L	2.0		0.058	0.20
J3 Range	90MW0054	90MW0054_F22	0	0	07-27-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.4		µg/L	0.60	X	0.037	0.20
J3 Range	90MW0054	90MW0054_F22	0	0	07-27-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.91		µg/L	400		0.11	0.20
J3 Range	90MW0054	90MW0054_F22D	0	0	07-27-2022	SW6850	Perchlorate	0.14	J	µg/L	2.0		0.058	0.20
J3 Range	90MW0054	90MW0054_F22D	0	0	07-27-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.86		µg/L	400		0.11	0.20
J3 Range	90MW0054	90MW0054_F22D	0	0	07-27-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	4.3		µg/L	0.60	X	0.037	0.20
J3 Range	MW-247M2	MW-247M2_F22	125	135	07-27-2022	SW6850	Perchlorate	0.18	J	µg/L	2.0		0.058	0.20

J = Estimated Result

MDL = Method Detection Limit

RL = Reporting Limit

MCL/HA= Either the MCL or Lowest Health Advisory Limit  
October 17, 2022

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

KGS 2019 PFAS MW&INF - Demolition Area 1

	<b>Location</b>	D1-INF	FPR-2-INF	MW-258M1	MW-663D	PR-INF
	<b>Field Sample ID</b>	D1-INF_PFAS19	FPR-2-INF_PFAS19	MW-258M1_PFAS19	MW-663D_PFAS19	PR-INF_PFAS19
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	109.00 - 119.00	240.60 - 250.60	0.00 - 0.00
	<b>Sampling Date</b>	06/24/2019	06/25/2019	06/19/2019	06/24/2019	06/25/2019
	<b>SDG</b>	320517141	320517141	320515981	320517141	320517141
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>2.20</b>	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	<b>1.00 J</b>	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	<b>0.460 J</b>	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	<b>1.20 J</b>	1.50 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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

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

KGS 2019 PFAS MW&INF - J1 Range Northern

	<b>Location</b>	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
	<b>Field Sample ID</b>	J1N-INF2_PFAS19	J1N-INF2_PFAS19R	MW-136S_PFAS19	MW-564M1_PFAS19	MW-590M2_PFAS19
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	107.00 - 117.00	227.00 - 237.00	238.00 - 248.00
	<b>Sampling Date</b>	06/17/2019	07/30/2019	06/24/2019	06/24/2019	06/24/2019
	<b>SDG</b>	320514661	320528231	320517141	320517141	320517141
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.990 J</b>	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)		<b>1.80 J</b>	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	<b>4.90</b>	2.90 U	<b>1.40 J</b>	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	<b>2.40</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>4.90</b>	<b>0.00</b>	<b>3.80</b>	<b>0.00</b>	<b>0.00</b>

**PFAS Summary Report – Groundwater**  
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	<b>Location</b>	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
	<b>Field Sample ID</b>	J1N-INF2_PFAS19	J1N-INF2_PFAS19R	MW-136S_PFAS19	MW-564M1_PFAS19	MW-590M2_PFAS19
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	107.00 - 117.00	227.00 - 237.00	238.00 - 248.00
	<b>Sampling Date</b>	06/17/2019	07/30/2019	06/24/2019	06/24/2019	06/24/2019
	<b>SDG</b>	320514661	320528231	320517141	320517141	320517141
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		<b>4.90</b>	<b>0.00</b>	<b>2.40</b>	<b>0.00</b>	<b>0.00</b>
§Sum of All Compounds Detected		<b>6.70</b>	<b>0.00</b>	<b>4.79</b>	<b>0.00</b>	<b>0.00</b>

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

KGS 2019 PFAS MW&INF - J2 Range Eastern

	<b>Location</b>	J2E-INF-I	J2E-INF-J	J2E-INF-K	MW-307M3	MW-307M3	MW-368M1
	<b>Field Sample ID</b>	J2E-INF-I_PFAS19	J2E-INF-J_PFAS19	J2E-INF-K_PFAS19	MW-307M3_PFAS19	MW-307M3_PFAS19D	MW-368M1_PFAS19
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	125.80 - 135.82	125.80 - 135.82	237.35 - 247.35
	<b>Sampling Date</b>	06/20/2019	06/20/2019	06/20/2019	06/18/2019	06/18/2019	06/18/2019
	<b>SDG</b>	320515981	320515981	320515981	320514662	320514662	320514662
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Field Duplicate	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.40 J</b>
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	<b>0.450 J</b>
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	<b>0.880 J</b>	<b>0.730 J</b>	<b>0.650 J</b>
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	<b>4.90</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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	<b>Location</b>	MW-368M2	MW-667M1
<b>Field Sample ID</b>	MW-368M2_PFAS19	MW-667M1_PFAS19	
<b>Sampling Depth</b>	202.73 - 212.73	302.30 - 312.30	
<b>Sampling Date</b>	06/18/2019	06/17/2019	
<b>SDG</b>	320514662	320514661	
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.00 U
N-Methyl perfluoroctanesulfonamidoacetic 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)		<b>0.800 J</b>	<b>4.30</b>
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	<b>2.80</b>
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)		<b>2.40</b>	<b>1.60 J</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>

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

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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<b>Location</b>	MW-368M2	MW-667M1
<b>Field Sample ID</b>	MW-368M2_PFAS19	MW-667M1_PFAS19
<b>Sampling Depth</b>	202.73 - 212.73	302.30 - 312.30
<b>Sampling Date</b>	06/18/2019	06/17/2019
<b>SDG</b>	320514662	320514661
<b>Sample Type</b>	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>	<b>7.10</b>
<b>§Sum of All Compounds Detected</b>	<b>3.20</b>	<b>8.70</b>

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

	<b>Location</b>	J2EW0001	J2EW0002	J2N-INF-E	J2N-INF-F	J2N-INF-F	J2N-INF-G
	<b>Field Sample ID</b>	J2EW0001_PFAS19	J2EW0002_PFAS19	J2N-INF_E_PFAS19	J2N-INF_F_PFAS19	J2N-INF_F_PFAS19R	J2N-INF_G_PFAS19
	<b>Sampling Depth</b>	179.00 - 234.00	198.00 - 233.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	11/20/2019	11/20/2019	06/18/2019	06/18/2019	07/30/2019	07/30/2019
	<b>SDG</b>	320565491	320565491	320514662	320514662	320528231	320528231
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.40 J</b>
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	<b>0.370 J</b>	0.930 U	<b>0.400 J</b>	<b>0.500 J</b>	0.970 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	<b>1.00 J</b>	1.40 U	<b>0.940 J</b>	<b>1.00 J</b>	1.50 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	<b>11.0</b>	0.930 U	<b>9.90</b>	<b>9.00</b>	1.90 U
Perfluorohexanoic acid (PFHxA)		0.960 U	<b>1.30 J</b>	0.930 U	<b>1.20 J</b>	<b>1.30 J</b>	<b>2.30</b>
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	<b>1.30 J</b>	2.80 U	2.80 U	<b>1.10 J</b>	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	<b>1.50 J</b>	1.40 U	<b>1.70 J</b>	<b>1.50 J</b>	1.50 U
Perfluoropentanoic acid (PFPeA)		0.960 U	<b>0.910 J</b>	0.930 U	<b>0.840 J</b>	<b>1.00 J</b>	<b>1.20 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>2.80</b>	<b>0.00</b>	<b>1.70</b>	<b>2.60</b>	<b>0.00</b>

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<b>Location</b>	MW-234M2	MW-313M1	MW-587M2
<b>Field Sample ID</b>	MW-234M2_PFAS19	MW-313M1_PFAS19	MW-587M2_PFAS19
<b>Sampling Depth</b>	110.00 - 120.00	255.40 - 265.40	220.00 - 230.00
<b>Sampling Date</b>	06/17/2019	06/19/2019	06/19/2019
<b>SDG</b>	320514661	320515981	320515981
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		8.80 U	9.80 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		8.80 U	9.80 U
Perfluorobutanesulfonic acid	600	0.880 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.80 U	<b>0.700 J</b>
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.880 U	<b>1.20 J</b>
Perfluorododecanoic acid (PFDoA)		1.30 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		0.880 U	0.980 U
Perfluoroheptanoic acid (PFHpA)		1.30 U	1.50 U
Perfluorohexane sulfonate (PFHxS)	39	<b>0.600 J</b>	0.980 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.980 U
Perfluorononanoic acid (PFNA)	5.9	1.30 U	<b>1.10 J</b>
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	<b>1.90 J</b>	2.90 U
Perfluorooctanoic acid (PFOA)	6	<b>0.550 J</b>	1.50 U
Perfluoropentanoic acid (PFPeA)		0.880 U	<b>0.680 J</b>
Perfluorotetradecanoic acid (PFTeDA)		2.60 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.60 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.30 U	<b>1.40 J</b>
<b>+PFOS + PFOA (EPA)</b>		<b>2.45</b>	<b>0.00</b>
			<b>0.00</b>

**PFAS Summary Report – Groundwater**  
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<b>Location</b>	J2EW0001	J2EW0002	J2N-INF-E	J2N-INF-F	J2N-INF-F	J2N-INF-G
<b>Field Sample ID</b>	J2EW0001_PFAS19	J2EW0002_PFAS19	J2N-INF-E_PFAS19	J2N-INF-F_PFAS19	J2N-INF-F_PFAS19R	J2N-INF-G_PFAS19
<b>Sampling Depth</b>	179.00 - 234.00	198.00 - 233.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
<b>Sampling Date</b>	11/20/2019	11/20/2019	06/18/2019	06/18/2019	07/30/2019	07/30/2019
<b>SDG</b>	320565491	320565491	320514662	320514662	320528231	320528231
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>						
	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		<b>0.00</b>	<b>11.0</b>	<b>0.00</b>	<b>9.90</b>	<b>9.00</b>
<b>§Sum of All Compounds Detected</b>		<b>0.00</b>	<b>17.4</b>	<b>0.00</b>	<b>15.0</b>	<b>15.4</b>
						<b>4.90</b>

**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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>		<b>3.05</b>	<b>5.08</b>
			<b>0.00</b>

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

KGS 2019 PFAS MW&INF - J3 Range

	<b>Location</b>	J3-INF	J3-INF	MW-163S	MW-163S	MW-163S	MW-227M2
	<b>Field Sample ID</b>	J3-INF_PFAS19	J3-INF_PFAS19D	MW-163S_PFAS19	MW-163S_PFAS19D	MW-163S_PFAS19R	MW-227M2_PFAS19
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	38.00 - 48.00	38.00 - 48.00	38.00 - 48.00	110.00 - 120.00
	<b>Sampling Date</b>	06/17/2019	06/17/2019	06/18/2019	06/18/2019	07/30/2019	06/19/2019
	<b>SDG</b>	320514661	320514661	320514662	320514662	320528231	320515981
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	17.0 U	17.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.20 U	8.60 U	8.60 U	9.30 U	9.60 U
Perfluorobutanesulfonic acid	600	0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.90 U	1.80 U	1.70 U	1.70 U	<b>0.560 J</b>	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorododecanoic acid (PFDoA)		<b>1.70 J</b>	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	<b>1.50 J</b>	<b>1.50 J</b>	<b>0.690 J</b>	<b>0.610 J</b>	1.90 U	<b>0.540 J</b>
Perfluorohexanoic acid (PFHxA)		0.940 U	0.920 U	<b>0.410 J</b>	0.860 U	0.930 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	<b>12.0</b>	<b>12.0</b>	<b>12.0</b>	2.90 U
Perfluorooctanoic acid (PFOA)	6	<b>0.520 J</b>	1.40 U	<b>1.70</b>	<b>1.60 J</b>	<b>1.30 J</b>	1.40 U
Perfluoropentanoic acid (PFPeA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		<b>1.40 J</b>	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.520</b>	<b>0.00</b>	<b>13.7</b>	<b>13.6</b>	<b>13.3</b>	<b>0.00</b>

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

<b>Location</b>	MW-250M2	
<b>Field Sample ID</b>	MW-250M2_PFAS19	
<b>Sampling Depth</b>	145.00 - 155.00	
<b>Sampling Date</b>	06/20/2019	
<b>SDG</b>	320515981	
<b>Sample Type</b>	Normal	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U
Perfluorobutanesulfonic acid	600	0.970 U
Perfluorobutanoic acid (PFBA)		<b>0.710 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>

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

Location	J3-INF	J3-INF	MW-163S	MW-163S	MW-163S	MW-227M2
<b>Field Sample ID</b>	J3-INF_PFAS19	J3-INF_PFAS19D	MW-163S_PFAS19	MW-163S_PFAS19D	MW-163S_PFAS19R	MW-227M2_PFAS19
<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	38.00 - 48.00	38.00 - 48.00	38.00 - 48.00	110.00 - 120.00
<b>Sampling Date</b>	06/17/2019	06/17/2019	06/18/2019	06/18/2019	07/30/2019	06/19/2019
<b>SDG</b>	320514661	320514661	320514662	320514662	320528231	320515981
<b>Sample Type</b>	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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
<b>§Sum of All Compounds Detected</b>		5.12	1.50	14.8	14.2	13.9
						0.540

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

<b>Location</b>	MW-250M2
<b>Field Sample ID</b>	MW-250M2_PFAS19
<b>Sampling Depth</b>	145.00 - 155.00
<b>Sampling Date</b>	06/20/2019
<b>SDG</b>	320515981
<b>Sample Type</b>	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b> Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>	<b>0.710</b>

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

KGS 2020 J1 Ranges SPM Fall - J1 Range Northern

	<b>Location</b>	MW-136M1	MW-136M1	MW-191M2	MW-245M1	MW-245M2	MW-303M2
	<b>Field Sample ID</b>	MW-136M1_F20	MW-136M1_F20D	MW-191M2_F20	MW-245M1_F20	MW-245M2_F20	MW-303M2_F20
	<b>Sampling Depth</b>	124.00 - 134.00	124.00 - 134.00	120.00 - 130.00	244.00 - 254.00	204.00 - 214.00	235.09 - 245.10
	<b>Sampling Date</b>	12/07/2020	12/07/2020	12/07/2020	12/07/2020	11/10/2020	12/08/2020
	<b>SDG</b>	320677691	320677691	320677691	320677691	320665921	320677701
	<b>Sample Type</b>	<b>Normal</b>	<b>Field Duplicate</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>15.0 J</b>	9.30 U	9.30 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	9.20 U	<b>2.90 J</b>	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)		<b>0.920 J</b>	<b>0.670 J</b>	1.50 U	1.40 U	<b>4.00</b>	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	<b>0.700 J</b>
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	<b>1.70 J</b>
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	<b>0.700 J</b>	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	<b>0.360 J</b>	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	<b>0.850 J</b>	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	<b>4.00</b>	<b>0.410 J</b>
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	<b>2.80</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-303M3	MW-326M1	MW-326M2	MW-326M3	MW-346M1	MW-346M2
	<b>Field Sample ID</b>	MW-303M3_F20	MW-326M1_F20	MW-326M2_F20	MW-326M3_F20	MW-346M1_F20	MW-346M2_F20
	<b>Sampling Depth</b>	139.74 - 149.69	250.01 - 260.01	196.27 - 206.28	165.24 - 175.26	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	12/08/2020	12/09/2020	12/09/2020	12/09/2020	12/02/2020	12/02/2020
	<b>SDG</b>	320677701	320678771	320678771	320678771	320675551	320675551
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)		<b>0.920 J</b>	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)		<b>1.60 J</b>	<b>0.950 J</b>	<b>5.40</b>	<b>3.50</b>	<b>2.50</b>	<b>2.40</b>
Perfluorododecanoic acid (PFDoA)		1.30 U	1.50 U	<b>1.20 J</b>	<b>0.600 J</b>	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	<b>2.60</b>	<b>1.50 J</b>	<b>1.40 J</b>	<b>2.70</b>	<b>3.40</b>	<b>3.50</b>
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	<b>0.440 J</b>	1.00 U	0.950 U	<b>0.620 J</b>	<b>0.870 J</b>
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	<b>1.00 J</b>	<b>13.0</b>	<b>6.90</b>	<b>5.90</b>	<b>2.50</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>2.60</b>	<b>0.00</b>	<b>5.40</b>	<b>6.20</b>	<b>5.90</b>	<b>5.90</b>

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

<b>Location</b>	MW-346M3	MW-346M4	MW-58S
<b>Field Sample ID</b>	MW-346M3_F20	MW-346M4_F20	MW-58S_F20
<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	100.00 - 110.00
<b>Sampling Date</b>	12/02/2020	12/02/2020	12/07/2020
<b>SDG</b>	320675551	320675551	320677691
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>			
	<b>Screening Limit</b>	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)		<b>0.730 J</b>	<b>1.70 J</b>
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	<b>2.20</b>	<b>0.650 J</b>
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)		<b>0.750 J</b>	<b>0.410 J</b>
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		<b>1.00 J</b>	<b>6.00</b>
<b>+PFOS + PFOA (EPA)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>2.20</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-136M1	MW-136M1	MW-191M2	MW-245M1	MW-245M2	MW-303M2
	<b>Field Sample ID</b>	MW-136M1_F20	MW-136M1_F20D	MW-191M2_F20	MW-245M1_F20	MW-245M2_F20	MW-303M2_F20
	<b>Sampling Depth</b>	124.00 - 134.00	124.00 - 134.00	120.00 - 130.00	244.00 - 254.00	204.00 - 214.00	235.09 - 245.10
	<b>Sampling Date</b>	12/07/2020	12/07/2020	12/07/2020	12/07/2020	11/10/2020	12/08/2020
	<b>SDG</b>	320677691	320677691	320677691	320677691	320665921	320677701
	<b>Sample Type</b>	Normal	<b>Field Duplicate</b>	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>Sum of All Compounds Detected</b>		<b>1.28</b>	<b>0.670</b>	<b>17.9</b>	<b>0.00</b>	<b>9.55</b>	<b>5.61</b>

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

<b>Location</b>	MW-303M3	MW-326M1	MW-326M2	MW-326M3	MW-346M1	MW-346M2
<b>Field Sample ID</b>	MW-303M3_F20	MW-326M1_F20	MW-326M2_F20	MW-326M3_F20	MW-346M1_F20	MW-346M2_F20
<b>Sampling Depth</b>	139.74 - 149.69	250.01 - 260.01	196.27 - 206.28	165.24 - 175.26	0.00 - 0.00	0.00 - 0.00
<b>Sampling Date</b>	12/08/2020	12/09/2020	12/09/2020	12/09/2020	12/02/2020	12/02/2020
<b>SDG</b>	320677701	320678771	320678771	320678771	320675551	320675551
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>\$Sum of All Compounds Detected</b>	<b>5.12</b>	<b>3.89</b>	<b>21.0</b>	<b>13.7</b>	<b>12.4</b>	<b>9.27</b>

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

	<b>Location</b>	MW-346M3	MW-346M4	MW-58S
	<b>Field Sample ID</b>	MW-346M3_F20	MW-346M4_F20	MW-58S_F20
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	100.00 - 110.00
	<b>Sampling Date</b>	12/02/2020	12/02/2020	12/07/2020
	<b>SDG</b>	320675551	320675551	320677691
	<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>\$Sum of All Compounds Detected</b>		<b>4.68</b>	<b>8.76</b>	<b>0.00</b>

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

KGS 2020 J2 Ranges SPM Fall - J2 Range Northern

	<b>Location</b>	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
	<b>Field Sample ID</b>	J2EW0002_F20	J2EW0002_F20D	J2EW2-MW2-B_F20	J2EW2-MW2-C_F20	MW-293M2_F20	MW-293M2_F20D
	<b>Sampling Depth</b>	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	196.42 - 206.42	196.42 - 206.42
	<b>Sampling Date</b>	09/10/2020	09/10/2020	09/09/2020	09/09/2020	08/27/2020	08/27/2020
	<b>SDG</b>	320645641	320645641	320645661	320645661	320641331	320641331
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>3.40</b>	<b>3.60</b>
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	<b>4.90</b>	<b>4.50</b>
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U	1.40 U	1.50 U	<b>3.50</b>	<b>3.60</b>
Perfluoroheptanesulfonic acid (PFHpS)		0.990 U	0.950 U	0.940 U	0.970 U	0.920 U	0.950 U
Perfluoroheptanoic acid (PFHpA)		<b>0.930 J</b>	<b>0.910 J</b>	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	<b>9.80</b>	<b>9.30</b>	0.940 U	0.970 U	0.920 U	0.950 U
Perfluorohexanoic acid (PFHxA)		<b>1.10 J</b>	<b>1.10 J</b>	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	<b>2.00</b>	<b>1.50 J</b>
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	<b>1.70 J</b>	<b>1.70 J</b>	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		<b>1.10 J</b>	<b>1.20 J</b>	0.940 U	0.970 U	<b>0.460 J</b>	<b>0.410 J</b>
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	<b>1.50 J</b>	<b>1.90 J</b>
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.40 U	1.40 U	1.50 U	<b>25.0</b>	<b>28.0</b>
<b>+PFOS + PFOA (EPA)</b>		<b>1.70</b>	<b>1.70</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-300M1	MW-300M2	MW-300M3	MW-302M2	MW-305M1	MW-348M2
	<b>Field Sample ID</b>	MW-300M1_F20	MW-300M2_F20	MW-300M3_F20	MW-302M2_F20	MW-305M1_F20	MW-348M2_F20
	<b>Sampling Depth</b>	293.03 - 303.02	197.23 - 207.23	135.31 - 145.31	194.35 - 204.43	202.82 - 212.82	206.54 - 216.54
	<b>Sampling Date</b>	09/08/2020	09/08/2020	09/08/2020	08/27/2020	08/31/2020	08/31/2020
	<b>SDG</b>	320644781	320644781	320644781	320641331	320642421	320642421
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.550 J</b>	1.40 U	1.40 U	<b>1.00 J</b>
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U				
Perfluorodecanoic acid (PFDA)		<b>3.10</b>	<b>3.60</b>	<b>1.50 J</b>	<b>2.80</b>	<b>2.40</b>	<b>2.50</b>
Perfluorododecanoic acid (PFDoA)		<b>0.800 J</b>	<b>1.10 J</b>	<b>0.610 J</b>	<b>1.70 J</b>	1.40 U	<b>2.20</b>
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	<b>3.90</b>	<b>2.30</b>	<b>0.960 J</b>	<b>1.00 J</b>	<b>1.40 J</b>	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)		<b>0.580 J</b>	<b>0.430 J</b>	0.940 U	<b>1.40 J</b>	0.910 U	<b>1.20 J</b>
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	<b>0.880 J</b>	2.80 U	2.80 U	2.70 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		<b>8.50</b>	<b>9.20</b>	<b>4.80</b>	<b>22.0</b>	<b>1.40 J</b>	<b>8.10</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-586M1	MW-586M2	MW-587M1	MW-588M1	MW-588M2	MW-589M1
	<b>Field Sample ID</b>	MW-586M1_F20	MW-586M2_F20	MW-587M1_F20	MW-588M1_F20	MW-588M2_F20	MW-589M1_F20
	<b>Sampling Depth</b>	237.00 - 247.00	211.00 - 221.00	250.00 - 260.00	238.00 - 248.00	198.00 - 208.00	240.00 - 250.00
	<b>Sampling Date</b>	09/02/2020	09/02/2020	09/10/2020	08/27/2020	08/27/2020	09/02/2020
	<b>SDG</b>	320643521	320643521	320645641	320641331	320641331	320643521
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>3.60</b>	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	<b>0.600 J</b>				
Perfluoropentanoic acid (PFPeA)		<b>0.490 J</b>	<b>0.490 J</b>	0.940 U	<b>0.420 J</b>	0.920 U	<b>0.600 J</b>
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					
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.600</b>

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

	<b>Location</b>	MW-589M2	MW-621M1	MW-621M2	MW-622M1	MW-622M2	MW-631M1
	<b>Field Sample ID</b>	MW-589M2_F20	MW-621M1_F20	MW-621M2_F20	MW-622M1_F20	MW-622M2_F20	MW-631M1_F20
	<b>Sampling Depth</b>	211.00 - 221.00	249.40 - 259.40	219.40 - 229.40	245.40 - 255.40	220.40 - 230.40	233.10 - 243.10
	<b>Sampling Date</b>	09/02/2020	08/26/2020	08/26/2020	09/01/2020	09/01/2020	08/26/2020
	<b>SDG</b>	320643521	320641331	320641331	320642411	320642411	320641331
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.440 J</b>	0.940 U	<b>0.400 J</b>	0.940 U	<b>0.420 J</b>
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					
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-631M2	MW-632M1	MW-632M2	MW-632M2	MW-640M1	MW-640M2
	<b>Field Sample ID</b>	MW-631M2_F20	MW-632M1_F20	MW-632M2_F20	MW-632M2_F20D	MW-640M1_F20	MW-640M2_F20
	<b>Sampling Depth</b>	200.10 - 210.10	254.50 - 264.50	229.50 - 239.50	229.50 - 239.50	246.00 - 256.00	216.00 - 226.00
	<b>Sampling Date</b>	08/26/2020	09/03/2020	09/03/2020	09/03/2020	09/03/2020	09/03/2020
	<b>SDG</b>	320641331	320643511	320643511	320643511	320643511	320643511
	<b>Sample Type</b>	Normal	Normal	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>8.50</b>	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluorobutanoic acid (PFBA)		<b>1.70 J</b>	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	<b>0.360 J</b>	0.930 U
Perfluorohexanoic acid (PFHxA)		<b>5.40</b>	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U					
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U
Perfluoroctanesulfonic 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)		<b>1.90</b>	<b>0.450 J</b>	0.900 U	0.960 U	<b>0.630 J</b>	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					
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	<b>Field Sample ID</b>	MW-703M1_F20	MW-703M2_F20	MW-704M1_F20	MW-704M2_F20
	<b>Sampling Depth</b>	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	<b>Sampling Date</b>	08/31/2020	08/31/2020	09/01/2020	09/01/2020
	<b>SDG</b>	320642421	320642421	320642411	320642411
	<b>Sample Type</b>	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.40 J</b>	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		<b>3.20</b>	<b>1.60 J</b>	<b>1.50 J</b>	<b>1.90</b>
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	<b>1.80</b>	<b>0.900 J</b>	1.50 U	<b>0.890 J</b>
Perfluorooctanesulfonamide (PFOSA)		<b>1.30 J</b>	<b>2.20 J</b>	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)		<b>0.650 J</b>	<b>0.830 J</b>	<b>1.10 J</b>	<b>0.400 J</b>
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)		<b>0.650 J</b>	1.40 U	<b>1.00 J</b>	1.40 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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

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

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)				
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	7.00	5.90	0.00	2.80	2.40	2.50
§Sum of All Compounds Detected	16.9	17.5	8.42	28.9	5.20	15.0

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

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

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

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

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

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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>		<b>17.5</b>	<b>0.450</b>	<b>0.00</b>	<b>0.00</b>	<b>0.990</b>
						<b>0.00</b>

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

	<b>Location</b>	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	<b>Field Sample ID</b>	MW-703M1_F20	MW-703M2_F20	MW-704M1_F20	MW-704M2_F20
	<b>Sampling Depth</b>	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	<b>Sampling Date</b>	08/31/2020	08/31/2020	09/01/2020	09/01/2020
	<b>SDG</b>	320642421	320642421	320642411	320642411
	<b>Sample Type</b>	Normal	Normal	Normal	Normal
PFAS 21 Cmps	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		<b>5.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.90</b>
§Sum of All Compounds Detected		<b>7.60</b>	<b>5.53</b>	<b>5.00</b>	<b>3.19</b>

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

KGS 2020 J3 Range SPM Fall - J3 Range

	<b>Location</b>	MW-143M2	MW-143M3	MW-163S	MW-163S	MW-181S	MW-193M1
	<b>Field Sample ID</b>	MW-143M2_F20	MW-143M3_F20	MW-163S_F20	MW-163S_F20D	MW-181S_F20	MW-193M1_F20
	<b>Sampling Depth</b>	117.00 - 122.00	107.00 - 112.00	38.00 - 48.00	38.00 - 48.00	32.25 - 42.25	57.50 - 62.50
	<b>Sampling Date</b>	07/20/2020	07/21/2020	07/16/2020	07/16/2020	07/21/2020	07/16/2020
	<b>SDG</b>	320629171	320629171	320627321	320627321	320629171	320627321
	<b>Sample Type</b>	Normal	Normal	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.20 J</b>	<b>0.620 J</b>	0.970 U	0.980 U	0.940 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	<b>1.00 J</b>	<b>1.00 J</b>	1.40 U	<b>0.570 J</b>
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	<b>26.0</b>	<b>4.20</b>	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	<b>4.90</b>	<b>5.00</b>	<b>16.0</b>	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	<b>0.840 J</b>	<b>0.940 J</b>	<b>0.510 J</b>	1.40 U
Perfluoropentanoic acid (PFPeA)		0.940 U	0.950 U	0.970 U	<b>0.460 J</b>	0.940 U	<b>0.490 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>5.74</b>	<b>5.94</b>	<b>16.5</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>26.0</b>	<b>4.20</b>	<b>4.90</b>	<b>5.00</b>	<b>16.0</b>	<b>0.00</b>

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

	<b>Location</b>	MW-193S	MW-196M1	MW-196S	MW-197M1	MW-197M2	MW-197M3
	<b>Field Sample ID</b>	MW-193S_F20	MW-196M1_F20	MW-196S_F20	MW-197M1_F20	MW-197M2_F20	MW-197M3_F20
	<b>Sampling Depth</b>	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	120.00 - 125.00	80.20 - 85.20	60.20 - 65.20
	<b>Sampling Date</b>	07/16/2020	07/23/2020	07/23/2020	07/20/2020	07/20/2020	07/20/2020
	<b>SDG</b>	320627321	320630121	320630121	320629171	320629171	320629171
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>2.20</b>	0.920 U	0.900 U	0.940 U	<b>1.80 J</b>	0.920 U
Perfluorobutanoic acid (PFBA)		<b>1.20 J</b>	1.80 U	1.80 U	1.40 U	<b>4.90</b>	<b>1.50 J</b>
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	<b>0.550 J</b>	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	<b>4.00</b>	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	<b>19.0</b>	<b>1.00 J</b>	0.900 U	1.90 U	<b>37.0</b>	1.80 U
Perfluorohexanoic acid (PFHxA)		<b>0.830 J</b>	<b>0.950 J</b>	<b>0.510 J</b>	0.940 U	<b>8.40</b>	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	<b>1.10 J</b>	<b>3.80</b>	2.80 U	<b>10.0</b>	<b>1.00 J</b>
Perfluorooctanoic acid (PFOA)	6	1.40 U	<b>2.10</b>	<b>1.10 J</b>	<b>0.550 J</b>	<b>3.10</b>	<b>0.990 J</b>
Perfluoropentanoic acid (PFPeA)		<b>1.30 J</b>	<b>0.660 J</b>	<b>0.440 J</b>	<b>0.400 J</b>	<b>6.50</b>	<b>0.430 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>3.20</b>	<b>4.90</b>	<b>0.550</b>	<b>13.1</b>	<b>1.99</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>19.0</b>	<b>2.10</b>	<b>3.80</b>	<b>0.00</b>	<b>54.1</b>	<b>0.00</b>

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

	<b>Location</b>	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	<b>Field Sample ID</b>	MW-197M3_F20D	MW-198M1_F20	MW-198M2_F20	MW-198M3_F20	MW-198M4_F20	MW-232M1_F20
	<b>Sampling Depth</b>	60.20 - 65.20	150.00 - 155.00	120.00 - 125.00	100.00 - 105.00	70.00 - 75.00	77.50 - 82.50
	<b>Sampling Date</b>	07/20/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/16/2020
	<b>SDG</b>	320629171	320627321	320627321	320627321	320627321	320627321
	<b>Sample Type</b>	<b>Field Duplicate</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)		<b>1.40 J</b>	1.40 U	<b>0.740 J</b>	<b>0.740 J</b>	<b>6.50</b>	<b>2.20</b>
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	<b>1.80 J</b>	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	1.80 U	0.950 U	0.950 U	1.90 U	<b>4.40</b>	0.950 U
Perfluorohexanoic acid (PFHxA)		<b>0.450 J</b>	0.950 U	0.950 U	0.950 U	<b>3.70</b>	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	<b>2.30 J</b>	2.90 U
Perfluorooctanoic acid (PFOA)	6	<b>1.10 J</b>	1.40 U	1.40 U	1.40 U	<b>2.30</b>	<b>0.640 J</b>
Perfluoropentanoic acid (PFPeA)		<b>0.440 J</b>	<b>0.460 J</b>	0.950 U	0.950 U	<b>2.80</b>	<b>0.420 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>1.10</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.60</b>	<b>0.640</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.70</b>	<b>0.00</b>

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

<b>Location</b>	MW-232M2	MW-30
<b>Field Sample ID</b>	MW-232M2_F20	MW-30_F20
<b>Sampling Depth</b>	61.00 - 66.00	26.00 - 36.00
<b>Sampling Date</b>	07/16/2020	07/21/2020
<b>SDG</b>	320627321	320629171
<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)		<b>3.20</b>
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	<b>1.10 J</b>
Perfluoropentanoic acid (PFPeA)		<b>0.520 J</b>
Perfluorotetradecanoic acid (PFTeDA)		3.00 U
Perfluorotridecanoic acid (PFTrDA)		3.00 U
Perfluoroundecanoic acid (PFUnA)		1.50 U
<b>+PFOS + PFOA (EPA)</b>	<b>1.10</b>	<b>15.8</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>	<b>15.0</b>

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

	<b>Location</b>	MW-143M2	MW-143M3	MW-163S	MW-163S	MW-181S	MW-193M1
	<b>Field Sample ID</b>	MW-143M2_F20	MW-143M3_F20	MW-163S_F20	MW-163S_F20D	MW-181S_F20	MW-193M1_F20
	<b>Sampling Depth</b>	117.00 - 122.00	107.00 - 112.00	38.00 - 48.00	38.00 - 48.00	32.25 - 42.25	57.50 - 62.50
	<b>Sampling Date</b>	07/20/2020	07/21/2020	07/16/2020	07/16/2020	07/21/2020	07/16/2020
	<b>SDG</b>	320629171	320629171	320627321	320627321	320629171	320627321
	<b>Sample Type</b>	Normal	Normal	Normal	<b>Field Duplicate</b>	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>\$Sum of All Compounds Detected</b>		<b>27.2</b>	<b>4.82</b>	<b>6.74</b>	<b>7.40</b>	<b>16.5</b>	<b>1.06</b>

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

	<b>Location</b>	MW-193S	MW-196M1	MW-196S	MW-197M1	MW-197M2	MW-197M3
	<b>Field Sample ID</b>	MW-193S_F20	MW-196M1_F20	MW-196S_F20	MW-197M1_F20	MW-197M2_F20	MW-197M3_F20
	<b>Sampling Depth</b>	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	120.00 - 125.00	80.20 - 85.20	60.20 - 65.20
	<b>Sampling Date</b>	07/16/2020	07/23/2020	07/23/2020	07/20/2020	07/20/2020	07/20/2020
	<b>SDG</b>	320627321	320630121	320630121	320629171	320629171	320629171
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>\$Sum of All Compounds Detected</b>		<b>24.5</b>	<b>6.36</b>	<b>5.85</b>	<b>0.950</b>	<b>75.7</b>	<b>3.92</b>

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

	<b>Location</b>	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	<b>Field Sample ID</b>	MW-197M3_F20D	MW-198M1_F20	MW-198M2_F20	MW-198M3_F20	MW-198M4_F20	MW-232M1_F20
	<b>Sampling Depth</b>	60.20 - 65.20	150.00 - 155.00	120.00 - 125.00	100.00 - 105.00	70.00 - 75.00	77.50 - 82.50
	<b>Sampling Date</b>	07/20/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/16/2020
	<b>SDG</b>	320629171	320627321	320627321	320627321	320627321	320627321
	<b>Sample Type</b>	<b>Field Duplicate</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>\$Sum of All Compounds Detected</b>		<b>3.39</b>	<b>0.460</b>	<b>0.740</b>	<b>0.740</b>	<b>23.8</b>	<b>3.26</b>

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

	<b>Location</b>	MW-232M2	MW-30
	<b>Field Sample ID</b>	MW-232M2_F20	MW-30_F20
	<b>Sampling Depth</b>	61.00 - 66.00	26.00 - 36.00
	<b>Sampling Date</b>	07/16/2020	07/21/2020
	<b>SDG</b>	320627321	320629171
	<b>Sample Type</b>	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)
<b>§Sum of All Compounds Detected</b>		<b>4.82</b>	<b>15.8</b>

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

KGS 2021 J2 North SPM Fall - J2 Range Northern

	<b>Location</b>	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
	<b>Field Sample ID</b>	J2EW0002_F21	J2EW0002_F21D	J2EW2-MW2-B_F21	J2EW2-MW2-C_F21	MW-293M2_F21	MW-293M2_F21D
	<b>Sampling Depth</b>	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	09/27/2021	09/27/2021	09/15/2021	09/15/2021	09/08/2021	09/08/2021
	<b>SDG</b>	320796651	320796651	320791141	320791141	320787611	320787611
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)	<b>6.70 J</b>	<b>6.70 J</b>	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 perfluoroctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U	
N-Methyl perfluoroctanesulfonamidoacetic 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	<b>3.90</b>	<b>3.80</b>
Perfluorobutanoic acid (PFBA)		1.40 U	1.30 U	1.40 U	1.50 U	<b>0.840 J</b>	<b>1.10 J</b>
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	<b>3.20</b>	<b>2.80</b>
Perfluorododecanoic acid (PFDoA)		1.40 U	1.30 U	1.40 U	1.50 U	<b>2.40</b>	<b>2.30</b>
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	<b>0.550 J</b>	1.40 U	1.50 U	1.40 U	1.30 U
Perfluorohexane sulfonate (PFHxS)	39	<b>8.10</b>	<b>7.70</b>	0.950 U	1.00 U	0.920 U	0.890 U
Perfluorohexanoic acid (PFHxA)		<b>0.820 J</b>	<b>0.770 J</b>	0.950 U	1.00 U	<b>1.30 J</b>	<b>1.10 J</b>
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.30 U	1.40 U	1.50 U	<b>1.30 J</b>	<b>1.10 J</b>
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.70 U	2.90 U	3.10 U	2.80 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	<b>1.30 J</b>	<b>1.10 J</b>	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	<b>1.80 J</b>	<b>1.20 J</b>	1.40 U	1.50 U	1.40 U	1.30 U
Perfluoropentanoic acid (PFPeA)		<b>0.680 J</b>	<b>0.640 J</b>	0.950 U	1.00 U	<b>1.10 J</b>	<b>1.00 J</b>
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	<b>0.760 J</b>	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.30 U	1.40 U	1.50 U	<b>23.0</b>	<b>22.0</b>
<b>+PFOS + PFOA (EPA)</b>		<b>3.10</b>	<b>2.30</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-300M1	MW-300M1	MW-300M2	MW-300M3	MW-302M2	MW-302M2
	<b>Field Sample ID</b>	MW-300M1_F21	MW-300M1_F21D	MW-300M2_F21	MW-300M3_F21	MW-302M2_F21	MW-302M2_F21D
	<b>Sampling Depth</b>	293.03 - 303.02	293.03 - 303.02	197.23 - 207.23	135.31 - 145.31	194.35 - 204.43	194.35 - 204.43
	<b>Sampling Date</b>	09/21/2021	09/21/2021	09/21/2021	09/21/2021	09/13/2021	09/13/2021
	<b>SDG</b>	320793351	320793351	320793351	320793351	320790821	320790821
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)		<b>3.40</b>	<b>3.60</b>	<b>4.00</b>	<b>1.70 J</b>	<b>2.60</b>	<b>2.50</b>
Perfluorododecanoic acid (PFDoA)		<b>0.520 J</b>	<b>0.680 J</b>	<b>1.10 J</b>	<b>0.710 J</b>	<b>2.80</b>	<b>3.00</b>
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	<b>0.440 J</b>	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	<b>4.80</b>	<b>4.80</b>	<b>3.60</b>	<b>2.10</b>	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	<b>0.700 J</b>	<b>0.840 J</b>	<b>1.10 J</b>	<b>1.20 J</b>
Perfluoroundecanoic acid (PFUnA)		<b>8.30</b>	<b>8.60</b>	<b>7.80</b>	<b>4.40</b>	<b>27.0</b>	<b>27.0</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-305M1	MW-330M1	MW-330M2	MW-330M3	MW-340D	MW-340M1
	<b>Field Sample ID</b>	MW-305M1_F21	MW-330M1_F21	MW-330M2_F21	MW-330M3_F21	MW-340D_F21	MW-340M1_F21
	<b>Sampling Depth</b>	202.82 - 212.82	313.10 - 323.13	238.01 - 248.04	154.97 - 164.99	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	09/14/2021	09/17/2021	09/17/2021	09/17/2021	09/23/2021	09/23/2021
	<b>SDG</b>	320790821	320791141	320791141	320791141	320793861	320793861
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
N-Ethyl 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	<b>1.60 J</b>	<b>0.890 J</b>	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)		<b>3.60</b>	<b>38.0</b>	<b>8.90</b>	<b>19.0</b>	<b>18.0</b>	<b>2.30</b>
Perfluorododecanoic acid (PFDoA)		1.50 U	<b>2.50</b>	<b>2.20</b>	<b>0.810 J</b>	<b>1.80 J</b>	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	<b>1.10 J</b>	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	<b>0.770 J</b>	0.970 U	0.990 U	0.950 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	<b>2.20</b>	<b>16.0</b>	<b>12.0</b>	<b>25.0</b>	<b>14.0</b>	<b>1.60 J</b>
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	<b>0.660 J</b>	<b>0.650 J</b>	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.970 U	<b>2.50</b>	<b>1.20 J</b>	0.990 U	0.950 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	<b>1.10 J</b>	2.90 U	3.00 U	<b>0.840 J</b>	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	<b>1.60 J</b>	<b>2.10 J</b>	3.00 U	<b>1.20 J</b>	2.90 U
Perfluoroundecanoic acid (PFUnA)		<b>3.30</b>	<b>23.0</b>	<b>9.60</b>	<b>8.90</b>	<b>18.0</b>	<b>1.50 J</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.660</b>	<b>0.650</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-340M2	MW-345M1	MW-345M2	MW-348M2	MW-586M1	MW-586M2
	<b>Field Sample ID</b>	MW-340M2_F21	MW-345M1_F21	MW-345M2_F21	MW-348M2_F21	MW-586M1_F21	MW-586M2_F21
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	206.54 - 216.54	237.00 - 247.00	211.00 - 221.00
	<b>Sampling Date</b>	09/23/2021	09/20/2021	09/20/2021	09/07/2021	09/09/2021	09/09/2021
	<b>SDG</b>	320793861	320793351	320793351	320787611	320787751	320787751
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	20.0 U	18.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
N-Ethyl 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	<b>0.790 J</b>	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)		<b>1.60 J</b>	<b>56.0</b>	<b>2.90</b>	<b>2.40</b>	0.930 U	0.910 U
Perfluorododecanoic acid (PFDoA)		1.40 U	<b>3.40</b>	<b>0.760 J</b>	<b>2.40</b>	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	<b>0.910 J</b>	1.50 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.950 U	<b>0.410 J</b>	<b>0.810 J</b>	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	<b>4.00</b>	<b>14.0</b>	<b>6.80</b>	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	<b>1.20 J</b>	2.70 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	<b>1.10 J</b>	<b>0.580 J</b>	1.30 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.950 U	<b>0.480 J</b>	<b>0.960 J</b>	0.890 U	0.930 U	0.910 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	<b>0.930 J</b>	3.00 U	2.70 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	<b>1.80 J</b>	<b>0.840 J</b>	<b>0.740 J</b>	2.80 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	<b>32.0</b>	<b>3.60</b>	<b>8.70</b>	1.40 U	1.40 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>1.10</b>	<b>1.78</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-587M1	MW-588M1	MW-588M2	MW-589M1	MW-589M2	MW-612M1
	<b>Field Sample ID</b>	MW-587M1_F21	MW-588M1_F21	MW-588M2_F21	MW-589M1_F21	MW-589M2_F21	MW-612M1_F21
	<b>Sampling Depth</b>	250.00 - 260.00	238.00 - 248.00	198.00 - 208.00	240.00 - 250.00	211.00 - 221.00	297.00 - 307.00
	<b>Sampling Date</b>	08/24/2021	09/08/2021	09/08/2021	09/09/2021	09/09/2021	09/14/2021
	<b>SDG</b>	320781081	320787611	320787611	320787751	320787751	320790821
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.70 J</b>	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				
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluoroctanesulfonic 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	<b>0.570 J</b>	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				
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.570</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-612M2	MW-613M1	MW-613M2	MW-621M1	MW-621M2	MW-622M1
	<b>Field Sample ID</b>	MW-612M2_F21	MW-613M1_F21	MW-613M2_F21	MW-621M1_F21	MW-621M2_F21	MW-622M1_F21
	<b>Sampling Depth</b>	267.00 - 277.00	267.10 - 277.10	246.10 - 256.10	249.40 - 259.40	219.40 - 229.40	245.40 - 255.40
	<b>Sampling Date</b>	09/14/2021	09/17/2021	09/17/2021	09/08/2021	09/08/2021	09/13/2021
	<b>SDG</b>	320790821	320791141	320791141	320787611	320787611	320790821
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-622M2	MW-631M1	MW-631M2	MW-632M1	MW-632M2	MW-640M1
	<b>Field Sample ID</b>	MW-622M2_F21	MW-631M1_F21	MW-631M2_F21	MW-632M1_F21	MW-632M2_F21	MW-640M1_F21
	<b>Sampling Depth</b>	220.40 - 230.40	233.10 - 243.10	200.10 - 210.10	254.50 - 264.50	229.50 - 239.50	246.00 - 256.00
	<b>Sampling Date</b>	09/13/2021	08/23/2021	08/23/2021	09/07/2021	09/07/2021	09/07/2021
	<b>SDG</b>	320790821	320781081	320781081	320787611	320787611	320787611
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>12.0</b>	0.900 U	0.900 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.30 U	<b>2.80</b>	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	<b>23.0</b>	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	<b>11.0</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-640M2	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	<b>Field Sample ID</b>	MW-640M2_F21	MW-703M1_F21	MW-703M2_F21	MW-704M1_F21	MW-704M2_F21
	<b>Sampling Depth</b>	216.00 - 226.00	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	<b>Sampling Date</b>	09/07/2021	09/14/2021	09/14/2021	09/13/2021	09/13/2021
	<b>SDG</b>	320787611	320790821	320790821	320790821	320790821
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>3.30</b>	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	<b>3.90</b>	<b>2.00</b>	<b>2.00</b>	<b>2.20</b>
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	<b>0.900 J</b>	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	<b>1.60 J</b>	<b>0.640 J</b>	<b>1.10 J</b>	<b>0.830 J</b>
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	<b>0.700 J</b>	0.970 U	<b>3.20</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>8.10</b>	<b>7.70</b>	<b>0.00</b>	<b>0.00</b>	<b>3.20</b>
<b>§Sum of All Compounds Detected</b>		<b>19.4</b>	<b>18.7</b>	<b>0.00</b>	<b>0.00</b>	<b>37.8</b>
						<b>35.2</b>

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

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

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

Location	MW-305M1	MW-330M1	MW-330M2	MW-330M3	MW-340D	MW-340M1
Field Sample ID	MW-305M1_F21	MW-330M1_F21	MW-330M2_F21	MW-330M3_F21	MW-340D_F21	MW-340M1_F21
Sampling Depth	202.82 - 212.82	313.10 - 323.13	238.01 - 248.04	154.97 - 164.99	0.00 - 0.00	0.00 - 0.00
Sampling Date	09/14/2021	09/17/2021	09/17/2021	09/17/2021	09/23/2021	09/23/2021
SDG	320790821	320791141	320791141	320791141	320793861	320793861
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	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

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

Location	MW-340M2	MW-345M1	MW-345M2	MW-348M2	MW-586M1	MW-586M2
Field Sample ID	MW-340M2_F21	MW-345M1_F21	MW-345M2_F21	MW-348M2_F21	MW-586M1_F21	MW-586M2_F21
Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	206.54 - 216.54	237.00 - 247.00	211.00 - 221.00
Sampling Date	09/23/2021	09/20/2021	09/20/2021	09/07/2021	09/09/2021	09/09/2021
SDG	320793861	320793351	320793351	320787611	320787751	320787751
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	4.00	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

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

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
§Sum of All Compounds Detected		0.00	0.00	1.70	0.570	0.00
						0.00

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

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

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

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

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

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

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

KGS 2021 J2 Ranges SPM Spring - J2 Range Northern

<b>Location</b>	J2EW0002	
<b>Field Sample ID</b>	J2EW0002_521	
<b>Sampling Depth</b>	198.00 - 233.00	
<b>Sampling Date</b>	01/13/2021	
<b>SDG</b>	320689351	
<b>Sample Type</b>	Normal	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		<b>7.40 J</b>
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)		<b>0.430 J</b>
Perfluoroheptanoic acid (PFHpA)		<b>0.860 J</b>
Perfluorohexane sulfonate (PFHxS)	39	<b>11.0</b>
Perfluorohexanoic acid (PFHxA)		<b>0.900 J</b>
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		<b>1.80 J</b>
Perfluorooctanesulfonic acid (PFOS)	4	<b>1.00 J</b>
Perfluorooctanoic acid (PFOA)	6	<b>1.80 J</b>
Perfluoropentanoic acid (PFPeA)		1.90 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
<b>+PFOS + PFOA (EPA)</b>		<b>2.80</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>11.0</b>

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

<b>Location</b>	J2EW0002
<b>Field Sample ID</b>	J2EW0002_521
<b>Sampling Depth</b>	198.00 - 233.00
<b>Sampling Date</b>	01/13/2021
<b>SDG</b>	320689351
<b>Sample Type</b>	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b> Results (ng/L)
<b>§Sum of All Compounds Detected</b>	<b>25.2</b>

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

KGS 2021 J3 Range SPM Fall - J3 Range

	<b>Location</b>	90EW0001	90WT0004	J3-EFF	J3-EFF	J3EW0032	J3EWIP1
	<b>Field Sample ID</b>	90EW0001_F21	90WT0004_F21	J3-EFF_4Q21	J3-EFF_F21	J3EW0032_F21	J3EWIP1_F21
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	102.00 - 152.00	153.00 - 193.00
	<b>Sampling Date</b>	07/13/2021	08/10/2021	10/20/2021	07/13/2021	07/13/2021	07/13/2021
	<b>SDG</b>	320762631	320775331	320807451	320762631	320762631	320762631
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.500 J</b>	0.920 U	0.960 U	0.950 U	<b>0.720 J</b>	<b>0.520 J</b>
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
Perfluoroctanoic 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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	J3EWIP2	J3-INF	J3-INF	MW-142M2	MW-142S	MW-143M1
	<b>Field Sample ID</b>	J3EWIP2_F21	J3-INF_4Q21	J3-INF_F21	MW-142M2_F21	MW-142S_F21	MW-143M1_F21
	<b>Sampling Depth</b>	150.50 - 170.50	0.00 - 0.00	0.00 - 0.00	140.00 - 150.00	42.00 - 52.00	144.00 - 154.00
	<b>Sampling Date</b>	07/13/2021	10/20/2021	07/13/2021	07/27/2021	07/27/2021	07/26/2021
	<b>SDG</b>	320762631	320807451	320762631	320769671	320769671	320769671
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>2.80</b>	<b>1.00 J</b>	<b>1.20 J</b>	<b>2.80 J</b>	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	<b>0.510 J</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.510</b>	<b>0.00</b>

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

	<b>Location</b>	MW-143M2	MW-143M2	MW-144M2	MW-144S	MW-145M1	MW-145S
	<b>Field Sample ID</b>	MW-143M2_F21DR	MW-143M2_F21R	MW-144M2_F21	MW-144S_F21R	MW-145M1_F21	MW-145S_F21
	<b>Sampling Depth</b>	117.00 - 122.00	117.00 - 122.00	130.00 - 140.00	26.00 - 36.00	125.00 - 135.00	30.00 - 40.00
	<b>Sampling Date</b>	09/16/2021	09/16/2021	07/27/2021	09/16/2021	08/11/2021	08/11/2021
	<b>SDG</b>	320791142	320791142	320769671	320791142	320776031	320776031
	<b>Sample Type</b>	Field Duplicate	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.640 J</b>	<b>0.700 J</b>	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	<b>4.10</b>	<b>4.00</b>	0.940 UJ	0.990 U	0.950 U	<b>1.50 J</b>
Perfluorohexanoic acid (PFHxA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	<b>0.630 J</b>
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	<b>3.60 J</b>	2.90 U	<b>3.90</b>
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 UJ	<b>0.570 J</b>	1.40 U	<b>0.760 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.17</b>	<b>0.00</b>	<b>4.66</b>

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

	<b>Location</b>	MW-157M1	MW-157M2	MW-157M3	MW-163S	MW-181S	MW-181S
	<b>Field Sample ID</b>	MW-157M1_F21	MW-157M2_F21	MW-157M3_F21	MW-163S_F21	MW-181S_F21	MW-181S_F21D
	<b>Sampling Depth</b>	154.00 - 164.00	110.00 - 120.00	70.00 - 80.00	38.00 - 48.00	32.25 - 42.25	32.25 - 42.25
	<b>Sampling Date</b>	07/14/2021	07/14/2021	07/14/2021	07/14/2021	08/02/2021	08/02/2021
	<b>SDG</b>	320763871	320763871	320763871	320763871	320772471	320772471
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Field Duplicate
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>9.40</b>	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	<b>0.720 J</b>	<b>1.50 J</b>	<b>0.450 J</b>	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	<b>4.80</b>	<b>15.0</b>	<b>15.0</b>
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U	<b>0.730 J</b>	<b>1.10 J</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.730</b>	<b>5.90</b>	<b>15.0</b>	<b>15.0</b>

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

	<b>Location</b>	MW-193S	MW-193S	MW-196M1	MW-196S	MW-197M2	MW-197M2
	<b>Field Sample ID</b>	MW-193S_F21	MW-193S_F21D	MW-196M1_F21	MW-196S_F21	MW-197M2_F21	MW-197M2_F21D
	<b>Sampling Depth</b>	32.50 - 37.50	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	80.20 - 85.20	80.20 - 85.20
	<b>Sampling Date</b>	08/04/2021	08/04/2021	08/11/2021	08/11/2021	08/02/2021	08/02/2021
	<b>SDG</b>	320772871	320772871	320776031	320776031	320772471	320772471
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.450 J</b>	<b>0.460 J</b>
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	<b>0.900 J</b>	1.50 U	<b>2.60</b>	<b>2.60</b>
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	<b>3.00</b>	<b>3.00</b>
Perfluorohexane sulfonate (PFHxS)	39	<b>2.80</b>	<b>2.60</b>	0.960 U	<b>0.440 J</b>	<b>15.0</b>	<b>15.0</b>
Perfluorohexanoic acid (PFHxA)		0.940 U	0.940 U	<b>0.760 J</b>	<b>0.480 J</b>	<b>5.00</b>	<b>5.50</b>
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	<b>5.30 J</b>	<b>4.90</b>	<b>4.80</b>
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	<b>1.40 J</b>	<b>0.700 J</b>	<b>2.70</b>	<b>2.90</b>
Perfluoropentanoic acid (PFPeA)		0.940 U	0.940 U	0.960 U	1.00 U	<b>4.20</b>	<b>4.20</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>1.40</b>	<b>6.00</b>	<b>7.60</b>	<b>7.70</b>

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

	<b>Location</b>	MW-197M3	MW-198M4	MW-218M1	MW-218M1	MW-218M2	MW-218M2
	<b>Field Sample ID</b>	MW-197M3_F21	MW-198M4_F21	MW-218M1_F21	MW-218M1_F21R	MW-218M2_F21	MW-218M2_F21R
	<b>Sampling Depth</b>	60.20 - 65.20	70.00 - 75.00	128.00 - 133.00	128.00 - 133.00	98.00 - 103.00	98.00 - 103.00
	<b>Sampling Date</b>	08/02/2021	08/05/2021	08/16/2021	09/30/2021	08/16/2021	09/30/2021
	<b>SDG</b>	320772471	320773351	320778561	320797671	320778561	320797671
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.420 J</b>	0.950 U	0.940 U	1.00 U
Perfluorobutanoic acid (PFBA)		<b>1.30 J</b>	<b>1.40 J</b>	<b>400</b>	1.40 U	<b>64.0</b>	<b>3.00</b>
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	<b>42.0</b>	<b>5.60</b>	<b>10.0</b>	<b>5.10</b>
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	<b>32.0</b>	1.40 U	<b>2.30</b>	<b>0.600 J</b>
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	<b>360</b>	1.40 U	<b>100</b>	<b>2.10</b>
Perfluorohexane sulfonate (PFHxS)	39	<b>2.40</b>	<b>8.50</b>	0.910 U	0.950 U	0.940 U	1.00 U
Perfluorohexanoic acid (PFHxA)		<b>0.590 J</b>	0.930 U	<b>350</b>	0.950 U	<b>57.0</b>	<b>1.90 J</b>
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	<b>75.0</b>	<b>6.20</b>	<b>35.0</b>	<b>6.20</b>
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	<b>1.70 J</b>	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)	6	<b>1.00 J</b>	<b>0.870 J</b>	<b>120</b>	<b>5.70</b>	<b>49.0</b>	<b>2.10</b>
Perfluoropentanoic acid (PPPeA)		0.940 U	0.930 U	<b>770</b>	0.950 U	<b>110</b>	<b>5.00</b>
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	<b>35.0</b>	2.80 U	<b>2.00 J</b>	3.00 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	<b>49.0</b>	2.80 U	<b>2.60 J</b>	3.00 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	<b>48.0</b>	<b>3.60</b>	<b>6.80</b>	<b>3.50</b>
<b>+PFOS + PFOA (EPA)</b>		<b>1.00</b>	<b>2.57</b>	<b>120</b>	<b>5.70</b>	<b>49.0</b>	<b>2.10</b>

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

	<b>Location</b>	MW-218M3	MW-218M3	MW-250M1	MW-250M3	MW-30	MW-576M2
	<b>Field Sample ID</b>	MW-218M3_F21	MW-218M3_F21R	MW-250M1_F21	MW-250M3_F21	MW-30_F21	MW-576M2_F21
	<b>Sampling Depth</b>	78.00 - 83.00	78.00 - 83.00	185.00 - 195.00	95.00 - 105.00	26.00 - 36.00	133.90 - 143.90
	<b>Sampling Date</b>	08/16/2021	09/30/2021	07/15/2021	07/15/2021	08/02/2021	08/10/2021
	<b>SDG</b>	320778561	320797671	320763871	320763871	320772471	320775331
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.550 J</b>	<b>1.90</b>	0.900 U	<b>0.470 J</b>
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	<b>1.00 J</b>	<b>7.00</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.00</b>	<b>7.00</b>	<b>0.00</b>

**PFAS Summary Report – Groundwater**  
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	<b>Location</b>	MW-636M1	MW-636M2	MW-653M1	MW-653M2
	<b>Field Sample ID</b>	MW-636M1_F21	MW-636M2_F21	MW-653M1_F21	MW-653M2_F21
	<b>Sampling Depth</b>	141.60 - 151.60	110.50 - 120.50	147.50 - 157.50	59.30 - 69.30
	<b>Sampling Date</b>	07/29/2021	07/29/2021	07/29/2021	07/29/2021
	<b>SDG</b>	320769861	320769861	320769861	320769861
	<b>Sample Type</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.20 J</b>	<b>3.50</b>	0.910 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	<b>1.20 J</b>	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	<b>2.50</b>	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.950 U	<b>4.80</b>	<b>83.0</b>	0.910 U
Perfluorohexanoic acid (PFHxA)		<b>0.460 J</b>	<b>0.570 J</b>	<b>5.80</b>	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	<b>1.60 J</b>	<b>5.30</b>	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	<b>1.80 J</b>	1.40 U
Perfluoropentanoic acid (PFPeA)		0.950 U	0.930 U	<b>3.30</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>1.60</b>	<b>7.10</b>	<b>0.00</b>

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

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	0.00 - 0.00	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

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

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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		<b>2.80</b>	<b>0.00</b>	<b>0.00</b>	<b>2.80</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>		<b>2.80</b>	<b>1.00</b>	<b>1.20</b>	<b>2.80</b>	<b>0.510</b>
						<b>0.00</b>

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

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

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

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**  
**Joint Base Cape Cod, IAGWSP**

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**  
**Joint Base Cape Cod, IAGWSP**

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

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

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**  
**Joint Base Cape Cod, IAGWSP**

	<b>Location</b>	MW-636M1	MW-636M2	MW-653M1	MW-653M2
	<b>Field Sample ID</b>	MW-636M1_F21	MW-636M2_F21	MW-653M1_F21	MW-653M2_F21
	<b>Sampling Depth</b>	141.60 - 151.60	110.50 - 120.50	147.50 - 157.50	59.30 - 69.30
	<b>Sampling Date</b>	07/29/2021	07/29/2021	07/29/2021	07/29/2021
	<b>SDG</b>	320769861	320769861	320769861	320769861
	<b>Sample Type</b>	Normal	Normal	Normal	Normal
PFAS 21 Cmps	<b>Screening Limit</b>	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
<b>§Sum of All Compounds Detected</b>		0.460	8.17	106	0.00

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

KGS 2022 J MID PFAS - J2 Range Northern

<b>Location</b>	J2N-MID-1F	
<b>Field Sample ID</b>	J2N-MID-1F-P01	
<b>Sampling Depth</b>	0.00 - 0.00	
<b>Sampling Date</b>	08/08/2022	
<b>SDG</b>	320909141	
<b>Sample Type</b>	<b>Normal</b>	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	<b>2.00 J</b>	
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)		<b>0.220 J</b>
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)		<b>1.00 J</b>
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)		<b>0.790 J</b>
Perfluorotetradecanoic acid (PFTeDA)		1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
<b>+PFOS + PFOA (EPA)</b>	<b>0.00</b>	
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>	

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

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

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

KGS 2022 J MID PFAS - J3 Range

	<b>Location</b>	J3-MID-1
	<b>Field Sample ID</b>	J3-MID-1-P01
	<b>Sampling Depth</b>	0.00 - 0.00
	<b>Sampling Date</b>	08/08/2022
	<b>SDG</b>	320909141
	<b>Sample Type</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>

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

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

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

KGS 2022 J2 North PFAS Spring - J2 Range Eastern

	<b>Location</b>	MW-128S	MW-18D	MW-18S	MW-48D	MW-48M2	MW-48S
	<b>Field Sample ID</b>	MW-128S_S22	MW-18D_S22	MW-18S_S22	MW-48D_S22	MW-48M2_S22	MW-48S_S22
	<b>Sampling Depth</b>	87.00 - 97.00	265.00 - 275.00	35.00 - 45.00	221.00 - 231.00	161.00 - 171.00	99.00 - 109.00
	<b>Sampling Date</b>	01/11/2022	12/27/2021	12/27/2021	01/04/2022	01/04/2022	01/05/2022
	<b>SDG</b>	320838001	320834481	320834481	320836321	320836321	320837121
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>4.30</b>	1.00 U	0.980 U	0.950 U	0.990 U	<b>0.600 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>4.30</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-49D	MW-49M1	MW-49M2	MW-49M3	MW-49S
	<b>Field Sample ID</b>	MW-49D_S22	MW-49M1_S22	MW-49M2_S22	MW-49M3_S22	MW-49S_S22
	<b>Sampling Depth</b>	185.00 - 195.00	160.00 - 170.00	130.00 - 140.00	100.50 - 110.50	68.50 - 78.00
	<b>Sampling Date</b>	01/03/2022	01/03/2022	01/03/2022	01/03/2022	01/03/2022
	<b>SDG</b>	320836321	320836321	320836321	320836321	320836321
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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

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

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

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

KGS 2022 J2 North PFAS Spring - J2 Range Northern

	<b>Location</b>	C-4D	C-4D	C-4M	C-4S	C-7D	C-7M
	<b>Field Sample ID</b>	C-4D_S22	C-4D_S22D	C-4M_S22	C-4S_S22	C-7D_S22	C-7M_S22
	<b>Sampling Depth</b>	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	01/13/2022	01/13/2022	01/13/2022	01/13/2022	01/12/2022	01/12/2022
	<b>SDG</b>	320838831	320838831	320838831	320838831	320838831	320838831
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
N-Ethyl 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	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		<b>4.30</b>	<b>4.50</b>	<b>5.90</b>	<b>5.30</b>	<b>4.80</b>	<b>4.20</b>
Perfluorododecanoic acid (PFDoA)		<b>0.760 J</b>	<b>1.00 J</b>	<b>1.60 J</b>	<b>1.10 J</b>	<b>1.70 J</b>	<b>0.960 J</b>
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		0.960 U	0.950 U	0.920 U	0.950 U	0.930 U	0.950 U
Perfluorohexane sulfonate (PFHxS)	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	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)	5.9	<b>0.900 J</b>	<b>0.930 J</b>	<b>1.30 J</b>	<b>1.90</b>	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.480 U	0.470 U	0.460 U	0.480 U	0.470 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.40 U	1.40 U	<b>0.970 J</b>	<b>0.940 J</b>	1.40 U
Perfluoroundecanoic acid (PFUnA)		<b>4.60</b>	<b>4.30</b>	<b>13.0</b>	<b>14.0</b>	<b>12.0</b>	<b>5.80</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**PFAS Summary Report – Groundwater**  
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	<b>Location</b>	C-7S	J2EW3-MW1-A	J2EW3-MW1-B	J2EW3-MW1-C	J2EW3-MW-2-A	J2EW3-MW-2-B
	<b>Field Sample ID</b>	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
	<b>Sampling Depth</b>	0.00 - 0.00	145.66 - 155.66	210.66 - 220.66	245.66 - 255.66	151.16 - 161.16	216.16 - 226.16
	<b>Sampling Date</b>	01/12/2022	01/05/2022	01/05/2022	01/05/2022	01/06/2022	01/06/2022
	<b>SDG</b>	320838831	320837121	320837121	320837121	320836691	320836691
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U	0.990 U	0.990 U	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)		<b>2.20</b>	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorododecanoic acid (PFDoA)		<b>1.70 J</b>	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
Perfluoroctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroctanoic 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)		<b>13.0</b>	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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	<b>Location</b>	J2EW3-MW-2-C	J2N-EFF-E	J2N-EFF-F	J2N-EFF-G	MW-130D	MW-18M1
	<b>Field Sample ID</b>	J2EW3-MW-2-C_S22	J2N-EFF-E_S22	J2N-EFF-F_S22	J2N-EFF-G_S22	MW-130D_S22	MW-18M1_S22
	<b>Sampling Depth</b>	251.13 - 261.13	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	320.00 - 330.00	171.00 - 176.00
	<b>Sampling Date</b>	01/06/2022	01/10/2022	01/10/2022	01/10/2022	12/29/2021	12/27/2021
	<b>SDG</b>	320836691	320838001	320838001	320838001	320835011	320834481
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>1.20 J</b>	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	<b>1.30 J</b>	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanoic acid (PFBA)		<b>0.380 J</b>	0.490 U	<b>0.250 J</b>	<b>0.290 J</b>	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	<b>1.20 J</b>	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexanoic acid (PFHxA)		<b>1.70 J</b>	1.50 U	<b>1.00 J</b>	<b>1.60 J</b>	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	<b>1.00 J</b>	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)		<b>0.900 J</b>	0.490 U	<b>0.620 J</b>	<b>0.510 J</b>	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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.00</b>	<b>0.00</b>

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	<b>Location</b>	MW-18M2	MW-289M1	MW-293M1	MW-296M1	MW-296M2	MW-318M1
	<b>Field Sample ID</b>	MW-18M2_S22	MW-289M1_S22	MW-293M1_S22	MW-296M1_S22	MW-296M2_S22	MW-318M1_S22
	<b>Sampling Depth</b>	107.00 - 112.00	0.00 - 0.00	0.00 - 0.00	255.08 - 265.08	214.98 - 224.98	305.79 - 315.81
	<b>Sampling Date</b>	12/27/2021	12/22/2021	01/11/2022	01/10/2022	01/10/2022	12/22/2021
	<b>SDG</b>	320834481	320833751	320838001	320838001	320838001	320833751
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>5.30</b>
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	<b>0.590 J</b>	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	<b>0.310 J</b>	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	<b>2.00</b>	<b>14.0</b>	0.940 U	<b>1.20 J</b>	<b>3.50</b>
Perfluorododecanoic acid (PFDoA)		1.00 U	<b>1.10 J</b>	<b>1.30 J</b>	<b>0.780 J</b>	<b>0.490 J</b>	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	<b>0.700 J</b>	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	<b>20.0</b>	<b>0.570 J</b>	<b>1.10 J</b>	<b>1.70 J</b>
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	<b>0.990 J</b>	1.40 U	1.40 U	1.40 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	<b>10.0</b>	<b>15.0</b>	<b>3.20</b>	<b>1.20 J</b>	<b>6.50</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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	<b>Location</b>	MW-318M2	MW-318M2	MW-327M1	MW-327M2	MW-327M3	MW-330M1
	<b>Field Sample ID</b>	MW-318M2_S22	MW-318M2_S22D	MW-327M1_S22	MW-327M2_S22	MW-327M3_S22	MW-330M1_S22
	<b>Sampling Depth</b>	205.80 - 215.82	205.80 - 215.82	296.06 - 306.04	265.01 - 275.01	220.16 - 230.15	313.10 - 323.13
	<b>Sampling Date</b>	12/22/2021	12/22/2021	12/28/2021	12/28/2021	12/28/2021	12/16/2021
	<b>SDG</b>	320833751	320833751	320834481	320834481	320834481	320831661
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.450 J</b>	0.960 U	0.990 U
Perfluorobutanoic acid (PFBA)		1.80 U	1.90 U	0.460 U	<b>1.80 J</b>	0.480 U	<b>1.40 J</b>
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U				
Perfluorodecanoic acid (PFDA)		<b>1.60 J</b>	<b>1.40 J</b>	<b>2.00</b>	<b>1.40 J</b>	<b>2.10</b>	<b>23.0</b>
Perfluorododecanoic acid (PFDoA)		0.920 U	0.960 U	<b>3.20</b>	<b>8.80</b>	<b>0.820 J</b>	<b>1.40 J</b>
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.50 U				
Perfluoroheptanoic acid (PFHpA)		0.920 U	0.960 U	0.910 U	<b>0.470 J</b>	0.960 U	<b>0.910 J</b>
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)		<b>1.30 J</b>	<b>1.20 J</b>	1.40 U	<b>0.560 J</b>	1.40 U	<b>0.680 J</b>
Perfluorononanoic acid (PFNA)	5.9	<b>0.560 J</b>	<b>0.630 J</b>	1.40 U	1.40 U	1.40 U	<b>4.20</b>
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)		<b>1.10 J</b>	<b>1.00 J</b>	<b>0.240 J</b>	<b>0.900 J</b>	0.480 U	<b>1.70 J</b>
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.50 U				
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.40 U	<b>0.650 J</b>	<b>1.70 J</b>	1.40 U	<b>0.880 J</b>
Perfluoroundecanoic acid (PFUnA)		<b>5.80</b>	<b>5.80</b>	<b>17.0</b>	<b>17.0</b>	<b>4.70</b>	<b>18.0</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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	<b>Location</b>	MW-330M1	MW-330M2	MW-330M3	MW-330M3	MW-337D	MW-337M1
	<b>Field Sample ID</b>	MW-330M1_S22D	MW-330M2_S22	MW-330M3_S22	MW-330M3_S22D	MW-337D_S22	MW-337M1_S22
	<b>Sampling Depth</b>	313.10 - 323.13	238.01 - 248.04	154.97 - 164.99	154.97 - 164.99	0.00 - 0.00	0.00 - 0.00
	<b>Sampling Date</b>	12/16/2021	12/16/2021	12/16/2021	12/16/2021	12/20/2021	12/20/2021
	<b>SDG</b>	320831661	320831661	320831661	320831661	320833421	320833421
	<b>Sample Type</b>	Field Duplicate	Normal	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.970 U	0.970 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)		<b>1.30 J</b>	<b>0.400 J</b>	<b>0.510 J</b>	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)		<b>18.0</b>	<b>5.10</b>	<b>14.0</b>	<b>11.0</b>	<b>23.0</b>	<b>1.00 J</b>
Perfluorododecanoic acid (PFDoA)		<b>0.800 J</b>	<b>0.650 J</b>	<b>0.560 J</b>	0.980 U	<b>0.640 J</b>	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)		<b>0.870 J</b>	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)		<b>0.580 J</b>	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	<b>3.50</b>	<b>4.70</b>	<b>6.50</b>	<b>6.00</b>	<b>19.0</b>	<b>5.80</b>
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)		<b>1.60 J</b>	<b>0.250 J</b>	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	<b>0.530 J</b>	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	<b>0.820 J</b>	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		<b>16.0</b>	<b>5.20</b>	<b>6.50</b>	<b>5.70</b>	<b>16.0</b>	<b>1.90 J</b>
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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	<b>Location</b>	MW-340D	MW-340D	MW-345M1	MW-345M1	MW-48M1	MW-48M3
	<b>Field Sample ID</b>	MW-340D_S22	MW-340D_S22D	MW-345M1_S22	MW-345M1_S22D	MW-48M1_S22	MW-48M3_S22
	<b>Sampling Depth</b>	329.60 - 339.60	329.60 - 339.60	0.00 - 0.00	0.00 - 0.00	191.00 - 201.00	131.50 - 142.00
	<b>Sampling Date</b>	12/29/2021	12/29/2021	12/16/2021	12/16/2021	01/04/2022	01/04/2022
	<b>SDG</b>	320835011	320835011	320831661	320831661	320836321	320836321
	<b>Sample Type</b>	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)	<b>6.50 J</b>	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)	<b>0.310 J</b>	0.490 U	<b>0.440 J</b>	<b>0.280 J</b>	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)	<b>13.0</b>	<b>14.0</b>	<b>21.0</b>	<b>28.0</b>	0.980 U	0.990 U	
Perfluorododecanoic acid (PFDoA)	<b>0.830 J</b>	<b>0.990 J</b>	<b>0.960 J</b>	<b>1.70 J</b>	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	<b>3.50</b>	<b>3.60</b>	<b>3.00</b>	<b>4.50</b>	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	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)	0.500 U	0.490 U	0.490 U	0.490 U	0.490 U	0.490 U	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	<b>1.30 J</b>	1.50 U	1.50 U	
Perfluoroundecanoic acid (PFUnA)	<b>19.0</b>	<b>20.0</b>	<b>20.0</b>	<b>23.0</b>	1.50 U	1.50 U	
<b>+PFOS + PFOA (EPA)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-55D	MW-55M1	MW-55M2	MW-55M3	MW-619M1	MW-619M2
	<b>Field Sample ID</b>	MW-55D_S22	MW-55M1_S22	MW-55M2_S22	MW-55M3_S22	MW-619M1_S22	MW-619M2_S22
	<b>Sampling Depth</b>	255.00 - 265.00	225.00 - 235.00	195.00 - 205.00	164.50 - 174.00	255.10 - 265.10	234.10 - 244.10
	<b>Sampling Date</b>	12/21/2021	12/21/2021	12/21/2021	12/21/2021	12/20/2021	12/20/2021
	<b>SDG</b>	320833421	320833421	320833421	320833421	320833421	320833421
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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)		<b>0.590 J</b>	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)		<b>0.620 J</b>	<b>0.540 J</b>	1.40 U	1.50 U	1.40 U	<b>0.620 J</b>
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
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

	<b>Location</b>	MW-620M1	MW-634M1	MW-63D	MW-63M1	MW-63M2	MW-63M3
	<b>Field Sample ID</b>	MW-620M1_S22	MW-634M1_S22	MW-63D_S22	MW-63M1_S22	MW-63M2_S22	MW-63M3_S22
	<b>Sampling Depth</b>	268.60 - 278.60	305.60 - 315.60	375.00 - 380.00	244.00 - 254.00	214.00 - 224.00	182.00 - 192.00
	<b>Sampling Date</b>	12/20/2021	12/22/2021	12/15/2021	12/15/2021	12/15/2021	12/15/2021
	<b>SDG</b>	320833421	320833751	320831661	320831661	320831661	320831661
	<b>Sample Type</b>	Normal	Normal	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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	<b>0.290 J</b>	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	<b>2.20</b>	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	<b>1.20 J</b>	1.50 U
Perfluoroctanesulfonamide (PFOSA)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	<b>0.790 J</b>	<b>0.590 J</b>	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)		<b>0.610 J</b>	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	<b>1.40 J</b>	1.50 U
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.790</b>	<b>0.590</b>	<b>0.00</b>	<b>0.00</b>

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

<b>Location</b>	MW-63S	
<b>Field Sample ID</b>	MW-63S_S22	
<b>Sampling Depth</b>	153.00 - 163.00	
<b>Sampling Date</b>	12/15/2021	
<b>SDG</b>	320831661	
<b>Sample Type</b>	Normal	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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
<b>+PFOS + PFOA (EPA)</b>	<b>0.00</b>	

**PFAS Summary Report – Groundwater**  
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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	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sampling Date	01/13/2022	01/13/2022	01/13/2022	01/13/2022	01/12/2022	01/12/2022
SDG	320838831	320838831	320838831	320838831	320838831	320838831
Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>4.30</b>	<b>4.50</b>	<b>5.90</b>	<b>7.20</b>	<b>4.80</b>
<b>§Sum of All Compounds Detected</b>		<b>10.6</b>	<b>10.7</b>	<b>21.8</b>	<b>23.3</b>	<b>19.4</b>
						<b>11.0</b>

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

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	0.00 - 0.00	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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>2.20</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>	<b>16.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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

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

Location	MW-18M2	MW-289M1	MW-293M1	MW-296M1	MW-296M2	MW-318M1
Field Sample ID	MW-18M2_S22	MW-289M1_S22	MW-293M1_S22	MW-296M1_S22	MW-296M2_S22	MW-318M1_S22
Sampling Depth	107.00 - 112.00	0.00 - 0.00	0.00 - 0.00	255.08 - 265.08	214.98 - 224.98	305.79 - 315.81
Sampling Date	12/27/2021	12/22/2021	01/11/2022	01/10/2022	01/10/2022	12/22/2021
SDG	320834481	320833751	320838001	320838001	320838001	320833751
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	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

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

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

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

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	0.00 - 0.00	0.00 - 0.00
Sampling Date	12/16/2021	12/16/2021	12/16/2021	12/16/2021	12/20/2021	12/20/2021
SDG	320831661	320831661	320831661	320831661	320833421	320833421
Sample Type	Field Duplicate	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)	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

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

Location	MW-340D	MW-340D	MW-345M1	MW-345M1	MW-48M1	MW-48M3
Field Sample ID	MW-340D_S22	MW-340D_S22D	MW-345M1_S22	MW-345M1_S22D	MW-48M1_S22	MW-48M3_S22
Sampling Depth	329.60 - 339.60	329.60 - 339.60	0.00 - 0.00	0.00 - 0.00	191.00 - 201.00	131.50 - 142.00
Sampling Date	12/29/2021	12/29/2021	12/16/2021	12/16/2021	01/04/2022	01/04/2022
SDG	320835011	320835011	320831661	320831661	320836321	320836321
Sample Type	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	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	0.00
§Sum of All Compounds Detected	43.1	38.6	45.4	58.8	0.00	0.00

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

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
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>		<b>1.21</b>	<b>0.540</b>	<b>0.00</b>	<b>0.00</b>	<b>0.620</b>

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

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

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

<b>Location</b>	MW-63S
<b>Field Sample ID</b>	MW-63S_S22
<b>Sampling Depth</b>	153.00 - 163.00
<b>Sampling Date</b>	12/15/2021
<b>SDG</b>	320831661
<b>Sample Type</b>	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b> Results (ng/L)
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>
<b>§Sum of All Compounds Detected</b>	<b>0.00</b>

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

KGS 2022 J2 North PFAS Spring - J3 Range

<b>Location</b>	MW-237S	
<b>Field Sample ID</b>	MW-237S_S22	
<b>Sampling Depth</b>	49.00 - 59.00	
<b>Sampling Date</b>	12/29/2021	
<b>SDG</b>	320835011	
<b>Sample Type</b>	Normal	
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>	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
<b>+PFOS + PFOA (EPA)</b>	<b>0.00</b>	
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>0.00</b>	

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

<b>Location</b>	MW-237S
<b>Field Sample ID</b>	MW-237S_S22
<b>Sampling Depth</b>	49.00 - 59.00
<b>Sampling Date</b>	12/29/2021
<b>SDG</b>	320835011
<b>Sample Type</b>	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b> Results (ng/L)
<b>§Sum of All Compounds Detected</b>	<b>0.00</b>

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

KGS 2022 J2 North PFAS Spring - Lima Range

<b>Location</b>	MW-236S
<b>Field Sample ID</b>	MW-236S_S22
<b>Sampling Depth</b>	96.00 - 106.00
<b>Sampling Date</b>	01/11/2022
<b>SDG</b>	320838001
<b>Sample Type</b>	<b>Normal</b>
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b>
	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)	<b>1.50 J</b>
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)	<b>1.20 J</b>
Perfluorohexane sulfonate (PFHxS)	39
Perfluorohexanoic acid (PFHxA)	<b>1.20 J</b>
Perfluorononanoic acid (PFNA)	5.9
Perfluorooctanesulfonamide (PFOSA)	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4
Perfluorooctanoic acid (PFOA)	6
Perfluoropentanoic acid (PFPeA)	<b>0.640 J</b>
Perfluorotetradecanoic acid (PFTeDA)	1.40 U
Perfluorotridecanoic acid (PFTrDA)	1.40 U
Perfluoroundecanoic acid (PFUnA)	1.40 U
<b>+PFOS + PFOA (EPA)</b>	<b>3.60</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>	<b>2.30</b>

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

<b>Location</b>	MW-236S
<b>Field Sample ID</b>	MW-236S_S22
<b>Sampling Depth</b>	96.00 - 106.00
<b>Sampling Date</b>	01/11/2022
<b>SDG</b>	320838001
<b>Sample Type</b>	Normal
<b>PFAS 21 Cmps</b>	<b>Screening Limit</b> Results (ng/L)
<b>§Sum of All Compounds Detected</b>	<b>8.14</b>

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

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)		<b>0.240 J</b>	0.480 U	0.470 U	<b>0.250 J</b>	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	<b>1.10 J</b>	<b>0.480 J</b>
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				
<b>+PFOS + PFOA (EPA)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

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

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

**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.