

**MONTHLY PROGRESS REPORT #304
FOR JULY 2022**

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

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

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

1. SUMMARY OF REMEDIATION ACTIONS

Remediation Actions (RA) Underway at Camp Edwards as of 29 July 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 2.934 billion gallons of water treated and re-injected as of 29 July 2022. No Frank Perkins Road Treatment Facility shutdowns occurred in July.

The Base Boundary MTU continues to operate at a flow rate of 65 gpm. As of 29 July 2022, over 339.0 million gallons of water were treated and re-injected. No Base Boundary MTU shutdowns occurred in July.

The Leading Edge system continues to operate at a flow rate of 100 gpm. As of 29 July 2022, over 311.4 million gallons of water were treated and re-injected. The following Leading Edge system shutdowns occurred in July.

- 0126 on 4 July 2022 due to a High Differential Pressure alarm and was restarted at 0750 on 5 July 2022.
- 0302 on 7 July 2022 due to a High Differential Pressure alarm and was restarted at 0749 on 7 July 2022.

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 29 July 2022, over 1.980 billion gallons of water have been treated and re-injected. No MTU E and F shutdowns occurred in July.

The Northern Treatment Building G continues to operate at a flow rate of 225 gpm. As of 29 July 2022, over 1.502 billion gallons of water have been treated and re-injected. No Northern MTU G shutdowns occurred in July.

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 29 July 2022, over 1.620 billion gallons of water have been treated and re-injected. No MTU H and I shutdowns occurred in July.

MTU J continues to operate at a flow rate of 120 gpm. As of 29 July 2022, over 755.8 million gallons of water have been treated and re-injected. No MTU J shutdowns occurred in July.

MTU K continues to operate at a flow rate of 125 gpm. As of 29 July 2022, over 878.4 million gallons of water have been treated and re-injected. No MTU K shutdowns occurred in July.

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 29 July 2022, over 1.630 billion gallons of water have been treated and re-injected. The following J-3 Range system shutdowns occurred in July.

- 0622 on 2 July 2022 due to a Low Flow alarm and was restarted at 0748 on 5 July 2022.
- 1049 on 6 July 2022 due to FS-12 being off and was restarted at 1206 on 6 July 2022.
- 1647 on 12 July 2022 due to FS-12 being off and was restarted at 0744 on 13 July 2022.
- 1558 on 13 July 2022 due to FS-12 being off and was restarted at 0733 on 14 July 2022.
- 1557 on 20 July 2022 due to FS-12 being off and was restarted at 0747 on 21 July 2022.
- 1554 on 21 July 2022 due to FS-12 being off and was restarted at 0753 on 22 July 2022.

J-1 Range Groundwater RA

Southern Plant

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

The Southern MTU continues to operate at a flow rate of 125 gpm. As of 29 July 2022, over 734.4 million gallons of water have been treated and re-injected. The following J-1 Range Southern system shutdowns occurred in July.

- 1120 on 12 July 2022 to repair a leaking sample port on the effluent line and was restarted at 1140 on 12 July 2022.

Northern Plant

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

The Northern MTU continues to operate at a total system flow rate of 250 gpm. As of 29 July 2022, over 1.120 billion gallons of water have been treated and re-injected. The following J-1 Range Northern MTU shutdowns occurred in July.

- 1107 on 23 July 2022 due to a VFD Fault and was restarted at 0807 on 25 July 2022.
- 0730 on 26 July 2022 to allow for inspection and redevelopment of extraction well J1NEW0002 and was restarted at 1118 on 29 July 2022.

Central Impact Area RA

The Central Impact Area (CIA) Groundwater treatment facility consists of removal and treatment of groundwater to minimize downgradient migration of explosives compounds and perchlorate. The ETR system includes the following components: three extraction wells, an ex-situ treatment process consisting of an ion exchange resin and granular activated carbon media to treat explosives compounds, and three infiltration galleries to return treated water to the aquifer. The CIA systems 1, 2, and 3 continue to run at a combined total flow rate of 750 gpm. As of 29 July 2022, over 2.919 billion gallons of water have been treated and re-injected. No CIA system shutdowns occurred in July.

2. SUMMARY OF ACTIONS TAKEN

Operable Unit (OU) Activity as of 29 July 2022:

CIA

- Sampled CSS stockpiles and BIP cover soil
- BIP demolition operations
- Intrusive investigations
- Cued data collection
- Routine processing of MD
- Routine check of CSS cover

Demolition Area 1

- Groundwater sampling within Demo 1 SPM

Demolition Area 2

- No activity

J-1 Range

- Groundwater sampling within J-1 Northern SPM
- Inspection and redevelopment of extraction well J1NEW0002
- Bag filters exchanged.

J-2 Range

- Bag filters exchanged.

J-3 Range

- Groundwater sampling within J-3 Range SPM
- PFAS sampling within SPM
- Hydraulic groundwater monitoring within J-3 Range SPM

L Range

- Groundwater sampling within L Range LTM

Small Arms Ranges

- No activity

Northwest Corner

- No activity

Training Areas

- Inspected staged soil at H Range

Impact Area Roads

- Performed grading and gravel installation

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 14 July 2022

Project and Fieldwork Update

The groundwater sampling crews completed all but three of the Demolition Area 1 system performance monitoring (SPM) wells on 28 June. There are a few fallen trees that are blocking access to the remaining wells. They should be cleared next week, and crews will be able to

finish the sampling event. The J-1 Northern long-term monitoring (LTM) wells were completed on 7 July and the J-3 treatment plant PFAS sampling was completed on 11 July. L Range LTM was completed yesterday, and crews moved to the J-3 SPM wells. There are 66 wells, and it will take approximately three to four weeks to complete. The monthly process samples were collected on the treatment systems 5 July through 13 July. The Demolition Area 1 leading edge system was down from 4 July to 5 July. The plant shut down was due to a high differential pressure alarm. J-3 EW-IP2 was offline for 73 hours on 7 July due to a low flow alarm. The entire J-3 system was down 12 July to 13 July due to FS-12 being down. J-1 North extraction well two (J1NEW0002) redevelopment is scheduled to begin 26 July. Waiting for approval of the updated Explosives Safety Submissions (ESS) for offsite disposal of the ~50 CY of soil staged at H Range. Once everyone has signed off on it, disposal will be scheduled.

There are some upcoming road maintenance projects schedule to begin next week. One of the sections of Turpentine Road that wasn't finished last year due to scheduling conflicts with the ongoing source removal work in the CIA. Grading will begin next week and the gravel installation the week after that. It is the section of Turpentine Road that begins at the southern end of the CIA boundary and extends past the consolidated shot structure.

In the CIA, Weston has three UXO teams working: one performing BIPs, one is doing investigations at SU3- 2 (which is last year's work), and the third is doing scrap and munitions debris management, sorting and getting it ready to go off-site. There are two Metal Mappers working. They plan on providing an EM-61 map for the new ten acres hopefully by the end of the week.

Action Items

The action items were discussed and updated.

Demolition Area 2 Annual Monitoring Report Presentation

A presentation was provided on the Demolition Area 2 Annual Monitoring Report. During the reporting period (June 2021 to May 2022), sampling locations, groundwater monitoring results, and trends were reviewed and discussed. In fall 2021, RDX was detected in four of eight monitoring wells sampled at a maximum concentration of 0.37 µg/L (MW-161S), which is located immediately downgradient of the source area. Three of the four samples reported estimated concentrations below the Reporting Limit (RL) of 0.2 µg/L for RDX. In spring 2022, 20 groundwater samples (excluding field duplicates) were collected.

RDX was non-detect (ND) in 12 samples and reported as estimated concentration in seven samples. The maximum detected concentration was 0.24 µg/L (MW-573M1). No other explosive compounds were detected in groundwater samples collected during the reporting period. Figures showing RDX trend plots in the upgradient, mid plume, and leading-edge wells were displayed.

Decision Document cleanup timelines were discussed. The estimates presented in the 2015 Decision Document addendum were shown. These were: (1) RDX below Health Advisory (HA) of 2 µg/L by 2016, (2) below Risk-Based Concentration (RBC) of 0.6 µg/L by 2018, and (3) below background level of 0.25 µg/L by 2025. The 2021-2022 reporting period results had zero monitoring wells exceeding either the HA of 2 µg/L or the RBC of 0.6 µg/L. The maximum detected RDX concentration was 0.347 µg/L (MW161S, December 2021). IAGWSP

recommends that the sample frequency be reduced from annual to biennial in five monitoring wells: MW-16S, MW-262M1, MW-654M1, MW-655M1, and MW-655M2. Additionally, it is recommended to reduce the sampling frequency from semi-annual to annual in eight monitoring wells: MW-161S, MW-380M2, MW-404M2, MW-435M1, MW-435M2, MW-572M1, MW-573M1, and MW-573M2. A table with a summary of the proposed changes was provided. MassDEP had no comments on the annual report and EPA comments are pending.

JBCC Cleanup Team Meeting

The next JBCC Cleanup Team (JBCCCT) has yet to be scheduled (previous meeting was 3 August 2022). Meeting details and presentation materials from previous meetings can be found on the IAGWSP web site at <http://bcc-iagwsp.org/community/impact/presentations/>. The Cleanup Team meeting discusses late breaking news and responses to action items, as well as updates from the IAGWSP and the Installation Restoration Program (IRP). The JBCCCT meetings provide a forum for community input regarding issues related to both the IRP and the IAGWSP.

3. SUMMARY OF DATA RECEIVED

Table 1 summarizes sampling for all media from 1 to 31 July 2022. Table 2 summarizes the validated detections of explosives compounds and perchlorate for all groundwater results received from 1 to 31 July 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:

- | | |
|--|--------------|
| • Monthly Progress Report No. 303 for June 2022 | 10 July 2022 |
| • Draft Demolition Area 2 2022 Environmental Monitoring Report | 1 July 2022 |
| • Small Arms Ranges Soil Removal Activities Completion of Work Report | 6 July 2022 |
| • Final L Range 2022 Environmental Monitoring Report | 8 July 2022 |
| • Response to Comments on the Draft Small Arms Ranges 2022 Environmental Monitoring Report | 8 July 2022 |

- | | |
|--|--------------|
| • Draft Demolition Area 2, 2022 Environmental Monitoring Report | 11 July 2022 |
| • Final Small Arms Range 2022 Environmental Monitoring Report | 22 July 2022 |
| • Response to Comments on the Draft Work Plan: J-3 Range Confirmatory PFAS Sampling | 26 July 2022 |
| • Response to Comments on the Draft Work Plan: J-2 Range Northern PFAS Evaluation | 26 July 2022 |
| • Draft Final Uniform Federal Policy - Quality Assurance Project Plan - 2022 Update for Source Response for Unexploded Ordnance at the Central Impact Area | 26 July 2022 |

5. SCHEDULED ACTIONS

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

- Response to Agency MOR Comments on RCL for J-3 Range 2021 Annual Environmental Monitoring Report
- Response to Comments on the J-3 Range Work Plan for PFAS Sampling
- Response to Comments on the J-2 East 2021 Annual Environmental Monitoring Report
- Demolition Area 2 2022 Annual Environmental Monitoring Report
- Response to Comments on the J-2 Range Northern 2021 Annual Environmental Monitoring Report
- Response to Comments on the J-2 Range Northern Work Plan for PFAS Sampling
- Response to Comments on the J-2 Range Eastern Plume Shell Development Technical Memorandum
- Response to Comments on the J-2 Range Northern Plume Shell Development Technical Memorandum
- Memorandum of Resolution on the Northwest Corner Demonstration of Compliance Report
- J-2 Range, Phase-2, Addendum to the Post-DD Confirmation Geophysical and Soil Investigation Findings Revised Technical Memorandum
- KD Range Technical Memorandum
- Five Year Review Report

TABLE 1
Sampling Progress: 1 to 31 July 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J3 Range	MW-295M2	MW-295M2_F22	N	07-28-2022	Ground Water	117	127
J3 Range	MW-295M1	MW-295M1_F22	N	07-28-2022	Ground Water	145	155
J1 Range Northern	J1NEW0002	J1NEW0002-IDW-8000	N	07-28-2022	Well Development Water	200	250
J1 Range Northern	J1NEW0002	J1NEW0002-IDW-6000	N	07-28-2022	Well Development Water	200	250
J3 Range	MW-232M2	MW-232M2_F22	N	07-28-2022	Ground Water	61	66
J1 Range Northern	J1NEW0002	J1NEW0002-IDW-4000	N	07-28-2022	Well Development Water	200	250
J3 Range	MW-232M1	MW-232M1_F22	N	07-28-2022	Ground Water	77.5	82.5
J3 Range	MW-232M1	MW-232M1_F22D	FD	07-28-2022	Ground Water	77.5	82.5
J1 Range Northern	J1NEW0002	J1NEW0002-IDW-2000	N	07-27-2022	Well Development Water	200	250
J3 Range	90MW0054	90MW0054_F22	N	07-27-2022	Ground Water	0	0
J3 Range	90MW0054	90MW0054_F22D	FD	07-27-2022	Ground Water	0	0
J3 Range	MW-247M3	MW-247M3_F22	N	07-27-2022	Ground Water	95	105
J3 Range	MW-247M2	MW-247M2_F22	N	07-27-2022	Ground Water	125	135
J3 Range	MW-247M1	MW-247M1_F22	N	07-27-2022	Ground Water	180	190
J3 Range	MW-157M3	MW-157M3_F22	N	07-26-2022	Ground Water	70	80
J3 Range	MW-157M2	MW-157M2_F22	N	07-26-2022	Ground Water	110	120
J3 Range	MW-157M1	MW-157M1_F22	N	07-26-2022	Ground Water	154	164
Demolition Area 1	MW-433	MW-433_S22	N	07-26-2022	Process Water	148	228
J3 Range	J3EWIP2	J3EWIP2_F22	N	07-25-2022	Ground Water	150.5	170.5
J3 Range	J3EWIP2	J3EWIP2_F22D	FD	07-25-2022	Ground Water	150.5	170.5
J3 Range	MW-155M1	MW-155M1_F22	N	07-25-2022	Ground Water	124	134
J3 Range	MW-144M2	MW-144M2_F22	N	07-25-2022	Ground Water	130	140
J3 Range	MW-142M2	MW-142M2_F22	N	07-25-2022	Ground Water	140	150
Demolition Area 1	MW-700M2	MW-700M2_S22	N	07-21-2022	Ground Water	147.7	157.7
Demolition Area 1	MW-700M1	MW-700M1_S22	MS	07-21-2022	Ground Water	197.9	207.9
Demolition Area 1	MW-700M1	MW-700M1_S22	N	07-21-2022	Ground Water	197.9	207.9
Demolition Area 1	MW-700M1	MW-700M1_S22	SD	07-21-2022	Ground Water	197.9	207.9
Demolition Area 1	MW-582M2	MW-582M2_S22	N	07-21-2022	Ground Water	84	94
Demolition Area 1	MW-582M1	MW-582M1_S22	N	07-21-2022	Ground Water	134	144
J3 Range	MW-701M2	MW-701M2_F22	N	07-20-2022	Ground Water	147.5	157.5
J3 Range	MW-701M1	MW-701M1_F22	MS	07-20-2022	Ground Water	177	187
J3 Range	MW-701M1	MW-701M1_F22	N	07-20-2022	Ground Water	177	187
J3 Range	MW-701M1	MW-701M1_F22	SD	07-20-2022	Ground Water	177	187
J3 Range	MW-227M3	MW-227M3_F22	N	07-20-2022	Ground Water	65	75
J3 Range	MW-227M2	MW-227M2_F22	N	07-20-2022	Ground Water	110	120
J3 Range	MW-227M2	MW-227M2_F22D	FD	07-20-2022	Ground Water	110	120
J3 Range	MW-227M1	MW-227M1_F22	N	07-20-2022	Ground Water	130	140
J3 Range	MW-636M2	MW-636M2_F22	N	07-19-2022	Ground Water	110.5	120.5
J3 Range	MW-636M1	MW-636M1_F22	N	07-19-2022	Ground Water	141.6	151.6
J3 Range	MW-653M2	MW-653M2_F22	N	07-19-2022	Ground Water	59.3	69.3
J3 Range	MW-653M1	MW-653M1_F22	N	07-19-2022	Ground Water	147.5	157.5
J3 Range	MW-329M2	MW-329M2_F22	N	07-18-2022	Ground Water	150.05	160.05
J3 Range	MW-329M2	MW-329M2_F22D	FD	07-18-2022	Ground Water	150.05	160.05
J3 Range	MW-329M1	MW-329M1_F22	N	07-18-2022	Ground Water	179.96	189.96
J3 Range	MW-250M3	MW-250M3_F22	N	07-18-2022	Ground Water	95	105
J3 Range	MW-250M2	MW-250M2_F22	N	07-18-2022	Ground Water	145	155
J3 Range	MW-250M1	MW-250M1_F22	N	07-18-2022	Ground Water	185	195
J3 Range	J3-MW-1-B	J3-MW-1-B_F22	N	07-14-2022	Ground Water	175.61	185.61
J3 Range	J3-MW-1-C	J3-MW-1-C_F22	N	07-14-2022	Ground Water	203.61	213.61
J3 Range	MW-143M3	MW-143M3_F22	N	07-14-2022	Ground Water	107	112
J3 Range	MW-143M2	MW-143M2_F22	MS	07-14-2022	Ground Water	117	122
J3 Range	MW-143M2	MW-143M2_F22	N	07-14-2022	Ground Water	117	122
J3 Range	MW-143M2	MW-143M2_F22	SD	07-14-2022	Ground Water	117	122
J3 Range	MW-143M1	MW-143M1_F22	N	07-14-2022	Ground Water	144	154
J3 Range	MW-637M3	MW-637M3_F22	N	07-13-2022	Ground Water	174.1	184.1
J2 Range Northern	J2N-EFF-G	J2N-EFF-G-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2G	J2N-MID-2G-190A	N	07-13-2022	Process Water	0	0

N = Normal Sample

FD = Field Duplicate

TABLE 1
Sampling Progress: 1 to 31 July 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	J2N-MID-1G	J2N-MID-1G-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-INF-G	J2N-INF-G-190A	N	07-13-2022	Process Water	0	0
J3 Range	MW-637M2	MW-637M2_F22	N	07-13-2022	Ground Water	214.1	224.1
J3 Range	MW-637M1	MW-637M1_F22	N	07-13-2022	Ground Water	236.1	246.1
J2 Range Northern	J2N-EFF-EF	J2N-EFF-EF-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2F	J2N-MID-2F-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1F	J2N-MID-1F-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-INF-EF	J2N-INF-EF-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-MID-2E	J2N-MID-2E-190A	N	07-13-2022	Process Water	0	0
J2 Range Northern	J2N-MID-1E	J2N-MID-1E-190A	N	07-13-2022	Process Water	0	0
Lima Range	MW-242M1	MW-242M1_F22	N	07-13-2022	Ground Water	235	245
J1 Range Northern	J1N-EFF	J1N-EFF-105A	N	07-13-2022	Process Water	0	0
J1 Range Northern	J1N-MID2	J1N-MID2-105A	N	07-13-2022	Process Water	0	0
J1 Range Northern	J1N-MID1	J1N-MID1-105A	N	07-13-2022	Process Water	0	0
Lima Range	MW-651M1	MW-651M1_F22	N	07-13-2022	Ground Water	242.3	252.3
J1 Range Northern	J1N-INF2	J1N-INF2-105A	N	07-13-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-K	J2E-EFF-K-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2K	J2E-MID-2K-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1K	J2E-MID-1K-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-K	J2E-INF-K-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-J	J2E-EFF-J-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2J	J2E-MID-2J-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1J	J2E-MID-1J-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-J	J2E-INF-J-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-EFF-IH	J2E-EFF-IH-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2H	J2E-MID-2H-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1H	J2E-MID-1H-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-2I	J2E-MID-2I-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-MID-1I	J2E-MID-1I-166A	N	07-12-2022	Process Water	0	0
J2 Range Eastern	J2E-INF-I	J2E-INF-I-166A	N	07-12-2022	Process Water	0	0
Lima Range	MW-595M2	MW-595M2_F22	N	07-11-2022	Ground Water	205.3	215.3
Demolition Area 1	FPR-2-EFF-A	FPR-2-EFF-A-196A	N	07-11-2022	Process Water	0	0
Lima Range	MW-595M1	MW-595M1_F22	N	07-11-2022	Ground Water	255.3	265.3
Lima Range	MW-595M1	MW-595M1_F22D	FD	07-11-2022	Ground Water	255.3	265.3
Demolition Area 1	FPR-2-GAC-MID1A	FPR-2-GAC-MID1A-196A	N	07-11-2022	Process Water	0	0
Demolition Area 1	FPR2-POST-IX-A	FPR2-POST-IX-A-196A	N	07-11-2022	Process Water	0	0
Demolition Area 1	FPR-2-INF	FPR-2-INF-196A	N	07-11-2022	Process Water	0	0
Lima Range	MW-596M1	MW-596M1_F22	N	07-11-2022	Ground Water	231.1	241.1
Demolition Area 1	D1LE-EFF	D1LE-EFF-72A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1LE-MID2	D1LE-MID2-72A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1LE-MID1	D1LE-MID1-72A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1LE-INF	D1LE-INF-72A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1-EFF	D1-EFF-144A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1-MID-2	D1-MID-2-144A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1-MID-1	D1-MID-1-144A	N	07-11-2022	Process Water	0	0
Demolition Area 1	D1-INF	D1-INF-144A	N	07-11-2022	Process Water	0	0
J3 Range	J3-EFF	J3-EFF_3Q22	N	07-11-2022	Ground Water	0	0
J3 Range	J3-INF	J3-INF_3Q22	N	07-11-2022	Ground Water	0	0
J3 Range	J3-EFF	J3-EFF-190A	N	07-07-2022	Process Water	0	0
J3 Range	J3-MID-2	J3-MID-2-190A	N	07-07-2022	Process Water	0	0
J1 Range Northern	MW-303M2	MW-303M2_S22	N	07-07-2022	Ground Water	235.09	245.1
J3 Range	J3-MID-1	J3-MID-1-190A	N	07-07-2022	Process Water	0	0
J3 Range	J3-INF	J3-INF-190A	N	07-07-2022	Process Water	0	0
J1 Range Northern	MW-245M2	MW-245M2_S22	N	07-07-2022	Ground Water	204	214
J1 Range Northern	MW-245M2	MW-245M2_S22D	FD	07-07-2022	Ground Water	204	214
J1 Range Northern	MW-430M2	MW-430M2_S22	N	07-07-2022	Ground Water	188.41	198.41
J1 Range Northern	MW-430M1	MW-430M1_S22	N	07-07-2022	Ground Water	245.23	255.23
J1 Range Northern	MW-590M2	MW-590M2_S22	N	07-06-2022	Ground Water	238	248
J1 Range Northern	MW-590M2	MW-590M2_S22D	FD	07-06-2022	Ground Water	238	248

N = Normal Sample
FD = Field Duplicate

TABLE 1
Sampling Progress: 1 to 31 July 2022

Area Of Concern	Location	Field Sample ID	Sample Type	Date Sampled	Matrix	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
J1 Range Northern	MW-590M1	MW-590M1_S22	N	07-06-2022	Ground Water	258	268
J1 Range Northern	MW-584M2	MW-584M2_S22	N	07-06-2022	Ground Water	228	238
J1 Range Northern	MW-584M1	MW-584M1_S22	N	07-06-2022	Ground Water	248	258
J1 Range Northern	J1N-INF1B	J1N-INF1B_S22	N	07-06-2022	Process Water	0	0
J1 Range Northern	J1N-INF1A	J1N-INF1A_S22	N	07-06-2022	Process Water	0	0
J1 Range Northern	MW-541M1	MW-541M1_S22	N	07-05-2022	Ground Water	210	220
J1 Range Southern	J1S-EFF	J1S-EFF-176A	N	07-05-2022	Process Water	0	0
J1 Range Southern	J1S-MID	J1S-MID-176A	N	07-05-2022	Process Water	0	0
J1 Range Southern	J1S-INF-2	J1S-INF-2-176A	N	07-05-2022	Process Water	0	0
J1 Range Northern	MW-689M2	MW-689M2_S22	N	07-05-2022	Ground Water	231.4	241.4
Central Impact Area	CIA2-EFF	CIA2-EFF-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA2-MID2	CIA2-MID2-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA2-MID1	CIA2-MID1-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA2-INF	CIA2-INF-102A	N	07-05-2022	Process Water	0	0
J1 Range Northern	MW-689M1	MW-689M1_S22	N	07-05-2022	Ground Water	253.5	263.5
Central Impact Area	CIA1-EFF	CIA1-EFF-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA1-MID2	CIA1-MID2-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA1-MID1	CIA1-MID1-102A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA1-INF	CIA1-INF-102A	N	07-05-2022	Process Water	0	0
J1 Range Northern	MW-688M2	MW-688M2_S22	N	07-05-2022	Ground Water	227.8	237.8
Central Impact Area	CIA3-EFF	CIA3-EFF-73A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA3-MID2	CIA3-MID2-73A	N	07-05-2022	Process Water	0	0
J1 Range Northern	MW-688M1	MW-688M1_S22	N	07-05-2022	Ground Water	255.2	265.2
Central Impact Area	CIA3-MID1	CIA3-MID1-73A	N	07-05-2022	Process Water	0	0
Central Impact Area	CIA3-INF	CIA3-INF-73A	N	07-05-2022	Process Water	0	0

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received July 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
Demolition Area 1	MW-610M1	MW-610M1_S22	110	120	06-28-2022	SW6850	Perchlorate	0.38		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-611M2	MW-611M2_S22	91	101	06-27-2022	SW6850	Perchlorate	1.2		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-611M1	MW-611M1_S22	141	151	06-27-2022	SW6850	Perchlorate	2.2		µg/L	2.0	X	0.086	0.20
Demolition Area 1	MW-611M1	MW-611M1_S22D	141	151	06-27-2022	SW6850	Perchlorate	2.2		µg/L	2.0	X	0.086	0.20
Demolition Area 1	MW-641M2	MW-641M2_S22	86.2	96.2	06-23-2022	SW6850	Perchlorate	0.19	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-641M1	MW-641M1_S22	113.2	123.2	06-23-2022	SW6850	Perchlorate	0.98		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-642M2	MW-642M2_S22	77.3	87.3	06-23-2022	SW6850	Perchlorate	0.16	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-642M1	MW-642M1_S22	104.3	114.3	06-23-2022	SW6850	Perchlorate	0.30		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-210M2	MW-210M2_S22	156	166	06-22-2022	SW6850	Perchlorate	0.33		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-556M2	MW-556M2_S22	111	121	06-21-2022	SW6850	Perchlorate	0.10	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-556M1	MW-556M1_S22	153	163	06-21-2022	SW6850	Perchlorate	0.74		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-558M1	MW-558M1_S22	134	144	06-21-2022	SW6850	Perchlorate	0.15	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-559M2	MW-559M2_S22	87	97	06-21-2022	SW6850	Perchlorate	0.11	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-559M1	MW-559M1_S22	135.6	145.6	06-21-2022	SW6850	Perchlorate	0.18	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-659M2	MW-659M2_S22	85	95	06-20-2022	SW6850	Perchlorate	0.091	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-659M1	MW-659M1_S22	120	130	06-20-2022	SW6850	Perchlorate	0.16	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-571M2	MW-571M2_S22	74	84	06-20-2022	SW6850	Perchlorate	0.17	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-571M1	MW-571M1_S22	114	124	06-20-2022	SW6850	Perchlorate	1.0		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-569M2	MW-569M2_S22	84	94	06-20-2022	SW6850	Perchlorate	0.11	J	µg/L	2.0		0.086	0.20
Demolition Area 1	MW-569M1	MW-569M1_S22	114	124	06-20-2022	SW6850	Perchlorate	0.41		µg/L	2.0		0.086	0.20
Demolition Area 1	XX9514	XX9514_S22	0	0	06-14-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.13	J	µg/L	0.60		0.037	0.20
Demolition Area 1	XX9514	XX9514_S22	0	0	06-14-2022	SW6850	Perchlorate	2.1		µg/L	2.0	X	0.086	0.20
Demolition Area 1	XX9514	XX9514_S22D	0	0	06-14-2022	SW6850	Perchlorate	2.1		µg/L	2.0	X	0.086	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22	120	130	06-13-2022	SW8330	2,4-Dinitrotoluene	0.077	J	µg/L	5.0		0.020	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22	120	130	06-13-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.14	J	µg/L	7.3		0.036	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22	120	130	06-13-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.19	J	µg/L	7.3		0.031	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22D	120	130	06-13-2022	SW8330	2,4-Dinitrotoluene	0.085	J	µg/L	5.0		0.020	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22D	120	130	06-13-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.14	J	µg/L	7.3		0.036	0.20
Demolition Area 1	MW-77M2	MW-77M2_S22D	120	130	06-13-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.20		µg/L	7.3		0.031	0.20
Demolition Area 1	MW-19S	MW-19S_S22	38	48	06-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.10	J	µg/L	7.3		0.036	0.20
Demolition Area 1	MW-19S	MW-19S_S22	38	48	06-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.55		µg/L	400		0.11	0.20
Demolition Area 1	MW-19S	MW-19S_S22	38	48	06-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.059	J	µg/L	7.3		0.031	0.20
Demolition Area 1	MW-19S	MW-19S_S22	38	48	06-08-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.9		µg/L	0.60	X	0.037	0.20
Demolition Area 1	MW-19S	MW-19S_S22D	38	48	06-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.60		µg/L	400		0.11	0.20
Demolition Area 1	MW-19S	MW-19S_S22D	38	48	06-08-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.9		µg/L	0.60	X	0.037	0.20
Demolition Area 1	MW-19S	MW-19S_S22D	38	48	06-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.064	J	µg/L	7.3		0.031	0.20
Demolition Area 1	MW-19S	MW-19S_S22D	38	48	06-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.12	J	µg/L	7.3		0.036	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.22		µg/L	7.3		0.031	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	2,4,6-Trinitrotoluene	0.69		µg/L	2.0		0.028	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	2,4-Dinitrotoluene	0.046	J	µg/L	5.0		0.020	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.24		µg/L	7.3		0.036	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.4		µg/L	400		0.11	0.20
Demolition Area 1	MW-31S	MW-31S_S22	98	103	06-08-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		µg/L	0.60	X	0.037	0.20
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	2,4,6-Trinitrotoluene	0.63		µg/L	2.0		0.028	0.20

J = Estimated Result

MDL = Method Detection Limit

RL = Reporting Limit

MCL/HA= Either the MCL or Lowest Health Advisory Limit
August 05, 2022

TABLE 2
VALIDATED EXPLOSIVE AND PERCHLORATE RESULTS
Data Received July 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
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	2,4-Dinitrotoluene	0.050	J	µg/L	5.0		0.020	0.20
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	2-Amino-4,6-dinitrotoluene	0.21		µg/L	7.3		0.031	0.20
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	4-Amino-2,6-dinitrotoluene	0.23		µg/L	7.3		0.036	0.20
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	1.3		µg/L	0.60	X	0.037	0.20
Demolition Area 1	MW-31S	MW-31S_S22D	98	103	06-08-2022	SW8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	1.3		µg/L	400		0.11	0.20
Demolition Area 1	MW-545M4	MW-545M4_S22	72	82	06-06-2022	SW6850	Perchlorate	0.24		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-545M3	MW-545M3_S22	101.5	111.5	06-06-2022	SW6850	Perchlorate	0.49		µg/L	2.0		0.086	0.20
Demolition Area 1	MW-545M2	MW-545M2_S22	142	152	06-06-2022	SW6850	Perchlorate	3.4		µg/L	2.0	X	0.086	0.20
Demolition Area 1	MW-545M2	MW-545M2_S22	142	152	06-06-2022	SW8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.16	J	µg/L	0.60		0.037	0.20
Demolition Area 1	MW-545M1	MW-545M1_S22	162	172	06-06-2022	SW6850	Perchlorate	0.82		µg/L	2.0		0.086	0.20

J = Estimated Result

MDL = Method Detection Limit

RL = Reporting Limit

MCL/HA= Either the MCL or Lowest Health Advisory Limit
August 05, 2022

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2019 PFAS MW&INF - Demolition Area 1

	Location	D1-INF	FPR-2-INF	MW-258M1	MW-663D	PR-INF
	Field Sample ID	D1-INF_PFAS19	FPR-2-INF_PFAS19	MW-258M1_PFAS19	MW-663D_PFAS19	PR-INF_PFAS19
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	109.00 - 119.00	240.60 - 250.60	0.00 - 0.00
	Sampling Date	06/24/2019	06/25/2019	06/19/2019	06/24/2019	06/25/2019
	SDG	320517141	320517141	320515981	320517141	320517141
	Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	20.0 U	20.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.50 U	9.80 U	9.80 U	9.80 U
Perfluorobutanesulfonic acid	600	0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.910 U	0.950 U	0.980 U	2.20	0.980 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluorohexane sulfonate (PFHxS)	39	0.910 U	0.950 U	0.980 U	0.980 U	2.00 U
Perfluorohexanoic acid (PFHxA)		0.910 U	0.950 U	0.980 U	0.980 U	0.980 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.50 U	1.00 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)		2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.50 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.910 U	0.950 U	0.980 U	0.460 J	0.980 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.80 U	2.90 U	3.00 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.20 J	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00

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

	Location	J1N-INF2	J1N-INF2	MW-136S	MW-564M1	MW-590M2
	Field Sample ID	J1N-INF2_PFAS19	J1N-INF2_PFAS19R	MW-136S_PFAS19	MW-564M1_PFAS19	MW-590M2_PFAS19
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	107.00 - 117.00	227.00 - 237.00	238.00 - 248.00
	Sampling Date	06/17/2019	07/30/2019	06/24/2019	06/24/2019	06/24/2019
	SDG	320514661	320528231	320517141	320517141	320517141
	Sample Type	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	20.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.60 U	9.80 U	9.20 U	9.60 U
Perfluorobutanesulfonic acid	600	0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.90 U	1.40 U	0.990 J	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.930 U	1.90 U	2.00 U	1.80 U	0.960 U
Perfluorohexanoic acid (PFHxA)		0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.80 J	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	4.90	2.90 U	1.40 J	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	2.40	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.930 U	0.960 U	0.980 U	0.920 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		4.90	0.00	3.80	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2019 PFAS MW&INF - J2 Range Eastern

	Location	J2E-INF-I	J2E-INF-J	J2E-INF-K	MW-307M3	MW-307M3	MW-368M1
	Field Sample ID	J2E-INF-I_PFAS19	J2E-INF-J_PFAS19	J2E-INF-K_PFAS19	MW-307M3_PFAS19	MW-307M3_PFAS19D	MW-368M1_PFAS19
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	125.80 - 135.82	125.80 - 135.82	237.35 - 247.35
	Sampling Date	06/20/2019	06/20/2019	06/20/2019	06/18/2019	06/18/2019	06/18/2019
	SDG	320515981	320515981	320515981	320514662	320514662	320514662
	Sample Type	Normal	Normal	Normal	Normal	Field Duplicate	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	20.0 U	18.0 U	19.0 U	17.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.30 U	9.80 U	9.00 U	9.60 U	8.50 U
Perfluorobutanesulfonic acid	600	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U	1.50 U	1.80 U	1.90 U	1.70 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluorodecanoic acid (PFDA)		0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	1.40 J
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	0.450 J
Perfluoroheptanesulfonic acid (PFHpS)		0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorohexanoic acid (PFHxA)		0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.40 U	1.50 U	0.880 J	0.730 J	0.650 J
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	1.30 U
Perfluoropentanoic acid (PFPeA)		0.970 U	0.930 U	0.980 U	0.900 U	0.960 U	0.850 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U	2.90 U	2.70 U	2.90 U	2.60 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.40 U	1.50 U	1.30 U	1.40 U	4.90
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-368M2	MW-667M1
Field Sample ID	MW-368M2_PFAS19	MW-667M1_PFAS19	
Sampling Depth	202.73 - 212.73	302.30 - 312.30	
Sampling Date	06/18/2019	06/17/2019	
SDG	320514662	320514661	
Sample Type	Normal	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		8.80 U	9.00 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		8.80 U	9.00 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		8.80 U	9.00 U
Perfluorobutanesulfonic acid	600	0.880 U	0.900 U
Perfluorobutanoic acid (PFBA)		1.30 U	1.80 U
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.800 J	4.30
Perfluorododecanoic acid (PFDoA)		1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.880 U	0.900 U
Perfluoroheptanoic acid (PFHpA)		1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.880 U	0.900 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.900 U
Perfluorononanoic acid (PFNA)	5.9	1.30 U	2.80
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.70 U
Perfluorooctanesulfonic acid (PFOS)	4	2.60 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.880 U	0.900 U
Perfluorotetradecanoic acid (PFTeDA)		2.60 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.60 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		2.40	1.60 J
+PFOS + PFOA (EPA)		0.00	0.00

PFAS Summary Report – Groundwater
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
§Sum of All Compounds Detected		0.00	0.00	0.00	0.880	0.730
						7.40

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2019 PFAS MW&INF - J2 Range Northern

	Location	J2EW0001	J2EW0002	J2N-INF-E	J2N-INF-F	J2N-INF-F	J2N-INF-G
	Field Sample ID	J2EW0001_PFAS19	J2EW0002_PFAS19	J2N-INF_E_PFAS19	J2N-INF_F_PFAS19	J2N-INF_F_PFAS19R	J2N-INF_G_PFAS19
	Sampling Depth	179.00 - 234.00	198.00 - 233.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
	Sampling Date	11/20/2019	11/20/2019	06/18/2019	06/18/2019	07/30/2019	07/30/2019
	SDG	320565491	320565491	320514662	320514662	320528231	320528231
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	40.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		19.0 U	20.0 U	9.30 U	9.30 U	9.60 U	9.70 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	10.0 U	9.30 U	9.30 U	9.60 U	9.70 U
Perfluorobutanesulfonic acid	600	0.960 U	1.00 U	0.930 U	0.930 U	0.960 U	1.40 J
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U	1.40 U	1.90 U	1.40 U	1.50 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.960 U	1.00 U	0.930 U	0.930 U	0.960 U	0.970 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		0.960 U	0.370 J	0.930 U	0.400 J	0.500 J	0.970 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.00 J	1.40 U	0.940 J	1.00 J	1.50 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	11.0	0.930 U	9.90	9.00	1.90 U
Perfluorohexanoic acid (PFHxA)		0.960 U	1.30 J	0.930 U	1.20 J	1.30 J	2.30
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	1.30 J	2.80 U	2.80 U	1.10 J	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 J	1.40 U	1.70 J	1.50 J	1.50 U
Perfluoropentanoic acid (PFPeA)		0.960 U	0.910 J	0.930 U	0.840 J	1.00 J	1.20 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	3.00 U	2.80 U	2.80 U	2.90 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.40 U	1.40 U	1.40 U	1.50 U
+PFOS + PFOA (EPA)		0.00	2.80	0.00	1.70	2.60	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	MW-234M2	MW-313M1	MW-587M2
Field Sample ID	MW-234M2_PFAS19	MW-313M1_PFAS19	MW-587M2_PFAS19
Sampling Depth	110.00 - 120.00	255.40 - 265.40	220.00 - 230.00
Sampling Date	06/17/2019	06/19/2019	06/19/2019
SDG	320514661	320515981	320515981
Sample Type	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)
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	9.70 U
Perfluorobutanesulfonic acid	600	0.880 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.80 U	0.700 J
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.880 U	1.20 J
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	0.600 J	0.980 U
Perfluorohexanoic acid (PFHxA)		0.880 U	0.980 U
Perfluorononanoic acid (PFNA)	5.9	1.30 U	1.10 J
Perfluorooctanesulfonamide (PFOSA)		2.60 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	1.90 J	2.90 U
Perfluorooctanoic acid (PFOA)	6	0.550 J	1.50 U
Perfluoropentanoic acid (PFPeA)		0.880 U	0.680 J
Perfluorotetradecanoic acid (PFTeDA)		2.60 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.60 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.30 U	1.40 J
+PFOS + PFOA (EPA)		2.45	0.00
			0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-234M2	MW-313M1	MW-587M2
	Field Sample ID	MW-234M2_PFAS19	MW-313M1_PFAS19	MW-587M2_PFAS19
	Sampling Depth	110.00 - 120.00	255.40 - 265.40	220.00 - 230.00
	Sampling Date	06/17/2019	06/19/2019	06/19/2019
	SDG	320514661	320515981	320515981
	Sample Type	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00
§Sum of All Compounds Detected		3.05	5.08	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2019 PFAS MW&INF - J3 Range

	Location	J3-INF	J3-INF	MW-163S	MW-163S	MW-163S	MW-227M2
	Field Sample ID	J3-INF_PFAS19	J3-INF_PFAS19D	MW-163S_PFAS19	MW-163S_PFAS19D	MW-163S_PFAS19R	MW-227M2_PFAS19
	Sampling Depth	0.00 - 0.00	0.00 - 0.00	38.00 - 48.00	38.00 - 48.00	38.00 - 48.00	110.00 - 120.00
	Sampling Date	06/17/2019	06/17/2019	06/18/2019	06/18/2019	07/30/2019	06/19/2019
	SDG	320514661	320514661	320514662	320514662	320528231	320515981
	Sample Type	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	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	0.560 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.70 J	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	1.50 J	1.50 J	0.690 J	0.610 J	1.90 U	0.540 J
Perfluorohexanoic acid (PFHxA)		0.940 U	0.920 U	0.410 J	0.860 U	0.930 U	0.960 U
Perfluorononanoic acid (PFNA)	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	12.0	12.0	12.0	2.90 U
Perfluorooctanoic acid (PFOA)	6	0.520 J	1.40 U	1.70	1.60 J	1.30 J	1.40 U
Perfluoropentanoic acid (PFPeA)		0.940 U	0.920 U	0.860 U	0.860 U	0.930 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		1.40 J	2.80 U	2.60 U	2.60 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.30 U	1.30 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.520	0.00	13.7	13.6	13.3	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	MW-250M2	
Field Sample ID	MW-250M2_PFAS19	
Sampling Depth	145.00 - 155.00	
Sampling Date	06/20/2019	
SDG	320515981	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.70 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U
Perfluorobutanesulfonic acid	600	0.970 U
Perfluorobutanoic acid (PFBA)		0.710 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.970 U
Perfluorododecanoic acid (PFDoA)		1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.970 U
Perfluoroheptanoic acid (PFHpA)		1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U
Perfluorohexanoic acid (PFHxA)		0.970 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U
Perfluoropentanoic acid (PFPeA)		0.970 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
+PFOS + PFOA (EPA)		0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	J3-INF	J3-INF	MW-163S	MW-163S	MW-163S	MW-227M2
Field Sample ID	J3-INF_PFAS19	J3-INF_PFAS19D	MW-163S_PFAS19	MW-163S_PFAS19D	MW-163S_PFAS19R	MW-227M2_PFAS19
Sampling Depth	0.00 - 0.00	0.00 - 0.00	38.00 - 48.00	38.00 - 48.00	38.00 - 48.00	110.00 - 120.00
Sampling Date	06/17/2019	06/17/2019	06/18/2019	06/18/2019	07/30/2019	06/19/2019
SDG	320514661	320514661	320514662	320514662	320528231	320515981
Sample Type	Normal	Field Duplicate	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	13.7	12.0	12.0
§Sum of All Compounds Detected		5.12	1.50	14.8	14.2	13.9
						0.540

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2020 J1 Ranges SPM Fall - J1 Range Northern

	Location	MW-136M1	MW-136M1	MW-191M2	MW-245M1	MW-245M2	MW-303M2
	Field Sample ID	MW-136M1_F20	MW-136M1_F20D	MW-191M2_F20	MW-245M1_F20	MW-245M2_F20	MW-303M2_F20
	Sampling Depth	124.00 - 134.00	124.00 - 134.00	120.00 - 130.00	244.00 - 254.00	204.00 - 214.00	235.09 - 245.10
	Sampling Date	12/07/2020	12/07/2020	12/07/2020	12/07/2020	11/10/2020	12/08/2020
	SDG	320677691	320677691	320677691	320677691	320665921	320677701
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.60 U	9.20 U	9.70 U	9.30 U	9.30 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	9.20 U	15.0 J	9.30 U	9.30 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	9.20 U	2.90 J	9.30 U	9.30 U	9.50 U
Perfluorobutanesulfonic acid	600	0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluorobutanoic acid (PFBA)		0.920 J	0.670 J	1.50 U	1.40 U	4.00	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.700 J
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.70 J
Perfluoroheptanesulfonic acid (PFHps)		0.960 U	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.40 U	0.700 J	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.360 J	0.920 U	0.970 U	0.930 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		0.960 U	0.920 U	0.970 U	0.930 U	0.850 J	0.950 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.960 U	0.920 U	0.970 U	0.930 U	4.00	0.410 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.40 U	1.40 U	2.80
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-303M3	MW-326M1	MW-326M2	MW-326M3	MW-346M1	MW-346M2
	Field Sample ID	MW-303M3_F20	MW-326M1_F20	MW-326M2_F20	MW-326M3_F20	MW-346M1_F20	MW-346M2_F20
	Sampling Depth	139.74 - 149.69	250.01 - 260.01	196.27 - 206.28	165.24 - 175.26	0.00 - 0.00	0.00 - 0.00
	Sampling Date	12/08/2020	12/09/2020	12/09/2020	12/09/2020	12/02/2020	12/02/2020
	SDG	320677701	320678771	320678771	320678771	320675551	320675551
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	20.0 U	20.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		8.90 U	10.0 U	10.0 U	9.50 U	9.70 U	9.30 U
Perfluorobutanesulfonic acid	600	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U
Perfluorobutanoic acid (PFBA)		0.920 J	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.60 J	0.950 J	5.40	3.50	2.50	2.40
Perfluorododecanoic acid (PFDoA)		1.30 U	1.50 U	1.20 J	0.600 J	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U
Perfluoroheptanoic acid (PFHpA)		1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U
Perfluorohexanoic acid (PFHxA)		0.890 U	1.00 U	1.00 U	0.950 U	0.970 U	0.930 U
Perfluorononanoic acid (PFNA)	5.9	2.60	1.50 J	1.40 J	2.70	3.40	3.50
Perfluorooctanesulfonamide (PFOSA)		2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.30 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.890 U	0.440 J	1.00 U	0.950 U	0.620 J	0.870 J
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	3.00 U	3.00 U	2.90 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.30 U	1.00 J	13.0	6.90	5.90	2.50
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		2.60	0.00	5.40	6.20	5.90	5.90

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	MW-346M3	MW-346M4	MW-58S
Field Sample ID	MW-346M3_F20	MW-346M4_F20	MW-58S_F20
Sampling Depth	0.00 - 0.00	0.00 - 0.00	100.00 - 110.00
Sampling Date	12/02/2020	12/02/2020	12/07/2020
SDG	320675551	320675551	320677691
Sample Type	Normal	Normal	Normal
PFAS 21 Cmps			
	Screening Limit	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.80 U	9.20 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.80 U	9.20 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.80 U	9.20 U
Perfluorobutanesulfonic acid	600	0.980 U	0.920 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.730 J	1.70 J
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.980 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.980 U	0.920 U
Perfluorohexanoic acid (PFHxA)		0.980 U	0.920 U
Perfluorononanoic acid (PFNA)	5.9	2.20	0.650 J
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.750 J	0.410 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.00 J	6.00
+PFOS + PFOA (EPA)	0.00	0.00	0.00
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.20	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2020 J2 Ranges SPM Fall - J2 Range Northern

	Location	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
	Field Sample ID	J2EW0002_F20	J2EW0002_F20D	J2EW2-MW2-B_F20	J2EW2-MW2-C_F20	MW-293M2_F20	MW-293M2_F20D
	Sampling Depth	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	196.42 - 206.42	196.42 - 206.42
	Sampling Date	09/10/2020	09/10/2020	09/09/2020	09/09/2020	08/27/2020	08/27/2020
	SDG	320645641	320645641	320645661	320645661	320641331	320641331
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	19.0 U	19.0 U	19.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.90 U	9.50 U	9.40 U	9.70 U	9.20 U	9.50 U
Perfluorobutanesulfonic acid	600	0.990 U	0.950 U	0.940 U	0.970 U	3.40	3.60
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.990 U	0.950 U	0.940 U	0.970 U	4.90	4.50
Perfluorododecanoic acid (PFDoA)		1.50 U	1.40 U	1.40 U	1.50 U	3.50	3.60
Perfluoroheptanesulfonic acid (PFHpS)		0.990 U	0.950 U	0.940 U	0.970 U	0.920 U	0.950 U
Perfluoroheptanoic acid (PFHpA)		0.930 J	0.910 J	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	9.80	9.30	0.940 U	0.970 U	0.920 U	0.950 U
Perfluorohexanoic acid (PFHxA)		1.10 J	1.10 J	0.940 U	0.970 U	0.920 U	0.950 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.40 U	1.40 U	1.50 U	2.00	1.50 J
Perfluoroctanesulfonamide (PFOSA)		3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.70 J	1.70 J	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		1.10 J	1.20 J	0.940 U	0.970 U	0.460 J	0.410 J
Perfluorotetradecanoic acid (PFTeDA)		3.00 U	2.80 U	2.80 U	2.90 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		3.00 U	2.80 U	2.80 U	2.90 U	1.50 J	1.90 J
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.40 U	1.40 U	1.50 U	25.0	28.0
+PFOS + PFOA (EPA)		1.70	1.70	0.00	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	19.0 U	18.0 U	18.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.00 U	9.40 U	9.20 U	9.10 U	9.80 U
Perfluorobutanesulfonic acid	600	0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	0.550 J	1.40 U	1.40 U	1.00 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U				
Perfluorodecanoic acid (PFDA)		3.10	3.60	1.50 J	2.80	2.40	2.50
Perfluorododecanoic acid (PFDoA)		0.800 J	1.10 J	0.610 J	1.70 J	1.40 U	2.20
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.50 U				
Perfluorohexane sulfonate (PFHxS)	39	1.90 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U
Perfluorohexanoic acid (PFHxA)		0.950 U	0.900 U	0.940 U	0.920 U	0.910 U	0.980 U
Perfluorononanoic acid (PFNA)	5.9	3.90	2.30	0.960 J	1.00 J	1.40 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U				
Perfluoropentanoic acid (PFPeA)		0.580 J	0.430 J	0.940 U	1.40 J	0.910 U	1.20 J
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.70 U	2.80 U	2.80 U	2.70 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	0.880 J	2.80 U	2.80 U	2.70 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		8.50	9.20	4.80	22.0	1.40 J	8.10
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	19.0 U	19.0 U	18.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.60 U	9.40 U	9.30 U	9.20 U	9.00 U
Perfluorobutanesulfonic acid	600	0.920 U	0.960 U	0.940 U	0.930 U	3.60	0.900 U
Perfluorobutanoic acid (PFBA)		1.40 U					
Perfluorodecanesulfonic acid (PFDS)		1.40 U					
Perfluorodecanoic acid (PFDA)		0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U
Perfluorododecanoic acid (PFDoA)		1.40 U					
Perfluoroheptanesulfonic acid (PFHpS)		0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U
Perfluoroheptanoic acid (PFHpA)		1.40 U					
Perfluorohexane sulfonate (PFHxS)	39	0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U
Perfluorohexanoic acid (PFHxA)		0.920 U	0.960 U	0.940 U	0.930 U	0.920 U	0.900 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U					
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	0.600 J				
Perfluoropentanoic acid (PFPeA)		0.490 J	0.490 J	0.940 U	0.420 J	0.920 U	0.600 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.600

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U					
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.60 U	9.40 U	9.30 U	9.40 U	9.60 U
Perfluorobutanesulfonic acid	600	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U					
Perfluorodecanesulfonic acid (PFDS)		1.40 U					
Perfluorodecanoic acid (PFDA)		0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.40 U					
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U					
Perfluorohexane sulfonate (PFHxS)	39	0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluorohexanoic acid (PFHxA)		0.940 U	0.960 U	0.940 U	0.930 U	0.940 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U					
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U					
Perfluoropentanoic acid (PFPeA)		0.940 U	0.440 J	0.940 U	0.400 J	0.940 U	0.420 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.90 U	2.80 U	2.80 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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
PFAS 21 Cmps	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	18.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.40 U	9.00 U	9.60 U	9.40 U	9.30 U
Perfluorobutanesulfonic acid	600	8.50	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluorobutanoic acid (PFBA)		1.70 J	1.40 U				
Perfluorodecanesulfonic acid (PFDS)		1.40 U					
Perfluorodecanoic acid (PFDA)		0.920 U	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluorododecanoic acid (PFDoA)		1.40 U					
Perfluoroheptanesulfonic acid (PFHpS)		0.920 U	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluoroheptanoic acid (PFHpA)		1.40 U					
Perfluorohexane sulfonate (PFHxS)	39	1.80 U	0.940 U	0.900 U	0.960 U	0.360 J	0.930 U
Perfluorohexanoic acid (PFHxA)		5.40	0.940 U	0.900 U	0.960 U	0.940 U	0.930 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U					
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)		1.90	0.450 J	0.900 U	0.960 U	0.630 J	0.930 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.70 U	2.90 U	2.80 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U					
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-703M1	MW-703M2	MW-704M1	MW-704M2
	Field Sample ID	MW-703M1_F20	MW-703M2_F20	MW-704M1_F20	MW-704M2_F20
	Sampling Depth	248.00 - 258.00	224.10 - 234.10	244.00 - 254.00	217.80 - 227.80
	Sampling Date	08/31/2020	08/31/2020	09/01/2020	09/01/2020
	SDG	320642421	320642421	320642411	320642411
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.20 U	9.70 U	9.20 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.20 U	9.70 U	9.20 U
Perfluorobutanesulfonic acid	600	0.910 U	0.920 U	0.970 U	0.920 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		3.20	1.60 J	1.50 J	1.90
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.910 U	0.920 U	0.970 U	0.920 U
Perfluorohexanoic acid (PFHxA)		0.910 U	0.920 U	0.970 U	0.920 U
Perfluorononanoic acid (PFNA)	5.9	1.80	0.900 J	1.50 U	0.890 J
Perfluorooctanesulfonamide (PFOSA)		1.30 J	2.20 J	2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.70 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.650 J	0.830 J	1.10 J	0.400 J
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.70 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.70 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		0.650 J	1.40 U	1.00 J	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2020 J3 Range SPM Fall - J3 Range

	Location	MW-143M2	MW-143M3	MW-163S	MW-163S	MW-181S	MW-193M1
	Field Sample ID	MW-143M2_F20	MW-143M3_F20	MW-163S_F20	MW-163S_F20D	MW-181S_F20	MW-193M1_F20
	Sampling Depth	117.00 - 122.00	107.00 - 112.00	38.00 - 48.00	38.00 - 48.00	32.25 - 42.25	57.50 - 62.50
	Sampling Date	07/20/2020	07/21/2020	07/16/2020	07/16/2020	07/21/2020	07/16/2020
	SDG	320629171	320629171	320627321	320627321	320629171	320627321
	Sample Type	Normal	Normal	Normal	Field Duplicate	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.50 U	9.70 U	9.80 U	9.40 U	9.60 U
Perfluorobutanesulfonic acid	600	1.20 J	0.620 J	0.970 U	0.980 U	0.940 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.00 J	1.00 J	1.40 U	0.570 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	26.0	4.20	1.90 U	2.00 U	1.90 U	1.90 U
Perfluorohexanoic acid (PFHxA)		0.940 U	0.950 U	0.970 U	0.980 U	0.940 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	4.90	5.00	16.0	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	0.840 J	0.940 J	0.510 J	1.40 U
Perfluoropentanoic acid (PFPeA)		0.940 U	0.950 U	0.970 U	0.460 J	0.940 U	0.490 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.90 U	2.90 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	5.74	5.94	16.5	0.00
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		26.0	4.20	4.90	5.00	16.0	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-193S	MW-196M1	MW-196S	MW-197M1	MW-197M2	MW-197M3
	Field Sample ID	MW-193S_F20	MW-196M1_F20	MW-196S_F20	MW-197M1_F20	MW-197M2_F20	MW-197M3_F20
	Sampling Depth	32.50 - 37.50	45.00 - 50.00	32.00 - 37.00	120.00 - 125.00	80.20 - 85.20	60.20 - 65.20
	Sampling Date	07/16/2020	07/23/2020	07/23/2020	07/20/2020	07/20/2020	07/20/2020
	SDG	320627321	320630121	320630121	320629171	320629171	320629171
	Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U	18.0 U	19.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.20 U	9.00 U	9.40 U	9.30 U	9.20 U
Perfluorobutanesulfonic acid	600	2.20	0.920 U	0.900 U	0.940 U	1.80 J	0.920 U
Perfluorobutanoic acid (PFBA)		1.20 J	1.80 U	1.80 U	1.40 U	4.90	1.50 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.920 U	0.550 J	0.900 U	0.940 U	0.930 U	0.920 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHps)		0.920 U	0.920 U	0.900 U	0.940 U	0.930 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.30 U	1.40 U	4.00	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	19.0	1.00 J	0.900 U	1.90 U	37.0	1.80 U
Perfluorohexanoic acid (PFHxA)		0.830 J	0.950 J	0.510 J	0.940 U	8.40	0.920 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	1.10 J	3.80	2.80 U	10.0	1.00 J
Perfluorooctanoic acid (PFOA)	6	1.40 U	2.10	1.10 J	0.550 J	3.10	0.990 J
Perfluoropentanoic acid (PFPeA)		1.30 J	0.660 J	0.440 J	0.400 J	6.50	0.430 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.30 U	1.40 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	3.20	4.90	0.550	13.1	1.99
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		19.0	2.10	3.80	0.00	54.1	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-197M3	MW-198M1	MW-198M2	MW-198M3	MW-198M4	MW-232M1
	Field Sample ID	MW-197M3_F20D	MW-198M1_F20	MW-198M2_F20	MW-198M3_F20	MW-198M4_F20	MW-232M1_F20
	Sampling Depth	60.20 - 65.20	150.00 - 155.00	120.00 - 125.00	100.00 - 105.00	70.00 - 75.00	77.50 - 82.50
	Sampling Date	07/20/2020	07/15/2020	07/15/2020	07/15/2020	07/15/2020	07/16/2020
	SDG	320629171	320627321	320627321	320627321	320627321	320627321
	Sample Type	Field Duplicate	Normal	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	19.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.50 U	9.50 U	9.50 U	9.50 U	9.50 U
Perfluorobutanesulfonic acid	600	0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluorobutanoic acid (PFBA)		1.40 J	1.40 U	0.740 J	0.740 J	6.50	2.20
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHps)		0.920 U	0.950 U	0.950 U	0.950 U	0.950 U	0.950 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.40 U	1.80 J	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	1.80 U	0.950 U	0.950 U	1.90 U	4.40	0.950 U
Perfluorohexanoic acid (PFHxA)		0.450 J	0.950 U	0.950 U	0.950 U	3.70	0.950 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.90 U	2.80 U	2.30 J	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.10 J	1.40 U	1.40 U	1.40 U	2.30	0.640 J
Perfluoropentanoic acid (PFPeA)		0.440 J	0.460 J	0.950 U	0.950 U	2.80	0.420 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.90 U	2.80 U	2.80 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		1.10	0.00	0.00	0.00	4.60	0.640
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	0.00	0.00	0.00	6.70	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	MW-232M2	MW-30
Field Sample ID	MW-232M2_F20	MW-30_F20
Sampling Depth	61.00 - 66.00	26.00 - 36.00
Sampling Date	07/16/2020	07/21/2020
SDG	320627321	320629171
Sample Type	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	20.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	10.0 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	10.0 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	10.0 U	9.40 U
Perfluorobutanesulfonic acid	600	1.00 U
Perfluorobutanoic acid (PFBA)		3.20
Perfluorodecanesulfonic acid (PFDS)		1.50 U
Perfluorodecanoic acid (PFDA)		1.00 U
Perfluorododecanoic acid (PFDoA)		1.50 U
Perfluoroheptanesulfonic acid (PFHpS)		1.00 U
Perfluoroheptanoic acid (PFHpA)		1.50 U
Perfluorohexane sulfonate (PFHxS)	39	1.00 U
Perfluorohexanoic acid (PFHxA)		1.00 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U
Perfluorooctanesulfonamide (PFOSA)		3.00 U
Perfluorooctanesulfonic acid (PFOS)	4	3.00 U
Perfluorooctanoic acid (PFOA)	6	1.10 J
Perfluoropentanoic acid (PFPeA)		0.520 J
Perfluorotetradecanoic acid (PFTeDA)		3.00 U
Perfluorotridecanoic acid (PFTrDA)		3.00 U
Perfluoroundecanoic acid (PFUnA)		1.50 U
+PFOS + PFOA (EPA)	1.10	15.8
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	15.0

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2021 J2 North SPM Fall - J2 Range Northern

	Location	J2EW0002	J2EW0002	J2EW2-MW2-B	J2EW2-MW2-C	MW-293M2	MW-293M2
	Field Sample ID	J2EW0002_F21	J2EW0002_F21D	J2EW2-MW2-B_F21	J2EW2-MW2-C_F21	MW-293M2_F21	MW-293M2_F21D
	Sampling Depth	198.00 - 233.00	198.00 - 233.00	209.79 - 219.79	243.83 - 253.81	0.00 - 0.00	0.00 - 0.00
	Sampling Date	09/27/2021	09/27/2021	09/15/2021	09/15/2021	09/08/2021	09/08/2021
	SDG	320796651	320796651	320791141	320791141	320787611	320787611
	Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Field Duplicate
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	6.70 J	6.70 J	19.0 U	20.0 U	18.0 U	18.0 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	9.40 U	9.00 U	9.50 U	10.0 U	9.20 U	8.90 U	
Perfluorobutanesulfonic acid	600	0.940 U	0.900 U	0.950 U	1.00 U	3.90	3.80
Perfluorobutanoic acid (PFBA)		1.40 U	1.30 U	1.40 U	1.50 U	0.840 J	1.10 J
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.30 U	1.40 U	1.50 U	1.40 U	1.30 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.900 U	0.950 U	1.00 U	3.20	2.80
Perfluorododecanoic acid (PFDoA)		1.40 U	1.30 U	1.40 U	1.50 U	2.40	2.30
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.900 U	0.950 U	1.00 U	0.920 U	0.890 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	0.550 J	1.40 U	1.50 U	1.40 U	1.30 U
Perfluorohexane sulfonate (PFHxS)	39	8.10	7.70	0.950 U	1.00 U	0.920 U	0.890 U
Perfluorohexanoic acid (PFHxA)		0.820 J	0.770 J	0.950 U	1.00 U	1.30 J	1.10 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.30 U	1.40 U	1.50 U	1.30 J	1.10 J
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.70 U	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanesulfonic acid (PFOS)	4	1.30 J	1.10 J	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.80 J	1.20 J	1.40 U	1.50 U	1.40 U	1.30 U
Perfluoropentanoic acid (PFPeA)		0.680 J	0.640 J	0.950 U	1.00 U	1.10 J	1.00 J
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.70 U	2.90 U	3.10 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.70 U	2.90 U	3.10 U	0.760 J	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.30 U	1.40 U	1.50 U	23.0	22.0
+PFOS + PFOA (EPA)		3.10	2.30	0.00	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U					
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.60 U	9.30 U	9.50 U	9.60 U	9.40 U
Perfluorobutanesulfonic acid	600	0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.40 U				
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U				
Perfluorodecanoic acid (PFDA)		3.40	3.60	4.00	1.70 J	2.60	2.50
Perfluorododecanoic acid (PFDoA)		0.520 J	0.680 J	1.10 J	0.710 J	2.80	3.00
Perfluoroheptanesulfonic acid (PFHpS)		0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.40 U				
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.960 U	0.930 U	0.440 J	0.960 U	0.940 U
Perfluorohexanoic acid (PFHxA)		0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorononanoic acid (PFNA)	5.9	4.80	4.80	3.60	2.10	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U				
Perfluoropentanoic acid (PFPeA)		0.970 U	0.960 U	0.930 U	0.950 U	0.960 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.90 U	2.80 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.90 U	0.700 J	0.840 J	1.10 J	1.20 J
Perfluoroundecanoic acid (PFUnA)		8.30	8.60	7.80	4.40	27.0	27.0
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.70 U	9.60 U	9.70 U	9.90 U	9.50 U	9.60 U
Perfluorobutanesulfonic acid	600	0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.50 U	1.60 J	0.890 J	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		3.60	38.0	8.90	19.0	18.0	2.30
Perfluorododecanoic acid (PFDoA)		1.50 U	2.50	2.20	0.810 J	1.80 J	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.10 J	1.50 U	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.960 U	0.970 U	0.990 U	0.950 U	0.960 U
Perfluorohexanoic acid (PFHxA)		0.970 U	0.770 J	0.970 U	0.990 U	0.950 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	2.20	16.0	12.0	25.0	14.0	1.60 J
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.90 U	2.90 U	3.00 U	2.80 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.90 U	3.00 U	2.80 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	0.660 J	0.650 J	1.50 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.970 U	2.50	1.20 J	0.990 U	0.950 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	1.10 J	2.90 U	3.00 U	0.840 J	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	1.60 J	2.10 J	3.00 U	1.20 J	2.90 U
Perfluoroundecanoic acid (PFUnA)		3.30	23.0	9.60	8.90	18.0	1.50 J
+PFOS + PFOA (EPA)		0.00	0.660	0.650	0.00	0.00	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	20.0 U	18.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.20 U	9.90 U	8.90 U	9.30 U	9.10 U
Perfluorobutanesulfonic acid	600	0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	0.790 J	1.30 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.60 J	56.0	2.90	2.40	0.930 U	0.910 U
Perfluorododecanoic acid (PFDoA)		1.40 U	3.40	0.760 J	2.40	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	0.910 J	1.50 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.950 U	0.410 J	0.810 J	0.890 U	0.930 U	0.910 U
Perfluorohexanoic acid (PFHxA)		0.950 U	0.920 U	0.990 U	0.890 U	0.930 U	0.910 U
Perfluorononanoic acid (PFNA)	5.9	4.00	14.0	6.80	1.30 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.70 U	3.00 U	2.70 U	2.80 U	2.70 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.70 U	1.20 J	2.70 U	2.80 U	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.10 J	0.580 J	1.30 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.950 U	0.480 J	0.960 J	0.890 U	0.930 U	0.910 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	0.930 J	3.00 U	2.70 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	1.80 J	0.840 J	0.740 J	2.80 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	32.0	3.60	8.70	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	1.10	1.78	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	18.0 U	19.0 U	19.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.30 U	9.10 U	9.40 U	9.40 U	9.80 U
Perfluorobutanesulfonic acid	600	0.920 U	0.930 U	1.70 J	0.940 U	0.940 U	0.980 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U				
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U				
Perfluorodecanoic acid (PFDA)		0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.50 U				
Perfluoroheptanesulfonic acid (PFHpS)		0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.50 U				
Perfluorohexane sulfonate (PFHxS)	39	0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U
Perfluorohexanoic acid (PFHxA)		0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U				
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	0.570 J	1.40 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.920 U	0.930 U	0.910 U	0.940 U	0.940 U	0.980 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U				
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.570	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	19.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.40 U	9.40 U	9.30 U	8.90 U	9.40 U
Perfluorobutanesulfonic acid	600	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluorohexanoic acid (PFHxA)		0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.930 U	0.940 U	0.940 U	0.930 U	0.890 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.80 U	2.80 U	2.70 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	18.0 U	18.0 U	18.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.60 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.60 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.60 U	8.80 U	9.00 U	9.00 U	9.00 U	9.60 U
Perfluorobutanesulfonic acid	600	0.960 U	0.880 U	12.0	0.900 U	0.900 U	0.960 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.30 U	2.80	1.40 U	1.30 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	0.880 U	0.900 U	0.900 U	0.900 U	0.960 U
Perfluorohexanoic acid (PFHxA)		0.960 U	0.880 U	23.0	0.900 U	0.900 U	0.960 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanesulfonic acid (PFOS)	4	2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.960 U	0.880 U	11.0	0.900 U	0.900 U	0.960 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.60 U	2.70 U	2.70 U	2.70 U	2.90 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.30 U	1.40 U	1.40 U	1.30 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)				
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	20.0 U	19.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.80 U	9.70 U	9.70 U	9.40 U
Perfluorobutanesulfonic acid	600	0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U	1.50 U	3.30	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.910 U	3.90	2.00	2.00	2.20
Perfluorododecanoic acid (PFDoA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.910 U	0.980 U	0.970 U	0.970 U	0.940 U
Perfluorohexanoic acid (PFHxA)		0.910 U	0.980 U	0.970 U	0.900 J	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.60 J	0.640 J	1.10 J	0.830 J
Perfluorooctanesulfonamide (PFOSA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.910 U	0.700 J	0.970 U	3.20	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00

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

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)	Results (ng/L)	Results (ng/L)	Results (ng/L)	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

Location	J2EW0002	
Field Sample ID	J2EW0002_521	
Sampling Depth	198.00 - 233.00	
Sampling Date	01/13/2021	
SDG	320689351	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		7.40 J
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U
Perfluorobutanesulfonic acid	600	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.430 J
Perfluoroheptanoic acid (PFHpA)		0.860 J
Perfluorohexane sulfonate (PFHxS)	39	11.0
Perfluorohexanoic acid (PFHxA)		0.900 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.80 J
Perfluorooctanesulfonic acid (PFOS)	4	1.00 J
Perfluorooctanoic acid (PFOA)	6	1.80 J
Perfluoropentanoic acid (PFPeA)		1.90 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
+PFOS + PFOA (EPA)		2.80
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		11.0

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2021 J3 Range SPM Fall - J3 Range

	Location	90EW0001	90WT0004	J3-EFF	J3-EFF	J3EW0032	J3EWIP1
	Field Sample ID	90EW0001_F21	90WT0004_F21	J3-EFF_4Q21	J3-EFF_F21	J3EW0032_F21	J3EWIP1_F21
	Sampling Depth	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)				
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	18.0 U	19.0 U	19.0 U	20.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.20 U	9.20 U	9.60 U	9.50 U	9.80 U	9.40 U
Perfluorobutanesulfonic acid	600	0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.500 J	0.920 U	0.960 U	0.950 U	0.720 J	0.520 J
Perfluorohexanoic acid (PFHxA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.920 U	0.920 U	0.960 U	0.950 U	0.980 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.80 U	2.90 U	2.90 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		20.0 U	19.0 U	19.0 U	19.0 UJ	19.0 UJ	19.0 UJ
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.80 U	9.70 U	9.50 U	9.70 UJ	9.30 UJ	9.60 UJ
Perfluorobutanesulfonic acid	600	0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorobutanoic acid (PFBA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorodecanoic acid (PFDA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorododecanoic acid (PFDoA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluoroheptanesulfonic acid (PFHpS)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluoroheptanoic acid (PFHpA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluorohexane sulfonate (PFHxS)	39	2.80	1.00 J	1.20 J	2.80 J	0.930 UJ	0.960 UJ
Perfluorohexanoic acid (PFHxA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
Perfluoroctanesulfonamide (PFOSA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluoroctanesulfonic acid (PFOS)	4	2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.40 U	1.50 UJ	0.510 J	1.40 UJ
Perfluoropentanoic acid (PFPeA)		0.980 U	0.970 U	0.950 U	0.970 UJ	0.930 UJ	0.960 UJ
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.90 U	2.80 U	2.90 UJ	2.80 UJ	2.90 UJ
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.50 U	1.40 U	1.50 UJ	1.40 UJ	1.40 UJ
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.510	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 UJ	20.0 U	19.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.40 U	9.40 UJ	9.90 U	9.50 U	9.40 U
Perfluorobutanesulfonic acid	600	0.640 J	0.700 J	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	4.10	4.00	0.940 UJ	0.990 U	0.950 U	1.50 J
Perfluorohexanoic acid (PFHxA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.630 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.80 UJ	3.60 J	2.90 U	3.90
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 UJ	0.570 J	1.40 U	0.760 J
Perfluoropentanoic acid (PFPeA)		0.950 U	0.940 U	0.940 UJ	0.990 U	0.950 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.80 UJ	3.00 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 UJ	1.50 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	4.17	0.00	4.66

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	20.0 U	19.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.30 U	9.70 U	10.0 U	9.40 U	9.50 U	9.00 U
Perfluorobutanesulfonic acid	600	0.930 U	9.40	1.00 U	0.940 U	0.950 U	0.900 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.930 U	0.720 J	1.50 J	0.450 J	0.950 U	0.900 U
Perfluorohexanoic acid (PFHxA)		0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.80 U	2.90 U	3.00 U	4.80	15.0	15.0
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U	0.730 J	1.10 J	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.930 U	0.970 U	1.00 U	0.940 U	0.950 U	0.900 U
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.90 U	3.00 U	2.80 U	2.80 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.730	5.90	15.0	15.0

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	19.0 U	20.0 U	19.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.40 U	9.60 U	10.0 U	9.60 U	9.20 U
Perfluorobutanesulfonic acid	600	0.940 U	0.940 U	0.960 U	1.00 U	0.450 J	0.460 J
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	0.900 J	1.50 U	2.60	2.60
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.940 U	0.960 U	1.00 U	0.960 U	0.920 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.940 U	0.960 U	1.00 U	0.960 U	0.920 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.50 U	3.00	3.00
Perfluorohexane sulfonate (PFHxS)	39	2.80	2.60	0.960 U	0.440 J	15.0	15.0
Perfluorohexanoic acid (PFHxA)		0.940 U	0.940 U	0.760 J	0.480 J	5.00	5.50
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	2.80 U	2.90 U	5.30 J	4.90	4.80
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 J	0.700 J	2.70	2.90
Perfluoropentanoic acid (PFPeA)		0.940 U	0.940 U	0.960 U	1.00 U	4.20	4.20
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	2.90 U	3.00 U	2.90 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.50 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	1.40	6.00	7.60	7.70

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	18.0 U	19.0 U	19.0 U	20.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.40 U	9.30 U	9.10 U	9.50 U	9.40 U	10.0 U
Perfluorobutanesulfonic acid	600	0.940 U	0.930 U	0.420 J	0.950 U	0.940 U	1.00 U
Perfluorobutanoic acid (PFBA)		1.30 J	1.40 J	400	1.40 U	64.0	3.00
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.40 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.940 U	0.930 U	42.0	5.60	10.0	5.10
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	32.0	1.40 U	2.30	0.600 J
Perfluoroheptanesulfonic acid (PFHpS)		0.940 U	0.930 U	0.910 U	0.950 U	0.940 U	1.00 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	360	1.40 U	100	2.10
Perfluorohexane sulfonate (PFHxS)	39	2.40	8.50	0.910 U	0.950 U	0.940 U	1.00 U
Perfluorohexanoic acid (PFHxA)		0.590 J	0.930 U	350	0.950 U	57.0	1.90 J
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	75.0	6.20	35.0	6.20
Perfluorooctanesulfonamide (PFOSA)		2.80 U	2.80 U	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanesulfonic acid (PFOS)	4	2.80 U	1.70 J	2.70 U	2.80 U	2.80 U	3.00 U
Perfluorooctanoic acid (PFOA)	6	1.00 J	0.870 J	120	5.70	49.0	2.10
Perfluoropentanoic acid (PFPeA)		0.940 U	0.930 U	770	0.950 U	110	5.00
Perfluorotetradecanoic acid (PFTeDA)		2.80 U	2.80 U	35.0	2.80 U	2.00 J	3.00 U
Perfluorotridecanoic acid (PFTrDA)		2.80 U	2.80 U	49.0	2.80 U	2.60 J	3.00 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	48.0	3.60	6.80	3.50
+PFOS + PFOA (EPA)		1.00	2.57	120	5.70	49.0	2.10

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		18.0 U	19.0 U	18.0 U	18.0 U	18.0 U	19.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.10 U	9.30 U	9.00 U	9.00 U	9.00 U	9.40 U
Perfluorobutanesulfonic acid	600	0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.910 U	0.930 U	0.550 J	1.90	0.900 U	0.470 J
Perfluorohexanoic acid (PFHxA)		0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluorooctanesulfonamide (PFOSA)		2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U
Perfluorooctanesulfonic acid (PFOS)	4	2.70 U	2.80 U	2.70 U	1.00 J	7.00	2.80 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.910 U	0.930 U	0.900 U	0.900 U	0.900 U	0.940 U
Perfluorotetradecanoic acid (PFTeDA)		2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U
Perfluorotridecanoic acid (PFTrDA)		2.70 U	2.80 U	2.70 U	2.70 U	2.70 U	2.80 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.40 U	1.30 U	1.40 U	1.40 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	1.00	7.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

	Location	MW-636M1	MW-636M2	MW-653M1	MW-653M2
	Field Sample ID	MW-636M1_F21	MW-636M2_F21	MW-653M1_F21	MW-653M2_F21
	Sampling Depth	141.60 - 151.60	110.50 - 120.50	147.50 - 157.50	59.30 - 69.30
	Sampling Date	07/29/2021	07/29/2021	07/29/2021	07/29/2021
	SDG	320769861	320769861	320769861	320769861
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		19.0 U	19.0 U	20.0 U	18.0 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		9.50 U	9.30 U	9.80 U	9.10 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		9.50 U	9.30 U	9.80 U	9.10 U
Perfluorobutanesulfonic acid	600	0.950 U	1.20 J	3.50	0.910 U
Perfluorobutanoic acid (PFBA)		1.40 U	1.40 U	1.20 J	1.40 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U	0.930 U	0.980 U	0.910 U
Perfluorododecanoic acid (PFDoA)		1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroheptanesulfonic acid (PFHpS)		0.950 U	0.930 U	0.980 U	0.910 U
Perfluoroheptanoic acid (PFHpA)		1.40 U	1.40 U	2.50	1.40 U
Perfluorohexane sulfonate (PFHxS)	39	0.950 U	4.80	83.0	0.910 U
Perfluorohexanoic acid (PFHxA)		0.460 J	0.570 J	5.80	0.910 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.40 U	1.50 U	1.40 U
Perfluoroctanesulfonamide (PFOSA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluoroctanesulfonic acid (PFOS)	4	2.90 U	1.60 J	5.30	2.70 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.40 U	1.80 J	1.40 U
Perfluoropentanoic acid (PFPeA)		0.950 U	0.930 U	3.30	0.910 U
Perfluorotetradecanoic acid (PFTeDA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluorotridecanoic acid (PFTrDA)		2.90 U	2.80 U	2.90 U	2.70 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.40 U	1.50 U	1.40 U
+PFOS + PFOA (EPA)		0.00	1.60	7.10	0.00

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

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

	Location	MW-636M1	MW-636M2	MW-653M1	MW-653M2
	Field Sample ID	MW-636M1_F21	MW-636M2_F21	MW-653M1_F21	MW-653M2_F21
	Sampling Depth	141.60 - 151.60	110.50 - 120.50	147.50 - 157.50	59.30 - 69.30
	Sampling Date	07/29/2021	07/29/2021	07/29/2021	07/29/2021
	SDG	320769861	320769861	320769861	320769861
	Sample Type	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		0.00	4.80	90.8	0.00
§Sum of All Compounds Detected		0.460	8.17	106	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2022 J2 North PFAS Spring - J2 Range Eastern

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2022 J2 North PFAS Spring - J2 Range Northern

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

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
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorobutanesulfonic acid	600	0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorobutanoic acid (PFBA)		0.490 U	0.490 U	0.490 U	0.460 U	0.500 U	0.510 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		2.20	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorododecanoic acid (PFDoA)		1.70 J	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorohexane sulfonate (PFHxS)	39	0.990 U	0.990 U	0.990 U	0.930 U	1.00 U	1.00 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
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)		13.0	1.50 U	1.50 U	1.40 U	1.50 U	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.950 U	0.970 U	1.20 J	0.950 U	1.00 U	0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanesulfonic acid	600	1.30 J	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorobutanoic acid (PFBA)		0.380 J	0.490 U	0.250 J	0.290 J	0.510 U	0.500 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorododecanoic acid (PFDoA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.950 U	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexane sulfonate (PFHxS)	39	1.20 J	0.970 U	0.960 U	0.950 U	1.00 U	0.990 U
Perfluorohexanoic acid (PFHxA)		1.70 J	1.50 U	1.00 J	1.60 J	1.50 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroctanesulfonamide (PFOSA)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	1.40 U	1.40 U	1.00 J	1.50 U
Perfluoroctanoic acid (PFOA)	6	1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.900 J	0.490 U	0.620 J	0.510 J	0.510 U	0.500 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.40 U	1.40 U	1.50 U	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	1.00	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	5.30
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		1.00 U	0.970 U	0.590 J	0.940 U	0.930 U	0.950 U
Perfluorobutanesulfonic acid	600	1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorobutanoic acid (PFBA)		0.500 U	1.90 U	0.480 U	0.310 J	0.460 U	1.90 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorodecanoic acid (PFDA)		1.00 U	2.00	14.0	0.940 U	1.20 J	3.50
Perfluorododecanoic acid (PFDoA)		1.00 U	1.10 J	1.30 J	0.780 J	0.490 J	0.950 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoroheptanoic acid (PFHpA)		1.00 U	0.970 U	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorohexane sulfonate (PFHxS)	39	1.00 U	0.700 J	0.960 U	0.940 U	0.930 U	0.950 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.50 U	20.0	0.570 J	1.10 J	1.70 J
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluoropentanoic acid (PFPeA)		0.500 U	0.490 U	0.480 U	0.470 U	0.460 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.40 U	1.40 U	1.40 U	1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.50 U	0.990 J	1.40 U	1.40 U	1.40 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	10.0	15.0	3.20	1.20 J	6.50
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorobutanesulfonic acid	600	0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorobutanoic acid (PFBA)		1.30 J	0.400 J	0.510 J	0.490 U	2.10 U	2.10 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorodecanoic acid (PFDA)		18.0	5.10	14.0	11.0	23.0	1.00 J
Perfluorododecanoic acid (PFDoA)		0.800 J	0.650 J	0.560 J	0.980 U	0.640 J	1.00 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.870 J	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.970 U	1.00 U	0.980 U	1.00 U	1.00 U
Perfluorohexanoic acid (PFHxA)		0.580 J	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	3.50	4.70	6.50	6.00	19.0	5.80
Perfluorooctanesulfonamide (PFOSA)		1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoropentanoic acid (PFPeA)		1.60 J	0.250 J	0.500 U	0.490 U	0.520 U	0.510 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U	1.50 U	1.50 U	1.50 U	0.530 J	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U	0.820 J	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		16.0	5.20	6.50	5.70	16.0	1.90 J
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	6.50 J	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
Perfluorobutanesulfonic acid	600	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorobutanoic acid (PFBA)	0.310 J	0.490 U	0.440 J	0.280 J	0.490 U	0.490 U	
Perfluorodecanesulfonic acid (PFDS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	
Perfluorodecanoic acid (PFDA)	13.0	14.0	21.0	28.0	0.980 U	0.990 U	
Perfluorododecanoic acid (PFDoA)	0.830 J	0.990 J	0.960 J	1.70 J	0.980 U	0.990 U	
Perfluoroheptanesulfonic acid (PFHpS)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	
Perfluoroheptanoic acid (PFHpA)	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U	
Perfluorohexane sulfonate (PFHxS)	39	1.00 U	0.970 U	0.970 U	0.990 U	0.980 U	0.990 U
Perfluorohexanoic acid (PFHxA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	
Perfluorononanoic acid (PFNA)	5.9	3.50	3.60	3.00	4.50	1.50 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	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	1.30 J	1.50 U	1.50 U	
Perfluoroundecanoic acid (PFUnA)	19.0	20.0	20.0	23.0	1.50 U	1.50 U	
+PFOS + PFOA (EPA)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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
PFAS 21 Cmps	Screening Limit	Results (ng/L)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorobutanesulfonic acid	600	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorobutanoic acid (PFBA)		1.90 U	1.90 U	1.90 U	2.00 U	1.90 U	1.90 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorododecanoic acid (PFDoA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorohexane sulfonate (PFHxS)	39	0.970 U	0.950 U	0.950 U	1.00 U	0.950 U	0.970 U
Perfluorohexanoic acid (PFHxA)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorooctanesulfonamide (PFOSA)		0.590 J	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.480 U	0.480 U	0.470 U	0.500 U	0.480 U	0.480 U
Perfluorotetradecanoic acid (PFTeDA)		0.620 J	0.540 J	1.40 U	1.50 U	1.40 U	0.620 J
Perfluorotridecanoic acid (PFTrDA)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U	1.40 U	1.40 U	1.50 U	1.40 U	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.00	0.00	0.00	0.00

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)					
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluorobutanesulfonic acid	600	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluorobutanoic acid (PFBA)		0.480 U	2.00 U	2.00 U	0.490 U	0.290 J	0.490 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorodecanoic acid (PFDA)		0.960 U	0.980 U	0.990 U	0.980 U	2.20	0.970 U
Perfluorododecanoic acid (PFDoA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroheptanoic acid (PFHpA)		0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluorohexane sulfonate (PFHxS)	39	0.960 U	0.980 U	0.990 U	0.980 U	1.00 U	0.970 U
Perfluorohexanoic acid (PFHxA)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U	1.50 U	1.50 U	1.50 U	1.20 J	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U	1.50 U	0.790 J	0.590 J	1.60 U	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoropentanoic acid (PFPeA)		0.480 U	0.490 U	0.490 U	0.490 U	0.520 U	0.490 U
Perfluorotetradecanoic acid (PFTeDA)		0.610 J	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U	1.50 U	1.50 U	1.50 U	1.60 U	1.50 U
Perfluoroundecanoic acid (PFUnA)		1.40 U	1.50 U	1.50 U	1.50 U	1.40 J	1.50 U
+PFOS + PFOA (EPA)		0.00	0.00	0.790	0.590	0.00	0.00

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	MW-63S	
Field Sample ID	MW-63S_S22	
Sampling Depth	153.00 - 163.00	
Sampling Date	12/15/2021	
SDG	320831661	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.950 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.40 U
N-Ethyl perfluoroctanesulfonamidoacetic acid (NEtFOSAA)		0.950 U
N-Methyl perfluoroctanesulfonamidoacetic acid (NMeFOSAA)		0.950 U
Perfluorobutanesulfonic acid	600	0.950 U
Perfluorobutanoic acid (PFBA)		0.470 U
Perfluorodecanesulfonic acid (PFDS)		1.40 U
Perfluorodecanoic acid (PFDA)		0.950 U
Perfluorododecanoic acid (PFDoA)		0.950 U
Perfluoroheptanesulfonic acid (PFHpS)		1.40 U
Perfluoroheptanoic acid (PFHpA)		0.950 U
Perfluorohexane sulfonate (PFHxS)	39	0.950 U
Perfluorohexanoic acid (PFHxA)		1.40 U
Perfluorononanoic acid (PFNA)	5.9	1.40 U
Perfluorooctanesulfonamide (PFOSA)		1.40 U
Perfluorooctanesulfonic acid (PFOS)	4	1.40 U
Perfluorooctanoic acid (PFOA)	6	1.40 U
Perfluoropentanoic acid (PFPeA)		0.470 U
Perfluorotetradecanoic acid (PFTeDA)		1.40 U
Perfluorotridecanoic acid (PFTrDA)		1.40 U
Perfluoroundecanoic acid (PFUnA)		1.40 U
+PFOS + PFOA (EPA)	0.00	

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

Location	C-4D	C-4D	C-4M	C-4S	C-7D	C-7M
Field Sample ID	C-4D_S22	C-4D_S22D	C-4M_S22	C-4S_S22	C-7D_S22	C-7M_S22
Sampling Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Sampling Date	01/13/2022	01/13/2022	01/13/2022	01/13/2022	01/12/2022	01/12/2022
SDG	320838831	320838831	320838831	320838831	320838831	320838831
Sample Type	Normal	Field Duplicate	Normal	Normal	Normal	Normal
PFAS 21 Cmps	Screening Limit	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)	Results (ng/L)
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)		4.30	4.50	5.90	7.20	4.80
§Sum of All Compounds Detected		10.6	10.7	21.8	23.3	19.4
						11.0

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

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

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

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2022 J2 North PFAS Spring - J3 Range

Location	MW-237S	
Field Sample ID	MW-237S_S22	
Sampling Depth	49.00 - 59.00	
Sampling Date	12/29/2021	
SDG	320835011	
Sample Type	Normal	
PFAS 21 Cmps	Screening Limit	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)		0.990 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		1.50 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		0.990 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		0.990 U
Perfluorobutanesulfonic acid	600	0.990 U
Perfluorobutanoic acid (PFBA)		0.500 U
Perfluorodecanesulfonic acid (PFDS)		1.50 U
Perfluorodecanoic acid (PFDA)		0.990 U
Perfluorododecanoic acid (PFDoA)		0.990 U
Perfluoroheptanesulfonic acid (PFHpS)		1.50 U
Perfluoroheptanoic acid (PFHpA)		0.990 U
Perfluorohexane sulfonate (PFHxS)	39	0.990 U
Perfluorohexanoic acid (PFHxA)		1.50 U
Perfluorononanoic acid (PFNA)	5.9	1.50 U
Perfluorooctanesulfonamide (PFOSA)		1.50 U
Perfluorooctanesulfonic acid (PFOS)	4	1.50 U
Perfluorooctanoic acid (PFOA)	6	1.50 U
Perfluoropentanoic acid (PFPeA)		0.500 U
Perfluorotetradecanoic acid (PFTeDA)		1.50 U
Perfluorotridecanoic acid (PFTrDA)		1.50 U
Perfluoroundecanoic acid (PFUnA)		1.50 U
+PFOS + PFOA (EPA)	0.00	
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	0.00	

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2022 J2 North PFAS Spring - Lima Range

Location	MW-236S
Field Sample ID	MW-236S_S22
Sampling Depth	96.00 - 106.00
Sampling Date	01/11/2022
SDG	320838001
Sample Type	Normal
PFAS 21 Cmps	Screening Limit
	Results (ng/L)
6:2 Fluorotelomer sulfonate (6:2 FTS)	0.960 U
8:2 Fluorotelomer sulfonate (8:2 FTS)	1.40 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.960 U
N-Methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.960 U
Perfluorobutanesulfonic acid	600
Perfluorobutanoic acid (PFBA)	1.50 J
Perfluorodecanesulfonic acid (PFDS)	1.40 U
Perfluorodecanoic acid (PFDA)	0.960 U
Perfluorododecanoic acid (PFDoA)	0.960 U
Perfluoroheptanesulfonic acid (PFHpS)	1.40 U
Perfluoroheptanoic acid (PFHpA)	1.20 J
Perfluorohexane sulfonate (PFHxS)	39
Perfluorohexanoic acid (PFHxA)	1.20 J
Perfluorononanoic acid (PFNA)	5.9
Perfluorooctanesulfonamide (PFOSA)	1.40 U
Perfluorooctanesulfonic acid (PFOS)	4
Perfluorooctanoic acid (PFOA)	6
Perfluoropentanoic acid (PFPeA)	0.640 J
Perfluorotetradecanoic acid (PFTeDA)	1.40 U
Perfluorotridecanoic acid (PFTrDA)	1.40 U
Perfluoroundecanoic acid (PFUnA)	1.40 U
+PFOS + PFOA (EPA)	3.60
#PFOS + PFOA + PFDA + PFHpA + PFHxS + PFNA (MassDEP)	2.30

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

KGS 2022 J3 Range SPM Spring - J3 Range

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

PFAS Summary Report – Groundwater
Joint Base Cape Cod, IAGWSP

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

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.