BRAC Program Management Office East
Philadelphia, Pennsylvania

Final
2024 Summary Report for Private Water Well Sampling

Former Naval Air Warfare Center Warminster
Warminster, Pennsylvania

September 16, 2025

VOLUME 1 OF 3
TEXT, TABLE, AND ATTACHMENT 1

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Contract Number: N6247016D9008
Contract Task Order: WE04 and Contract Task Order No. N4008518F5769

1.0 INTRODUCTION

Tetra Tech has prepared this *Draft 2024 Summary Report for Private Water Well Sampling* for the Base Realignment and Closure Program Management Office East (BRAC PMOE) of the Naval Facilities Engineering Systems Command (NAVFAC) as part of Contract Task Order (CTO) number WE04 under the Comprehensive Long-Term Environmental Action Navy (CLEAN) contract number N6247016D9008. Some private well sampling for the project was performed in October to December 2024 under Warminster CTO Number N4008518F5769 for funding reasons, as agreed to by the Navy. This document includes the results from the sampling of groundwater from 228 privately-owned drinking water wells in 2024, located near the former Naval Air Warfare Center (NAWC) Warminster site in Warminster, Bucks County, Pennsylvania. The objective of the program was to determine the concentrations of per- and polyfluoroalkyl substances (PFAS), if present, in these wells.

Pennsylvania Department of Environmental Protection (PADEP) drinking water standards, or maximum contaminant levels (MCL), were promulgated on January 14, 2023 (PADEP, 2023). Since May 2023, the Navy has taken an actionable response by providing an alternative water source based on these levels. The Pennsylvania Department of Environmental Protection (PADEP) MCL for perfluorooctanoic acid (PFOA) is 14 nanograms per liter (ng/L), and the MCL for perfluorooctanesulfonic acid (PFOS) is 18 ng/L. At properties where PFOA and PFOS were detected at or above the PADEP MCLs, the Navy has offered bottled water to locations based on sample results collected since May 2023. Additionally, the Navy initiated resampling locations where laboratory limits of detection were above PADEP MCLs, or samples were collected prior to August 2020 (i.e., more than three years old).

As further described below, analytical results of the 2024 private water well sampling program were compared to:

- PFOA and PFOS PADEP MCLs (PADEP, 2023).
- PFOA, PFOS, perfluorobutanesulfonic acid (PFBS), perfluorononanoic acid (PFNA), perfluorohexanoic acid (PFHxA), perfluorohexanesulfonic acid (PFHxS), and hexafluoropropylene oxide dimer acid (HFPO-DA) Environmental Protection Agency (EPA) residential tap water RSLs (EPA, 2023), per the current off-property drinking water SAP (Tetra Tech, 2020) and SAP Field Task Modification Requests (FTMRs) (Tetra Tech, 2021; 2022).

Decision Rules from the *Final Sampling and Analysis Plan for Off-Base Drinking Water Per- and Polyfluoroalkyl Substances Sampling* and SAP FTMR Form 2 were revised in

2023 to address the publication of the PADEP MCLs and applied to the 2023 and 2024 monitoring program (Tetra Tech, 2020; 2021; 2022). The 2023 Decision Rules as applied to the drinking water program in 2023 and 2024 are provided in Attachment 1.

The Navy applied the PADEP MCLs for PFOA and PFOS to the 2024 drinking water sampling results as action levels for supplying alternate drinking water. The sampling program also categorized wells (locations) for potential resampling based on analytical results in comparison to the PADEP MCLs. The following summarizes Decision Rules that were first implemented in 2023 and incorporated the PADEP MCLs for identifying locations for specific resampling schedules (Tetra Tech, 2023):

- Four Consecutive Sampling Events: If a location exceeds 50 percent of the PFOA or PFOS PADEP MCLs, or based on judgment by the Project Team (Navy/EPA/PADEP) due to proximity to other locations that exceed the PFOA or PFOS PADEP MCLs, then affected residence(s) will be sampled for four consecutive sampling events.
- Annual Sampling: If a location within the category of four consecutive sampling events completes the four consecutive sampling events with PFOA and PFOS concentrations below their respective PADEP MCLs, then it will be sampled annually moving forward.
- Sample Every Three Years: If it has been three or more years since the last sampling event for a property with previous sampling results below the PADEP MCLs that are not connected to the municipal water supply, collect one sample and assess against existing Decision Rules.

It should be noted that the EPA issued PFAS drinking water regulations, effective on June 25, 2024 (EPA, 2024), and the Office of the Assistant Secretary of Defense (OASD) issued a policy memorandum (dated September 3, 2024) for application of the EPA PFAS MCLs to “DoD’s ongoing PFAS cleanups and prioritiz(ing) actions to address private drinking water wells with the highest levels of PFAS from DoD activities.” (DoD, 2024). The OASD policy memorandum directs that removal actions be initiated for private drinking water wells impacted by PFAS from DoD activities where concentrations are known to be at or above three times the EPA PFAS National Primary Drinking Water Regulation (NPDWR) MCL values. The federal MCLs for six regulated PFAS are: PFOA (4 ng/L), PFOS (4 ng/L), PFNA (10 ng/L), PFHxS (10 ng/L), HFPO-DA (10 ng/L), and a hazard index (HI) MCL of one for the combination of two or more of four PFAS (PFBS, PFNA, PFHxS, and HFPO-DA) in a drinking water sample. As such, the three times these MCLs as DoD interim removal action levels are the following for individual PFAS: PFOA (12 ng/L), PFOS (12 ng/L), PFHxS (30 ng/L), PFNA (30 ng/L), and HFPO-DA (30 ng/L). For those PFAS included in the HI MCL, the interim actionable level is an HI of three for a combination of two or more of the following analytes, PFBS, PFNA, PFHxS, and HFPO-DA in a drinking water sample (DoD, 2024).

The Navy is currently drafting an updated SAP for the off-base private drinking water sampling that incorporates the PFAS policy direction of the OASD memorandum; however, for the 2024 sampling program, the PADEP MCLs for PFOA and PFOS were the action levels for removal action and decision-making on resampling private drinking water wells.

2.0 SAMPLING AND ANALYSIS ACTIVITIES

The 2024 private water well samples were collected between January 3, 2024 and December 11, 2024, in accordance with approved SAPs (Tetra Tech, 2020; 2021; 2022) the decision rules discussed in Section 1.0, implemented in 2023 and 2024. Each private water well sampling location was assigned a unique sample identifier to protect personal information such as street addresses and names of property owners. A total of 228 private water well locations and 24 field duplicate samples were collected (Table 1). One of these 228 locations, location NAWC-654 had a sample originally collected at a post-treatment location, however, the location was re-visited at a later date at which time the treatment system was identified and a pre-treatment sample was collected. The treatment system included a filter (unknown material), water softener, and ultraviolet system installed by the private home owner. A summary of the sampling status shown in Table 1 is provided below. Locations have been divided into two main categories: “First Sampled in 2024” and “Resampled in 2024” for ease of discussion:

- Locations with Private Water Wells First Sampled in 2024: 209
    - Locations Offered Bottled Water: 98
      These are private water wells with sampling results above the PFOA and/or PFOS PADEP MCLs.
    - Locations in the Second Sample Needed Category: 51
      These are private water wells with sampling results less than 50 percent of the PFOA and/or PFOS PADEP MCLs.
    - Locations in the Four Consecutive Samples Category: 60
      These are private water wells with sampling results more than 50 percent of the PFOA and/or PFOS PADEP MCLs, but still below the PFOA and/or PFOS PADEP MCLs.

        - Of the 60 locations in the “Four Consecutive Samples” category identified above that had sample results below the PADEP MCLs, 14 were sampled a second time in 2024.
    - Locations in the Annual Sampling Category: 0
      These are private water wells that have completed the four consecutive sampling events with PFOA and/or PFOS concentrations below the PADEP MCLs and will now be sampled annually moving forward.
    - Locations in the Sample Every Three Years Category: 0
      These are private water wells that have not been sampled for three or more years and have previous sample results below the PADEP MCLs.

- Locations with Private Water Wells Resampled in 2024: 19
    - Locations Connected to Municipal Water: 1
      These are private water wells with sampling results above the PFOA and/or PFOS PADEP MCLs that have since been connected to a municipal water supply.
    - Locations Offered Bottled Water: 4
      These are private water wells with sampling results above the PFOA and/or PFOS PADEP MCLs.
    - Locations in the Second Sample Needed Category: 0
      These are private water wells with sampling results less than 50 percent of the PFOA and/or PFOS PADEP MCLs.
    - Locations in the Four Consecutive Samples Category: 11
      These are private water wells with sampling results more than 50 percent of the PFOA and/or PFOS PADEP MCLs, but still below the PFOA and/or PFOS PADEP MCLs.
        - Of the 11 locations in the “Four Consecutive Samples” category identified above that had sample results below the PADEP MCLs, two were sampled a second time in 2024.
    - Locations in the Annual Sampling Category: 2
      These are private water wells that have completed the four consecutive sampling events with PFOA and/or PFOS concentrations below the PADEP MCLs and will now be in the annual sampling category.
    - Locations in the Sample Every Three Years Category: 1
      These are private water wells that have not been sampled for three or more years and have previous sample results below the PADEP MCLs.

All samples were analyzed by Battelle Memorial Institute in Norwell, Massachusetts using EPA Method 537.1, Version 1.0. The analytical laboratory is accredited by both the Department of Defense (DoD) Environmental Laboratory Accreditation Program and the PADEP. The following 18 PFAS were analyzed and reported:

- 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
- 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)
- 4,8-dioxa-3H-perfluorononanoic acid (ADONA)
- hexafluoropropylene oxide dimer acid (HFPO-DA)
- n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
- n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
- PFBS
- Perfluorodecanoic acid (PFDA)
- Perfluorododecanoic acid (PFDoA)
- Perfluoroheptanoic acid (PFHpA)
- PFHxA
- PFHxS
- PFNA
- PFOA
- PFOS
- Perfluorotetradecanoic acid (PFTeA)
- Perfluorotridecanoic acid (PFTrDA)
- Perfluoroundecanoic acid (PFUnA)

3.0 DATA VALIDATION

The laboratory analytical results from the 2024 private well monitoring program were reviewed and validated in accordance with the following EPA and DoD guidance, as applicable:

- EPA *Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.1* (EPA, 2018a).

- EPA *Data Review and Validation Guidelines for PFAS Analyzed Using EPA Method 537* (EPA, 2018b).

The results of the data validation indicated that the data could be used for its intended purposes as part of the 2024 private well sampling program.

The validated data were then compared to:

Analyte							
	PFOA	PFOS	PFBS	PFNA	PFHxA	PFHxS	HFPO-DA
Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PADEP MCL(1)	**14**	**18**	NC	NC	NC	NC	NC
EPA Tap Water RSL(2)	4	6	**600**	**5.9**	**990**	**39**	**6**

Bold text indicates which criteria were used to compare with validated results.
NC - No criteria
1 - (PADEP, 2023).
2 - (EPA, 2023).

The results were evaluated using the decision rules implemented in May 2023. The results of these comparisons are discussed in Section 4.0.

4.0 RESULTS

During the 2024 sampling period, a total of 251 PFAS samples were collected from 228 private water well locations, 23 of which were sampled multiple times per the Decision Rules (see Table 1 for which locations were sampled multiple times). One of these private well locations (NAWC-654) had both a pre-treatment and post-treatment sample collected. Duplicate samples were collected at 24 well locations, and the sample results were consistent with the associated parent sample. Laboratory analytical data packages and validated analytical data reports are provided as Attachment 2.
A comparison of the results to applicable criteria is provided below:

- PADEP MCLs
  - Groundwater samples from 102 well locations had reported levels of PFOA and/or PFOS greater than or equal to the respective PADEP MCLs. Bottled water was offered to all 102 properties. One property (NAWC-419) has since been connected to municipal water. It should also be noted that the sample collected at well location NAWC-654 was a pre-treatment sample that had PFOA concentrations above the respective PADEP MCLs. Additionally, the sample collected at well location NAWC-710 had PFOA and/or PFOS results exceeding the PADEP MCLs, which was a post-treatment sample; however, this location was offered bottled water based on the post-treatment results, so a pre-treatment sample was not collected at NAWC-710.
  - Groundwater samples from 135 well locations had reported detectable levels of PFOA and/or PFOS less than their respective PADEP MCLs. It should be noted that bottled water is supplied to 10 properties due to either proximity to

other private drinking water wells that exceeded the PADEP MCLs or project team judgement.

- EPA RSLs – As discussed above, EPA Tap Water RSLs are risk screening levels only and are not considered actionable levels.
  - PFOA
    - 227 of 228 well locations had detections above the PFOA EPA Tap Water RSL.
    - 1 of 228 well locations had detections that were below the PFOA EPA Tap Water RSL.
  - PFOS
    - 201 of 228 well locations had detections above the PFOS EPA Tap Water RSL.
    - 27 of 228 well locations had detections that were below the PFOS EPA Tap Water RSL.
  - PFBS
    - No well location had detections above the PFBS EPA Tap Water RSL.
    - 228 of 228 well locations had detections that were below the PFBS EPA Tap Water RSL.
  - PFNA
    - 2 of 228 well locations had detections above the PFNA EPA Tap Water RSL.
    - 226 of 228 well locations had detections that were below the PFNA EPA Tap Water RSL.
  - PFHxA
    - No well location had detections above the PFHxA EPA Tap Water RSL.
    - 228 of 228 well locations had detections that were below the PFHxA EPA Tap Water RSL.
  - PFHxS
    - No well location had detections above the PFHxS EPA Tap Water RSL.
    - 228 of 228 well locations had detections that were below the PFHxS EPA Tap Water RSL.
  - HFPO-DA
    - No well locations had detectable levels of HFPO-DA.

5.0 REFERENCES

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TABLE

Table 1: 2024 PFAS Private Well Sampling Results
Former Naval Air Warfare Center Warminster
Warminster, Pennsylvania

Sample Number	Resample/Dup	Location	Status	Sample Date	PFBS	PFHpA	PFHxS	PFNA	11CL-PF3OUdS	ADONA	9Cl-PF3ONS	HFPO-DA	NEtFOSAA	NMeFOSAA	PFDA	PFDoA	PFHxA	PFTeA	PFTrDA	PFUnA	PFOA	PFOS	PFOA + PFOS
				PADEP MCL:[1,3]	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	14	18	NC
				EPA RSL:[2]	600	NC	39	5.9	NC	NC	NC	6	NC	NC	NC	NC	990	NC	NC	600	4	6	NC
				Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
NAWC-010324-RW-716		716	Four Consecutive Sampling Events	01/03/2024	7.14	2.85	1.55 J	1.41 J	U	U	U	U	U	U	U	U	3.75	U	U	U	8.67	4.74	13.4
NAWC-010424-RW-668		668	Bottled Water	01/04/2024	2.88	2.52	1.52 J	1.21 J	U	U	U	U	U	U	U	U	2.62	U	U	U	8.23	4.97	13.2
NAWC-010924-RW-509		509	Four Consecutive Sampling Events	01/09/2024	5.68	2.93	1.71 J	1.6 J	U	U	U	U	U	U	U	U	3.68	U	U	U	12	7.66	19.7
NAWC-011624-RW-518		518	Bottled Water	01/16/2024	4.23	5.96	3.3	4.01	U	U	U	U	U	U	0.877 J	U	6.09	U	U	U	28.2	31.6	59.8
NAWC-011624-RW-518-D	Dup	518	Bottled Water	01/16/2024	4.3	7.25	3.4	5.08	U	U	U	U	U	U	1.08 J	U	7.2	U	U	U	33.6	31.6	65.2
NAWC-011624-RW-654-POST		654	Bottled Water	01/16/2024	6.15	2.09 J	1.78 J	1.36 J	U	U	U	U	U	U	0.385 J	U	3.14	U	U	U	6.53	7.18	13.7
NAWC-011724-RW-952		952	Bottled Water	01/17/2024	7.78	3.22	2.58	2.29	U	U	U	U	U	U	U	U	6.16	U	U	U	14.9	11.7	26.6
NAWC-012324-RW-732		732	Bottled Water	01/23/2024	6.62	5.32	2.58	2.77	U	U	U	U	U	U	0.501 J	U	8.3	U	U	U	19.4	17.2	36.6
NAWC-012324-RW-763		763	Four Consecutive Sampling Events	01/23/2024	7.22	3.24	2.42	1.95 J	U	U	U	U	U	U	0.315 J	U	5.78	U	U	U	10.8	9.06	19.9
NAWC-012424-RW-719		719	Four Consecutive Sampling Events	01/24/2024	5.67	3.42	1.64 J	1.58 J	U	U	U	U	U	U	U	U	3.97	U	U	U	12.1	8.05	20.2
NAWC-013024-RW-344		344	Annual Sampling	01/30/2024	6.66	3.12	2.78	1.38 J	U	U	U	U	U	U	U	U	4.14	U	U	U	11.3	7.1	18.4
NAWC-013024-RW-686		686	Bottled Water	01/30/2024	4.61	4.51	1.76 J	3.3	U	U	U	U	U	U	1.91 J	U	11.1	U	U	U	23.4	6.15	29.6
NAWC-013024-RW-930		930	Bottled Water	01/30/2024	4.64	3.58	2.5	1.87 J	U	U	U	U	U	U	U	U	4.68	U	U	U	12.8	10.7	23.5
NAWC-013024-RW-959		959	Four Consecutive Sampling Events	01/30/2024	1.2 J	1.8 J	1.75 J	0.766 J	U	U	U	U	U	U	U	U	3.42 J+	U	U	U	5.59	2.61	8.2
NAWC-013124-RW-089		089	Sample every three years	01/31/2024	2.71	4.27	1.6 J	1.67 J	U	U	U	U	U	U	U	U	7.53	U	U	U	12.2	3.55	15.8
NAWC-013124-RW-419		419	Connected	01/31/2024	7.14	4.89	6.24	2.33	U	U	U	U	U	U	U	U	6.52	U	U	U	18.3	16.5	34.8
NAWC-013124-RW-575		575	Bottled Water	01/31/2024	11.3	4.35	2.19 J	1.96 J	U	U	U	U	U	U	U	U	5.49	U	U	U	14.1	13.7	27.8
NAWC-013124-RW-575-D	Dup	575	Bottled Water	01/31/2024	11.7	4.4	2.29	2.09 J	U	U	U	U	U	U	U	U	5.36	U	U	U	14.9	13.8	28.7
NAWC-013124-RW-616		616	Bottled Water	01/31/2024	7.49	8.29	3.6	3.96	U	U	U	U	U	U	0.336 J	U	8.89	U	U	U	30.9	32.4	63.3
NAWC-013124-RW-644		644	Bottled Water	01/31/2024	2.99	3.08	1.57 J	2.16 J	U	U	U	U	U	U	0.5 J	U	6.02	U	U	U	13.7	7.02	20.7
NAWC-020124-RW-435		435	Four Consecutive Sampling Events	02/01/2024	3.58	3.09	1.74 J	1.31 J	U	U	U	U	U	U	U	U	5.03	U	U	U	11.1	7.77	18.9
NAWC-020124-RW-710-POST		710	Bottled Water	02/01/2024	3.64	16.8	1.64 J	21.6	U	U	U	U	U	U	28.4	U	45.6	U	U	U	91.7	8.41	100
NAWC-020124-RW-799		799	Four Consecutive Sampling Events	02/01/2024	5.65	2.54	4.77	0.832 J	U	U	U	U	U	U	U	U	3.85	U	U	U	7.57	6.06	13.6
NAWC-020624-RW-634		634	Four Consecutive Sampling Events	02/06/2024	5.22	2.97	1.74 J	1.67 J	U	U	U	U	U	U	U	U	3.81	U	U	U	11.1	6.55	17.7
NAWC-020624-RW-701		701	Four Consecutive Sampling Events	02/06/2024	5.57	2.02 J	1.4 J	1.05 J	U	U	U	U	U	U	U	U	3.09	U	U	U	6.84	4.44	11.3
NAWC-020724-RW-537		537	Four Consecutive Sampling Events	02/07/2024	9.13	1.74 J	1.29 J	0.998 J	U	U	U	U	U	U	U	U	2.42	U	U	U	5.5	8.06	13.6
NAWC-020824-RW-600		600	Bottled Water	02/08/2024	4.52	3.43	2.32	1.77 J	U	U	U	U	U	U	U	U	4.25	U	U	U	13.6 J+	15	28.6
NAWC-020824-RW-600-D	Dup	600	Bottled Water	02/08/2024	5.09	3.32	2.17 J	1.66 J	U	U	U	U	U	U	U	U	3.82	U	U	U	12.9 J+	14	26.9
NAWC-020824-RW-743		743	Bottled Water	02/08/2024	8.23	2.74	2 J	1.16 J	U	U	U	U	U	U	U	U	4.62	U	U	U	8.19 J+	6.59	14.8
NAWC-021424-RW-074		074	Four Consecutive Sampling Events	02/14/2024	3.05	3.09	1.17 J	1.41 J	U	U	U	U	U	U	U	U	3.69	U	U	U	8.67	3.29	12
NAWC-022124-RW-364		364	Four Consecutive Sampling Events	02/21/2024	3.75	2.81	2.72	1.45 J	U	U	U	U	U	U	U	U	4.04	U	U	U	8.76	7.11	15.9
NAWC-022724-RW-527		527	Bottled Water	02/27/2024	6.56	5.86	2.61	2.63	U	U	U	U	U	U	0.297 J	U	6.6	U	U	U	20.7	21.7	42.4
NAWC-022824-RW-501		501	Four Consecutive Sampling Events	02/28/2024	4.97	2.23 J	1.61 J	1.26 J	U	U	U	U	U	U	U	U	2.33	U	U	U	8.18	8	16.2
NAWC-022824-RW-950		950	Bottled Water	02/28/2024	7.92	3.01	2.31	1.39 J	U	U	U	U	U	U	U	U	4.23	U	U	U	10.1	8.81	18.9
NAWC-030524-RW-271		271	Bottled Water	03/05/2024	6.96	4.18	5.02	1.78 J	U	U	U	U	U	U	U	U	5.14	U	U	U	16.6	11.5	28.1
NAWC-030524-RW-513		513	Bottled Water	03/05/2024	6.21	4.69	2.03 J	3.01	U	U	U	U	U	U	2.34	U	8.27	U	U	U	19.5	6.94	26.4
NAWC-030524-RW-628		628	Need Second Sample	03/05/2024	3.51	3.04	2.05 J	1.63 J	U	U	U	U	U	U	U	U	4.47	U	U	U	12.5	9.15	21.7
NAWC-030624-RW-539		539	Four Consecutive Sampling Events	03/06/2024	7.27	3.33	2.23	1.82 J	U	U	U	U	U	U	U	U	4.03	U	U	U	13.7	12.9	26.6
NAWC-030624-RW-539-D	Dup	539	Four Consecutive Sampling Events	03/06/2024	7.84	3.54	2.28	1.87 J	U	U	U	U	U	U	U	U	4.24	U	U	U	13.5	13.1	26.6
NAWC-030624-RW-588		588	Need Second Sample	03/06/2024	6.91	3.17	2.04 J	1.45 J	U	U	U	U	U	U	U	U	3.83	U	U	U	11.9	9.49	21.4
NAWC-030624-RW-791		791	Need Second Sample	03/06/2024	1.42 J	1.43 J	1.03 J	0.733 J	U	U	U	U	U	U	U	U	1.51 J	U	U	U	5.77	4	9.77
NAWC-030724-RW-508		508	Need Second Sample	03/07/2024	5.29	2.52	2.15 J	0.932 J	U	U	U	U	U	U	U	U	3.93	U	U	U	8.05	6.69	14.7
NAWC-030724-RW-536		536	Need Second Sample	03/07/2024	23.7	4.24	1.78 J	2.62	U	U	U	U	U	U	U	U	4.34	U	U	U	13.8	8.38	22.2
NAWC-031324-RW-567		567	Four Consecutive Sampling Events	03/13/2024	5.43	3.35	1.81 J	1.54 J	U	U	U	U	U	U	U	U	4.33	U	U	U	12.1	10.2	22.3
NAWC-031324-RW-573		573	Four Consecutive Sampling Events	03/13/2024	5.03	2.3	1.31 J	1.08 J	U	U	U	U	U	U	U	U	3.27	U	U	U	7.26	6.76	14
NAWC-031324-RW-685		685	Bottled Water	03/13/2024	4	6.47	1.42 J	4.16	U	U	U	U	U	U	1.01 J	U	5.36	U	U	U	29.4	4.87	34.3
NAWC-031324-RW-722		722	Bottled Water	03/13/2024	6.25	9.25	2.03 J	3.71	U	U	U	U	U	U	6.3	U	12.9	U	U	U	27.3	7.86	35.2
NAWC-031324-RW-921		921	Four Consecutive Sampling Events	03/13/2024	7.09	3.27	1.87 J	1.56 J	U	U	U	U	U	U	U	U	4.8	U	U	U	10.3	8.28	18.6
NAWC-031424-RW-560		560	Need Second Sample	03/14/2024	5.23	3.69	1.55 J	1.69 J	U	U	U	U	U	U	0.345 J	U	4.74	U	U	U	12.5	9.74	22.2
NAWC-031424-RW-620		620	Need Second Sample	03/14/2024	3.47	2.61	1.44 J	1.21 J	U	U	U	U	U	U	U	U	3.35	U	U	U	9.16	11.3	20.5
NAWC-031424-RW-630		630	Need Second Sample	03/14/2024	2.63	1.81 J	1.42 J	0.871 J	U	U	U	U	U	U	U	U	2.5	U	U	U	7.03	3.67	10.7
NAWC-031424-RW-630-D	Dup	630	Need Second Sample	03/14/2024	2.75	1.84 J	1.42 J	0.916 J	U	U	U	U	U	U	U	U	2.39	U	U	U	7.04	3.78	10.8
NAWC-031924-RW-618		618	Four Consecutive Sampling Events	03/19/2024	4.51	3.33	1.93 J	1.61 J	U	U	U	U	U	U	U	U	3.97	U	U	U	12	10.6	22.6
NAWC-031924-RW-960		960	Bottled Water	03/19/2024	5.06	19.6	1.36 J	8.53	U	U	U	U	U	U	0.536 J	U	23.4	U	U	U	46.7	5.93	52.6
NAWC-032724-RW-502		502	Need Second Sample	03/27/2024	10.1	4.05	2.16	1.53 J	U	U	U	U	U	U	U	U	6.55	U	U	U	11.8	7.13	18.9
NAWC-032824-RW-596		596	Need Second Sample	03/28/2024	5.35	3.61	1.64 J	2 J	U	U	U	U	U	U	0.345 J	U	4.84	U	U	U	10.6	9.72	20.3
NAWC-032824-RW-622		622	Need Second Sample	03/28/2024	4.49	3.54	1.79 J	1.78 J	U	U	U	U	U	U	U	U	4.54	U	U	U	13.4	8.79	22.2
NAWC-040324-RW-597		597	Need Second Sample	04/03/2024	4.86	2.66	1.76 J	1.45 J	U	U	U	U	U	U	0.323 J	U	3.92	U	U	U	8.26	11.4	19.7
NAWC-040424-RW-654	Pretreatment	654	Bottled Water	04/04/2024	4.2	6.95	2.12 J	2.36	U	U	U	U	U	U	0.502 J	U	13.9	U	U	U	18.9	10.6	29.5
NAWC-041024-RW-666		666	Need Second Sample	04/10/2024	3.53	3.44	1.99 J	1.65 J	U	U	U	U	U	U	U	U	5.23	U	U	U	13.1	9.95	23.1
NAWC-041024-RW-961		961	Bottled Water	04/10/2024	2.63	3.18	8.38	1.41 J	U	U	U	U	U	U	U	U	6.16	U	U	U	11.8	18.4	30.2
NAWC-041724-RW-649		649	Four Consecutive Sampling Events	04/17/2024	3.12	3.14	1.8 J	0.898 J	U	U	U	U	U	U	U	U	4.25	U	U	U	10.5	4.43	14.9
NAWC-041724-RW-690		690	Four Consecutive Sampling Events	04/17/2024	4.72	3.47	1.96 J	1.76 J	U	U	U	U	U	U	U	U	4.08	U	U	U	12.8	9.1	21.9
NAWC-041724-RW-690-D	Dup	690	Four Consecutive Sampling Events	04/17/2024	5.15	3.75	1.88 J	1.74 J	U	U	U	U	U	U	U	U	4.21	U	U	U	12.8	8.52	21.3
NAWC-041724-RW-702		702	Four Consecutive Sampling Events	04/17/2024	6.97	3.93	2.01 J	1.79 J	U	U	U	U	U	U	U	U	4.95	U	U	U	13.2	9.68	22.9
NAWC-042324-RW-683		683	Four Consecutive Sampling Events	04/23/2024	4.45	3.57	2.03 J	1.62 J	U	U	U	U	U	U	U	U	4.34	U	U	U	13	8.17	21.2
NAWC-042324-RW-700		700	Need Second Sample	04/23/2024	3.52	1.35 J	1.07 J	0.603 J	U	U	U	U	U	U	U	U	2.03 J	U	U	U	4.42	2.07 J	6.49
NAWC-042324-RW-962		962	Bottled Water	04/23/2024	8.22	5.15	1.67 J	3.03	U	U	U	U	U	U	0.611 J	U	7.08	U	U	U	15.9	14.6	30.5
NAWC-042324-RW-964		964	Bottled Water	04/23/2024	10.7	4.18	3.34	2.29	U	U	U	U	0.684 J	0.532 J	0.485 J	U	5.14	U	U	U	14.3	18.1	32.4
NAWC-042424-RW-884		884	Four Consecutive Sampling Events	04/24/2024	4.47	2.57	1.5 J	1.05 J	U	U	U	U	U	U	U	U	3.59	U	U	U	8.27	7.76	16
NAWC-050124-RW-639		639	Four Consecutive Sampling Events	05/01/2024	3.93	3.82	1.86 J	1.47 J	U	U	U	U	U	U	U	U	4.58	U	U	U	12.4	9.9	22.3
NAWC-050124-RW-963		963	Four Consecutive Sampling Events	05/01/2024	17.8	2.55	2.48	1.36 J	U	U	U	U	U	U	U	U	3.79	U	U	U	8.31	8.43	16.7
NAWC-050224-RW-323		323	Bottled Water	05/02/2024	7.9	4.4	1.92 J	3.44	U	U	U	U	U	U	0.643 J	U	6.35	U	U	U	14.2	10.8	25
NAWC-050824-RW-965		965	Bottled Water	05/08/2024	4.28	4.72	1.61 J	3.22	U	U	U	U	U	U	0.469 J	U	6.54	U	U	U	15.4	13.3	28.7
NAWC-050824-RW-965-D	Dup	965	Bottled Water	05/08/2024	4.74	5.19	1.8 J	3.51	U	U	U	U	U	U	0.503 J	U	7.45	U	U	U	16.4	14.9	31.3
NAWC-051324-RW-717		717	Need Second Sample	05/13/2024	3.57	0.909 J	1.13 J	0.472 J	U	U	U	U	U	U	U	U	1.06 J	U	U	U	3.19	1.8 J	4.99
NAWC-052124-RW-507		507	Four Consecutive Sampling Events	05/21/2024	5.13	2.53	1.61 J	1.15 J	U	U	U	U	U	U	U	U	2.72	U	U	U	9.19	6.65	15.8
NAWC-052124-RW-966		966	Bottled Water	05/21/2024	9.96	5.38	2.18 J	3.38	U	U	U	U	U	U	0.793 J	U	6.44	U	U	U	18.7	16.9	35.6
NAWC-052924-RW-544		544	Four Consecutive Sampling Events	05/29/2024	4.04	2.94	1.77 J	1.34 J	U	U	U	U	U	U	U	U	3.76	U	U	U	10.8	9.06	19.9
NAWC-053024-RW-967		967	Four Consecutive Sampling Events	05/30/2024	3.85	2.75	2.03 J	1.53 J	U	U	U	U	U	U	U	U	3.42	U	U	U	8.97	11.5	20.5
NAWC-060524-RW-968		968	Bottled Water	06/05/2024	5.15	4.18	2.41	4.28	U	U	U	U	U	U	0.762 J	U	4.42	U	U	U	16	15	31
NAWC-060524-RW-969		969	Bottled Water	06/05/2024	5.44	5.15	2.53	2.75	U	U	U	U	U	U	0.663 J	U	5.32	U	U	U	16.6	16.5	33.1
NAWC-060524-RW-970		970	Bottled Water	06/05/2024	5.52	4.59	2.27	3.78	U	U	U	U	U	U	0.665 J	U	5.38	U	U	U	16	16.8	32.8
NAWC-060524-RW-970-D	Dup	970	Bottled Water	06/05/2024	5.85	5	2.43	4.18	U	U	U	U	U	U	0.661 J	U	6.09	U	U	U	17.1	17.6	34.7
NAWC-060524-RW-971		971	Four Consecutive Sampling Events	06/05/2024	2.91	2.57	0.955 J	1.75 J	U	U	U	U	U	U	0.638 J	U	2.53	U	U	U	7.24	8	15.2
NAWC-060624-RW-972		972	Bottled Water	06/06/2024	7.79	4.79	3.21	3.48	U	U	U	U	U	U	0.497 J	U	5.56	U	U	U	16.3	16.3	32.6
NAWC-060624-RW-974		974	Bottled Water	06/06/2024	3.73	4.12	2.28	2.53	U	U	U	U	U	U	0.36 J	U	5.95	U	U	U	14.8	20.4	35.2
NAWC-061324-RW-657		657	Four Consecutive Sampling Events	06/13/2024	5.95	4.13	2.12 J	1.71 J	U	U	U	U	U	U	0.364 J	U	6.46	U	U	U	13.2	11.9	25.1
NAWC-061324-RW-785		785	Bottled Water	06/13/2024	6.9	5.58	1.69 J	2.83	U	U	U	U	U	U	0.568 J	U	7.92	U	U	U	16.5	11	27.5
NAWC-061324-RW-975		975	Four Consecutive Sampling Events	06/13/2024	6.71	2.44	2.19 J	1.46 J	U	U	U	U	U	U	U	U	3.05	U	U	U	8.99	14.8	23.8
NAWC-061924-RW-178		178	Annual Sampling	06/19/2024	2.06 J	2.42 J	7.24 J	0.957 J	1.07 UJ	0.853 UJ	1.07 UJ	1.07 UJ	1.28 UJ	1.07 UJ	1.07 UJ	1.07 UJ	1.89 J	1.07 UJ	1.07 UJ	1.07 UJ	8.29 J	8.73 J	17 J
NAWC-061924-RW-600		600	Bottled Water	06/19/2024	4.24	4.02	2.1 J	1.9 J	U	U	U	U	U	U	U	U	4.89	U	U	U	14.6	14	28.6
NAWC-061924-RW-977		977	Bottled Water	06/19/2024	6.64	5.24	2.09 J	3.46	U	U	U	U	U	U	0.56 J	U	7.91	U	U	U	15.9	15	30.9
NAWC-062624-RW-644		644	Bottled Water	06/26/2024	3.39	4.83	2.01 J	3.08	U	U	U	U	U	U	0.934 J	U	10.2	U	U	U	U	8.84	31.9
NAWC-062624-RW-644-D	Dup	644	Bottled Water	06/26/2024	3.77	4.87	2.06 J	3.14	U	U	U	U	U	U	0.931 J	U	10.1	U	U	U	23.2	9.14	32.3
NAWC-062624-RW-921		921	Four Consecutive Sampling Events	06/26/2024	5.97	3.22	2.03 J	1.45 J	U	U	U	U	U	U	U	U	4.63	U	U	U	10.3	8.37	18.7
NAWC-062624-RW-951		951	Need Second Sample	06/26/2024	5.27	3.86	2.72	1.82 J	U	U	U	U	U	U	U	U	5.67	U	U	U	12.6	10.5	23.1
NAWC-062724-RW-484		484	Four Consecutive Sampling Events	06/27/2024	5.67	3.95	1.12 J	1.37 J	U	U	U	U	U	U	U	U	5.6	U	U	U	11.9	5.43	17.3
NAWC-062724-RW-550		550	Four Consecutive Sampling Events	06/27/2024	4.35	3.19	1.94 J	1.56 J	U	U	U	U	U	U	U	U	3.99	U	U	U	11.3	10.3	21.6
NAWC-062724-RW-743		743	Bottled Water	06/27/2024	5.01	4.26	2.52	2.33	U	U	U	U	U	U	0.357 J	U	6.63	U	U	U	14.7	11	25.7
NAWC-070124-RW-526		526	Need Second Sample	07/01/2024	6.5	3.52	2.41	1.39 J	U	U	U	U	U	U	U	U	5.09	U	U	U	11.7	7.77	19.5
NAWC-070124-RW-528		528	Need Second Sample	07/01/2024	4.35	4.03	1.37 J	1.97 J	U	U	U	U	U	U	0.353 J	U	6.18	U	U	U	12.5	8.85	21.4
NAWC-070124-RW-613		613	Need Second Sample	07/01/2024	5.56	4.41	3.41	1.89 J	U	U	U	U	U	U	0.298 J	U	4.71	U	U	U	13.7	11.3	25
NAWC-070124-RW-615		615	Need Second Sample	07/01/2024	2.5	1.92 J	1.27 J	1 J	U	U	U	U	U	U	U	U	2.41	U	U	U	8.33	4.06	12.4
NAWC-070224-RW-504		504	Need Second Sample	07/02/2024	6.81	2.48	2.1 J	1.29 J	U	U	U	U	U	U	U	U	3.87	U	U	U	8.34	6.57	14.9
NAWC-070224-RW-570		570	Need Second Sample	07/02/2024	4.54	3.28	1.79 J	1.41 J	U	U	U	U	U	U	U	U	4.24	U	U	U	11.1	7.79	18.9
NAWC-070224-RW-589		589	Need Second Sample	07/02/2024	3.89	2.21	1.4 J	1.28 J	U	U	U	U	U	U	U	U	3.08	U	U	U	7.96	7.28	15.2

Table 1: 2024 PFAS Private Well Sampling Results
Former Naval Air Warfare Center Warminster
Warminster, Pennsylvania

Sample Number	Resample/Dup	Location	Status	Sample Date	PFBS	PFHpA	PFHxS	PFNA	11CL-PF3OUdS	ADONA	9Cl-PF3ONS	HFPO-DA	NEtFOSAA	NMeFOSAA	PFDA	PFDoA	PFHxA	PFTeA	PFTrDA	PFUnA	PFOA	PFOS	PFOA + PFOS
				PADEP MCL:[1,3]	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	14	18	NC
				EPA RSL:[2]	600	NC	39	5.9	NC	NC	NC	6	NC	NC	NC	NC	990	NC	NC	600	4	6	NC
				Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
NAWC-070224-RW-626		626	Need Second Sample	07/02/2024	6.92	3.88	1.72 J	1.5 J	U	U	U	U	U	U	U	U	6.02	U	U	U	12.3	6.87	19.2
NAWC-070224-RW-634		634	Four Consecutive Sampling Events	07/02/2024	4.97	2.98	1.69 J	1.46 J	U	U	U	U	U	U	U	U	3.65	U	U	U	10.6	6.08	16.7
NAWC-070224-RW-634-D	Dup	634	Four Consecutive Sampling Events	07/02/2024	4.72	3.17	1.83 J	1.65 J	U	U	U	U	U	U	U	U	3.86	U	U	U	11.4	6.18	17.6
NAWC-071024-RW-524		524	Need Second Sample	07/10/2024	6.27	3.93	2.17	1.7 J	U	U	U	U	U	U	U	U	5.68	U	U	U	13	7.61	20.6
NAWC-071024-RW-535		535	Bottled Water	07/10/2024	13.6	6.77	2.3	1.69 J	U	U	U	U	U	U	U	U	9.75	U	U	U	18.8	7.69	26.5
NAWC-071024-RW-604		604	Need Second Sample	07/10/2024	5.54	4.11	1.87 J	1.86 J	U	U	U	U	U	U	U	U	6.4	U	U	U	13.7	10.4	24.1
NAWC-071024-RW-647		647	Bottled Water	07/10/2024	9.31	5.45	4.2	2.13 J	U	U	U	U	U	U	0.367 J	U	5.94	U	U	U	24.7	15.8	40.5
NAWC-071024-RW-882		882	Need Second Sample	07/10/2024	8.05	4.41	2.68	1.68 J	U	U	U	U	U	U	U	U	6.35	U	U	U	13.7	10.3	24
NAWC-071024-RW-976		976	Bottled Water	07/10/2024	6.13	4.8	6.18	1.73 J	U	U	U	U	U	U	0.464 J	U	6.08	U	U	U	17.8	22.3	40.1
NAWC-071124-RW-771		771	Need Second Sample	07/11/2024	5.4	3.21	1.74 J	1.54 J	U	U	U	U	U	U	U	U	4.18	U	U	U	10.9	8.47	19.4
NAWC-071124-RW-827		827	Bottled Water	07/11/2024	8.87	5.68	1.21 J	4	U	U	U	U	U	U	1.68 J	U	6.07	U	U	U	18	7.45	25.5
NAWC-071124-RW-897		897	Need Second Sample	07/11/2024	6.19	3.1	2.08 J	1.27 J	U	U	U	U	U	U	U	U	4.27	U	U	U	9.91	7.85	17.8
NAWC-071124-RW-897-D	Dup	897	Need Second Sample	07/11/2024	6.34	2.97	1.88 J	1.38 J	U	U	U	U	U	U	U	U	4.46	U	U	U	10.3	7.63	17.9
NAWC-071724-RW-531		531	Bottled Water	07/17/2024	5.78	4.23	2.84	2.34	U	U	U	U	U	U	0.452 J	U	5.75	U	U	U	17.3	12.2	29.5
NAWC-071724-RW-670		670	Need Second Sample	07/17/2024	7.07	3.68	1.88 J	1.53 J	U	U	U	U	U	U	U	U	5.77	U	U	U	12.4	8.13	20.5
NAWC-071724-RW-693		693	Need Second Sample	07/17/2024	5.93	4.31	2.16 J	1.96 J	U	U	U	U	U	U	U	U	6.51	U	U	U	13.3	13.6	26.9
NAWC-071824-RW-545		545	Bottled Water	07/18/2024	5.15	4.41	2.07 J	1.97 J	U	U	U	U	U	U	U	U	6.12	U	U	U	14.4	11.2	25.6
NAWC-071824-RW-558		558	Need Second Sample	07/18/2024	6.64	3.42	1.26 J	1.34 J	U	U	U	U	U	U	U	U	5.47	U	U	U	11.1	5.62	16.7
NAWC-071824-RW-567		567	Four Consecutive Sampling Events	07/18/2024	5.12	3.37	2 J	1.55 J	U	U	U	U	U	U	U	U	4.65	U	U	U	12.1	10.6	22.7
NAWC-071824-RW-925		925	Need Second Sample	07/18/2024	6.27	2.71	2 J	1.48 J	U	U	U	U	U	U	U	U	4.23	U	U	U	9.79	7.58	17.4
NAWC-072324-RW-716		716	Four Consecutive Sampling Events	07/23/2024	6.24	2.33	1.63 J	1.2 J	U	U	U	U	U	U	U	U	3.19	U	U	U	8.19	4.54	12.7
NAWC-072324-RW-735		735	Bottled Water	07/23/2024	3.37	4.21	1.91 J	2.14 J	U	U	U	U	U	U	U	U	5.47	U	U	U	14.4	11.6	26
NAWC-072324-RW-762		762	Bottled Water	07/23/2024	2.93	3.98	2.56	1.99 J	U	U	U	U	U	U	U	U	5.02	U	U	U	15.5	16.1	31.6
NAWC-072324-RW-777		777	Need Second Sample	07/23/2024	2.44	2.24	1.12 J	1.03 J	U	U	U	U	U	U	U	U	3.44	U	U	U	7.11	4.92	12
NAWC-072324-RW-778		778	Bottled Water	07/23/2024	7.94	5.31	1.76 J	2.43	U	U	U	U	U	U	0.386 J	U	7.11	U	U	U	15.7	10.2	25.9
NAWC-072324-RW-830		830	Bottled Water	07/23/2024	4.12	6.15	0.979 J	2.81	U	U	U	U	U	U	0.706 J	U	7.32	U	U	U	16.9	3.58	20.5
NAWC-072324-RW-930		930	Bottled Water	07/23/2024	4.9	4.61	3.88	1.86 J	U	U	U	U	U	U	U	U	5.47	U	U	U	14.6	11	25.6
NAWC-072324-RW-930-D	Dup	930	Bottled Water	07/23/2024	4.27	3.59	3.11	1.44 J	U	U	U	U	U	U	U	U	4.37	U	U	U	11.8	9.35	21.2
NAWC-072424-RW-546		546	Bottled Water	07/24/2024	11.6	3.95	2.38	1.33 J	U	U	U	U	U	U	U	U	5.06	U	U	U	13.3	9.9	23.2
NAWC-072424-RW-546-D	Dup	546	Bottled Water	07/24/2024	11.6	4.07	2.38	1.41 J	U	U	U	U	U	U	U	U	5.4	U	U	U	14.8	9.91	24.7
NAWC-072424-RW-696		696	Bottled Water	07/24/2024	4.59	3.4	1.48 J	2.32	U	U	U	U	U	U	0.512 J	U	3.72	U	U	U	15.5	4.02	19.5
NAWC-072424-RW-718		718	Need Second Sample	07/24/2024	4.91	3.61	1.94 J	1.74 J	U	U	U	U	U	U	0.311 J	U	5.09	U	U	U	11.8	11.3	23.1
NAWC-072424-RW-752		752	Need Second Sample	07/24/2024	4.66	3.47	1.57 J	1.73 J	U	U	U	U	U	U	U	U	5.46	U	U	U	9.42	7.11	16.5
NAWC-072424-RW-804		804	Need Second Sample	07/24/2024	7.21	3.07	1.16 J	1.71 J	U	U	U	U	U	U	0.352 J	U	4.83	U	U	U	9.79	6.7	16.5
NAWC-072524-RW-515		515	Need Second Sample	07/25/2024	7.65	5.01	1.99 J	1.48 J	U	U	U	U	U	U	U	U	8.59	U	U	U	13.5	6.6	20.1
NAWC-072524-RW-672		672	Bottled Water	07/25/2024	6.69	5.16	2.42	2.94	U	U	U	U	U	U	0.387 J	U	6.77	U	U	U	19.9	10.9	30.8
NAWC-073124-RW-625		625	Bottled Water	07/31/2024	7.24	4.81	1.65 J	1.89 J	U	U	U	U	U	U	U	U	7.49	U	U	U	15.5	7.82	23.3
NAWC-073124-RW-742		742	Bottled Water	07/31/2024	3.81	5.3	2.36	2.92	U	U	U	U	U	U	0.7 J	U	6.38	U	U	U	17.6	11.2	28.8
NAWC-073124-RW-861		861	Bottled Water	07/31/2024	16.9	5.9	3.58	2.07 J	U	U	U	U	U	U	0.528 J	U	8.16	U	U	U	17.6	12.3	29.9
NAWC-073124-RW-913		913	Bottled Water	07/31/2024	9.75	6.16	2.68	2.42	U	U	U	U	U	U	0.42 J	U	8.05	U	U	U	18.1	13.2	31.3
NAWC-080124-RW-747		747	Bottled Water	08/01/2024	3.39	4.91	2.22	2.54	U	U	U	U	U	U	0.364 J	U	6.17	U	U	U	18.5	13.6	32.1
NAWC-080124-RW-798		798	Bottled Water	08/01/2024	8.89	7.18	1.77 J	3.35	U	U	U	U	U	U	0.686 J	U	8.5	U	U	U	22.9	13.4	36.3
NAWC-080124-RW-935		935	Bottled Water	08/01/2024	6.41	4.65	3.23	1.93 J	U	U	U	U	U	U	U	U	5.96	U	U	U	15.7	14.8	30.5
NAWC-080624-RW-601		601	Need Second Sample	08/06/2024	4.26	3.64	2.43	1.18 J	U	U	U	U	U	U	U	U	5.72	U	U	U	11.1	6.21	17.3
NAWC-080624-RW-942		942	Bottled Water	08/06/2024	6.13	6.51	4.67	2.62	U	U	U	U	U	U	U	U	7.5	U	U	U	19.9	19.8	39.7
NAWC-080624-RW-942-D	Dup	942	Bottled Water	08/06/2024	6.08	6.88	4.71	2.77	U	U	U	U	U	U	U	U	7.68	U	U	U	18.7	19.5	38.2
NAWC-080724-RW-505		505	Need Second Sample	08/07/2024	5.42	3.75	1.88 J	1.69 J	U	U	U	U	U	U	U	U	4.5	U	U	U	11.8	8.71	20.5
NAWC-080724-RW-547		547	Need Second Sample	08/07/2024	4.58	3.36	2.12 J	1.64 J	U	U	U	U	U	U	U	U	4.18	U	U	U	12.2	10.6	22.8
NAWC-080724-RW-940		940	Bottled Water	08/07/2024	5.54	4.3	3.02	1.93 J	U	U	U	U	U	U	U	U	5.85	U	U	U	14.2	11.7	25.9
NAWC-081324-RW-510		510	Need Second Sample	08/13/2024	5.06	3.49	1.57 J	1.57 J	U	U	U	U	U	U	U	U	6.09	U	U	U	9.76	8.03	17.8
NAWC-081324-RW-890		890	Need Second Sample	08/13/2024	8.16	3.73	2.24	1.65 J	U	U	U	U	U	U	U	U	5.1	U	U	U	12.4	9.61	22
NAWC-081324-RW-902		902	Bottled Water	08/13/2024	8.09	4.26	2.72	1.79 J	U	U	U	U	U	U	U	U	5.28	U	U	U	14.9	12.5	27.4
NAWC-081324-RW-909		909	Need Second Sample	08/13/2024	8	3.68	2.48	1.76 J	U	U	U	U	U	U	0.317 J	U	5.24	U	U	U	12.6	10.9	23.5
NAWC-081324-RW-915		915	Need Second Sample	08/13/2024	7.36	3.59	2.14 J	1.46 J	U	U	U	U	U	U	0.344 J	U	4.98	U	U	U	12	9.31	21.3
NAWC-081524-RW-534		534	Bottled Water	08/15/2024	12.7	5.59	2.14 J	2.06 J	U	U	U	U	U	U	0.928 J	U	13.3	U	U	U	14.4	8.61	23
NAWC-081524-RW-541		541	Bottled Water	08/15/2024	14.6	6.34	2.18 J	1.51 J	U	U	U	U	U	U	U	U	8.3	U	U	U	19	7.25	26.3
NAWC-081524-RW-610		610	Need Second Sample	08/15/2024	5.65	3.79	1.7 J	1.27 J	U	U	U	U	U	U	U	U	4.91	U	U	U	12.8	8.68	21.5
NAWC-081524-RW-610-D	Dup	610	Need Second Sample	08/15/2024	5.26	3.97	1.57 J	1.22 J	U	U	U	U	U	U	U	U	5.08	U	U	U	13.2	8.62	21.8
NAWC-081524-RW-880		880	Bottled Water	08/15/2024	8.36	4.55	2.36	1.71 J	U	U	U	U	U	U	U	U	5.23	U	U	U	15	10	25
NAWC-081524-RW-901		901	Bottled Water	08/15/2024	8.69	5.23	2.56	1.96 J	U	U	U	U	U	U	U	U	6.22	U	U	U	15.3	11.1	26.4
NAWC-082024-RW-593		593	Four Consecutive Sampling Events	08/20/2024	4.46	2.64	1.47 J	1.12 J	U	U	U	U	U	U	U	U	3.22	U	U	U	9.4	6.39	15.8
NAWC-082024-RW-867		867	Bottled Water	08/20/2024	16.6	4.99	2.61	2.2	U	U	U	U	U	U	0.833 J	U	7.45	U	U	U	15.7	12.9	28.6
NAWC-082024-RW-928		928	Bottled Water	08/20/2024	9.22	4.64	2.39	2.19 J	U	U	U	U	U	U	0.389 J	U	6.19	U	U	U	15.2	12.1	27.3
NAWC-082124-RW-856		856	Bottled Water	08/21/2024	23.6	11	2.5	3.51	U	U	U	U	U	U	0.393 J	U	13.4	U	U	0.533 J	28.7	15.8	44.5
NAWC-082124-RW-916		916	Need Second Sample	08/21/2024	7.86	4.14	2.16	1.87 J	U	U	U	U	U	U	0.305 J	U	5.65	U	U	U	13.5	8.27	21.8
NAWC-082124-RW-932		932	Bottled Water	08/21/2024	7.38	4.06	3.16	1.7 J	U	U	U	U	U	U	U	U	5.37	U	U	U	14.9	11.3	26.2
NAWC-082124-RW-946		946	Bottled Water	08/21/2024	4.99	4.02	2.71	2.14 J	U	U	U	U	U	U	U	U	5.85	U	U	U	15.5	11.8	27.3
NAWC-082724-RW-489		489	Four Consecutive Sampling Events	08/27/2024	4.89	3.78	2.1 J	1.6 J	U	U	U	U	U	U	U	U	4.68	U	U	U	13.3	5.61	18.9
NAWC-082724-RW-624		624	Bottled Water	08/27/2024	6.17	4.55	2.25	2.08 J	U	U	U	U	U	U	U	U	4.95	U	U	U	16.5	7.05	23.6
NAWC-082724-RW-877		877	Bottled Water	08/27/2024	8.14	3.98	2.38	1.7 J	U	U	U	U	U	1.07 J	0.553 J	U	6.15	U	U	U	14.9	11.4	26.3
NAWC-082724-RW-877-D	Dup	877	Bottled Water	08/27/2024	8.97	4.21	2.6	1.64 J	U	U	U	U	U	0.569 J	U	U	5.28	U	U	U	14	10	24
NAWC-090424-RW-251		251	Four Consecutive Sampling Events	09/04/2024	3.54	3.39	1.46 J	1.91 J	U	U	U	U	U	U	0.424 J	U	4.85	U	U	U	10.2	3.58	13.8
NAWC-090424-RW-509		509	Four Consecutive Sampling Events	09/04/2024	5.6	3.09	2.24	1.44 J	U	U	U	U	U	U	U	U	4.27	U	U	U	11.2	7.73	18.9
NAWC-090424-RW-573		573	Four Consecutive Sampling Events	09/04/2024	5.46	1.79 J	1.49 J	1.02 J	U	U	U	U	U	U	U	U	2.83	U	U	U	5.84	6.98	12.8
NAWC-090424-RW-642		642	Bottled Water	09/04/2024	5.83	4.12	2.17 J	2.12 J	U	U	U	U	U	U	0.475 J	U	5.76	U	U	U	14.2	10.6	24.8
NAWC-090424-RW-668		668	Bottled Water	09/04/2024	4.74	4.57	1.92 J	2.46	U	U	U	U	U	U	0.317 J	U	5.05	U	U	U	16.3	7.35	23.7
NAWC-090424-RW-701		701	Four Consecutive Sampling Events	09/04/2024	5.65	2.72	1.67 J	1.43 J	U	U	U	U	U	U	U	U	3.95	U	U	U	10.1	5.39	15.5
NAWC-090424-RW-799		799	Four Consecutive Sampling Events	09/04/2024	2.95	2.91	2.14 J	1.24 J	U	U	U	U	U	U	U	U	3.68	U	U	U	9.99	8.12	18.1
NAWC-090424-RW-900		900	Bottled Water	09/04/2024	9.07	4.84	2.53	2.26	U	U	U	U	U	U	0.418 J	U	6.81	U	U	U	16.1	11.7	27.8
NAWC-090424-RW-900-D	Dup	900	Bottled Water	09/04/2024	9.49	5.15	2.55	2.35	U	U	U	U	U	U	0.417 J	U	7.09	U	U	U	17.1	12	29.1
NAWC-090524-RW-503		503	Four Consecutive Sampling Events	09/05/2024	4.77	2.48	1.74 J	1.27 J	U	U	U	U	U	U	U	U	2.78	U	U	U	8.55	6.89	15.4
NAWC-090524-RW-514		514	Four Consecutive Sampling Events	09/05/2024	4.35	3.27	2.04 J	1.55 J	U	U	U	U	U	U	U	U	3.59	U	U	U	11.9	7.68	19.6
NAWC-090524-RW-719		719	Four Consecutive Sampling Events	09/05/2024	5.05	2.83	1.92 J	1.41 J	U	U	U	U	U	U	U	U	3.02	U	U	U	10.5	7.85	18.4
NAWC-090524-RW-834		834	Bottled Water	09/05/2024	11	3.96	3.45	1.6 J	U	U	U	U	U	U	0.364 J	U	4.87	U	U	U	15.1	9.89	25
NAWC-090524-RW-924		924	Four Consecutive Sampling Events	09/05/2024	5.82	3.75	2.6	1.65 J	U	U	U	U	U	U	0.322 J	U	4.5	U	U	U	13.3	9.66	23
NAWC-090524-RW-948		948	Bottled Water	09/05/2024	3.69	4.58	3.73	1.83 J	U	U	U	U	U	U	U	U	5.39	U	U	U	14	11.4	25.4
NAWC-090524-RW-950		950	Bottled Water	09/05/2024	8.28	4.82	3.3	1.96 J	U	U	U	U	U	U	U	U	6.74	U	U	U	15.4	12.4	27.8
NAWC-091024-RW-364		364	Four Consecutive Sampling Events	09/10/2024	4.24	3.6	3.43	1.97 J	U	U	U	U	U	U	U	U	5.46	U	U	U	10.4	8.66	19.1
NAWC-091024-RW-501		501	Four Consecutive Sampling Events	09/10/2024	5.84	3.44	1.95 J	1.68 J	U	U	U	U	U	U	0.338 J	U	4.51	U	U	U	12.4	8.86	21.3
NAWC-091024-RW-501-D	Dup	501	Four Consecutive Sampling Events	09/10/2024	5.73	3.39	1.96 J	1.66 J	U	U	U	U	U	U	0.305 J	U	4.46	U	U	U	11.3	8.48	19.8
NAWC-091024-RW-539		539	Four Consecutive Sampling Events	09/10/2024	5.47	3.58	2.15 J	1.94 J	U	U	U	U	U	U	U	U	4.95	U	U	U	13.8	11.7	25.5
NAWC-091024-RW-548		548	Bottled Water	09/10/2024	45.6	6.18	4.83	1.48 J	U	U	U	U	U	U	U	U	7.11	U	U	U	18.3	13.2	31.5
NAWC-091024-RW-581		581	Need Second Sample	09/10/2024	5.95	3.53	1.9 J	1.42 J	U	U	U	U	U	U	U	U	6.77	U	U	U	11.6	8.37	20
NAWC-091024-RW-959		959	Four Consecutive Sampling Events	09/10/2024	1.31 J	2.33	1.97 J	1.02 J	U	U	U	U	U	U	U	U	4.63	U	U	U	6.45	3.11	9.56
NAWC-091124-RW-202		202	Four Consecutive Sampling Events	09/11/2024	2.18 J	3.16	1.35 J	1.02 J	U	U	U	U	U	U	U	U	4.81	U	U	U	9.26	4.69	14
NAWC-091124-RW-537		537	Four Consecutive Sampling Events	09/11/2024	2.01 J	1.52 J	0.545 J	0.596 J	U	U	U	U	U	U	U	U	2.19 J	U	U	U	4.56	2.48	7.04
NAWC-091124-RW-618		618	Four Consecutive Sampling Events	09/11/2024	4.61	3.76	2.15	1.88 J	U	U	U	U	U	U	U	U	4.27	U	U	U	13.6	11.9	25.5
NAWC-091124-RW-763		763	Four Consecutive Sampling Events	09/11/2024	5.37	3.41	2.73	1.8 J	U	U	U	U	U	U	0.378 J	U	5.62	U	U	U	10.9	9.91	20.8
NAWC-091124-RW-923		923	Four Consecutive Sampling Events	09/11/2024	2.97	2.29	1.32 J	0.922 J	U	U	U	U	U	U	U	U	3.17	U	U	U	7.78	5.33	13.1
NAWC-091724-RW-519		519	Bottled Water	09/17/2024	5.41	5.3	2.45	3.59	U	U	U	U	U	U	2.17	U	10.5	U	U	U	26.4	8.6	35
NAWC-091724-RW-530		530	Four Consecutive Sampling Events	09/17/2024	10.7	3.9	2.03 J	1.45 J	U	U	U	U	U	U	0.331 J	U	5.06	U	U	U	12.5	7.67	20.2
NAWC-091724-RW-530-D	Dup	530	Four Consecutive Sampling Events	09/17/2024	10.4	3.65	1.97 J	1.39 J	U	U	U	U	U	U	0.354 J	U	4.96	U	U	U	11.4	7.42	18.8
NAWC-091724-RW-533		533	Four Consecutive Sampling Events	09/17/2024	9.18	3.96	1.9 J	2.05 J	U	U	U	U	U	U	U	U	5.61	U	U	U	13.2	13.8	27
NAWC-091724-RW-638		638	Four Consecutive Sampling Events	09/17/2024	5.17	4.02	2.07 J	1.99 J	U	U	U	U	U	U	0.396 J	U	5	U	U	U	13.5	10.3	23.8
NAWC-091724-RW-681		681	Bottled Water	09/17/2024	3.96	4.93	1.78 J	3.01	U	U	U	U	U	U	0.472 J	U	4.67	U	U	U	20.2	6.49	26.7
NAWC-091724-RW-899		899	Four Consecutive Sampling Events	09/17/2024	4.96	3.71	1.54 J	1.67 J	U	U	U	U	U	U	U	U	5.65	U	U	U	12.2	7	19.2
NAWC-091724-RW-941		941	Bottled Water	09/17/2024	5.01	4.05	2.77	1.55 J	U	U	U	U	U	U	U	U	4.92	U	U	U	14.2	9.85	24.1

Table 1: 2024 PFAS Private Well Sampling Results
Former Naval Air Warfare Center Warminster
Warminster, Pennsylvania

Sample Number	Resample/Dup	Location	Status	Sample Date	PFBS	PFHpA	PFHxS	PFNA	11CL-PF3OUdS	ADONA	9Cl-PF3ONS	HFPO-DA	NEtFOSAA	NMeFOSAA	PFDA	PFDoA	PFHxA	PFTeA	PFTrDA	PFUnA	PFOA	PFOS	PFOA + PFOS
				PADEP MCL:[1,3]	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	14	18	NC
				EPA RSL:[2]	600	NC	39	5.9	NC	NC	NC	6	NC	NC	NC	NC	990	NC	NC	600	4	6	NC
				Units:	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
NAWC-091824-RW-1111		1111	Four Consecutive Sampling Events	09/18/2024	1.81 J	2.23	1.03 J	1.05 J	U	U	U	U	U	U	U	U	3.61	U	U	U	7	3.31	10.3
NAWC-091824-RW-1112		1112	Four Consecutive Sampling Events	09/18/2024	9.03	3.72	2.49	2.6	U	U	U	U	U	U	0.975 J	U	5.24	U	U	U	11.3	10.2	21.5
NAWC-091824-RW-665		665	Four Consecutive Sampling Events	09/18/2024	3.72	3.82	2.71	1.59 J	U	U	U	U	U	U	U	U	4.53	U	U	U	12.7	8.63	21.3
NAWC-091824-RW-855		855	Bottled Water	09/18/2024	14.7	6.09	3.27	3.26	U	U	U	U	U	U	0.402 J	U	5.69	U	U	U	23.6	18.4	42
NAWC-091824-RW-862		862	Four Consecutive Sampling Events	09/18/2024	7.04	3.35	2.53	1.38 J	U	U	U	U	U	U	U	U	4.59	U	U	U	10.9	6.92	17.8
NAWC-091824-RW-885		885	Bottled Water	09/18/2024	13.3	3.79	2.18 J	2.53	U	U	U	U	U	U	0.453 J	U	7.77	U	U	U	18.7	16.1	34.8
NAWC-092424-RW-876		876	Bottled Water	09/24/2024	9.52	4.56	2.92	2.01 J	U	U	U	U	U	U	U	U	6.16	U	U	U	16.3	11.5	27.8
NAWC-092424-RW-876-D	Dup	876	Bottled Water	09/24/2024	10.6	4.91	2.62	2.72	U	U	U	U	U	U	0.672 J	U	6.52	U	U	U	15.9	12.2	28.1
NAWC-092424-RW-878		878	Bottled Water	09/24/2024	9.79	4.65	2.45	2.45	U	U	U	U	U	U	0.65 J	U	5.94	U	U	U	14.4	11.6	26
NAWC-092424-RW-949		949	Four Consecutive Sampling Events	09/24/2024	5.07	4.06	3.09	1.67 J	U	U	U	U	U	U	U	U	4.93	U	U	U	13.9	10.4	24.3
NAWC-092524-RW-552		552	Bottled Water	09/25/2024	4.97	4.13	1.78 J	1.83 J	U	U	U	U	U	U	U	U	4.81	U	U	U	15	10.2	25.2
NAWC-092524-RW-887		887	Four Consecutive Sampling Events	09/25/2024	9.13	4.33	2.31	1.58 J	U	U	U	U	U	U	U	U	5.62	U	U	U	13.1	9.03	22.1
NAWC-092524-RW-888		888	Bottled Water	09/25/2024	8.83	4.54	2.72	2.23 J	U	U	U	U	U	U	0.352 J	U	5.93	U	U	U	15.5	12.7	28.2
NAWC-100124-RW-486		486	Four Consecutive Sampling Events	10/01/2024	5.05	3.9	1.63 J	1.77 J	U	U	U	U	U	U	U	U	4.51	U	U	U	13	7.38	20.4
NAWC-100124-RW-517		517	Bottled Water	10/01/2024	7.86 J	4.36 J	2.02 J	1.86 J	U	U	U	U	U	U	0.322 J	U	6.73 J	U	U	U	13.1 J	8.03 J	21.1 J
NAWC-100124-RW-831		831	Four Consecutive Sampling Events	10/01/2024	10.7 J	3.74 J	2.1 J	1.5 J	U	U	U	U	U	U	U	U	4.96 J	U	U	U	10.7 J	8.21 J	18.9 J
NAWC-100124-RW-852		852	Bottled Water	10/01/2024	12.7	6.92	4.88	2.56	U	U	U	U	U	U	0.928 J	U	8.51	U	U	U	23	19.1	42.1
NAWC-100124-RW-920		920	Bottled Water	10/01/2024	9.74	5.1	2.75	2.08	U	U	U	U	U	U	0.358 J	U	6.65	U	U	U	15.3	11.4	26.7
NAWC-100124-RW-920-D	Dup	920	Bottled Water	10/01/2024	8.59 J	4.81 J	2.06 J	2.05 J	U	U	U	U	U	U	0.331 J	U	7.33 J	U	U	U	15 J	8.55 J	23.6 J
NAWC-100224-RW-561		561	Bottled Water	10/02/2024	11	4.29	1.92 J	1.96 J	U	U	U	U	U	U	0.489 J	U	5.54	U	U	U	15	7.71	22.7
NAWC-100224-RW-868		868	Bottled Water	10/02/2024	10.9 J	6.23	3.39	2.13	U	U	0.737 J	U	U	U	0.395 J	U	8.58	U	U	U	19	12	31
NAWC-100224-RW-893		893	Four Consecutive Sampling Events	10/02/2024	5	2.86	1.66 J	1.23 J	U	U	U	U	U	U	U	U	3.98	U	U	U	9.31	6.69	16
NAWC-100224-RW-898		898	Need Second Sample	10/02/2024	2.76	2 J	1.26 J	0.766 J	U	U	U	U	U	U	U	U	2.87	U	U	U	6.55	4.07	10.6
NAWC-100224-RW-911		911	Four Consecutive Sampling Events	10/02/2024	4.28	2.51	1.29 J	1.67 J	U	U	U	U	U	U	U	U	3.46	U	U	U	8.8	6.43	15.2
NAWC-100924-RW-565		565	Four Consecutive Sampling Events	10/09/2024	5.28	3.8	2.01 J	1.59 J	U	U	U	U	U	U	U	U	5.62	U	U	U	12.6	8.89	21.5
NAWC-100924-RW-661		661	Bottled Water	10/09/2024	10.5	4.79	2.51	1.82 J	U	U	U	U	U	U	U	U	6.39	U	U	U	16.1	9.39	25.5
NAWC-100924-RW-671		671	Four Consecutive Sampling Events	10/09/2024	5.46	3.54	1.92 J	1.83 J	U	U	U	U	U	U	U	U	4.63	U	U	U	12.5	6.84	19.3
NAWC-100924-RW-730		730	Bottled Water	10/09/2024	5.42	4.17	2 J	3.13	U	U	U	U	U	U	0.344 J	U	5.13	U	U	U	14.3	12.6	26.9
NAWC-100924-RW-776		776	Bottled Water	10/09/2024	4.7	5.54	1.64 J	4.8	U	U	U	U	U	U	2.41	U	4.02	U	U	U	23.4	6.75	30.2
NAWC-100924-RW-836		836	Bottled Water	10/09/2024	14.2	5.8	4.53	2.5	U	U	U	U	U	U	1.22 J	U	7.41	U	U	U	18.2	16.8	35
NAWC-100924-RW-836-D	Dup	836	Bottled Water	10/09/2024	14.4	5.6	4.42	2.33	U	U	U	U	U	U	1.2 J	U	6.91	U	U	U	18.2	16.8	35
NAWC-101024-RW-662		662	Bottled Water	10/10/2024	11.4	4.11	3.11	2.16 J	U	U	U	U	U	U	U	U	4.33	U	U	U	15.9	14.9	30.8
NAWC-101024-RW-825		825	Bottled Water	10/10/2024	8.64	5.07	1.28 J	3.56	U	U	U	U	U	U	1.17 J	U	6.02	U	U	U	15.9	8.06	24
NAWC-101024-RW-828		828	Four Consecutive Sampling Events	10/10/2024	11.1	3.73	2.19	1.31 J	U	U	U	U	U	U	U	U	4.35	U	U	U	12.4	7.11	19.5
NAWC-101024-RW-850		850	Four Consecutive Sampling Events	10/10/2024	10.8	3.89	2.42	1.51 J	U	U	U	U	U	U	U	U	4.52	U	U	U	12.7	8.17	20.9
NAWC-101024-RW-870		870	Bottled Water	10/10/2024	8.59	5.11	2.63	2.45	U	U	3.86	U	U	U	1.01 J	U	7.48	U	U	U	18.2	10.7	28.9
NAWC-101624-RW-516		516	Bottled Water	10/16/2024	13.6	5.74	2.25	1.71 J	U	U	U	U	U	U	U	U	8.03	U	U	U	17.2	7.87	25.1
NAWC-102324-RW-875		875	Bottled Water	10/23/2024	7.43	4.92	2.64	1.8 J	U	U	U	U	U	U	U	U	5.76	U	U	U	15.5	10.7	26.2
NAWC-102324-RW-881		881	Bottled Water	10/23/2024	6.13	5.08	3.37	2.22	U	U	7.05	U	U	U	U	U	7.14	U	U	U	18	15.3	33.3
NAWC-102924-RW-907		907	Bottled Water	10/29/2024	9.11	4.68	2.95	1.68 J	U	U	U	U	U	U	U	U	7.3	U	U	U	13.9	13.5	27.4
NAWC-102924-RW-907-D	Dup	907	Bottled Water	10/29/2024	9.76	4.79	3.05	1.72 J	U	U	U	U	U	U	U	U	7.03	U	U	U	14.3	13.9	28.2
NAWC-102924-RW-919		919	Need Second Sample	10/29/2024	3.76	3.57	1.51 J	2.03 J	U	U	U	U	U	U	0.492 J	U	4.21	U	U	U	12.4	9.17	21.6
NAWC-110624-RW-627		627	Four Consecutive Sampling Events	11/06/2024	3.72	3.23	1.99 J	1.52 J	U	U	U	U	U	U	0.302 J	U	3.87	U	U	U	12.1	8.23	20.3
NAWC-110624-RW-953		953	Four Consecutive Sampling Events	11/06/2024	3.98	4.04	3.81	1.56 J	U	U	U	U	U	U	U	U	5.34	U	U	U	12.3	9.93	22.2
NAWC-110724-RW-577		577	Need Second Sample	11/07/2024	8.89	1.49 J	0.761 J	0.494 J	U	U	U	U	U	U	U	U	2.05 J	U	U	U	4.11	1.71 J	5.82
NAWC-110724-RW-847		847	Bottled Water	11/07/2024	11.9	5.08	4.09	1.86 J	U	U	U	U	U	U	0.627 J	U	7.31	U	U	U	17	12.2	29.2
NAWC-110724-RW-849		849	Bottled Water	11/07/2024	8.8	3.95	3.6	1.67 J	U	U	U	U	U	U	U	U	4.57	U	U	U	18	12.2	30.2
NAWC-110724-RW-883		883	Four Consecutive Sampling Events	11/07/2024	6.5	3.65	2.33	1.49 J	U	U	U	U	U	U	U	U	4.44	U	U	U	13	9.11	22.1
NAWC-110724-RW-914		914	Four Consecutive Sampling Events	11/07/2024	4.39	2.21	1.77 J	1.17 J	U	U	U	U	U	U	U	U	3.13	U	U	U	8.38	6.85	15.2
NAWC-111424-RW-598		598	Bottled Water	11/14/2024	5.99	3.96	2.02 J	1.82 J	U	U	U	U	U	U	U	U	4.55	U	U	U	14.3	7.2	21.5
NAWC-111924-RW-857		857	Bottled Water	11/19/2024	10.3	4.35	2.82	1.60 J	U	U	U	U	U	U	U	U	5.74	U	U	U	14.8	9.28	24.1
NAWC-112624-RW-1113		1113	Four Consecutive Sampling Events	11/26/2024	6.6	5.7	3.24	2.63	U	U	U	U	U	U	0.504 J	U	6.84	U	U	U	13.3	8.57	21.9
NAWC-112624-RW-050		050	Four Consecutive Sampling Events	11/26/2024	4.15	2.95	1.28 J	1.17 J	U	U	U	U	U	U	U	U	4	U	U	U	9.16	3.49	12.7
NAWC-112624-RW-050-D	Dup	050	Four Consecutive Sampling Events	11/26/2024	3.33	2.77	1.16 J	1.12 J	U	U	U	U	U	U	U	U	3.64	U	U	U	7.38	2.87	10.3
NAWC-112624-RW-874		874	Four Consecutive Sampling Events	11/26/2024	5.64	2.96	1.89 J	1.06 J	U	U	U	U	U	U	U	U	3.32	U	U	U	9.85	7.09	16.9
NAWC-112624-RW-729		729	Four Consecutive Sampling Events	11/26/2024	5.67	4.05	2.49	2.02 J	U	U	U	U	U	U	U	U	5.38	U	U	U	13.5	13.1	26.6
NAWC-121024-RW-859		859	Four Consecutive Sampling Events	12/10/2024	8.14	3.76	2.52	1.62 J	U	U	U	U	U	U	U	U	4.86	U	U	U	12.8	8.39	21.2
NAWC-121124-RW-603		603	Bottled Water	12/11/2024	5.65	3.91	1.94 J	1.90 J	U	U	U	U	U	U	U	U	8.25	U	U	U	14.5	9.69	24.2
NAWC-121124-RW-540		540	Four Consecutive Sampling Events	12/11/2024	5.48	3.62	2.06 J	1.70 J	U	U	U	U	U	U	U	U	6.7	U	U	U	12.6	9.81	22.4
NAWC-121124-RW-929		929	Four Consecutive Sampling Events	12/11/2024	7.14	3.56	2.17 J	1.42 J	U	U	U	U	U	U	U	U	5.35	U	U	U	11.4	8.88	20.3
NAWC-121124-RW-586		586	Four Consecutive Sampling Events	12/11/2024	4.6	3.55	1.86 J	1.94 J	U	U	U	U	U	U	U	U	6.25	U	U	U	13.7	9.58	23.3

Notes:

Sample did not have detectable PFOA or PFOS.

Result was less than the PADEP MCL.

Result was greater than or equal to the PADEP MCL.

Result was greater than EPA RSL

Data Qualifiers:

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample, due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit.

U = The analyte was analyzed for, but was not detected, at a level greater than or equal to the level of the adjusted method detection limit for sample and method.

Notes:

* Status based on recent and historical sample results

1 - January 2023 PADEP MCL (Source: https://www.dep.pa.gov/Business/Land/LandRecycling/Standards-Guidance-Procedures/Pages/Statewide-Health-Standards.aspx)

2 - November 2023 RSL for Resident Tap Water (Target risk of one in one million and target hazard quotient of 0.1) (Source: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables)

3 - Removal action is taken if results are over the January 2023 PADEP MCL

D = Duplicate.

EPA = Environmental Protection Agency.

MCL = Maximum contaminant level.

NC = No criteria.

ng/L = Nanograms per liter.

PADEP = Pennsylvania Department of Environmental Protection.

RSL = Regional Screening Level

Compound names:

11Cl-PF3OUdS = 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid.

9Cl-PF3ONS = 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid.

ADONA = 4,8-dioxa-3H-perfluorononanoic acid.

HFPO-DA = Hexafluoropropylene oxide dimer acid.

NEtFOSAA = N-ethyl perfluorooctanesulfonamidoacetic acid.

NMeFOSAA = N-methyl perfluorooctanesulfonamidoacetic acid.

PFBS = Perfluorobutanesulfonic acid.

PFDA = Perfluorodecanoic acid.

PFDoA = Perfluorododecanoic acid.

PFHpA = Perfluoroheptanoic acid.

PFHxA = Perfluorohexanoic acid.

PFHxS = Perfluorohexanesulfonoic acid.

PFNA = Perfluorononanoic acid.

PFOA = Perfluorooctanoic acid.

PFOS = Perfluorooctanesulfonic acid.

PFTeA = Perfluorotetradecanoic acid.

PFTrDA = Perfluorotridecanoic acid.

PFUnA = Perfluoroundecanoic acid.

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ATTACHMENT 1

May 2023 Decision Rules

May 2023 Decision Rules from
Field Task Modification Request Forms 2 (September 2021) and 3 (October 2022)
Former Naval Air Station Joint Reserve Base Willow Grove
Horsham Township, Pennsylvania
and
Former Naval Air Warfare Center Warminster
Warminster, Pennsylvania

Decision Rule #1:

If the Navy receives a request to sample a new location within the sampling area, a location outside of the sampling area is approved by the Navy, or the Navy determines an additional sample is necessary at an existing location, then collect a drinking water sample and proceed to Decision Rule #2.

Decision Rule #2:

If the measured PFOA or PFOS concentration in the drinking water sample exceeds the PALs (Worksheet #15), then provide an alternate source of drinking water for the affected residence(s) and remove the corresponding sampling location from the sampling program; otherwise, collect a second sample and proceed to Decision Rule #3.

Decision Rule #3:

If the PFOA or PFOS concentration in the second sample exceeds the PALs, then provide an alternate source of drinking water for the affected residence(s) and remove the corresponding sampling location from the sampling program; otherwise, proceed to Decision Rule #4.

Decision Rule #4:

If PFOA and PFOS concentrations in drinking water sample are less than their respective PALs, but the measured concentration of PFBA, PFBS, PFHxA, PFHxS, PFNA, or HFPO-DA is greater than the respective PAL for two sampling events, then convene the Project Team. Project Team will review recent toxicity data to determine whether the analyte concentration is likely to be a concern. If so, the team will develop DQOs for evaluating concerns and may provide an alternate source of drinking water; otherwise, monitor location annually and proceed to Decision Rule #5.

Decision Rule #5:

If a location is expected to exceed the combined concentration of PFOA and PFOS of 70 ng/L based on judgment by the Project Team (Navy/EPA/PADEP) due to proximity to other locations where the combined PFOA and PFOS concentration is greater than or equal to 70 ng/L, then the Navy will provide an alternate source of drinking water for the affected residence(s) and remove the corresponding sampling location from the sampling program; otherwise, proceed to Decision Rule #6.

Decision Rule #6:

If a location exceeds 50 percent of the PFOA or PFOS PALs or based on judgment by the Project Team (Navy/EPA/PADEP) due to proximity to other locations that exceed the PFOA or PFOS PALs, then affected residence(s) will be sampled quarterly for four consecutive sampling events. If the results exceed the PALs at any time then provide an alternate source of drinking water for the affected residence(s) and remove the corresponding sampling location from the sampling program; otherwise sample annually. Proceed to Decision Rule #7.

Decision Rule #7:

If it has been three or more years since the last sampling event for a property with previous sampling results below the PALs that is not connected to the municipal water supply, collect one sample and proceed to Decision Rule #3.

ATTACHMENT 2

Laboratory Analytical Data Packages and
Validated Analytical Data Reports

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