



DEPARTMENT OF THE NAVY  
PORTSMOUTH NAVAL SHIPYARD  
PORTSMOUTH, N. H. 03804-5000

IN REPLY REFER TO:

11018  
Ser 100/«SER\_»

«first» «last»  
Parcel #«parcel»  
«Owner Address\_1»  
«City\_and\_1»

SUBJECT: DRINKING WATER SAMPLING RESULTS IN THE VICINITY OF  
NAVAL SUPPORT ACTIVITY (NSA) CUTLER FIRE STATION  
(SAMPLE:«DW#»)

Dear Mr./Mrs. «first» «last»:

Thank you for recently allowing the Navy to sample your drinking water well at «Owner Address\_1», «City\_and\_1» for certain per- and polyfluoroalkyl substances (PFAS). I am writing today to provide you with the validated test results of your residence's drinking water in the enclosures to this letter.

The validated test results confirm that your drinking water is lower than the U.S. Environmental Protection Agency (EPA) lifetime health advisory for two PFAS, specifically perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). The enclosures also provide the test results for other PFAS compounds included in the drinking water test method used for this investigation (EPA Method 537.1); however, there are no lifetime health advisories for these compounds at this time.

These validated test results, being below the EPA lifetime health advisory, indicate that no further action is required at your property at this time. However, based on the overall results of the Navy's off-base PFAS drinking water investigation, the Navy continues to work in partnership with the Maine Department of Environmental Protection, Maine Department of Health and Human Services, and Agency for Toxic Substances and Disease Registry (ATSDR) Region 1. The Navy is committed to keeping you informed on developments and will update our public website at <https://go.usa.gov/xwfdW> about the PFAS investigation and additional actions the Navy is taking to address exposure to PFOA and PFOS above the EPA lifetime health advisory.

Additional informative resources on PFAS can be found at the Assistant Secretary of the Navy (Energy, Installations & Environment) website on PFAS and at U.S. EPA's website on the Drinking Water Health Advisories for PFOA and PFOS. Both links are provided as follows:

ASN(EI&E)

<https://www.secnav.navy.mil/eie/pages/pfc-pfas.aspx>

EPA

<https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>

If you have additional questions about this letter, please contact the Navy Public Affairs Office at NAVFAC\_ML\_PAO@navy.mil or (800)915-4705.

We appreciate your continued cooperation as we work to ensure that human health and the environment are protected.

Sincerely,

DANIEL W. ETTLICH  
Captain, U.S. Navy  
Installation Commanding Officer

Enclosures:   1. Validated Sample Results  
                  2. Laboratory Results  
                  3. Explanation of Laboratory Results

# Enclosure 1

## Validated Sample Results

**Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Sample ID:** \_\_\_\_\_  
**Date Collected:** \_\_\_\_\_  
**Time Collected:** \_\_\_\_\_

Below are the validated test results confirming that your drinking water is below the U.S. Environmental Protection Agency's (EPA) lifetime health advisory levels for certain per- and polyfluoroalkyl Substances (PFAS). These results indicate that no further action is required for your property at this time. The Navy is working in partnership with the Maine Department of Environmental Protection, Maine Department of Health and Human Services, U.S. EPA Region 1, and Agency for Toxic Substances and Disease Registry (ATSDR) Region 1.

### Results of Laboratory Analytical Tests for PFAS with EPA Lifetime Health Advisory Levels

Chemical Name	Result	Health Advisory (ppt)
perfluorooctanoic acid (PFOA)	Value or Not Detected	70
perfluorooctane sulfonate (PFOS)	Value or Not Detected	70
Total PFOA-PFOS (sum)	Value or Not Detected	70

ppt – parts per trillion (1 ppt = 1 ng/L (nanogram per liter))

J – The reported result is an estimated value.

### Results for Other PFAS with No Established EPA Lifetime Health Advisory Levels

Chemical Name	Result	Other Screening Value, if available (ppt)
perfluorohexanoic acid (PFHxA)	Value or Not Detected	N/A
perfluoroheptanoic acid (PFHpA)	Value or Not Detected	N/A
perfluorononanoic acid (PFNA)	Value or Not Detected	N/A
perfluorodecanoic acid (PFDA)	Value or Not Detected	N/A
perfluoroundecanoic acid (PFUnA)	Value or Not Detected	N/A
perfluorododecanoic acid (PFDoA)	Value or Not Detected	N/A
perfluorotridecanoic acid (PFTrDA)	Value or Not Detected	N/A
perfluorotetradecanoic Acid (PFTeDA)	Value or Not Detected	N/A
n-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	Value or Not Detected	N/A
n-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	Value or Not Detected	N/A
perfluorobutanesulfonic acid (PFBS)	Value or Not Detected	400,000 *
perfluorohexanesulfonic acid (PFHxS)	Value or Not Detected	N/A
hexafluoropropylene oxide dimer acid (HFPO-DA)	Value or Not Detected	N/A
4,8-dioxa-3H-perfluorononanoic acid (Adona)	Value or Not Detected	N/A
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	Value or Not Detected	N/A
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	Value or Not Detected	N/A

ppt – parts per trillion (1 ppt = 1 ng/L (nanogram per liter))

J – The reported result is an estimated value.

N/A – Not available.

\*Although there is not a health advisory for PFBS, EPA has estimated a toxicity value for possible health effects when PFBS is ingested. This toxicity value was used by the EPA to calculate a "Regional Screening Level" or RSL. The RSL is a conservative, risk-based level that is used at "Superfund" sites to identify sites that may warrant further investigation or site cleanup.

## Enclosure 2: Laboratory Report of Sample (DWXX)



Project Client:  
Project Name:  
Project No.:

Client ID NSAC-DWXX-20220916

Battelle ID E6825-FS  
Sample Type SA  
Collection Date 09/16/2022  
Extraction Date 09/26/2022  
Analysis Date 10/06/2022  
Analytical Instrument Sciex 5500 (AC) LC/MS/MS  
% Moisture NA  
Matrix DW  
Sample Size 0.287  
Size Unit-Basis L

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
PFHxA	307-24-4	ND	0.711	1.52	2.18
PFHpA	375-85-9	ND	0.328	1.09	2.18
PFOA	335-67-1	ND	0.357	1.09	2.18
PFNA	375-95-1	ND	0.336	1.09	2.18
PFDA	335-76-2	ND	0.306	1.09	2.18
PFUnA	2058-94-8	ND	0.282	1.09	2.18
PFDoA	307-55-1	ND	0.469	1.09	2.18
PFTrDA	72629-94-8	ND	0.372	1.09	2.18
PFTeDA	376-06-7	ND	0.382	1.09	2.18
NMeFOSAA	2355-31-9	ND	0.472	1.09	2.18
NEtFOSAA	2991-50-6	ND	0.588	1.31	2.18
PFBS	375-73-5	ND	0.314	1.09	2.18
PFHxS	355-46-4	ND	0.403	1.09	2.18
PFOS	1763-23-1	ND	0.355	1.09	2.18
HFPO-DA	13252-13-6	ND	0.354	1.09	2.18
Adona	919005-14-4	ND	0.269	0.871	2.18
11CI-PF3OUdS	763051-92-9	ND	0.314	1.09	2.18
9CI-PF3ONS	756426-58-1	ND	0.403	1.09	2.18

Surrogate Recoveries (%)	Recovery
13C2-PFHxA	94
13C2-PFDA	89
d5-EtFOSAA	81
13C3-HFPO-DA	85

*Steven J. Selman*  
11/02/2022

## Enclosure 3 (page 1 of 2): Explanation of Laboratory Results

You will notice that the data report comes with several laboratory descriptions that may not be familiar to you. The following definitions of those descriptions may assist you in understanding your sample results:

- **Analyte** – the chemical or substance of interest.
- **CAS No.** – (Chemical Abstracts Service Number) – a universal system to provide a unique, unmistakable identifier for chemical substances.
- **Result (ng/L)** - the amount of an analyte (chemical or substance of interest) determined to be present in the sample analyzed by the laboratory; the reporting units ng/L (nanograms per liter) is the same as ppt (parts per trillion)
- **Detection Limit (DL)** - The lowest analyte concentration that can confidently be distinguished from zero (or a blank) concentration.
- **Limit of Detection (LOD)** - The lowest analyte concentration that must be present in a sample to be confidently (i.e., consistently) detectable.
- **Limit of Quantitation (LOQ)** - The lowest concentration that produces a quantitative result within known and recorded precision and accuracy.
- **Non-Detect (ND)** - indicates the analyte was not detected.
- **Qualifiers (if needed)**
  - **"J" (Estimated Value)** - indicates the value reported for the analyte is above the DL but below the LOQ and was detected. The value reported is considered estimated.

# Enclosure 3 (page 2 of 2): Explanation of Lab Results - Example of Lab Report with Definitions and Explanations



Project Client:  
Project Name:  
Project No.:

Client ID

Battelle ID I3392-FS  
Sample Type SA  
Collection Date 05/24/2019  
Extraction Date 05/28/2019  
Analysis Date 05/30/2019  
Analytical Instrument Sciex 5500 LC/MS/MS  
% Moisture NA  
Matrix DW  
Sample Size 0.260  
Size Unit-Basis L

1 ng/L = 1 ppt  
nanogram(s) part(s)  
per liter per trillion

The result for PFOA:  
**PFOA was not detected in the sample, represented as "ND".**  
The result for PFOS:  
**PFOS was detected in the sample at 0.13 J ng/L (0.13 J ppt).**  
The result for PFOA + PFOS:  
**PFOA + PFOS was detected in the sample at 0.13 ng/L (0.13 ppt).**

Analyte was not detected in this sample.  
Represented as "ND" (Non-Detect).

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
<b>DV QUALIFIER</b>					
PFHxA	307-24-4	1.2	0.22	0.48	2.40
PFHpA	375-85-9	ND	0.22	0.48	2.40
PFOA	335-67-1	ND	0.19	0.48	2.40
PFNA	375-95-1	0.21 J	0.12	0.38	2.40
PFDA	335-76-2	ND	0.11	0.38	2.40
PFUnA	2058-94-8	ND	0.10	0.38	2.40
PFDoA	307-55-1	ND	0.13	0.48	2.40
PFTTrDA	72629-94-8	ND	0.10	0.38	2.40
PFTeDA	376-06-7	ND	0.21	0.48	2.40
NMeFOSAA	2355-31-9	ND	0.19	0.48	2.40
NEtFOSAA	2991-50-6	ND	0.16	0.48	2.40
PFBS	375-73-5	20	0.12	0.38	2.40
PFHxS	355-46-4	0.56 J	0.12	0.38	2.40
PFOS	1763-23-1	0.13 J	0.14	0.48	2.40
HFPO-DA	13252-13-6	ND	0.09	0.38	2.40
Adona	919005-14-4	ND	0.12	0.38	2.40
11CI-PF3OUdS	763051-92-9	ND	0.10	0.38	2.40
9CI-PF3ONS	756426-58-1	ND	0.12	0.38	2.40

Surrogate Recoveries (%)	Recovery
13C2-PFHxA	129
13C2-PFDA	113
d5-EtFOSAA	95
13C3-HFPO-DA	116

Data Validator's Signature

6/10/2019

The detection limit (DL) is the lowest analyte concentration that can confidently be distinguished from zero (or a blank) concentration.  
The limit of detection (LOD) is the lowest analyte concentration that must be present in a sample to be confidently (i.e., consistently) detectable.  
The limit of quantitation (LOQ) is the lowest concentration that produces a quantitative result within known and recorded precision and accuracy.

This is a data qualifier for this result. Possible qualifiers are:

"J" (Estimated Value) - Indicates the value reported for the analyte is greater than the DL but below the LOQ and was detected. The value reported is considered estimated.

"B" (Blank) - Indicates the compound also was detected in the method blank.