Town of Coupeville and Fort Casey Treatment Plant 466 Keystone Hill Road WI-CV-1RW24-1216 (Well 487) 12/06/2016 09:45 Preliminary Results Provided January 23, 2017 Validated Results Provided April 24, 2017

Below are the <u>validated</u> test results for your drinking water sampled on December 6, 2016. These results indicate that your drinking water is below the U.S. Environmental Protection Agency (EPA)'s lifetime health advisory (LHA) for Perfluorooctane Sulfonate (PFOS) and/or Perfluorooctanoic acid (PFOA). Based upon the completion of data validation no results or qualifier flags have changed for the test results listed below.

The Navy's Environmental Restoration Program analyzed for three per- and polyfluoroalkyl substances (PFAS) as part of this drinking water investigation, which include PFOA, PFOS, and Perfluorobutanesulfonic acid (PFBS). The Navy reports only these PFAS because these are the only three for which the EPA has established human health exposure information. PFOA and PFOS are the only PFAS that EPA has established a LHA. The Navy provides bottled water when the sample results exceed the EPA's LHA.

The Navy also reports PFBS in the lab reports because this compound has health effects information that can be used to evaluate potential impact in the Navy's Environmental Restoration Program. If the EPA sets a health advisory for PFBS in the future, then the Navy will evaluate necessary actions to take based on the health advisory.

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

Chemical Name Perfluorooctane Sulfonate (PFOS)	Dec 2016	Health Advisory (ppt)	
	Result (ppt)		
	45 U	70	
Perfluorooctanoic acid (PFOA)	22 U	70	
PFOS and PFOA (cumulative) ¹	Not Detected	70	

¹Only detected values of PFOS and PFOA are summed.

	Dec 2016	
Chemical Name	Result (ppt)	Health Advisory (ppt)
Perfluorobutanesulfonic acid (PFBS)	100 U	Not applicable

J - Analyte present, but result is estimated

J - Analyte present, but result is estimated

U- Analyte not detected in the sample

U- Analyte not detected in the sample

FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-24178-1 SDG No.: Client Sample ID: WI-CV-1RW24-1216 Lab Sample ID: 320-24178-4 Matrix: Water Lab File ID: 15DEC2016A6A 012.d Analysis Method: 537 Date Collected: 12/06/2016 09:45 Extraction Method: 537 Date Extracted: 12/09/2016 18:59 Sample wt/vol: 267.4(mL) Date Analyzed: 12/15/2016 12:59 Con. Extract Vol.: 1.00(mL) Dilution Factor: 1 Injection Volume: 10(uL) GC Column: Acquity ID: 2.1(mm) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 142223 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
1763-23-1	Perfluorocctanesulfonic acid (PFOS)	0.045	J.	0.056	0.045	0.014
335-67-1	Perfluoroctancic acid (PFCA)	0.022	U	0.028	0.022	0.0088
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.10	Ū	0.13	0.10	0.044

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00993	13C2 PFHxA	94		70-130
STL00996	13C2 PFDA	91		70-130

Town of Coupeville and Fort Casey Treatment Plant 466 Keystone Hill Road WI-CV-1RW25-1216 (Well 106) 12/06/2016 10:00 Preliminary Results Provided January 23, 2017 Validated Results Provided April 24, 2017

Below are the <u>validated</u> test results for your drinking water sampled on December 6, 2016. These results indicate that your drinking water is below the U.S. Environmental Protection Agency (EPA)'s lifetime health advisory (LHA) for Perfluorooctane Sulfonate (PFOS) and/or Perfluorooctanoic acid (PFOA). Based upon the completion of data validation no results or qualifier flags have changed for the test results listed below.

The Navy's Environmental Restoration Program analyzed for three per- and polyfluoroalkyl substances (PFAS) as part of this drinking water investigation, which include PFOA, PFOS, and Perfluorobutanesulfonic acid (PFBS). The Navy reports only these PFAS because these are the only three for which the EPA has established human health exposure information. PFOA and PFOS are the only PFAS that EPA has established a LHA. The Navy provides bottled water when the sample results exceed the EPA's LHA.

The Navy also reports PFBS in the lab reports because this compound has health effects information that can be used to evaluate potential impact in the Navy's Environmental Restoration Program. If the EPA sets a health advisory for PFBS in the future, then the Navy will evaluate necessary actions to take based on the health advisory.

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

	Dec 2016	Health Advisory (ppt)	
Chemical Name Perfluorooctane Sulfonate (PFOS)	Result (ppt)		
	44 U	70	
Perfluorooctanoic acid (PFOA)	22 U	70	
PFOS and PFOA (cumulative) ¹	Not Detected	70	

¹ Only detected values of PFOS and PFOA are summed.

, a	Dec 2016	
Chemical Name	Result (ppt)	Health Advisory (ppt)
Perfluorobutanesulfonic acid (PFBS)	100 U	Not applicable

J - Analyte present, but result is estimated

J - Analyte present, but result is estimated

U- Analyte not detected in the sample

U- Analyte not detected in the sample

FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento	Job No.: 320-24178-1
SDG No.:	
Client Sample ID: WI-CV-1RW25-1216	Lab Sample ID: 320-24178-6
Matrix: Water	Lab File ID: 15DEC2016A6A_014.d
Analysis Method: 537	Date Collected: 12/06/2016 10:00
Extraction Method: 537	Date Extracted: 12/09/2016 18:59
Sample wt/vol: 271.7(mL)	Date Analyzed: 12/15/2016 14:25
Con. Extract Vol.: 1.00(mL)	Dilution Factor: 1
Injection Volume: 10(uL)	GC Column: Acquity ID: 2.1(mm)
% Moisture:	GPC Cleanup:(Y/N) N
Analysis Batch No.: 142223	Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
1763-23-1	Perfluorcoctanesulfonic acid (PFOS)	0.044	IJ	0.055	0.044	0.014
335-67-1	Perfluorocctanoic acid (PFOA)	0.022	Ü	0.028	0.022	0.0087
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.10	U	0.13	0.10	0.044

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00993	13C2 PFHxA	97		70-130
STL00996	13C2 PFDA	92		70-130

Town of Coupeville and Fort Casey Treatment Plant 466 Keystone Hill Road WI-CV-1RW26-1216 (Well 190) 12/06/2016 10:12 Preliminary Results Provided January 23, 2017 Validated Results Provided April 24, 2017

Below are the <u>validated</u> test results for your drinking water sampled on December 6, 2016. These results indicate that your drinking water is below the U.S. Environmental Protection Agency (EPA)'s lifetime health advisory (LHA) for Perfluorooctane Sulfonate (PFOS) and/or Perfluorooctanoic acid (PFOA). Based upon the completion of data validation no results or qualifier flags have changed for the test results listed below.

The Navy's Environmental Restoration Program analyzed for three per- and polyfluoroalkyl substances (PFAS) as part of this drinking water investigation, which include PFOA, PFOS, and Perfluorobutanesulfonic acid (PFBS). The Navy reports only these PFAS because these are the only three for which the EPA has established human health exposure information. PFOA and PFOS are the only PFAS that EPA has established a LHA. The Navy provides bottled water when the sample results exceed the EPA's LHA.

The Navy also reports PFBS in the lab reports because this compound has health effects information that can be used to evaluate potential impact in the Navy's Environmental Restoration Program. If the EPA sets a health advisory for PFBS in the future, then the Navy will evaluate necessary actions to take based on the health advisory.

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

	Dec 2016	Health Advisory (ppt)	
Chemical Name Perfluorooctane Sulfonate (PFOS)	Result (ppt)		
	44 U	70	
Perfluorooctanoic acid (PFOA)	22 U	70	
PFOS and PFOA (cumulative) ¹	Not Detected	70	

¹Only detected values of PFOS and PFOA are summed.

	Dec 2016	
Chemical Name	Result (ppt)	Health Advisory (ppt)
Perfluorobutanesulfonic acid (PFBS)	100 U	Not applicable

J - Analyte present, but result is estimated

J - Analyte present, but result is estimated

U- Analyte not detected in the sample

U- Analyte not detected in the sample

FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-24178-1 SDG No.: Client Sample ID: WI-CV-1RW26-1216 Lab Sample ID: 320-24178-8 Lab File ID: 15DEC2016A6A 018.d Matrix: Water Date Collected: 12/06/2016 10:12 Analysis Method: 537 Extraction Method: 537 Date Extracted: 12/09/2016 18:59 Date Analyzed: 12/15/2016 16:24 Sample wt/vol: 270.3(mL) Con. Extract Vol.: 1.00(mL) Dilution Factor: 1 GC Column: Acquity ID: 2.1(mm) Injection Volume: 10(uL)

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
1763-23-1	Ferfluorooctanesulfonic acid (PFOS)	0.044	U	0.055	0.044	0.014
335-67-1	Perfluorooctanoic acid (PFOA)	0.022	U	0.028	0.022	0.0087
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.10	U	0.13	0.10	0.044

GPC Cleanup: (Y/N) N

Units: ug/L

CAS NO.	SURROGATE	%REC Q	LIMITS
STL00993	13C2 PFHxA	100	70-130
STL00996	13C2 PFDA	97	70-130

% Moisture:

Analysis Batch No.: 142412

Town of Coupeville and Fort Casey Treatment Plant 466 Keystone Hill Road WI-CV-1RW27-1216 (Post-Treatment) 12/06/2016 10:24 Preliminary Results Provided January 23, 2017 Validated Results Provided April 24, 2017

Below are the <u>validated</u> test results for your drinking water sampled on December 6, 2016. These results indicate that your drinking water is below the U.S. Environmental Protection Agency (EPA)'s lifetime health advisory (LHA) for Perfluorooctane Sulfonate (PFOS) and/or Perfluorooctanoic acid (PFOA). Based upon the completion of data validation no results or qualifier flags have changed for the test results listed below.

The Navy's Environmental Restoration Program analyzed for three per- and polyfluoroalkyl substances (PFAS) as part of this drinking water investigation, which include PFOA, PFOS, and Perfluorobutanesulfonic acid (PFBS). The Navy reports only these PFAS because these are the only three for which the EPA has established human health exposure information. PFOA and PFOS are the only PFAS that EPA has established a LHA. The Navy provides bottled water when the sample results exceed the EPA's LHA.

The Navy also reports PFBS in the lab reports because this compound has health effects information that can be used to evaluate potential impact in the Navy's Environmental Restoration Program. If the EPA sets a health advisory for PFBS in the future, then the Navy will evaluate necessary actions to take based on the health advisory.

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

	Dec 2016	Health Advisory (ppt)	
Chemical Name	Result (ppt)		
Perfluorooctane Sulfonate (PFOS)	47 U	70	
Perfluorooctanoic acid (PFOA)	38	70	
PFOS and PFOA (cumulative) ¹	38	70	

¹ Only detected values of PFOS and PFOA are summed.

	Dec 2016	Health Advisory (ppt)	
Chemical Name	Result (ppt)		
Perfluorobutanesulfonic acid (PFBS)	110 U	Not applicable	

J - Analyte present, but result is estimated

J - Analyte present, but result is estimated

U- Analyte not detected in the sample

U- Analyte not detected in the sample

FORM I LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-24178-1 SDG No.: Client Sample ID: WI-CV-1RW27-1216 Lab Sample ID: 320-24178-10 Matrix: Water Lab File ID: 15DEC2016A6A 020.d Analysis Method: 537 Date Collected: 12/06/2016 10:24 Date Extracted: 12/09/2016 18:59 Extraction Method: 537 Sample wt/vol: 254.4(mL) Date Analyzed: 12/15/2016 17:23 Con. Extract Vol.: 1.00(mL) Dilution Factor: 1 Injection Volume: 10(uL) GC Column: Acquity ID: 2.1(mm) % Moisture: GPC Cleanup: (Y/N) N Analysis Batch No.: 142412 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.047	T.	0.059	0.047	0.015
335-67-1	Perfluorooctanoic acid (PFOA)	0.038		0.029	0.024	0.0093
375-73-5	Perfluorobutanesultonic acid (PFBS)	0.11	U	0.14	0.11	0.047

CAS NO.	SURROGATE	%REC	Ď	LIMITS
STL00993	13C2 PFHxA	114		70-130
STL00996	13C2 PFDA	112		70-130