DEPARTMENT OF HEALTH

PFAS Field Blanks

PFAS REFERENCE METHOD EPA 533

Pre-Collection Information

- One field blank is required at each public water system (PWS), regardless of the number of samples taken, according to guidance developed by the Public Health Laboratory (PHL).
- PHL will provide reagent water used to take the field blank sample.
- After preparing the field blank at the first sampling location, the sample bottle must be opened at each subsequent sample location at the PWS during sample collection.

Bottle Information

- One field blank bottle label is printed for each PWS.
 - You do not need to write anything on the bottle, "Field Blank" on the pre-printed label serves as the unique identifier.
- If pre-printed bottle labels are not available, you must write the PWS identification (PWSID), PWS name, and the unique identifier on the field blank bottle label.

Chain of Custody (COC) Information

- You must write "Field Blank" on a line of the COC. You must mark PFAS Method 533 analysis.
 - PHL uses this information to log the field blank into their database, track it throughout the lab, and analyze it as a quality control sample.
- Do not enter anything in the Location ID field.
- You must write down a time on the COC and the field blank bottle labels that a sample is collected.
 - The time should be the same time as the time the first PFAS sample is collected.
 - If you chose to use a field number as the unique identifier, you must write that on the COC and the field blank bottle labels.

1 XYZ123A	Time Collected	Location ID E01	Sampling Point	int							_	
	1:15 0006			Vell #1 Entry Point								
2 Field Number XYZ123B	1:15 post.	Location ID	Sampling Point Field Blank	J								
	amD	Location ID	Sampling	_	_		~			_		_
3 Field Number	Collected	Location ID	Sampling Point	_	_		~	Leave blank- do no	not			_
4		add a Location ID										
INORGANIC		4	METALS	1	2	3	4	ORGANIC	1	2	3	-
Unpreserved								BNA (Na;SO;O;) EPA 545				Γ
Alkalinity SM 2326B	Field	number is	nber is only					BNA (Na;SO;/HCI) EPA 525				Γ
Bromide EPA 300.1	required	d if being ເ	used as					Carbamates (Na ₂ S ₂ O ₃ Na ₂ SO ₃ & C ₃ H ₃ K ₃ O ₇) EPA 531.1/531.2				
Chloride EPA 300.1	the ur	nique iden [.]	tifier.					Glyphosate (Na2S2O2) EPA 547				
Conductivity SM 2519B		Lead EP	A 200.8					Herbicides (Na ₂ SO ₃) EPA 515.4				Γ
DOC SM 5319C		Mangan	150 EPA 200.8					VOCs, Low Level (HCsH+Os/CsH4Os) EPA 524.3				Γ
Fluoride SM 4500-F-C		Sodium	EPA 200.7									Γ
Nitrite-N SM 4500 NO2 B		Ca as C	CO3 EPA 299.7					THMs (Ascorbic/HCI or HCI) EPA 524.3				
pH SM 4500-H+B		Mg as C	BCO3 EPA 200.7					HAA (NH ₄ CI) EPA 552.2				Γ
Silica SM 4500-SIO2 C		Hardnes	5 EPA 200.7					PFC Expanded (Unpreserved) MDH 555				Γ
Sulfate EPA 300.1		Metals S	can (Non-Regulatory)					PFAS (NH ₄ C ₂ H ₂ O ₄) EPA 533	X	Х	Γ	Г

Unique COC Examples

 If a COC *already has four sample points* identified, the field blank must be documented on a second COC.

- In this case it is necessary to mark the COC "1 of 2" and "2 of 2".
- Ship or drop off both COCs and containers in the same box to PHL.
- The images below show examples. You can write across the Sample Point section or you can write in the Sampler Comment section.

Matrix Drinking Water

Comm. Sanitary Sur Date

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ORGANIC
 DRA (MassOu) EPA 505
 DRA (MassOu) EPA 505
 CARAMAS (MASSOu) EPA 505
 CARAMAS (MASSOu) EPA 505
 CARAMAS (MASSOu) EPA 505
 Herbicides (MassOu) EPA 505
 Herbicides (MassOu) EPA 505
 THMS (AssorbicACI or HCI)
 EPA 523
 THMS (AssorbicACI or HCI)
 EPA 523
 HAA ((MLC) EPA 502.2
 THMS (MASSOrbicACI or HCI)
 FAA 523
 HAA (MALC) EPA 502.2
 THMS (MASSOrbicACI or HCI)
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 HAA (MALC) EPA 502.2
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Program Code	PWSID	1	System	Name					City,	Town, Township		ſ	Prog	ram Code	PWSID		5	iystem Na	ime				City,	Town, Township
IJ	XXXXXXX	()	ABC	System					Алу	City				IJ	XXXXX	ΧХ	A	ABC S	stem			- 1	Any	(City
Date Collected (for all s	amples on form)		Collecto XXXX	r ID Collect	tor Name (please print XXXXXXXX)			Origi	nal Sample Number	Comm. Date		Date	Collected (for all sar	nples on for	n)	\$	ollector I	D Collector Name (plea XXXXXXXXXXX	se print)			Origin	nal Sample Numl
Sample Type X	Your Chlorine	Residu	ial Resu _ mg/l	lt Sample	er Comments								Sam X	ple Type	Your Chlor	ine Re		l Result mg/l	Sampler Comments					
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2 Field Number XYZ123B Field Number	Time Collec 1:35 Time Collec	am 🗆	EO	2 We	ell #2 Entry Point I #2 Entry Poin	t			<u>.</u>	\$ [™] <]		2	Field Number	Time Co	llecte	am pm d	Locati	on ID Sampling Point				,	2012
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Unpreserved				HNO.	Preserved					BNA (NaiSOIO) EPA 54	5			Unpreserved					HNO ₃ Preserved					BNA (NasSO10
Alkalinity SM 2320B				Arsenic EPA 200	3.8				1	BNA (NasSOs/HCI) EPA			Alkali	nity SM 2320B					Arsenic EPA 200.8		_	_		BNA (Na ₂ SO ₂ /F Carbamates (I
Bromide EPA 300.1				Copper EPA 200	18					Carbamates (Na ₂ S ₂ O ₃ / C ₄ H ₃ K ₃ O ₇) EPA 531.1/53	Na ₂ SO ₃ &		Brom	ide EPA 300.1					Copper EPA 200.8					CaH_K_O_JEP
Chloride EPA 300.1		-		Iron EPA 200,7						Glyphosate (Na ₂ S ₂ O ₃)			Chlor	ide EPA 300.1					Iron EPA 200.7					Glyphosate (N
Conductivity SM 2510B		+		Lead EPA 200.8						Herbicides (Na ₂ SO ₃) El			Cond	uctivity SM 2510B					Lead EPA 200.8					Herbicides (Na
DOC SM 5319C		+	+	Manganese EPA	A 200 8				-	VOCs, Low Level (HC ₂ H ₇ O ₂ /C ₄ H ₄ O ₄) EPA			DOC	SM 5310C					Manganese EPA 200.8					VOCs, Low Le (HCgH;Og/CgH
Fluoride SM 4500-F-C				Sodium EPA 200	17					(negrijog cinio) Ern	024.3		Fluori	ide SM 4500-F-C					Sodium EPA 200.7	\rightarrow	\rightarrow	\perp		THMs (Ascord
Nitrite-N SM 4500-NO2 B				Ca as CaCO ₃ EF	PA 200.7					THMs (Ascorbic/HCl o EPA 524.3	or HCI)	-		-N SM 4500-NO2 B		+	-		Ca as CaCO ₃ EPA 200.7	\rightarrow	+	+		EPA 524.3
pH SM 4500-H+B				Mg as CaCO ₃ El	PA 299.7					HAA (NH ₄ CI) EPA 552.2		-		4500-H+B			-		Mg as CaCO ₃ EPA 200.7		+	+	_	HAA (NH ₄ CI) I
Silica SM 4500-SiO2 C				Hardness EPA 2	100.7					PFC Expanded (Unpreserved) MDH 55	6	-		SM 4500-SiO2 C		+			Hardness EPA 200.7	\rightarrow	+	+		(Unpreserved
Sulfate EPA 300.1				Metals Scan (No	on-Regulatory)					PFAS (NH4C2H3O2) EP		-	Sulfat	te EPA 300.1					Metals Scan (Non-Regulatory)	\square	+	+	-	PEAS (NH4C2
		-	-	-		_	-	1	-															

Post-Collection Information

- If a PFAS sample arrives at the PHL without a field blank or with a field blank that is canceled, the PFAS sample will **not** be canceled. It will be analyzed and the data qualified if needed.
- If a field blank is documented on the COC but no time is documented, PHL will contact MDH staff and request a time. In these cases, the field blank and the sample will **not** be canceled.
- PWSs may see two data qualifiers (B6 and B7) associated with field blanks on their final reports. If you receive questions about these, please refer the PWS to the PFAS Project Manager. Information about what the new data qualifiers mean:
 - B6: The analyte was found in both field blank and sample.
 - B7: The result is suspect. It was not confirmed as a positive detection because there was no trip blank to evaluate for possible contamination.

If you have questions, call 651-201-4700, or email <u>health.drinkingwater@state.mn.us</u>.

Minnesota Department of Health Drinking Water Protection 651-201-4700 health.drinkingwater@state.mn.us www.health.state.mn.us

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To obtain this information in a different format, call 651-201-4700.