

Focus on Quality - PFAS Container Requirements - Water

A pair of sample containers is required to conduct PFAS analysis, plus additional pairs for the lab QA/QC to comply with DoD QSM 5.3 and NEPM.

When sampling waters for PFAS analysis, providing the correct number of sample containers will ensure quality objectives are achieved for your important projects. Additional bottle pairs facilitate the minimum frequency of lab QA/QC samples per NEPM and satisfies the requirements of the Department of Defence (DoD) Quality Services Manual (QSM 5.3). The QSM prescribes whole bottle extraction meaning each container represents a single analysis. Pairs are supplied for confirmation by re-extraction (where required).

To perform laboratory QA/QC (duplicates and matrix spikes), additional sample volume is required, dependent on the quantity of samples submitted for PFAS analysis. Laboratory QA/QC specifications are based on:

- 5% Matrix Spikes (MS) – 1 analysed per 20 samples.
- 10% Laboratory Duplicates (DUP) – 2 analysed per 20 samples.
- When submitting >20 samples include additional pairs of containers for DUP and MS following the same logic described above and represented below.

	PRIMARY ANALYSIS	LAB QA/QC
SAMPLE 11	▣▣	▣▣ DUP
SAMPLE 12	▣▣	
SAMPLE 13	▣▣	
SAMPLE 14	▣▣	
SAMPLE 15	▣▣	
SAMPLE 16	▣▣	
SAMPLE 17	▣▣	
SAMPLE 18	▣▣	
SAMPLE 19	▣▣	
SAMPLE 20	▣▣	

	PRIMARY ANALYSIS	LAB QA/QC
SAMPLE 1	▣▣	▣▣ DUP
SAMPLE 2	▣▣	▣▣ MS
SAMPLE 3	▣▣	
SAMPLE 4	▣▣	
SAMPLE 5	▣▣	
SAMPLE 6	▣▣	
SAMPLE 7	▣▣	
SAMPLE 8	▣▣	
SAMPLE 9	▣▣	
SAMPLE 10	▣▣	

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The example table above is a guide to highlight the required frequency. It is not mandatory to submit the additional volume on samples 1, 2 & 11. Sample selection for DUP and MS analysis should be carefully considered based on the sample properties.

Additional volume for MS analysis and DUP analysis should be provided for different samples.

Samples must be submitted in line with an existing sample ID but must indicate via the COC additional volume has been provided for QA/QC purposes e.g., by noting "Lab QC" (for both Dup and MS) as shown in the COC below.

If in doubt, please contact your local Client Services representative who will assist in confirming the bottle requirements for your project to ensure QA/QC compliance is achieved.

 CHAIN OF CUSTODY ALS Laboratory: <i>please tick</i> →		DADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com		DMACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com		DNEWCASTLE 5 Rose Gum Road Warabrook NSW 2334 Ph: 02 4966 9433 E: samples.newcastle@alsglobal.com		DSYDNEY 277-299 Woodpark Road Smithfield NSW 2147 Ph: 02 8784 8556 E: samples.sydney@alsglobal.com							
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CLIENT: BLOGGS CONSULTING OFFICE: Australia PROJECT: Water Testing PURCHASE ORDER NUMBER: 123456 PROJECT MANAGER: JOE BLOGGS SAMPLER: JOE BLOGGS COC Emailed to ALS? (YES / NO) Email Reports to: Joe.Bloggs@bloggsconsulting.com Email Invoice to: Admin@bloggsconsulting.com		TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ALS QUOTE NO.: EP/3006/21 COUNTRY OF ORIGIN: AUSTRALIA		<input type="checkbox"/> Standard TAT (List due date): <input type="checkbox"/> Non Standard or urgent TAT (List due date):		FOR LABORATORY USE ONLY (Circle) Custody Seal Intact? Yes No N/A Free ice / frozen ice bricks present upon receipt? Yes No N/A Random Sample Temperature on Receipt: °C Other comment:		CDC SEQUENCE NUMBER (Circle) coc: 1 2 6 7 OF: 1 2 6 7		RECEIVED BY: DATE/TIME:		RELINQUISHED BY: DATE/TIME:		RECEIVED BY: DATE/TIME:	
COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:															
ALS USE ONLY	SAMPLE DETAILS MATRX: Solid(S) Water(W)			CONTAINER INFORMATION			ANALYSIS REQUIRED including SUITES (NB: Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).				Additional Information				
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES	EP231X PFAS Extended Suite								Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.	
	Sample 1	29/04/2021	W		4									Additional volume supplied for Lab QC	
	Sample 2	29/04/2021	W		2										
	Sample 3	29/04/2021	W		4									Additional volume supplied for Lab QC	

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