



Corporate Accreditation No 63
Accredited for compliance with ISO/IEC 17025 - Testing



Analytical Report 317128

Issue Date: 17/12/2024
Issued By : Sydney Water Laboratory Services

Delivery Address: Sydney Water Corporation
51 Hermitage Rd
West Ryde NSW 2114
Telephone: (02) 9800 6935
Email: analyticalservices@sydneywater.com.au

Attention: Zenah Bradford-Hartke
Customer: Health Systems Support Group- Health Protection NSW
Customer ID: ZHSSG

Address: 1 Reserve Rd, St Leonards NSW 2165
Telephone:
Email: Zenah.BradfordHartke@health.nsw.gov.au

CONTENTS

1. Sydney Water Approved Signatory
2. Sample Summary
3. Analytical results
4. Comments
5. Laboratory QC results

Sydney Water Approved Signatory

Abhilasha Bhandari, Organics Analyst

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered. Uncertainty estimates are available for all accredited test results.

SAMPLE SUMMARY

<u>Client Sample ID</u>	<u>Sample Number</u>	<u>Sampling Procedure</u>	<u>Date Sampled</u>	<u>Date Received</u>	<u>Date Authorised</u>	<u>Description</u>
Field Blank	L24104321	1	10/12/2024	11/12/2024	16/12/2024	Bellingen (DW)
T91 Bellingen	L24104322	1	10/12/2024	11/12/2024	16/12/2024	A24BE0100001 (DW)
Bellingen Dup	L24104323	1	10/12/2024	11/12/2024	16/12/2024	(DW)
T89 Dorrigo	L24104326	1	10/12/2024	11/12/2024	16/12/2024	A24BE0200001 (DW)

Sampling procedures

- 1 Samples analysed as received.
- 2 Samples collected as per FS procedures SAWI 070, Excluding Oil & Grease which is collected as per clients instructions.
- 3 Samples collected as per FS procedures SAWI 070.
- 4 Results reported as received from WNSW.

ANALYTICAL RESULTS

Client Sample ID		Field Blank	T91 Bellingin	Bellingin Dup	T89 Dorrigo				
Sampled Date		10/12/2024 11:20:00 AM	10/12/2024 11:20:00 AM	10/12/2024 11:20:00 AM	10/12/2024 10:10:00 AM				
Sample Number		L24104321	L24104322	L24104323	L24104326				
ORGANICS									
TC0066WULL : Analysis of PFAS by LCMSMS									
PFOA (335-67-1)	ug/L	<0.0001	<0.0001	<0.0001	<0.0001				
PFBS (375-73-5)	ug/L	<0.0005	<0.0005	<0.0005	<0.0005				
PFHxS (355-46-4)	ug/L	<0.0001	<0.0001	<0.0001	<0.0001				
PFOS (1763-23-1)	ug/L	<0.0001	<0.0001	<0.0001	<0.0001				
HFPO-DA (13252-13-6)	ug/L	<0.0005	<0.0005	<0.0005	<0.0005				
13C8-PFOA surrogate	% Recovery	72.8	83.8	82.5	81.2				
13C3-PFBS surrogate	% Recovery	78.0	91.2	79.8	86.8				
13C3-PFHxS surrogate	% Recovery	77.2	79.0	84.0	96.2				
13C8-PFOS surrogate	% Recovery	54.2	81.2	91.2	73.2				
13C3-HFPO-DA surrogate	% Recovery	70.0	75.8	77.0	75.0				
PFHxS + PFOS	ug/L	<0.0001	<0.0001	<0.0001	<0.0001				

Client Sample ID	Field Blank	T91 Bellingin	Bellingin Dup	T89 Dorrigo				
Sampled Date	10/12/2024 11:20:00 AM	10/12/2024 11:20:00 AM	10/12/2024 11:20:00 AM	10/12/2024 10:10:00 AM				
Sample Number	L24104321	L24104322	L24104323	L24104326				
ORGANICS								
Date of Performance	DD/MM/YY	12/12/24	12/12/24	12/12/24	12/12/24			

COMMENTS

Analysis

Analysis Requirements

TC0066WULL

See PFAS comments below

PFAS comments**Recovery corrected through true isotope dilution**

Perfluoro-n-butyanoic acid (PFBA)
 Perfluoro-n-pentanoic (PFPeA)
 Perfluoro-n-hexanoic Acid (PFHxA)
 Perfluoro-n-heptanoic Acid (PFHpA)
 Perfluoro-n-octanoic Acid (PFOA)
 Perfluoro-n-nonanoic Acid (PFNA)
 Perfluoro-n-decanoic Acid (PFDA)
 Perfluoro-n-undecanoic Acid (PFUnA)
 Perfluoro-n-dodecanoic Acid (PFDoA)
 Perfluoro-n-tetradecanoic Acid (PFTeDA)
 Perfluoro-n-hexadecanoic Acid (PFHxDA)
 2H-Perfluoro-2-decenoic Acid (FOUEA)
 Perfluoro-1-butanefulfonic Acid (PFBS)
 Perfluoro-1-hexanesulfonic Acid (PFHxS)
 Perfluoro-1-octanesulfonic Acid (PFOS)
 Perfluoro-1-ctanesulfonamide (PFOSA)
 N-methyl perfluorooctanesulfonamide (N-MeFOSA)
 N-ethyl perfluorooctanesulfonamide (N-EtFOSA)
 N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)
 N-ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)
 N-methylperfluorooctanesulfonamidoethanol (N-MeFOSE)
 N-ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)
 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)
 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2 FTS)
 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2 FTS)
 1H,1H,2H,2H-Perfluorododecanesulfonic acid (10:2 FTS)
 Bis(1H,1H,2H,2H-perfluorodecyl)Phosphate (8:2 diPAP)
 Hexafluoropropylene oxide dimer acid (HFPO-DA)

Recovery corrected through extracted internal standard

Perfluoro-n-tridecanoic Acid (PFTrDA)
 Perfluoro-n-octadecanoic Acid (PFODA)
 Perfluoro-1-pentanesulfonic Acid (PFPeS)
 Perfluoro-1-heptanesulfonic Acid (PFHpS)
 Perfluoro-1-nonanesulfonic Acid (PFNS)
 Perfluoro-1-decanesulfonic Acid (PFDS)
 Perfluoro-1-dodecanesulfonic Acid (PFDoS)
 Perfluoro-3-methoxypropionic acid (PFMPA)
 Perfluoro-4-methoxybutanoic acid (PFMBA)
 Perfluoro-3,6-dioxaheptanoic acid (NFDHA)
 4,8-dioxa-3H-perfluorononanoate (ADONA)
 Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)
 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)
 11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
 3-Perfluoropropyl Propanoic Acid (3:3FTCA)
 3-Perfluoropentyl propanoic acid (5:3FTCA)
 3-Perfluoroheptyl propanoic acid (7:3FTCA)

NOTE

PFOA, PFNA, PFHxS, PFOS, PFOSA, N-MeFOSAA, N-EtFOSAA, N-MeFOSE and N-EtFOSE are quantified and reported as sum of the isomers.

For liquid samples

Whole sample is analysed.

For solid samples

Sample analysed as received and reported on dry weight basis.

LABORATORY QC RESULTS

N/A - Not Applicable

PQL - Practical Quantitation Limit

LOQ - Limit of Quantification

RPD - Relative Percent Difference

SPIKE/Positive Control - Addition of a known amount and concentration

Duplicate Precision = Accepted - Result 2 within 95% confidence limits of result 1

Duplicate Precision = Outlier - Result 2 outside 95% confidence limits of result 1

Duplicate Precision = Not calculated - Result is outside test range

LOQ	Blank	Control <i>Acceptance Criteria</i>	Spike <i>Acceptance Criteria</i>	Duplicate1	Duplicate2	RPD <i>Acceptance Criteria</i>
TC0066WULL HFPO-DA (13252-13-6)						
<0.0005 ug/L	<0.0005	96.6 70.0 - 130.0 ug/L	106 % Recovery 70.0 - 135.0 % Recovery	<0.0005	<0.0005	B 0.0 - 0.0 %
TC0066WULL PFBS (375-73-5)						
<0.0005 ug/L	<0.0005	91.4 70.0 - 130.0 ug/L	118 % Recovery 70.0 - 140.0 % Recovery	<0.0005	<0.0005	B 0.0 - 0.0 %
TC0066WULL PFHxS (355-46-4)						
<0.0001 ug/L	<0.0001	128 70.0 - 130.0 ug/L	104 % Recovery 70.0 - 135.0 % Recovery	0.0011	0.0012	8.70 % 0.0 - 50.0 %
TC0066WULL PFOA (335-67-1)						
<0.0001 ug/L	<0.0001	115 70.0 - 130.0 ug/L	149 % Recovery 65.0 - 155.0 % Recovery	0.0004	0.0006	B 0.0 - 0.0 %
TC0066WULL PFOS (1763-23-1)						
<0.0001 ug/L	<0.0001	130 70.0 - 130.0 ug/L	120 % Recovery 70.0 - 140.0 % Recovery	<0.0001	<0.0001	B 0.0 - 0.0 %

Extra Note:

B: Duplicate RPD reject criteria is not applicable, results are <10 times LOQ