



Your P.O. #: 200826
Your C.O.C. #: 756674-03-01

City of Nanaimo
South Fork WTP
2500 South Forks Rd.
Nanaimo, BC
Canada V9X 1H3

Report Date: 2025/07/07
Report #: R3682364
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C557136

Received: 2025/06/24, 13:15

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Low Level PFAS in water by SPE/LC-MS/MS (1)	2	2025/07/03	2025/07/04	CAM SOP-00894	EPA 537.1 m
PFAS in Water by LCMSMS (1, 2)	2	2025/07/03	2025/07/04	CAM SOP-00985	EPA 1633 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Campobello, 6740 Campobello Road, Mississauga, ON, L5N 2L8

(2) Per- and polyfluoroalkyl substances (PFAS) identified as surrogates on the certificate of analysis represent the extracted internal standard.

Per- and Polyfluoroalkyl Substances (PFAS) data were evaluated against the prescribed elements for performance and quality in the British Columbia Environmental Laboratory Manual Performance Based PFAS Method (PBM).



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Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas
07 Jul 2025 08:36:41

Please direct all questions regarding this Certificate of Analysis to:
Morgan Melnychuk, Customer Solutions Representative
Email: Morgan.MELNYCHUK@bureauveritas.com
Phone# (604)638-8034 Ext:8034

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This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rob Gilbert, BBY General Manager responsible for British Columbia Environmental laboratory operations.



**BUREAU
VERITAS**

Bureau Veritas Job #: C557136

Report Date: 2025/07/07

City of Nanaimo

Your P.O. #: 200826

SUBCONTRACTED ANALYSIS (WATER)

Bureau Veritas ID		DNU756	DNU757			DNU758	DNU759		
Sampling Date		2025/06/23 12:40	2025/06/23 13:15			2025/06/23 13:20	2025/06/23 14:40		
COC Number		756674-03-01	756674-03-01			756674-03-01	756674-03-01		
	UNITS	JUMP LAKE	SFWTP RAW	RDL	QC Batch	SFWTP TREATED	TANYA RESERVOIR	RDL	QC Batch

Perfluorinated Compounds

Perfluorobutanoic acid (PFBA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluoropentanoic Acid (PFPeA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorohexanoic Acid (PFHxA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluoroheptanoic Acid (PFHpA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorooctanoic Acid (PFOA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorononanoic Acid (PFNA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorodecanoic Acid (PFDA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluoroundecanoic Acid (PFUnA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorododecanoic Acid (PFDoA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorotridecanoic acid (PFTRDA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorotetradecanoic acid (PFTEDA)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorohexadecanoic acid (PFHxDA)	ng/L	ND	ND	2.0	C010845				
Perfluorooctadecanoic acid (PFODA)	ng/L	ND	ND	2.0	C010845				
Perfluoropropanesulfonic acid PFP RS	ng/L	ND	ND	2.0	C010845				
Perfluorobutanesulfonic acid (PFBS)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluoropentanesulfonic acid PFPes	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorohexanesulfonic acid (PFHxS)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluoroheptanesulfonic acid PFHpS	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorooctanesulfonic acid (PFOS)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorononanesulfonic acid (PFNS)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorodecanesulfonic acid (PFDS)	ng/L	ND	ND	2.0	C010845	ND	ND	2.0	C010844
Perfluorododecanesulfonic acid	ng/L	ND	ND	2.0	C010845				
Perfluorooctane Sulfonamide (PFOSA)	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
2H-Perfluorooctenoic Acid	ng/L	ND	ND	2.0	C010845				
2H-Perfluoro-decenoic Acid	ng/L	ND	ND	2.0	C010845				
4:2 Fluorotelomer sulfonic acid	ng/L	ND	ND	2.0	C010845	ND	ND	4.0	C010844
6:2 Fluorotelomer sulfonic acid	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
8:2 Fluorotelomer sulfonic acid	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
10:2 Fluorotelomer sulfonic acid	ng/L	ND	ND	4.0	C010845				
EtFOSAA	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
MeFOSA	ng/L	ND	ND	4.0	C010845				
EtFOSA	ng/L	ND	ND	4.0	C010845				

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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City of Nanaimo

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SUBCONTRACTED ANALYSIS (WATER)

Bureau Veritas ID		DNU756	DNU757			DNU758	DNU759		
Sampling Date		2025/06/23 12:40	2025/06/23 13:15			2025/06/23 13:20	2025/06/23 14:40		
COC Number		756674-03-01	756674-03-01			756674-03-01	756674-03-01		
	UNITS	JUMP LAKE	SFWTP RAW	RDL	QC Batch	SFWTP TREATED	TANYA RESERVOIR	RDL	QC Batch
MeFOSAA	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
MeFOSE	ng/L	ND	ND	4.0	C010845				
EtFOSE	ng/L	ND	ND	4.0	C010845				
Hexafluoropropyleneoxide Dimer Acid	ng/L	ND	ND	4.0	C010845	ND	ND	4.0	C010844
4,8-Dioxo-3H-Perfluorononanoic Acid	ng/L	ND	ND	2.0	C010845	ND	ND	4.0	C010844
9Cl-PF3ONS (F-53B Major)	ng/L	ND	ND	2.0	C010845	ND	ND	4.0	C010844
11Cl-PF3OUdS (F-53B Minor)	ng/L	ND	ND	2.0	C010845	ND	ND	4.0	C010844
Perfluoro-3-methoxypropanoic acid	ng/L	ND	ND	2.0	C010845				
Perfluoro-4-methoxybutanoic acid	ng/L	ND	ND	2.0	C010845				
Nonafluoro-3,6-dioxaheptanoic acid	ng/L	ND	ND	4.0	C010845				
Perfluoro2ethoxyethanesulfonic acid	ng/L	ND	ND	2.0	C010845				
PFECHS	ng/L	ND	ND	2.0	C010845				
3-Perfluoropropylpropanoic acid	ng/L	ND	ND	10	C010845				
2H2H3H3H-Perfluorooctanoic acid	ng/L	ND	ND	4.0	C010845				
3-Perfluoroheptylpropanoic acid	ng/L	ND	ND	4.0	C010845				
Surrogate Recovery (%)									
13C2-4:2-Fluorotelomersulfonic Acid	%					70	69		C010844
13C2-6:2-Fluorotelomersulfonic Acid	%					75	71		C010844
13C2-8:2-Fluorotelomersulfonic Acid	%					71	71		C010844
13C2-Perfluorodecanoic acid	%					83	86		C010844
13C2-Perfluorododecanoic acid	%					72	75		C010844
13C2-Perfluorohexanoic acid	%					94	91		C010844
13C2-perfluorotetradecanoic acid	%					61	69		C010844
13C2-Perfluoroundecanoic acid	%					75	79		C010844
13C3-HFPO-DA	%					88	89		C010844
13C3-Perfluorobutanesulfonic acid	%					83	81		C010844
13C4-Perfluorobutanoic acid	%					95	98		C010844
13C4-Perfluoroheptanoic acid	%					91	92		C010844
13C4-Perfluorooctanesulfonic acid	%					76	79		C010844
13C4-Perfluorooctanoic acid	%					89	87		C010844
13C5-Perfluorononanoic acid	%					85	85		C010844
13C5-Perfluoropentanoic acid	%					84	83		C010844
13C8-Perfluorooctane Sulfonamide	%					66	68		C010844
RDL = Reportable Detection Limit									
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.									



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SUBCONTRACTED ANALYSIS (WATER)

Bureau Veritas ID		DNU756	DNU757			DNU758	DNU759		
Sampling Date		2025/06/23 12:40	2025/06/23 13:15			2025/06/23 13:20	2025/06/23 14:40		
COC Number		756674-03-01	756674-03-01			756674-03-01	756674-03-01		
	UNITS	JUMP LAKE	SFWTP RAW	RDL	QC Batch	SFWTP TREATED	TANYA RESERVOIR	RDL	QC Batch
18O2-Perfluorohexanesulfonic acid	%					87	82		C010844
D3-MeFOSAA	%					64	68		C010844
D5-EtFOSAA	%					60	65		C010844
13C2-2H-Perfluoro-decenoic Acid	%	69	80		C010845				
13C2-2H-Perfluorooctenoic Acid	%	73	93		C010845				
13C2-4:2-Fluorotelomersulfonic Acid	%	81	88		C010845				
13C2-6:2-Fluorotelomersulfonic Acid	%	88	93		C010845				
13C2-8:2-Fluorotelomersulfonic Acid	%	90	82		C010845				
13C2D4-10:2Fluorotelomersulfonic Ac	%	70	58		C010845				
13C2-Perfluorodecanoic acid	%	94	93		C010845				
13C2-Perfluorododecanoic acid	%	70	65		C010845				
13C2-Perfluorohexadecanoic acid	%	29	25		C010845				
13C2-Perfluorohexanoic acid	%	92	100		C010845				
13C2-Perfluorotetradecanoic acid	%	45	41		C010845				
13C3-HFPO-DA	%	76	82		C010845				
13C3-Perfluorobutanesulfonic acid	%	86	95		C010845				
13C3-Perfluorobutanoic Acid	%	91	94		C010845				
13C3-Perfluorohexanesulfonic Acid	%	81	92		C010845				
13C4-Perfluorobutanoic acid	%	67	91		C010845				
13C4-Perfluoroheptanoic acid	%	87	86		C010845				
13C4-Perfluorooctanesulfonic acid	%	97	98		C010845				
13C4-Perfluorooctanoic acid	%	97	87		C010845				
13C5-Perfluorohexanoic Acid	%	84	89		C010845				
13C5-Perfluorononanoic acid	%	84	94		C010845				
13C5-Perfluoropentanoic acid	%	83	86		C010845				
13C6-Perfluorodecanoic Acid	%	82	79		C010845				
13C7-Perfluoroundecanoic Acid	%	71	70		C010845				
13C8-Perfluorooctane Sulfonamide	%	75	76		C010845				
13C8-Perfluorooctanesulfonic Acid	%	74	77		C010845				
13C8-Perfluorooctanoic Acid	%	77	97		C010845				
13C9-Perfluorononanoic Acid	%	94	86		C010845				
18O2-Perfluorohexanesulfonic acid	%	95	96		C010845				
D3-MeFOSA	%	59	58		C010845				
D3-MEFOSAA	%	66	58		C010845				
RDL = Reportable Detection Limit									



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City of Nanaimo

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SUBCONTRACTED ANALYSIS (WATER)

Bureau Veritas ID		DNU756	DNU757			DNU758	DNU759		
Sampling Date		2025/06/23 12:40	2025/06/23 13:15			2025/06/23 13:20	2025/06/23 14:40		
COC Number		756674-03-01	756674-03-01			756674-03-01	756674-03-01		
	UNITS	JUMP LAKE	SFWTP RAW	RDL	QC Batch	SFWTP TREATED	TANYA RESERVOIR	RDL	QC Batch
D5-EtFOSA	%	54	51		C010845				
D5-ETFOSAA	%	53	57		C010845				
D7-MeFOSE	%	50	41		C010845				
D9-EtFOSE	%	43	37		C010845				
RDL = Reportable Detection Limit									



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GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C557136

Report Date: 2025/07/07

QUALITY ASSURANCE REPORT

City of Nanaimo
Your P.O. #: 200826

QC Batch	Parameter	Date	Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
C010844	13C2-4:2-Fluorotelomersulfonic Acid	2025/07/04	68	10 - 130	55	%		
C010844	13C2-6:2-Fluorotelomersulfonic Acid	2025/07/04	71	10 - 130	56	%		
C010844	13C2-8:2-Fluorotelomersulfonic Acid	2025/07/04	65	10 - 130	51	%		
C010844	13C2-Perfluorodecanoic acid	2025/07/04	74	10 - 130	52	%		
C010844	13C2-Perfluorododecanoic acid	2025/07/04	66	10 - 130	45	%		
C010844	13C2-Perfluorohexanoic acid	2025/07/04	83	10 - 130	64	%		
C010844	13C2-perfluorotetradecanoic acid	2025/07/04	43	10 - 130	33	%		
C010844	13C2-Perfluoroundecanoic acid	2025/07/04	67	10 - 130	49	%		
C010844	13C3-HFPO-DA	2025/07/04	90	10 - 130	53	%		
C010844	13C3-Perfluorobutanesulfonic acid	2025/07/04	75	10 - 130	59	%		
C010844	13C4-Perfluorobutanoic acid	2025/07/04	92	10 - 130	65	%		
C010844	13C4-Perfluoroheptanoic acid	2025/07/04	83	10 - 130	61	%		
C010844	13C4-Perfluorooctanesulfonic acid	2025/07/04	69	10 - 130	54	%		
C010844	13C4-Perfluorooctanoic acid	2025/07/04	80	10 - 130	61	%		
C010844	13C5-Perfluorononanoic acid	2025/07/04	76	10 - 130	56	%		
C010844	13C5-Perfluoropentanoic acid	2025/07/04	88	10 - 130	64	%		
C010844	13C8-Perfluorooctane Sulfonamide	2025/07/04	49	10 - 130	43	%		
C010844	18O2-Perfluorohexanesulfonic acid	2025/07/04	78	10 - 130	59	%		
C010844	D3-MeFOSAA	2025/07/04	66	10 - 130	42	%		
C010844	D5-EtFOSAA	2025/07/04	59	10 - 130	42	%		
C010845	13C2-2H-Perfluoro-decenoic Acid	2025/07/04	90	20 - 150	90	%		
C010845	13C2-2H-Perfluorooctenoic Acid	2025/07/04	90	20 - 150	91	%		
C010845	13C2-4:2-Fluorotelomersulfonic Acid	2025/07/04	90	40 - 200	99	%		
C010845	13C2-6:2-Fluorotelomersulfonic Acid	2025/07/04	87	40 - 200	89	%		
C010845	13C2-8:2-Fluorotelomersulfonic Acid	2025/07/04	93	40 - 300	93	%		
C010845	13C2D4-10:2Fluorotelomersulfonic Ac	2025/07/04	73	20 - 150	86	%		
C010845	13C2-Perfluorodecanoic acid	2025/07/04	97	50 - 200	101	%		
C010845	13C2-Perfluorododecanoic acid	2025/07/04	87	10 - 130	75	%		
C010845	13C2-Perfluorohexadecanoic acid	2025/07/04	44	20 - 150	51	%		
C010845	13C2-Perfluorohexanoic acid	2025/07/04	103	50 - 200	105	%		
C010845	13C2-Perfluorotetradecanoic acid	2025/07/04	57	10 - 130	63	%		
C010845	13C3-HFPO-DA	2025/07/04	86	40 - 130	72	%		
C010845	13C3-Perfluorobutanesulfonic acid	2025/07/04	93	10 - 135	95	%		



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QUALITY ASSURANCE REPORT(CONT'D)

City of Nanaimo
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QC Batch	Parameter	Date	Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
C010845	13C3-Perfluorobutanoic Acid	2025/07/04	100	50 - 200	98	%		
C010845	13C3-Perfluorohexanesulfonic Acid	2025/07/04	94	40 - 130	88	%		
C010845	13C4-Perfluorobutanoic acid	2025/07/04	84	5 - 130	89	%		
C010845	13C4-Perfluoroheptanoic acid	2025/07/04	83	40 - 130	81	%		
C010845	13C4-Perfluorooctanesulfonic acid	2025/07/04	103	50 - 200	93	%		
C010845	13C4-Perfluorooctanoic acid	2025/07/04	92	50 - 200	96	%		
C010845	13C5-Perfluorohexanoic Acid	2025/07/04	81	40 - 130	84	%		
C010845	13C5-Perfluorononanoic acid	2025/07/04	96	50 - 200	102	%		
C010845	13C5-Perfluoropentanoic acid	2025/07/04	81	40 - 130	79	%		
C010845	13C6-Perfluorodecanoic Acid	2025/07/04	88	40 - 130	90	%		
C010845	13C7-Perfluoroundecanoic Acid	2025/07/04	80	30 - 130	77	%		
C010845	13C8-Perfluorooctane Sulfonamide	2025/07/04	88	40 - 130	103	%		
C010845	13C8-Perfluorooctanesulfonic Acid	2025/07/04	82	10 - 130	90	%		
C010845	13C8-Perfluorooctanoic Acid	2025/07/04	90	10 - 130	83	%		
C010845	13C9-Perfluorononanoic Acid	2025/07/04	87	10 - 130	88	%		
C010845	18O2-Perfluorohexanesulfonic acid	2025/07/04	92	50 - 200	95	%		
C010845	D3-MEFOSAA	2025/07/04	72	40 - 170	87	%		
C010845	D3-MeFOSA	2025/07/04	67	10 - 130	68	%		
C010845	D5-ETFOSAA	2025/07/04	67	25 - 135	86	%		
C010845	D5-EtFOSA	2025/07/04	61	10 - 130	63	%		
C010845	D7-MeFOSE	2025/07/04	65	10 - 130	79	%		
C010845	D9-EtFOSE	2025/07/04	50	10 - 130	64	%		
C010844	11Cl-PF3OUdS (F-53B Minor)	2025/07/04	79	70 - 130	ND, RDL=4.0	ng/L	0.80	30
C010844	4,8-Dioxa-3H-Perfluorononanoic Acid	2025/07/04	80	70 - 130	ND, RDL=4.0	ng/L	4.9	30
C010844	4:2 Fluorotelomer sulfonic acid	2025/07/04	86	70 - 130	ND, RDL=4.0	ng/L	1.2	30
C010844	6:2 Fluorotelomer sulfonic acid	2025/07/04	82	70 - 130	ND, RDL=4.0	ng/L	5.5	30
C010844	8:2 Fluorotelomer sulfonic acid	2025/07/04	82	70 - 130	ND, RDL=4.0	ng/L	4.7	30
C010844	9Cl-PF3ONS (F-53B Major)	2025/07/04	70	70 - 130	ND, RDL=4.0	ng/L	12	30
C010844	EtFOSAA	2025/07/04	82	70 - 130	ND, RDL=4.0	ng/L	1.5	30
C010844	Hexafluoropropyleneoxide Dimer Acid	2025/07/04	87	70 - 130	ND, RDL=4.0	ng/L	6.4	30
C010844	MeFOSAA	2025/07/04	77	70 - 130	ND, RDL=4.0	ng/L	7.3	30
C010844	Perfluorobutanesulfonic acid (PFBS)	2025/07/04	85	70 - 130	ND, RDL=2.0	ng/L	5.5	30
C010844	Perfluorobutanoic acid (PFBA)	2025/07/04	84	70 - 130	ND, RDL=2.0	ng/L	4.8	30



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VERITAS**

Bureau Veritas Job #: C557136

Report Date: 2025/07/07

QUALITY ASSURANCE REPORT(CONT'D)

City of Nanaimo

Your P.O. #: 200826

QC Batch	Parameter	Date	Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
C010844	Perfluorodecanesulfonic acid (PFDS)	2025/07/04	72	70 - 130	ND, RDL=2.0	ng/L	9.0	30
C010844	Perfluorodecanoic Acid (PFDA)	2025/07/04	80	70 - 130	ND, RDL=2.0	ng/L	8.1	30
C010844	Perfluorododecanoic Acid (PFDoA)	2025/07/04	79	70 - 130	ND, RDL=2.0	ng/L	7.4	30
C010844	Perfluoroheptanesulfonic acid PFHpS	2025/07/04	77	70 - 130	ND, RDL=2.0	ng/L	4.8	30
C010844	Perfluoroheptanoic Acid (PFHpA)	2025/07/04	82	70 - 130	ND, RDL=2.0	ng/L	6.4	30
C010844	Perfluorohexanesulfonic acid(PFHxS)	2025/07/04	83	70 - 130	ND, RDL=2.0	ng/L	5.6	30
C010844	Perfluorohexanoic Acid (PFHxA)	2025/07/04	85	70 - 130	ND, RDL=2.0	ng/L	3.4	30
C010844	Perfluorononanesulfonic acid (PFNS)	2025/07/04	70	70 - 130	ND, RDL=2.0	ng/L	12	30
C010844	Perfluorononanoic Acid (PFNA)	2025/07/04	80	70 - 130	ND, RDL=2.0	ng/L	6.6	30
C010844	Perfluorooctane Sulfonamide (PFOSA)	2025/07/04	80	70 - 130	ND, RDL=4.0	ng/L	5.6	30
C010844	Perfluorooctanesulfonic acid (PFOS)	2025/07/04	82	70 - 130	ND, RDL=2.0	ng/L	8.1	30
C010844	Perfluorooctanoic Acid (PFOA)	2025/07/04	86	70 - 130	ND, RDL=2.0	ng/L	2.2	30
C010844	Perfluoropentanesulfonic acid PFPes	2025/07/04	72	70 - 130	ND, RDL=2.0	ng/L	7.3	30
C010844	Perfluoropentanoic Acid (PFPeA)	2025/07/04	82	70 - 130	ND, RDL=2.0	ng/L	4.0	30
C010844	Perfluorotetradecanoic acid(PFTEDA)	2025/07/04	86	70 - 130	ND, RDL=2.0	ng/L	2.5	30
C010844	Perfluorotridecanoic acid (PFTRDA)	2025/07/04	111	70 - 130	ND, RDL=2.0	ng/L	2.5	30
C010844	Perfluoroundecanoic Acid (PFUnA)	2025/07/04	80	70 - 130	ND, RDL=2.0	ng/L	3.3	30
C010845	10:2 Fluorotelomer sulfonic acid	2025/07/04	97	40 - 150	ND, RDL=4.0	ng/L	0.62	30
C010845	11Cl-PF3OUdS (F-53B Minor)	2025/07/04	73	55 - 160	ND, RDL=2.0	ng/L	2.1	30
C010845	2H2H3H3H-Perfluorooctanoic acid	2025/07/04	98	70 - 135	ND, RDL=4.0	ng/L	0.044	30
C010845	2H-Perfluoro-decenoic Acid	2025/07/04	95	40 - 150	ND, RDL=2.0	ng/L	3.8	30
C010845	2H-Perfluorooctenoic Acid	2025/07/04	101	40 - 150	ND, RDL=2.0	ng/L	0.33	30
C010845	3-Perfluoroheptylpropanoic acid	2025/07/04	99	50 - 145	ND, RDL=4.0	ng/L	3.1	30
C010845	3-Perfluoropropylpropanoic acid	2025/07/04	91	65 - 130	ND, RDL=10	ng/L	1.3	30
C010845	4,8-Dioxo-3H-Perfluorononanoic Acid	2025/07/04	97	65 - 145	ND, RDL=2.0	ng/L	3.4	30
C010845	4:2 Fluorotelomer sulfonic acid	2025/07/04	100	70 - 145	ND, RDL=2.0	ng/L	5.6	30
C010845	6:2 Fluorotelomer sulfonic acid	2025/07/04	99	65 - 155	ND, RDL=4.0	ng/L	1.3	30
C010845	8:2 Fluorotelomer sulfonic acid	2025/07/04	90	60 - 150	ND, RDL=4.0	ng/L	6.9	30
C010845	9Cl-PF3ONS (F-53B Major)	2025/07/04	93	70 - 155	ND, RDL=2.0	ng/L	3.9	30
C010845	EtFOSAA	2025/07/04	89	70 - 145	ND, RDL=4.0	ng/L	6.0	30
C010845	EtFOSA	2025/07/04	99	65 - 145	ND, RDL=4.0	ng/L	5.8	30
C010845	EtFOSE	2025/07/04	102	70 - 135	ND, RDL=4.0	ng/L	2.5	30
C010845	Hexafluoropropyleneoxide Dimer Acid	2025/07/04	86	70 - 140	ND, RDL=4.0	ng/L	9.0	30



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			% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
C010845	MeFOSAA	2025/07/04	91	50 - 140	ND, RDL=4.0	ng/L	3.2	30
C010845	MeFOSA	2025/07/04	110	60 - 150	ND, RDL=4.0	ng/L	1.4	30
C010845	MeFOSE	2025/07/04	102	70 - 145	ND, RDL=4.0	ng/L	0.10	30
C010845	Nonafluoro-3,6-dioxaheptanoic acid	2025/07/04	105	50 - 150	ND, RDL=4.0	ng/L	2.3	30
C010845	Perfluoro2ethoxyethanesulfonic acid	2025/07/04	104	70 - 140	ND, RDL=2.0	ng/L	1.2	30
C010845	Perfluoro-3-methoxypropanoic acid	2025/07/04	102	55 - 140	ND, RDL=2.0	ng/L	9.3	30
C010845	Perfluoro-4-methoxybutanoic acid	2025/07/04	103	60 - 150	ND, RDL=2.0	ng/L	4.7	30
C010845	Perfluorobutanesulfonic acid (PFBS)	2025/07/04	98	70 - 130	ND, RDL=2.0	ng/L	2.2	30
C010845	Perfluorobutanoic acid (PFBA)	2025/07/04	94	70 - 140	ND, RDL=2.0	ng/L	2.2	30
C010845	Perfluorodecanesulfonic acid (PFDS)	2025/07/04	83	60 - 145	ND, RDL=2.0	ng/L	1.8	30
C010845	Perfluorodecanoic Acid (PFDA)	2025/07/04	99	70 - 140	ND, RDL=2.0	ng/L	5.2	30
C010845	Perfluorododecanesulfonic acid	2025/07/04	63	50 - 145	ND, RDL=2.0	ng/L	4.5	30
C010845	Perfluorododecanoic Acid (PFDoA)	2025/07/04	99	70 - 140	ND, RDL=2.0	ng/L	5.9	30
C010845	Perfluoroheptanesulfonic acid PFHpS	2025/07/04	94	70 - 150	ND, RDL=2.0	ng/L	1.4	30
C010845	Perfluoroheptanoic Acid (PFHpA)	2025/07/04	97	70 - 150	ND, RDL=2.0	ng/L	2.2	30
C010845	Perfluorohexadecanoic acid (PFHxDA)	2025/07/04	104	40 - 150	ND, RDL=2.0	ng/L	1.9	30
C010845	Perfluorohexanesulfonic acid(PFHxS)	2025/07/04	95	65 - 145	ND, RDL=2.0	ng/L	0.62	30
C010845	Perfluorohexanoic Acid (PFHxA)	2025/07/04	100	70 - 145	ND, RDL=2.0	ng/L	0.22	30
C010845	Perfluorononanesulfonic acid (PFNS)	2025/07/04	95	65 - 145	ND, RDL=2.0	ng/L	0.46	30
C010845	Perfluorononanoic Acid (PFNA)	2025/07/04	103	70 - 150	ND, RDL=2.0	ng/L	0.20	30
C010845	Perfluorooctadecanoic acid (PFODA)	2025/07/04	71	40 - 150	ND, RDL=2.0	ng/L	6.9	30
C010845	Perfluorooctane Sulfonamide (PFOSA)	2025/07/04	104	70 - 145	ND, RDL=4.0	ng/L	0.44	30
C010845	Perfluorooctanesulfonic acid (PFOS)	2025/07/04	95	70 - 130	ND, RDL=2.0	ng/L	2.2	30
C010845	Perfluorooctanoic Acid (PFOA)	2025/07/04	94	70 - 130	ND, RDL=2.0	ng/L	7.7	30
C010845	Perfluoropentanesulfonic acid PFPeS	2025/07/04	98	65 - 145	ND, RDL=2.0	ng/L	0.15	30
C010845	Perfluoropentanoic Acid (PFPeA)	2025/07/04	105	65 - 135	ND, RDL=2.0	ng/L	2.2	30
C010845	Perfluoropropanesulfonic acid PFPRS	2025/07/04	101	40 - 150	ND, RDL=2.0	ng/L	4.8	30
C010845	Perfluorotetradecanoic acid(PFTEDA)	2025/07/04	101	60 - 140	ND, RDL=2.0	ng/L	0.93	30
C010845	Perfluorotridecanoic acid (PFTRDA)	2025/07/04	121	65 - 140	ND, RDL=2.0	ng/L	3.5	30
C010845	Perfluoroundecanoic Acid (PFUnA)	2025/07/04	106	70 - 145	ND, RDL=2.0	ng/L	9.3	30



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			% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
C010845	PFECHS	2025/07/04	97	40 - 150	ND, RDL=2.0	ng/L	1.7	30
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement. Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy. Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination. Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.								



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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Janet Dalisay, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rob Gilbert, BBV General Manager responsible for British Columbia Environmental laboratory operations.