

### Certificate of Analysis E25-00-0378

<b>Client:</b>	Richmond Valley Council	<b>Laboratory:</b>	Environmental Analysis Laboratory
<b>Contact:</b>	Lab Results	<b>Contact:</b>	EAL Customer Service Team
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<b>Customer reference:</b>	RVC Raw & Finished Quarterly, 14/01/25	<b>Request ID:</b>	EAL/E25-00-0378
<b>Number of samples:</b>	2	<b>Report ID:</b>	E25-00-0378_EALP3_1
<b>Date samples received:</b>	15 January 2025	<b>Issue date:</b>	07 February 2025

<b>Authorised by:</b>	Alex Smith
<b>Position:</b>	Senior Technical Officer



**Comments:** EAL is a NATA accredited laboratory (14960), accredited for compliance with ISO/IEC 17025 - Testing.

## Certificate of Analysis

Request ID: EAL/E25-00-0378 Report ID: E25-00-0378\_EALP3\_1 Issue date: 07 February 2025

				Client Sample ID:	RVC Finished	RVC Raw
				Sample Date:	14 January 2025	14 January 2025
				Sample Time:	10:40	10:00
				Sampled By:	MM	CC
				EAL Sample ID:	E25-00-0378-0001	E25-00-0378-0002
Parameter	Unit	Method Reference	LOR	---	---	---
pH	---	APHA 4500-H+ B	---	7.20	7.48	---
Electrical Conductivity	dS/m	APHA 2510-B	<0.01	0.307	0.234	---
Total Dissolved Salts (Calculation EC x 680)	mg/L	APHA 2510-B	<7	209	159	---
Total Suspended Solids	mg/L	GFC equiv. filter - APHA 2540-D	<1	1	34	---
Turbidity	NTU	APHA 2130	<1	< 1	45	---
True Colour	PtCo	** APHA 2120	<5	< 5	35	---
Apparent Colour	PtCo	** APHA 2120	<5	< 5	281	---
Total Alkalinity	mg CaCO <sub>3</sub> /L	** APHA 2320	<1	82	90	---
Water Hardness	mg/L CaCO <sub>3</sub> equivalent	** Calculation using Ca and Mg	<1	92	89	---
Total Plate Count	cfu/ml	** Inhouse	<1	4	---	---
Total Coliforms	cfu/100 mL	APHA 9222-B	<1	< 1	21000	---
E.Coli	cfu/100 mL	ColiBlue Membrane Filtration	<1	< 1	450	---
Total Organic Carbon	mg/L	** APHA 5310-B	<0.1	2.17	4.51	---
Calcium	mg/L	Dissolved - APHA 3125 ICPMS	<0.5	18.6	17.4	---
Magnesium	mg/L	Dissolved - APHA 3125 ICPMS	<0.5	10.7	10.2	---
Aluminium	mg/L	Dissolved - APHA 3125 ICPMS	<0.005	0.028	0.097	---
Iron	mg/L	Dissolved - APHA 3125 ICPMS	<0.005	< 0.005	0.177	---
Manganese	mg/L	Dissolved - APHA 3125 ICPMS	<0.001	< 0.001	0.003	---
Aluminium	mg/L	Total Available - APHA 3125 ICPMS	<0.005	0.029	0.314	---
Iron	mg/L	Total Available - APHA 3125 ICPMS	<0.005	0.006	0.728	---
Manganese	mg/L	Total Available - APHA 3125 ICPMS	<0.001	< 0.001	0.086	---
Dissolved Organic Carbon	mg/L	** APHA 5310-B	<1	2.17	4.51	---
Total Phosphorus	mg/L P	Inhouse W4	<0.01	0.012	0.182	---
Nitrate	mg/L N	APHA 4500 NO <sub>3</sub> -F	<0.005	0.089	0.064	---
Nitrite	mg/L N	APHA 4500 NO <sub>2</sub> -I	<0.005	< 0.005	0.012	---
SGS Report No.	---	** Subcontracted SGS Laboratories Australia	---	SE276896	---	---
Dichlorodifluoromethane (CFC-12)	µg/L	** Subcontracted SGS Laboratories Australia	<1	<5	---	---
Chloromethane	µg/L	** Subcontracted SGS Laboratories Australia	<1	<5	---	---
Vinyl chloride (Chloroethene)	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.3	---	---
Chloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<1	<5	---	---
Trichlorofluoromethane	µg/L	** Subcontracted SGS Laboratories Australia	<1	<1	---	---
Iodomethane	µg/L	** Subcontracted SGS Laboratories Australia	<5	<5	---	---
1,1-dichloroethene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Dichloromethane (Methylene chloride)	µg/L	** Subcontracted SGS Laboratories Australia	<0.5	<5	---	---
Allyl chloride	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<2	---	---
trans-1,2-dichloroethene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,1-dichloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
cis-1,2-dichloroethene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---

## Certificate of Analysis

Request ID: EAL/E25-00-0378 Report ID: E25-00-0378\_EALP3\_1 Issue date: 07 February 2025

				Client Sample ID:	RVC Finished	RVC Raw
				Sample Date:	14 January 2025	14 January 2025
				Sample Time:	10:40	10:00
				Sampled By:	MM	CC
				EAL Sample ID:	E25-00-0378-0001	E25-00-0378-0002
Parameter	Unit	Method Reference	LOR	---	---	---
Bromochloromethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Chloroform (THM)	µg/L	** Subcontracted SGS Laboratories Australia	---	18	---	---
2,2-dichloropropane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,2-dichloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,1,1-trichloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,1-dichloropropene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Carbon tetrachloride	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Dibromomethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,2-dichloropropane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Trichloroethene (Trichloroethylene -TCE)	µg/L	** Subcontracted SGS Laboratories Australia	---	<0.5	---	---
Bromodichloromethane (THM)	µg/L	** Subcontracted SGS Laboratories Australia	---	11	---	---
cis-1,3-dichloropropene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
trans-1,3-dichloropropene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,1,2-trichloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,3-dichloropropane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Dibromochloromethane (THM)	µg/L	** Subcontracted SGS Laboratories Australia	---	3.7	---	---
1,2-dibromoethane (EDB)	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Tetrachloroethene (PerchloroethylenePCE)	µg/L	** Subcontracted SGS Laboratories Australia	---	<0.5	---	---
1,1,1,2-tetrachloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Chlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Bromoform (THM)	µg/L	** Subcontracted SGS Laboratories Australia	---	<0.5	---	---
1,1,2,2-tetrachloroethane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,2,3-trichloropropane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
trans-1,4-dichloro-2-butene	µg/L	** Subcontracted SGS Laboratories Australia	<1	<1	---	---
Bromobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
2-chlorotoluene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
4-chlorotoluene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,3-dichlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,4-dichlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.3	---	---
1,2-dichlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,2-dibromo-3-chloropropane	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---

## Certificate of Analysis

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				Sample Date:	14 January 2025	14 January 2025
				Sample Time:	10:40	10:00
				Sampled By:	MM	CC
				EAL Sample ID:	E25-00-0378-0001	E25-00-0378-0002
Parameter	Unit	Method Reference	LOR			
1,2,4-trichlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Hexachlorobutadiene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
1,2,3-trichlorobenzene	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	<0.5	---	---
Total Chlorinated Hydrocarbons VIC EPA	µg/L	** Subcontracted SGS Laboratories Australia	---	32	---	---
SGS Report No.	---	** Subcontracted SGS Laboratories Australia	---	SE276894	---	SE276894
Perfluorobutanoic acid (PFBA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.05	<0.05	<0.05
Perfluoropentanoic acid (PFPeA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
Perfluorohexanoic acid (PFHxA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
Perfluoroheptanoic acid (PFHpA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
Perfluorooctanoic Acid (PFOA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.001	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01
Perfluorodecanoic acid (PFDA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01
Perfluorotridecanoic acid (PFTrDA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01
Perfluorotetradecanoic acid (PFTeDA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01
Sum of Positive PFAS	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
SGS Report No.	---	** Subcontracted SGS Laboratories Australia	---	---	---	SE276895
Hexachlorobenzene (HCB)	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Alpha BHC	µg/L	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Lindane (gamma BHC)	µg/L	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Heptachlor	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
Aldrin	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Beta BHC	µg/L	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Delta BHC	µg/L	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Heptachlor epoxide	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
Gamma Chlordane	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.01
Alpha Chlordane	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
p,p'-DDE	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Dieldrin	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Endrin	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
Beta Endosulfan	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
p,p'-DDD	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01

## Certificate of Analysis

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				Client Sample ID:	RVC Finished	RVC Raw
				Sample Date:	14 January 2025	14 January 2025
				Sample Time:	10:40	10:00
				Sampled By:	MM	CC
				EAL Sample ID:	E25-00-0378-0001	E25-00-0378-0002
Parameter	Unit	Method Reference	LOR	---	---	---
p,p'-DDT	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Endosulfan sulphate	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
Methoxychlor	µg/L	** Subcontracted SGS Laboratories Australia	<0.1	---	---	<0.1
Mirex	µg/L	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Total OC	µg/L	** Subcontracted SGS Laboratories Australia	<1	---	---	<1
Alpha Endosulfan	µg/L	** Subcontracted SGS Laboratories Australia	<0.02	---	---	<0.02
SGS Report No.	---	** Subcontracted SGS Laboratories Australia	---	---	---	SE276895
Azinphos-methyl (Guthion)	---	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Bromophos ethyl	---	** Subcontracted SGS Laboratories Australia	---	---	---	<0.05
Chlorpyrifos (Chlorpyrifos Ethyl)	---	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Diazinon (Dimpylate)	---	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Dichlorvos	---	** Subcontracted SGS Laboratories Australia	<0.5	---	---	<0.5
Dimethoate	---	** Subcontracted SGS Laboratories Australia	<0.15	---	---	<0.15
Ethion	---	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Fenitrothion	---	** Subcontracted SGS Laboratories Australia	<0.2	---	---	<0.2
Malathion	---	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Methidathion	---	** Subcontracted SGS Laboratories Australia	<0.05	---	---	<0.05
Parathion-ethyl (Parathion)	---	** Subcontracted SGS Laboratories Australia	<0.01	---	---	<0.01
Envirolab Report No.	---	** Subcontracted Envirolab	---	---	---	PGA0772
Geosmin	ng/L	** Subcontracted Envirolab	---	---	---	<2.0
2-Methylisoborneol	ng/L	** Subcontracted Envirolab	---	---	---	<2.0
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	** Subcontracted SGS Laboratories Australia	<0.002	<0.01	<0.01	<0.01
Perfluorododecanoic acid (PFDoDA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01
Perfluoroundecanoic acid (PFUnDA)	µg/L	** Subcontracted SGS Laboratories Australia	<0.004	<0.01	<0.01	<0.01

### Notes:

- \*\* denotes NATA accreditation does not cover the performance of this service.
- .. denotes not requested, no data/information or no guidelines available.
- All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (available on request or at scu.edu.au/eal).
- Analysis conducted between sample arrival date and reporting date.
- This report is not to be reproduced except in full.

## Certificate of Analysis

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- Results only relate to the item tested.
- Analysis performed according to APHA. 2017. Standard Methods for the Examination of Water & Wastewater, 23rd Edition. Except where stated otherwise.
- Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
- 1:3 Nitric/HCl digest analysed in accordance with APHA 3125 ICPMS.
- For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
- mg/L = ppm