RESULTS OF WATER ANALYSIS

2 samples supplied by Richmond Valley Council on 1/10/2024. Lab Job No. R9569. Samples submitted by Water Results. Your Job: RVC Raw & Finished Quarterly

Locked Bag 10 CASINO NSW 2470 Parameter	Methods reference	Sample 1	Sample 2
		RVC Finished	RVC Raw
	Int. No.		
	Job No.	R9569/1	R9569/2
рН	APHA 4500-H ⁺ -B	6.94	7.10
Conductivity (EC) (dS/m)	APHA 2510-B	0.263	0.138
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	179	94
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	<1	103
Turbidity (NTU)	APHA 2130	<1	115
True Colour (Pt-Co)	** APHA 2120	6	78
Apparent Colour (Pt-Co)	** APHA 2120	19	1,190
Bicarbonate (Alkalinity) (mg/L CaCO ₃ equivalent)	** Bicarbonate Alkalinity - APHA 2320	53	52
Water Hardness (mg/L CaCO3 equivalent)	** Using Ca and Mg calculation	48	48
Total Phosphorus (mg/L P)	In house method W4	<0.01	0.345
Nitrate (mg/L N)	APHA 4500 NO ₃ -F	0.375	0.351
Nitrite (mg/L N)	APHA 4500 NO₂-I	<0.005	0.021
Total Coliforms (cfu/100 ml)	APHA 9222-B	<1	50,000
E.Coli (cfu/100 ml)	ColiBlue Membrane Filtration	<1	<1000
	** Inhouse		
Total Plate Count (cfu/1 ml)		13	
Total Organic Carbon (mg/L) Dissolved Organic Carbon (mg/L)	APHA 5310-B APHA 5310-B	2.58 2.58	7.28 7.28
Aluminium (mg/L)	Total Available - APHA 3125 ICPMS*note 182	0.014	2.77
Iron (mg/L)	Total Available - APHA 3125 ICPMS note 182	<0.005	2.79
Manganese (mg/L)	Total Available - APHA 3125 ICPMS*note 182	0.002	0.123
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS*note 182	0.011	0.324
iron (mg/L)	Dissolved - APHA 3125 ICPMS*note 182	<0.005	0.384
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS ^{*note 182}	0.002	0.003
Calcium (mg/L)	Dissolved - APHA 3125 ICPMS ^{*note 182}	10.2	10.1
Magnesium (mg/L)	Dissolved - APHA 3125 ICPMS*note 182	5.35	5.52
Geosim (ng/L)	Subcontracted: Envirolab report PFJ0250		<1
2-Methylisoborneol (2-MIB) (ng/L)	Subcontracted: Envirolab report PFJ0250		1.10
Pesticide analysis screen ^{*see notes}			
Hexachlorobenzene (HCB) (μg/L)	Subcontracted: SGS report SE271957		<0.01
Alpha BHC (μg/L)	Subcontracted: SGS report SE271957		<0.05
Lindane (gamma BHC) (μg/L)	Subcontracted: SGS report SE271957		<0.05
Heptachlor (µg/L)	Subcontracted: SGS report SE271957		<0.02
Aldrin (µg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957		<0.01
Beta BHC (μg/L) Delta BHC (μg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957		<0.05 <0.05
Heptachlor epoxide (µg/L)	Subcontracted: SGS report SE271957		<0.02
Alpha Endosulfan (µg/L)	Subcontracted: SGS report SE271957		<0.02
Gamma Chlordane (μg/L)	Subcontracted: SGS report SE271957		<0.01
Alpha Chlordane (µg/L)	Subcontracted: SGS report SE271957		<0.01
p,p'-DDE (µg/L)	Subcontracted: SGS report SE271957		<0.01
Dieldrin (μg/L)	Subcontracted: SGS report SE271957		<0.01
Endrin (µg/L)	Subcontracted: SGS report SE271957		<0.02
Beta Endosulfan (μg/L)	Subcontracted: SGS report SE271957		<0.02
p,p'-DDD (µg/L)	Subcontracted: SGS report SE271957		<0.01
p,p'-DDT (µg/L)	Subcontracted: SGS report SE271957		<0.01
p,p'-DDT (µg/L) Endosulfan sulphate (µg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957	 	<0.02
ρ.p·-DDT (μg/L) Endosulfan sulphate (μg/L) Endrin Aldehyde (μg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957	 	<0.02 <0.02
p.p'-DDT (μg/L) Endosulfan sulphate (μg/L) Endrin Aldehyde (μg/L) Methoxychlor (μg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1
ρ.p·-DDT (μg/L) Endosulfan sulphate (μg/L) Endrin Aldehyde (μg/L)	Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957 Subcontracted: SGS report SE271957	 	<0.02 <0.02
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L)	Subcontracted: SGS report SE271957	 	<0.02 <0.02 <0.1 <0.05
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L)	Subcontracted: SGS report SE271957	 	<0.02 <0.02 <0.1 <0.05 <0.02
p,p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01
p,p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01 <0.01
p,p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01 <1 <0.5
p,p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Dimethoate (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01 <0.01 <1 <0.5 <0.15 <0.01 <0.2
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Sodrin (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Dimethoate (µg/L) Diazinon (Dimpylate) (µg/L) Fenitrothion (µg/L) Malathion (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.01 <0.01 <1 <0.5 <0.15 <0.15 <0.01 <0.01 <0.01
p.p'-DDT (μg/L) Endosulfan sulphate (μg/L) Endrin Aldehyde (μg/L) Methoxychlor (μg/L) Endrin Ketone (μg/L) Isodrin (μg/L) Isodrin (μg/L) Oxychlordane (μg/L) Total OC (μg/L) Dichlorvos (μg/L) Dimethoate (μg/L) Diazinon (Dimpylate) (μg/L) Fenitrothion (μg/L) Malathion (μg/L) Chlorpyrifos (Chlorpyrifos Ethyl) (μg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.02 <0.01 <0.01 <1 <0.5 <0.15 <0.15 <0.01 <0.01 <0.01
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Isodrin (µg/L) Oxychlordane (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Dimethoate (µg/L) Diazinon (Dimpylate) (µg/L) Fenitrothion (µg/L) Malathion (µg/L) Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L) Parathion-ethyl (Parathion) (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.001 <0.01 <1 <0.05 <0.01 <1 <0.05 <0.05 <0.015 <0.015 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Diazinon (Dimpylate) (µg/L) Fenitrothion (µg/L) Malathion (µg/L) Malathion (µg/L) Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L) Parathion-ethyl (Parathion) (µg/L) Bromophos Ethyl (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.1 <0.05 <0.001 <0.01 <1 <0.05 <0.01 <1 <0.5 <0.05 <0.015 <0.01 <0.01 <0.01 <0.01 <0.01 <0.001 <0.001 <0.005 <0.001 <0.005 <0.001 <0.001 <0.005
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Dimethoate (µg/L) Dimethoate (µg/L) Chlorpyrifos (Dimpylate) (µg/L) Malathion (µg/L) Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L) Parathion-ethyl (Parathion) (µg/L) Bromophos Ethyl (µg/L) Methidathion (µg/L) Methidathion (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.01 <0.05 <0.02 <0.01 <0.01 <1 <0.5 <0.015 <0.01 <0.05 <0.015 <0.01 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.01 <0.05 <0.05 <0.001 <0.05 <0.005 <0.005 <0.005
p.p'-DDT (µg/L) Endosulfan sulphate (µg/L) Endrin Aldehyde (µg/L) Methoxychlor (µg/L) Endrin Ketone (µg/L) Isodrin (µg/L) Mirex (µg/L) Oxychlordane (µg/L) Total OC (µg/L) Dichlorvos (µg/L) Diazinon (Dimpylate) (µg/L) Fenitrothion (µg/L) Malathion (µg/L) Malathion (µg/L) Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L) Parathion-ethyl (Parathion) (µg/L) Bromophos Ethyl (µg/L)	Subcontracted: SGS report SE271957		<0.02 <0.02 <0.01 <0.05 <0.002 <0.01 <0.01 <1 <0.05 <0.05 <0.015 <0.01 <0.01 <0.01 <0.01 <0.01 <0.001 <0.001 <0.001 <0.001 <0.0005 <0.001 <0.0001 <0.0001 <0.0005



RESULTS OF WATER ANALYSIS

2 samples supplied by Richmond Valley Council on 1/10/2024. Lab Job No. R9569. Samples submitted by Water Results. Your Job: RVC Raw & Finished Quarterly

Locked Bag 10 CASINO NSW 2470				
Parameter	Methods reference	Sample 1	Sample 2	
		RVC Finished	RVC Raw	
	Job No.	R9569/1	R9569/2	
Volatile Halogenated Compounds				
Dichlorodifluoromethane (CFC-12) (μg/L)	Subcontracted: SGS report SE271956	<5		
Chloromethane (µg/L)	Subcontracted: SGS report SE271956	<5		
Vinyl chloride (Chloroethene) (μg/L)	Subcontracted: SGS report SE271956	<0.3		
Chloroethane (μg/L)	Subcontracted: SGS report SE271956	<5		
Trichlorofluoromethane (μg/L)	Subcontracted: SGS report SE271956	<1		
1,1-dichloroethene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Dichloromethane (Methylene chloride) (μg/L)	Subcontracted: SGS report SE271956	<5		
Allyl chloride (µg/L)	Subcontracted: SGS report SE271956	<2		
trans-1,2-dichloroethene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1-dichloroethane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
cis-1,2-dichloroethene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Bromochloromethane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
Chloroform (THM) (µg/L)	Subcontracted: SGS report SE271956	7.70		
2,2-dichloropropane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2-dichloroethane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1,1-trichloroethane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1-dichloropropene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
Carbon tetrachloride (µg/L)	Subcontracted: SGS report SE271956	<0.5		
Dibromomethane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2-dichloropropane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Trichloroethene (Trichloroethylene,TCE) (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Bromodichloromethane (THM) (µg/L)	Subcontracted: SGS report SE271956	2.20		
cis-1,3-dichloropropene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
trans-1,3-dichloropropene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1,2-trichloroethane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,3-dichloropropane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
Dibromochloromethane (THM) (µg/L)	Subcontracted: SGS report SE271956	0.60		
1,2-dibromoethane (EDB) (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Tetrachloroethene (Perchloroethylene,PCE) (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1,1,2-tetrachloroethane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Chlorobenzene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Bromoform (THM) (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,1,2,2-tetrachloroethane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2,3-trichloropropane (µg/L)	Subcontracted: SGS report SE271956	<0.5		
trans-1,4-dichloro-2-butene (μg/L)	Subcontracted: SGS report SE271956	<1		
Bromobenzene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
2-chlorotoluene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
4-chlorotoluene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,3-dichlorobenzene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,4-dichlorobenzene (µg/L)	Subcontracted: SGS report SE271956	<0.3		
1,2-dichlorobenzene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2-dibromo-3-chloropropane (μg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2,4-trichlorobenzene (μg/L)	Subcontracted: SGS report SE271956	<0.5		
Hexachlorobutadiene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
1,2,3-trichlorobenzene (µg/L)	Subcontracted: SGS report SE271956	<0.5		
lodomethane (μg/L)	Subcontracted: SGS report SE271956	<5		
Total Chlorinated Hydrocarbons (µg/L)	Subcontracted: SGS report SE271956	11.00		
, ",				

Notes:

- 1. Total metals samples digested with nitric acid; Total available (acid soluble/ extractable) metals samples acidffied with nitric acid to pH <2;

 Dissolved metals samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
- 2. Metals and salts analysed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).
- $3.\ 1\ mg/L\ (milligram\ per\ litre) = 1\ ppm\ (part\ per\ million) = 1000\ \mu g/L\ \ (micrograms\ per\ litre) = 1000\ ppb\ (part\ per\ billion).$
- 4. For conductivity 1 dS/m = 1 mS/cm = 1000 $\mu\text{S/cm}.$
- 5. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- 6. Analysis conducted between sample arrival date and reporting date.
- 7. ** NATA accreditation does not cover the performance of this service.
- 8. .. Denotes not requested.
- 9. This report is not to be reproduced except in full.
- 10. All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (refer scu.edu.au/eal or on request).
- 11. Results relate only to the samples tested.
- 12. This report was issued on 25/10/2024.



