

RVWSA Discoloured Water Investigation – Treatment Plant

- October 9th, 2026 the Rose Valley Treatment Plant changed from Sodium Permanganate to Sodium Hypochlorite as a Pre-Treatment Oxidant to assist in the removal of manganese from the raw water.
- October 12th, 2026 saw significant reduction in the turbidity leaving the treated plant.

Date	RV Raw	RV Treated	Raw Turbidity	Treated Turbidity	Treated FCR
	Total Mn (mg/L)		(NTU)	(NTU)	(mg/L)
4-Oct-26	0.61100	0.09180	0.74	0.40	0.81
5-Oct-26	0.6810	0.07560	0.62	0.36	0.72
6-Oct-26	0.42800	0.10200	0.78	0.26	0.80
7-Oct-26	N/A	N/A	0.62	0.25	0.81
8-Oct-26	N/A	N/A	0.65	0.33	0.75
9-Oct-26	N/A	N/A	0.59	0.38	0.96
10-Oct-26	0.156	0.0848	0.6	0.35	1.18
11-Oct-26	0.161	0.0697	0.78	0.23	0.94
12-Oct-26	0.163	0.0763	0.47	0.14	0.93
13-Oct-26	0.326	0.104	0.47	0.13	1.01
14-Oct-26	N/A	N/A	0.46	0.13	1.02
15-Oct-26	N/A	N/A	0.36	0.13	1.16

*Turbidity and FCR values displayed as 24 Hour Averages

*Drinking Water

*Raw Water

RVWSA Discoloured Water Investigation – Distribution System

- October 4th, 2026 the Utilities on-call operator was made aware of discoloured water at a property on Merlot Court.
- Further reports were received the following day October 5th, 2026. The Utility followed up with further investigation and consultation with Interior Health who advised no water quality advisory is required, and it was confirmed that the discoloured water was an aesthetic issue and still met all drinking water guidelines.
- Additional testing and monitoring continued during the week of October 12th and in consultation with Interior Health, they advised the City to continue monitoring and testing and no water quality advisory is required.
- Further testing continues to be carried out until the discoloured water has left the distribution system.

Date	Time	Sample Location	Turbidity (NTU)	FCR (mg/L)	Temp (°C)	pH	Apparent Colour (Pt-Co)	True Colour (Pt-Co)	Total Mn (mg/L)
4-Oct-26	14:07	3345 MERLOT CRT**	0.97	0.76	18.8	7.41			
4-Oct-26	14:45	MENU PS	0.41	0.78	15.7	7.44			
4-Oct-26	14:45	MENU ONLINE ANALYSER	0.40	0.84	14.3	7.39			
5-Oct-26	10:25	ROSEWOOD PS	0.41	0.98	15.1	7.33	13	8	
5-Oct-26	9:15	BLACKWOOD INLET	0.51	0.57	15.4	7.28	20	7	
5-Oct-26	9:35	LOWER HORIZON SS	0.78	0.47	16.5	7.34	21	16	
5-Oct-26	9:55	MENU PS	0.57	1.14	15.1	7.31	26	14	
5-Oct-26	10:20	PRITCHARD SS	0.57	0.48	16.8	7.36	17	12	
5-Oct-26	11:00	SHANNON WAY SS	0.66	0.53	17.0	7.37	15	13	
5-Oct-26	10:45	BIG SKY SS	0.53	0.96	15.4	7.33	16	15	
5-Oct-26	11:40	UTILITY YARD	0.54	0.72	17.7	7.35	24	9	
6-Oct-26	8:00	ROSEWOOD PS	0.37	0.97	14.3				0.131
6-Oct-26	8:20	BLACKWOOD PS - INLET	0.53	0.66	15.7				0.067
6-Oct-26	8:40	LOWER HORIZON SS	0.65	0.35	16.7				0.053
6-Oct-26	8:55	MENU PS	0.65	0.86	13.6				0.087
6-Oct-26	9:20	PRITCHARD SS	0.66	0.49	17.0				0.050
6-Oct-26	10:15	SHANNON WAY SS	0.51	0.61	16.0				0.050
8-Oct-26	12:42	ROSEWOOD PS	0.71	0.99	14.2				0.132
8-Oct-26	12:57	BLACKWOOD PS - INLET	0.58	0.72	15.4				0.083
8-Oct-26	13:13	LOWER HORIZON SS	0.73	0.35	17.0				0.049
8-Oct-26	13:28	MENU PS	0.47	0.95	14.6				0.069
8-Oct-26	13:45	PRITCHARD SS	0.56	0.57	16.9				0.045

8-Oct-26	14:10	SHANNON WAY SS	0.76	0.67	15.9				0.062
13-Oct-26	9:11	ROSEWOOD PS	1.05	0.24	13.8				0.090
13-Oct-26	9:30	BLACKWOOD PS - INLET	0.76	0.46	14.2				0.036
13-Oct-26	9:50	LOWER HORIZON SS	0.41	0.82	16.1				0.052
13-Oct-26	9:16	MENU PS	0.69	0.27	13.3				0.064
13-Oct-26	9:44	PRITCHARD SS	0.39	0.55	15.2				0.040
13-Oct-26	10:36	SHANNON WAY SS	0.47	0.25	16.0				0.026

****Note:** Water quality sampling and analytical results obtained at an individual private property cannot be considered representative for system-wide assessment purposes, as the utility has no control over, or detailed knowledge of, the property's internal plumbing infrastructure, materials, fixtures, treatment devices, or operational conditions. These site-specific factors may influence water quality parameters and potentially affect the accuracy and interpretation of the test results.

- The investigation concluded that the discoloration is due to low levels of naturally occurring manganese that are affecting the aesthetic quality of the water. Contributing factors include a mechanical issue with the peroxidation system responsible for manganese removal, as well as seasonal reservoir conditions and reduced reservoir levels, which can increase manganese concentrations in the source water.