



REGIONAL DISTRICT NORTH OKANAGAN

Silver Star Water (SSW) Water Quality Report for June 2025

The following is the water quality summary for the Silver Star Water (SSW) Utility.

On June 10, 2025, a planned curbstop replacement and water main leak repair was completed. Prior to the work, customers in the area were notified that a precautionary Water Quality Advisory (WQA) would be issued if a water outage occurred during construction. The work was completed without any interruption to water service, therefore, a WQA was not required.

1. Sources

Not all of Silver Star's water sources are utilized year-round; the system is constructed so that the sources can be brought online based on demand. As Silver Star is primarily a winter resort, the highest water demands occur from November to March. SSW has nine water sources used for domestic use: Well 1, Well 2, Well 3, Well 4, Well 5, Well 10, Well 12, Paradise Reservoir and Vance Reservoir.

The surface water sources, Paradise and Vance Reservoirs, are metered in the Mid T Water Treatment Plant (MTWTP) as one volume; it is not possible to separate the volumes of each reservoir.

Table 1 summarizes the results of the raw water entering the treatment process. This is a blend of sources depending on demands in the system. This results in data variation throughout the year. Table 2 summarizes the results for the untreated water from the wells.

Wells 4 and 10 have not been used this season. Vance Reservoir was turned off on April 22, 2025.

Table 1 Mid T Raw Water Monitoring

Parameter	Laboratory		# of Samples	# of Deviations ¹	Min	Max	Average
E.coli	RDNO Lab	MPN/100 mL	4	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	4	-----	<1	<1	<1
Turbidity	Grab sample	NTU	13	-----	0.09	0.18	0.14
Turbidity	SCADA ² Daily Average	NTU	30	-----	0.05	0.18	0.09

¹SSW WQ Deviation Response Plan – Turbidity >1.0 NTU

²SCADA: Supervisory Control and Data Acquisition.

Table 2 Mid T Raw Water Monitoring – Wells

Parameter	Laboratory		# of Samples	# of Deviations ¹	Min	Max	Average
Turbidity	SCADA ² Daily Average	NTU	30	1 ³	0.07	1.22	0.18

¹SSW WQ Deviation Response Plan – Turbidity >1.0 NTU

²SCADA: Supervisory Control and Data Acquisition.

³Daily average turbidity > 1.0 on June 10 due to a leak repair on a water main section connecting two of the wells.

2. Treatment Plant

SSW has a treatment plant, the Mid T Water Treatment Plant (MTWTP). The MTWTP uses a dual disinfection process of Ultra-violet (UV) disinfection and chlorine. Chlorine is added after UV treatment to ensure contact time for the removal of viruses. Tables 3, 4, and 5 summarize the results for chlorine, bacterial, turbidity, manganese, calculated contact time, and UV transmittance (UVT).

Table 3 Mid T Water Treatment Plant

Parameter	Laboratory		# of Samples	# of Deviations ¹	Min	Max	Average
Free Chlorine	SCADA ² Daily Average	mg/L	30	-----	1.74	1.83	1.79
Free Chlorine	Grab sample	mg/L	4	-----	1.64	1.67	1.65
Total Chlorine	Grab sample	mg/L	4	-----	1.70	1.75	1.73
E.coli	RDNO Lab	MPN/100 mL	6	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	6	-----	<1	<1	<1
Turbidity	SCADA ² Daily Average	NTU	30	-----	0.04	0.12	0.06
Turbidity	Grab sample	NTU	4	-----	0.15	0.17	0.16
Manganese	RDNO Lab	mg/L	4	-----	0.008	0.017	0.012

¹SSW WQ Deviation Response Plan – Free Chlorine <0.20 mg/L, Turbidity >1.0 NTU, Manganese >0.12 mg/L

²SCADA: Supervisory Control and Data Acquisition.

³Treatment Plant and Distribution bacterial samples are included in the required monthly bacterial sampling amounts as per Drinking Water Protection Regulations Schedule B.

Table 4 Contact Time (CT)

Parameter	Days Monitored	Min	Max	Average
Days 99.9% achieved	5	100%	100%	100%

99.9% is 3-log removal for Giardia

Table 5 Ultra-violet (UV) Disinfection

Parameter	Laboratory	Days Monitored	Min	Max	Average
UVT	SCADA ¹ Daily Average	30	93%	99%	98%

¹SCADA: Supervisory Control and Data Acquisition.

3. Distribution

Table 6 summarizes the results for chlorine, turbidity and bacterial for the distribution system from the following sites: Pinnacles, Grandview, Firehall, and Maintenance Building. The monthly water volume used at Silver Star was 6,429 m³.

Table 6 Distribution

Parameter	Laboratory		# of Samples	# of Deviations ¹	Min	Max	Average
Free Chlorine	Grab sample	mg/L	10	-----	0.84	1.64	1.43
Total Chlorine	Grab sample	mg/L	10	-----	0.97	1.70	1.51
E.coli	RDNO Lab	MPN/100 mL	8 ²	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	8 ²	-----	<1	<1	<1
Turbidity	Grab sample	NTU	10	-----	0.09	0.22	0.17

¹SSW WQ Deviation Response Plan – Free Chlorine <0.20 mg/L, Turbidity >1.0 NTU

²Treatment Plant and Distribution bacterial samples are included in the required monthly bacterial sampling amounts as per Drinking Water Protection Regulations Schedule B.

4. Customer Calls and Notifications

Customer calls within the Silver Star Water Utility service area are tracked and recorded. There were no customer calls this month.

5. Operational or Maintenance Activity

Operational activities within the Silver Star Water service area are tracked and recorded. Table 7 summarizes the operational activities this month.

Table 7 Monthly Operational Work and Maintenance

NUMBER OF LOCATIONS	TYPE OF WORK
1	Hydrant Maintenance
1	Hydrant Box Rental
0	Water Service Locate
1	Water Main Break Repair
0	Water Service Install/Inspection
1	Water Turn On/Off
1	Water Service and/or Curb Stop Repair
0	Water Investigation
0	Reservoir Cleaning
0	Water Meter Install
1	Water Meter Inspection
0	Water Meter Maintenance
1	Water Meter Replacement
0	Water Meter Manual Read
2	ERT Install
1	ERT Inspection
0	ERT Maintenance
0	ERT Replacement