



# REGIONAL DISTRICT NORTH OKANAGAN

## Silver Star Water (SSW) Water Quality Report for December 2025

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

### 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. Table 3 summarizes the results for the untreated water from Paradise and/or Vance Reservoirs.

Wells 4 and 10 have not been used this season. Vance Reservoir was brought online on November 17, 2025.

**Table 1 Mid T Raw Water Monitoring**

Parameter	Laboratory		# of Samples	# of Deviations <sup>1</sup>	Min	Max	Average
E.coli	RDNO Lab	MPN/100 mL	5	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	5	-----	<1	1	0.2
Turbidity	Grab sample	NTU	21	-----	0.24	0.58	0.40
Turbidity	SCADA <sup>2</sup> Daily Average	NTU	31	1 <sup>3</sup>	0.20	1.06	0.33

<sup>1</sup>SSW WQ Deviation Response Plan – Turbidity >1.0 NTU

<sup>2</sup>SCADA: Supervisory Control and Data Acquisition.

<sup>3</sup>Daily average turbidity >1.0 NTU on December 3. Turbidity increase caused by an increase in flow rate from Vance reservoir.

**Table 2 Mid T Raw Water Monitoring – Wells**

Parameter	Laboratory		# of Samples	# of Deviations <sup>1</sup>	Min	Max	Average
Turbidity	SCADA <sup>2</sup> Daily Average	NTU	31	-----	0.12	0.83	0.43

<sup>1</sup>SSW WQ Deviation Response Plan – Turbidity >1.0 NTU

<sup>2</sup>SCADA: Supervisory Control and Data Acquisition.

**Table 3 Mid T Raw Water Monitoring – Surface Sources**

Parameter	Laboratory		# of Samples	# of Deviations <sup>1</sup>	Min	Max	Average
E.coli	RDNO Lab	MPN/100 mL	5	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	5	-----	<1	1	0.4
Turbidity	Grab sample	NTU	5	-----	0.32	0.71	0.52
Turbidity	SCADA <sup>2</sup> Daily Average	NTU	31	-----	0.23	0.79	0.40
UVT - Unfiltered	RDNO Lab	%	4	-----	95.0	96.1	95.4

<sup>1</sup>SSW WQ Deviation Response Plan – Turbidity >1.0 NTU

<sup>2</sup>SCADA: Supervisory Control and Data Acquisition.

## 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 4, 5, and 6 summarize the results for chlorine, bacterial, turbidity, manganese, calculated contact time, and UV transmittance (UVT).

**Table 4 Mid T Water Treatment Plant**

Parameter	Laboratory		# of Samples	# of Deviations <sup>1</sup>	Min	Max	Average
Free Chlorine	SCADA <sup>2</sup> Daily Average	mg/L	31	-----	1.46	1.62	1.54
Free Chlorine	Grab sample	mg/L	5	-----	1.62	1.69	1.66
Total Chlorine	Grab sample	mg/L	5	-----	1.71	1.82	1.76
E.coli	RDNO Lab	MPN/100 mL	10	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	10	-----	<1	<1	<1
Turbidity	SCADA <sup>2</sup> Daily Average	NTU	31	-----	0.17	0.26	0.20
Turbidity	Grab sample	NTU	5	-----	0.23	0.43	0.33
Manganese	RDNO Lab	mg/L	8	-----	0.008	0.048	0.018

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

<sup>2</sup>SCADA: Supervisory Control and Data Acquisition.

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

**Table 5 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 6 Ultra-violet (UV) Disinfection**

Parameter	Laboratory	Days Monitored	Min	Max	Average
UVT	SCADA <sup>1</sup> Daily Average	31	94%	102%	97%

<sup>1</sup>SCADA: Supervisory Control and Data Acquisition.

### 3. Distribution

Table 7 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 15,122 m<sup>3</sup>.

**Table 7 Distribution**

Parameter	Laboratory		# of Samples	# of Deviations <sup>1</sup>	Min	Max	Average
Free Chlorine	Grab sample	mg/L	20	-----	0.91	1.66	1.44
Total Chlorine	Grab sample	mg/L	20	-----	0.96	1.75	1.52
E.coli	RDNO Lab	MPN/100 mL	20 <sup>2</sup>	-----	<1	<1	<1
Total Coliform	RDNO Lab	MPN/100 mL	20 <sup>2</sup>	-----	<1	<1	<1
Turbidity	Grab sample	NTU	20	-----	0.12	0.36	0.24

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

<sup>2</sup>Treatment 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. Table 8 summarizes the customer calls this month.

**Table 8 Customer Calls**

# of Calls	Type of Call	Issue/Inquiry	Investigation	Comments
1	Inquiry	Vance Creek Flows	Yes	Water Survey of Canada inquiring about Vance Creek flows

**5. Operational or Maintenance Activity**

Operational activities within the Silver Star Water service area are tracked and recorded. Table 9 summarizes the operational activities this month.

**Table 9 Monthly Operational Work and Maintenance**

NUMBER OF LOCATIONS	TYPE OF WORK
0	Hydrant Maintenance
0	Hydrant Box Rental
0	Water Service Locate
0	Water Main Break Repair
0	Water Service Install/Inspection
0	Water Turn On/Off
0	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
0	Water Meter Replacement
0	Water Meter Manual Read
4	ERT Install
0	ERT Inspection
0	ERT Maintenance
0	ERT Replacement