



MONTHLY REPORTING PERIOD - OCTOBER, 2025

SUMMARY

This document provides a summary of water quantity and quality data collected by BMID in October 2025.

WATER SUPPLY SUMMARY

Water Source	Active / Not Active	Volume (Mega Liters)	Irrigation / Domestic	Comments
Mission Ck.	Active	418.20	Domestic/Irrig.	Primary Water supply. Domestic and irrig. demand.
Scotty Creek	Not Active	0	Irrig. only	Scotty Creek source ended operations in September 2025
Well 3 Cornish	Not Active	0	Irrig. only	Well #3 upgrade underway to provide for irrigation
Well 4	Active	18.48	Domestic	Well 4 resumed operations September 2025
Well 5	Not Active	0	Domestic/Irrig	Well #5 ended operations in September 2025
Well 6	Not Active	0	Irrig. only	Well # 6 ended operations in September 2025
October 2025	Total:	436.68	10 Year Average for October = 405.25	

WATER QUALITY SUMMARY

Raw Water Microbiological Summary		E-Coli		
Location	# of Samples	Lowest <i>E.Coli</i> Reading	Ave. <i>E.Coli</i> Reading	Highest <i>E.Coli</i> Reading
Mission Creek Intake	4	2	5.25	12
Stevens Reservoir	4	0	0.0	0
Hadden Reservoir	4	0	0.5	1
Treated Water Microbiological Summary		Turbidity Summary		
Location	Low Reading	Average Reading	High Reading	Comments
Mission Creek Raw Water	0.56 NTU	1.00 NTU	1.64 NTU	
Distribution Intake	0.24 NTU	0.29 NTU	0.39 NTU	
UV Plant	0.40 NTU	0.54 NTU	0.74 NTU	
Booster # 1 (first customer)	0.22 NTU	0.34 NTU	0.47 NTU	
UV Treatment Plant				
Plant Flow Volume	In-Spec	Off-Spec	% Off-Spec	Comments
m ³	415,936 m ³	2,260 m ³	0.543%	See details for false "off-spec" water, Oct 29

WATER QUALITY DISTRIBUTION TESTING

		CARO (third party) Testing	25
BMID Population:	30,000	In House Pres./Absence	9
Required Minimum # of Tests:	30	Total Tests:	34
		Total Positive Tests:	0

Documentation and figures are provided on the following pages to support this submission.



1.0 FLOWS - OCTOBER, 2025

Mission Creek provided 96% of the 437 Mega Liters used in the BMID system in October, with Well 4 supplying the remaining 4%.

Figure 1.1 - Domestic Water System Flow

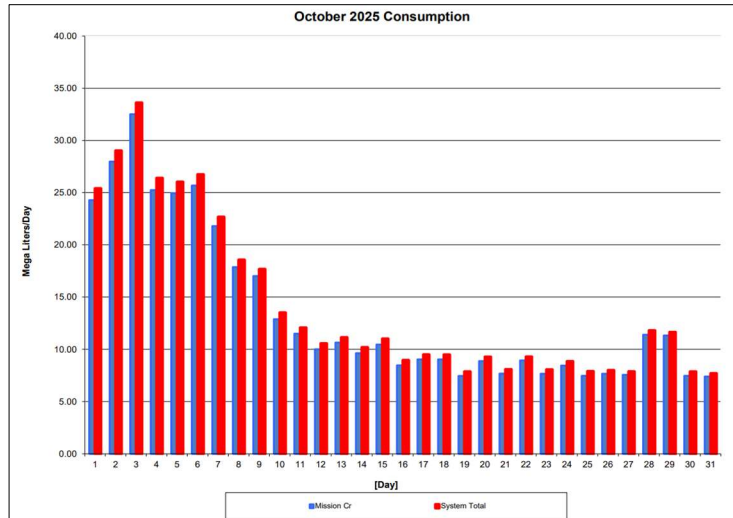


Table 1.2 - October 2025 - Daily Consumption Report

Year	Mission Cr	Well #4	Well #5	System Total
2025	ML/Day	ML/Day	ML/Day	ML/Day
1-Oct	24.27	1.12	-	25.40
2-Oct	27.97	1.05	-	29.02
3-Oct	32.50	1.11	-	33.61
4-Oct	25.24	1.15	-	26.39
5-Oct	24.94	1.09	-	26.03
6-Oct	25.68	1.05	-	26.74
7-Oct	21.79	0.88	-	22.67
8-Oct	17.87	0.69	-	18.56
9-Oct	17.01	0.66	-	17.67
10-Oct	12.89	0.63	-	13.51
11-Oct	11.50	0.57	-	12.07
12-Oct	10.01	0.56	-	10.56
13-Oct	10.65	0.49	-	11.14
14-Oct	9.63	0.56	-	10.18
15-Oct	10.45	0.56	-	11.01
16-Oct	8.47	0.49	-	8.95
17-Oct	9.03	0.47	-	9.49
18-Oct	9.03	0.45	-	9.48
19-Oct	7.45	0.41	-	7.86
20-Oct	8.87	0.41	-	9.28
21-Oct	7.67	0.41	-	8.07
22-Oct	8.94	0.35	-	9.28
23-Oct	7.66	0.40	-	8.06
24-Oct	8.44	0.40	-	8.85
25-Oct	7.46	0.44	-	7.90
26-Oct	7.66	0.34	-	8.00
27-Oct	7.55	0.33	-	7.88
28-Oct	11.40	0.40	-	11.80
29-Oct	11.32	0.32	-	11.64
30-Oct	7.46	0.40	-	7.86
31-Oct	7.39	0.31	-	7.70
Totals ML	418.20	18.48	0.00	436.68
Avg's	13.49	0.60		14.30
Max	32.50	1.15		33.61
Min	7.39	0.31		7.86

2.0 RAW WATER QUALITY - BACTERIOLOGICAL MONITORING

Raw water samples were taken at three points at BMID settling ponds before chlorination. Samples were taken at the Mission Creek raw water intake, the outlet for Stevens Pond, and the point of disinfection at the end of Hadden Reservoir.

Samples from the previous month are also provided to show a two-month trend

Figure 2.1 - Raw Water *E.Coli* Readings (CARO Lab results) September 2025 - October 2025

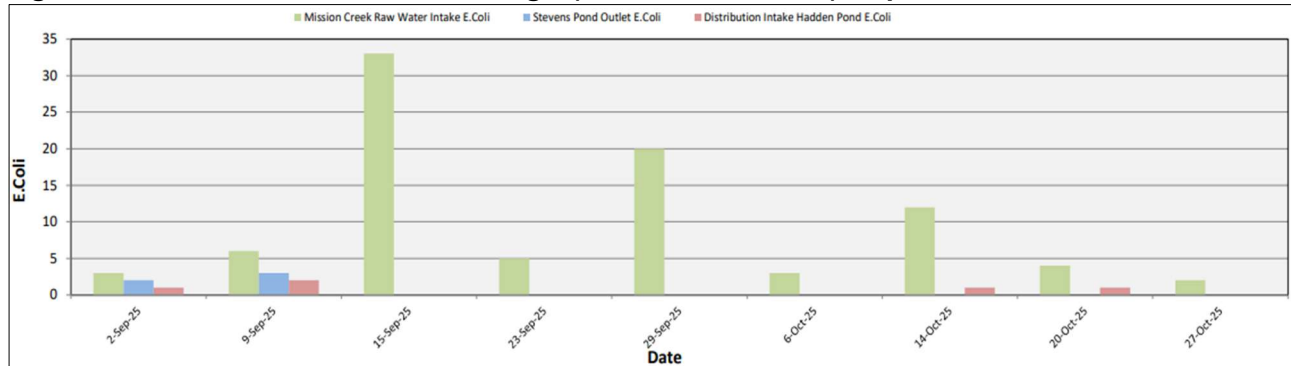


Table 2.1 - *E.Coli* Readings (CARO Labs)

Date	Mission Creek Raw Water Intake E.Coli	Stevens Pond Outlet E.Coli	Distribution Intake Hadden Pond E.Coli
2-Sep-25	3	2	1
9-Sep-25	6	3	2
15-Sep-25	33	0	0
23-Sep-25	5	0	0
29-Sep-25	20	0	0
6-Oct-25	3	0	0
14-Oct-25	12	0	1
20-Oct-25	4	0	1
27-Oct-25	2	0	0

Stevens or WTP Intake (Raw) - Sampling of raw water at intake from Mission Creek

Stevens Outlet (Raw) - Sampling point after exiting 142,000 m³ 1st upper balancing reservoir (Stevens Res.)

Hadden Outlet (Raw) - Sampling point after exiting 75,000 m³ 2nd lower balancing reservoir (Hadden Res.)

(Hadden Outlet = Distribution Intake - Point of Disinfection)

3.0 RAW AND TREATED WATER TURBIDITY

Turbidity is measured online at four locations, Mission Creek raw water intake, the Distribution Intake, the UV treatment plant, and Booster#1. The first user of the BMID system is located near Booster #1. The highest turbidity level recorded at this location was 0.47 NTU on October 31, 2025.

**Figure 3.1 – Daily Turbidity Readings
(Mission Creek Raw - Distribution Intake – UV Plant and Booster Station 1)**

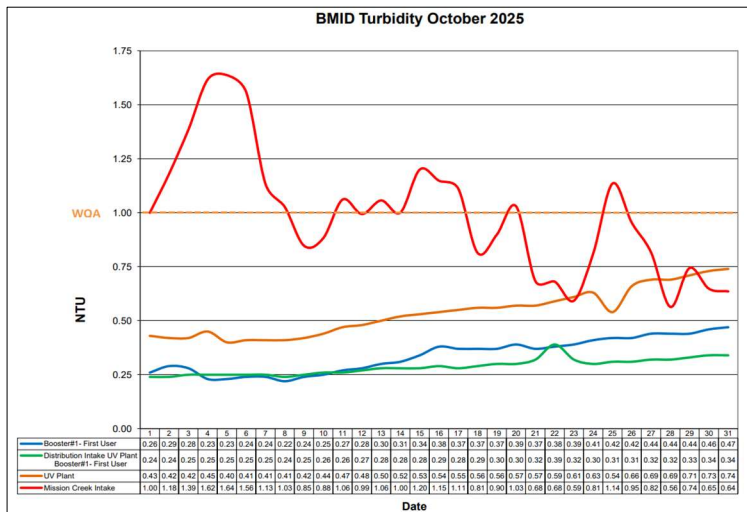


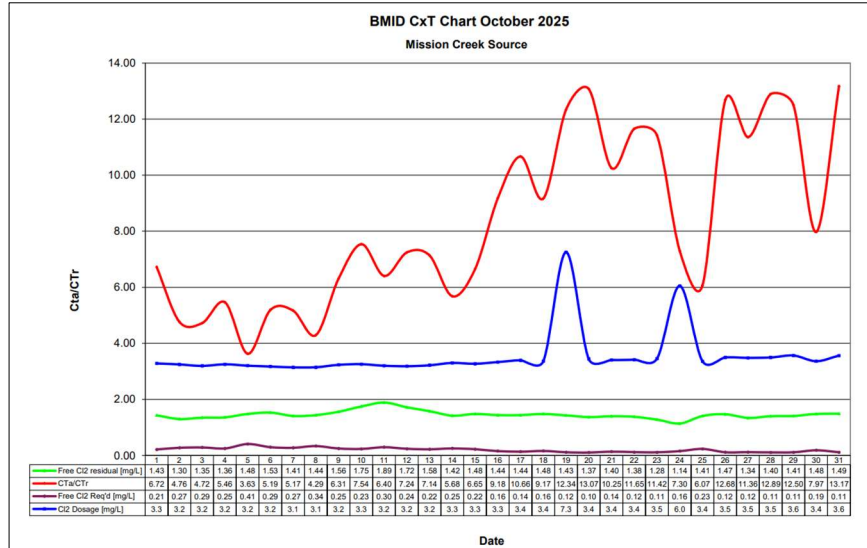
Table 3.1 - Daily Monitoring Record – Turbidity at On-Line Turbidity Analyzers

Turbidity Point Sampling for October 2025				
Date	Mission Creek Intake	Distribution Intake	UV Plant	Booster#1- First User
	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]	Daily Average [NTU]
1	1.00	0.24	0.43	0.26
2	1.18	0.24	0.42	0.29
3	1.39	0.25	0.42	0.28
4	1.62	0.25	0.45	0.23
5	1.64	0.25	0.40	0.23
6	1.56	0.25	0.41	0.24
7	1.13	0.25	0.41	0.24
8	1.03	0.24	0.41	0.22
9	0.85	0.25	0.42	0.24
10	0.88	0.26	0.44	0.25
11	1.06	0.26	0.47	0.27
12	0.99	0.27	0.48	0.28
13	1.06	0.28	0.50	0.30
14	1.00	0.28	0.52	0.31
15	1.20	0.28	0.53	0.34
16	1.15	0.29	0.54	0.38
17	1.11	0.28	0.55	0.37
18	0.81	0.29	0.56	0.37
19	0.90	0.30	0.56	0.37
20	1.03	0.30	0.57	0.39
21	0.68	0.32	0.57	0.37
22	0.68	0.39	0.59	0.38
23	0.59	0.32	0.61	0.39
24	0.81	0.30	0.63	0.41
25	1.14	0.31	0.54	0.42
26	0.95	0.31	0.66	0.42
27	0.82	0.32	0.69	0.44
28	0.56	0.32	0.69	0.44
29	0.74	0.33	0.71	0.44
30	0.65	0.34	0.73	0.46
31	0.64	0.34	0.74	0.47
Average	1.00	0.29	0.54	0.34

4.0 CHLORINE CONTACT TIME

Temperature, pH, peak flow and chlorine residual levels are recorded to determine the CT levels that are required to provide 3 log inactivation of *Giardia*. Chlorine Contact times exceeded the CT levels required to provide 3 log (99.9%) inactivation of *Giardia Lamblia* throughout the month of October, 2025.

Figure 4.1 - CT Trending – BMID Mission Creek Source – October 2025



CTa – CT achieved
CTr – CT Required

The minimum CT that BMID achieved was 3.90 X that of what was required

Table 4.2 - CT Table – Mission Creek Source

BMID October 2025 Mission Creek Source													
DATE	pH (Average)	TEMP (Present)	PEAK FLOW L/s	Free Cl2 residual mg/L	CT achieved	CT req'd	CTa/CTr	Free Cl2 Req'd [mg/L]	Cl2 Dosage mg/L	VOLUME TOTAL Liters	TIME [mins]	FLOW Daily Average L/s	Dosage Average KG/Day
October													
1	7.27	14.0	450	1.48	550.0	100.1	5.49	0.27	3.52	10029827	372	272	83
2	7.27	13.9	497	1.40	471.0	100.0	4.71	0.30	3.65	10029827	336	310	98
3	7.27	13.5	619	1.50	405.1	103.9	3.90	0.38	3.34	10029827	270	352	102
4	7.26	13.4	457	1.41	516.2	103.3	5.00	0.28	3.36	10029827	366	278	81
5	7.25	12.9	409	1.40	571.9	106.4	5.38	0.26	3.28	10029827	409	277	79
6	7.29	12.7	423	1.45	573.6	110.1	5.21	0.28	3.06	10029827	396	279	74
7	7.32	12.5	420	1.40	557.8	112.2	4.97	0.28	3.02	10029827	398	244	64
8	7.34	12.5	402	1.23	511.9	110.9	4.62	0.27	3.43	10029827	416	198	59
9	7.28	12.4	407	1.15	472.0	108.1	4.37	0.26	3.58	10029827	410	185	57
10	7.31	12.3	200	1.44	1200.9	113.9	10.55	0.14	3.25	10029827	834	144	41
11	7.33	12.3	207	1.32	1066.7	113.2	9.42	0.14	3.68	10029827	808	128	41
12	7.30	11.8	191	1.28	1120.2	115.4	9.71	0.13	3.72	10029827	875	109	35
13	7.29	11.3	198	1.30	1099.4	119.3	9.21	0.14	3.41	10029827	846	118	35
14	7.28	10.6	176	1.25	1186.6	124.1	9.57	0.13	3.55	10029827	949	107	33
15	7.29	10.4	206	1.38	1118.4	128.1	8.73	0.16	3.56	10029827	810	114	35
16	7.22	9.8	134	1.53	1912.4	132.2	14.47	0.11	4.48	10029827	1250	84	33
17	7.16	9.9	139	1.40	1683.2	126.7	13.29	0.11	3.56	10029827	1202	95	29
18	7.18	9.7	182	1.38	1265.8	129.1	9.80	0.14	4.50	10029827	917	82	32
19	7.18	9.2	125	1.35	1798.7	133.2	13.50	0.10	4.89	10029827	1332	63	27
20	7.18	9.3	157	1.26	1342.4	131.0	10.25	0.12	4.44	10029827	1065	85	32
21	7.18	9.0	160	1.19	1241.3	132.6	9.36	0.13	4.39	10029827	1043	70	27
22	7.15	9.0	177	1.25	1182.5	132.1	8.96	0.14	4.64	10029827	946	82	33
23	7.12	8.1	169	1.29	1299.5	139.6	9.31	0.14	4.10	10029827	992	77	27
24	7.11	11.0	166	1.31	1353.0	114.0	11.87	0.11	4.48	10029827	1010	78	30
25	7.13	10.9	130	1.34	1724.9	116.1	14.86	0.09	4.12	10029827	1287	75	27
26	7.12	10.9	134	1.34	1670.8	115.6	14.45	0.09	4.66	10029827	1247	69	28
27	6.57	10.1	183	1.33	1216.5	98.4	12.37	0.11	4.71	10029827	915	67	27
28	5.89	10.3	173	1.31	1263.4	72.1	17.51	0.07	4.41	10029827	964	72	27
29	6.69	10.2	127	1.27	1675.6	101.8	16.45	0.08	4.70	10029827	1319	67	27
30	7.26	10.2	134	1.25	1557.0	126.6	12.30	0.10	4.61	10029827	1246	67	27
31	7.28	9.8	119	1.21	1705.3	130.5	13.07	0.09	4.42	10029827	1409	65	27
Averages	7.15	11.14	252	1.34	1120.3	115.7	9.65	0.17	3.94	10029827	841.1	141.63	44.89

5.0 ULTRAVIOLET DISINFECTION

Total Water Treated:	418,196 m ³	100.000%
On-Spec Water:	415,935 m ³	99.457%
Off-Spec Water:	2,260 m ³	0.543%

- On October 29th, a false "off-spec" reading of 1,872 m³ was recorded at the UV plant. A programming error in reactor 102 recorded water as "off-spec" during routine CIP. The plant continued to run normally and provided secondary disinfection throughout the event.

Average monthly chlorine residual before UV Treatment was 1.49 mg/L

The average monthly chlorine residual after UV treatment and re-chlorination was 1.44 mg/L.

Figure 5.1 - UV Disinfection – BMID Mission Creek Source – October 2025

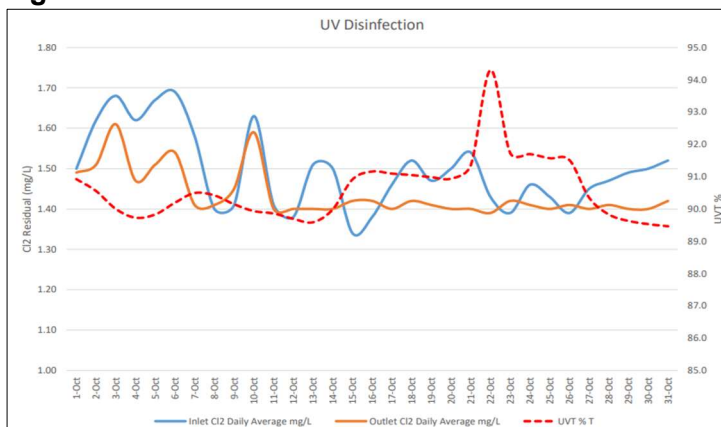


Table 5.2 - UV Disinfection Table – Mission Creek Source

Date	Inlet Cl2 Daily mg/L	Outlet Cl2 Daily mg/L	UVT % T	Turbidity NTU	In Spec Water Volume Cubic Meters	Off Spec Water Cubic Meters	Off Spec % of Water Percentage
1-Oct	1.50	1.49	90.9	0.43	24,275	0	0.00%
2-Oct	1.62	1.51	90.6	0.42	27,971	0	0.00%
3-Oct	1.68	1.61	90.0	0.42	32,503	0	0.00%
4-Oct	1.62	1.47	89.7	0.45	24,987	249	0.99%
5-Oct	1.67	1.51	89.8	0.40	24,931	12	0.05%
6-Oct	1.69	1.54	90.2	0.41	25,652	32	0.12%
7-Oct	1.58	1.41	90.5	0.41	21,792	2	0.01%
8-Oct	1.40	1.41	90.4	0.41	17,871	0	0.00%
9-Oct	1.41	1.45	90.1	0.42	17,013	0	0.00%
10-Oct	1.63	1.59	89.9	0.44	12,887	0	0.00%
11-Oct	1.41	1.40	89.9	0.47	11,496	0	0.00%
12-Oct	1.38	1.40	89.7	0.48	10,006	0	0.00%
13-Oct	1.51	1.40	89.6	0.50	10,648	0	0.00%
14-Oct	1.50	1.40	90.0	0.52	9,626	0	0.00%
15-Oct	1.34	1.42	90.9	0.53	10,450	0	0.00%
16-Oct	1.38	1.42	91.2	0.54	8,465	0	0.00%
17-Oct	1.46	1.40	91.1	0.55	9,026	0	0.00%
18-Oct	1.52	1.42	91.1	0.56	9,034	0	0.00%
19-Oct	1.47	1.41	91.0	0.56	7,450	0	0.00%
20-Oct	1.50	1.40	90.9	0.57	8,872	0	0.00%
21-Oct	1.54	1.40	91.4	0.57	7,670	0	0.00%
22-Oct	1.43	1.39	94.3	0.59	8,935	0	0.00%
23-Oct	1.39	1.42	91.7	0.61	7,658	0	0.00%
24-Oct	1.46	1.41	91.7	0.63	8,443	0	0.00%
25-Oct	1.43	1.40	91.6	0.54	7,456	0	0.00%
26-Oct	1.39	1.41	91.5	0.66	7,660	0	0.00%
27-Oct	1.45	1.40	90.4	0.69	7,554	0	0.00%
28-Oct	1.47	1.41	89.8	0.69	11,399	0	0.00%
29-Oct	1.49	1.40	89.6	0.71	9,449	1872	19.81%
30-Oct	1.50	1.40	89.5	0.73	7,368	94	1.27%
31-Oct	1.52	1.42	89.5	0.74	7,390	0	0.00%
Average	1.49	1.44	90.60	0.54	Total 415,935.60	2260	0.543%



6.0 WATER DISTRIBUTION SAMPLING (TREATED)

Third Party Analysis (CARO Analytical Services)

- Samples taken once per week at ten locations around the BMID service area
- 25 samples were found to be absent of Coliforms.
- 25 samples were found to be absent of *E. Coli*.

Table 6.1 - CARO Independent Lab Testing – Total Coliforms – *E. Coli*

Date	2921 Belgo Rd		Booster 1		Ellison Blow-Off		Ellison School		3976 Highway 97		Prospect Reservoir		Tower Reservoir		Well #5		Well #4		Kirschner Res		Pearson School	
	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli	Coliforms	E.coli
2-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

In-House Analysis (BMID Staff)

- Presence/Absence samples taken on a three-week cycle at seven sites around the BMID service area.
- All 9 samples were found to be absent of both *Total Coliforms* and *E. Coli*.

Table 6.2 - BMID In-house Testing – Presence Absence

Location	10/6/2025				10/14/2025				10/20/2025				10/29/2025			
	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.
Sylvania Cres					0.80	12.3	-	X								
170 Kneller Rd					0.80	12.6	-	X								
2105 Morrison									0.52	15.5	-	X				
Staymen Rd									0.20	15.7	-	X				
260 Campion Rd	0.24	18.4	-	X									0.28	15.2	-	X
Fenwick Rd	0.57	19.0	-	X									0.49	16.5	-	X
Solly Ct					0.78	14.7	-	X								

Table 6.3 - BMID Disinfection By-product Testing – THM and HAA

14-Oct-25		
Location	THM (mg/L)	HAA (mg/L)
Kirschner Reservoir	0.0827	0.1010
Pearson School	0.0747	0.1000
2921 Belgo Rd	0.1100	0.1090
Ellison School*	0.0056	<0.00600
3976 Hwy 97 N	0.0876	0.0952

*Primarily Ground Water

- THM quarterly averages (0.0721 mg/L) were within acceptable limits as set out in the Guideline for Canadian Drinking Water Quality (below 0.10 mg/L).
- HAA quarterly averages (0.0822 mg/L) were above acceptable limits (below 0.08 mg/L).



7.0 WELL #6 POTENTIAL POTABILITY TESTING

Table 7.1 - Well 6 Bacterial Testing

BMID will take monthly bacterial samples on the raw water at Well #6 to determine the potential potability of the source. Results are as follows:

Well 6 Bacterial Testing		
Date	Total Coliforms	E.Coli Coliforms
24-Jun-24	0	0
29-Jul-24	0	0
26-Aug-24	0	0
28-Oct-24	0	0
25-Nov-24	0	0
31-Dec-24	0	0
27-Jan-25	0	0
24-Feb-25	0	0
24-Mar-25	0	0
28-Apr-25	0	0
26-May-25	0	0
7-Jul-25	0	0
28-Jul-25	0	0
25-Aug-25	0	0
29-Sep-25	0	0
27-Oct-25	0	0

Table 7.2 - Nitrate Testing

- BMID will take quarterly Nitrate samples on the raw water at Well #6 to determine the potential potability of the source (results should be below 10 mg/L). Results are as follows:

Well 6 Nitrate Testing	
Date	Nitrate (as N) mg/L
24-Jun-24	0.918
26-Oct-24	1.49
28-Apr-25	0.35
30-Jun-25	0.929
7-Jul-25	1.13
28-Jul-25	1.56
27-Oct-25	1.88