MONTHLY REPORTING PERIOD - MARCH, 2025

SUMMARY

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

WATER SUPPLY SUMMARY

Water Source	Active / Not Active	Volume (Mega Liters)	Irrigation / Domestic	Comments
Mission Ck.	**Active**	**231.88**	**Domestic**	Primary Water supply. Domestic demand only this month.
Scotty Creek	Not Active	0	Irrig. only	Scotty Creek source will resume operations in summer 2025
Well 3 Cornish	Not Active	0	Irrig. only	Well #3 upgrade underway to provide for irrigation
Well 4	**Active**	**13.10**	**Domestic**	Primary domestic source to Scotty Creek service area
Well 5	Not Active	0	Irrig. only	Well #5 will resume supply in summer 2025
Well 6	Not Active	0	Irrig. only	Well # 6 will resume supply in summer 2025
March 2025	**Total:**	**244.98**		**10 Year Average for March = 253.96**

WATER QUALITY SUMMARY

Raw Water Microbiological Summary		**E-Coli**		
Location	# of Samples	Lowest *E.Coli* Reading	Ave. *E.Coli* Reading	Highest *E.Coli* Reading
Mission Creek Intake	5	0	0.6	6
Stevens Reservoir	5	0	0.0	0
Hadden Reservoir	5	0	0.0	0

Treated Water Microbiological Summary		**Turbidity Summary**		
Location	Low Reading	Average Reading	High Reading	Comments
Mission Creek Raw Water	0.73 NTU	3.53 NTU	20.98 NTU	
Distribution Intake	0.28 NTU	0.51 NTU	0.72 NTU	
Booster # 1 (first customer)	0.16 NTU	0.45 NTU	0.73 NTU	
UV Treatment Plant	0.51 NTU	0.73 NTU	1.00 NTU	

UV Treatment Plant				
Plant Flow Volume	In-Spec	Off-Spec	% Off-Spec	Comments
m^3	231,877 m^3	0.0 m^3	0.0%	

WATER QUALITY DISTRIBUTION TESTING

		CARO (third party) Testing	**30**
BMID Population:	30,000	In House Pres./Absence	**11**
Required Minimum # of Tests:	30	Total Tests:	**41**
		Total Positive Tests:	**0**

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

1.0 FLOWS - MARCH, 2025

Mission Creek provided 95% of the 244.98 Mega Liters used in the BMID system in March, with Well # 4 supplying the remaining 5%.

Figure 1.1 - Domestic Water System Flow

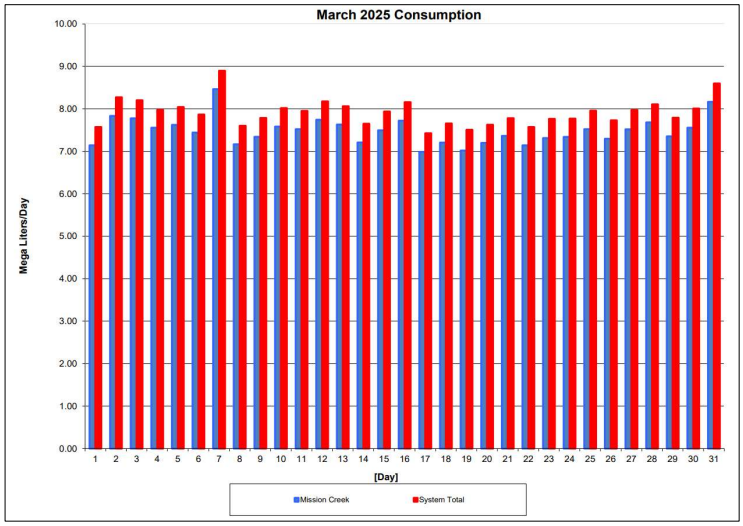


Table 1.2 - March 2025 - Daily Consumption Report

Year	Mission Cr	Well #4	Well #5	System Total
2025	ML/Day	ML/Day	ML/Day	ML/Day
1-Mar	7.14	0.43		7.57
2-Mar	7.83	0.44		8.27
3-Mar	7.78	0.42		8.20
4-Mar	7.56	0.42		7.98
5-Mar	7.62	0.42		8.04
6-Mar	7.44	0.43		7.87
7-Mar	8.46	0.43		8.90
8-Mar	7.16	0.44		7.60
9-Mar	7.34	0.45		7.79
10-Mar	7.58	0.43		8.02
11-Mar	7.52	0.43		7.95
12-Mar	7.74	0.43		8.18
13-Mar	7.63	0.43		8.06
14-Mar	7.21	0.44		7.65
15-Mar	7.49	0.44		7.94
16-Mar	7.72	0.44		8.16
17-Mar	6.99	0.44		7.43
18-Mar	7.20	0.45		7.65
19-Mar	7.02	0.49		7.51
20-Mar	7.20	0.43		7.63
21-Mar	7.36	0.42		7.78
22-Mar	7.14	0.43		7.57
23-Mar	7.31	0.45		7.76
24-Mar	7.34	0.43		7.77
25-Mar	7.52	0.44		7.96
26-Mar	7.30	0.43		7.73
27-Mar	7.52	0.45		7.97
28-Mar	7.68	0.43		8.11
29-Mar	7.35	0.44		7.79
30-Mar	7.56	0.45		8.01
31-Mar	8.16	0.43		8.60
Totals ML	**231.88**	**13.10**	**0.00**	**244.98**
Avg's	7.46	0.00		7.89
Max	8.46	0.00		8.90
Min	6.99	0.00		7.43

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) February 2024 - March 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
3-Feb-25	1	3	1
10-Feb-25	0	0	0
18-Feb-25	2	0	0
24-Feb-25	0	0	0
3-Mar-25	6	0	0
10-Mar-25	0	0	0
17-Mar-25	1	0	0
24-Mar-25	0	0	0
31-Mar-25	1	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 m^3 1st upper balancing reservoir (Stevens Res.)

Hadden Outlet (Raw) - Sampling point after exiting 75,000 m^3 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 0.73 NTU on March 21st, 2025.

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

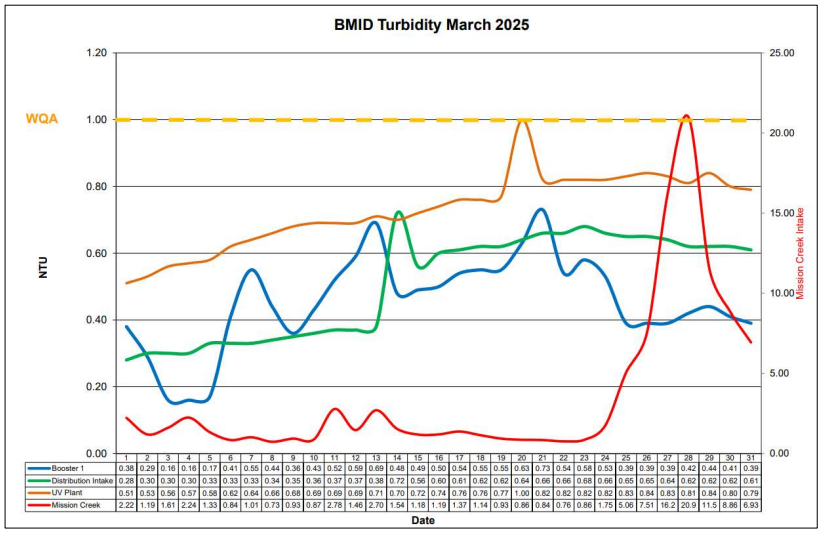


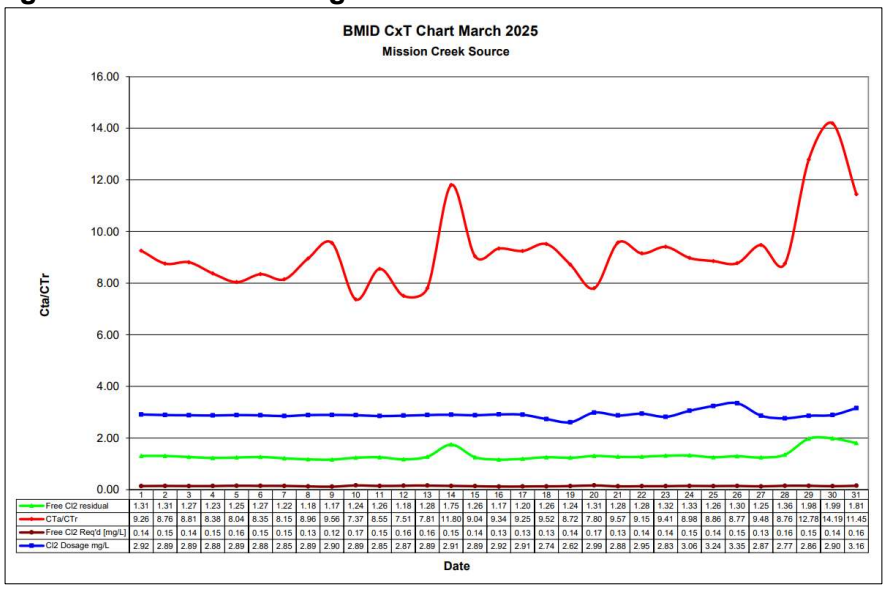
Table 3.1 - Daily Monitoring Record – Turbidity at On-Line Turbidity Analyzers

Turbidity Point Sampling for March 2025				
Date	Mission Creek Intake	Distribution Intake	Booster#1- First User	UV Plant
	Daily Average [NTU]	Daily Average NTU	Daily Average NTU	Daily Average [NTU]
1	2.22	0.28	0.38	0.51
2	1.19	0.30	0.29	0.53
3	1.61	0.30	0.16	0.56
4	2.24	0.30	0.16	0.57
5	1.33	0.33	0.17	0.58
6	0.84	0.33	0.41	0.62
7	1.01	0.33	0.55	0.64
8	0.73	0.34	0.44	0.66
9	0.93	0.35	0.36	0.68
10	0.87	0.36	0.43	0.69
11	2.78	0.37	0.52	0.69
12	1.46	0.37	0.59	0.69
13	2.70	0.38	0.69	0.71
14	1.54	0.72	0.48	0.70
15	1.18	0.56	0.49	0.72
16	1.19	0.60	0.50	0.74
17	1.37	0.61	0.54	0.76
18	1.14	0.62	0.55	0.76
19	0.93	0.62	0.55	0.77
20	0.86	0.64	0.63	1.00
21	0.84	0.66	0.73	0.82
22	0.76	0.66	0.54	0.82
23	0.86	0.68	0.58	0.82
24	1.75	0.66	0.53	0.82
25	5.06	0.65	0.39	0.83
26	7.51	0.65	0.39	0.84
27	16.23	0.64	0.39	0.83
28	20.98	0.62	0.42	0.81
29	11.52	0.62	0.44	0.84
30	8.86	0.62	0.41	0.80
31	6.93	0.61	0.39	0.79
AVG	3.53	0.51	0.45	0.73

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 March, 2025.

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



CTa – CT achieved
CTr – CT Required

The minimum CT that BMID achieved was 7.37 X that of what was required

Table 4.2 - CT Table – Mission Creek Source

BMID March 2024 Mission Creek Source													
DATE	pH (Average)	TEMP (Present)	PEAK FLOW	Free Cl2 residual	CT achieved	CT req'd	CTa/CTr	Free Cl2 Req'd	Cl2 Dosage	VOLUME TOTAL	TIME	FLOW Daily Average	Dosage Average
March		[°C]	L/s	[mg/L]				[mg/L]	mg/L	Liters	[mins]	L/s	KG/Day
1	7.24	3.8	120	1.31	1826	197.3	9.26	0.14	2.92	10029827	1394	84	21.1
2	7.25	4.1	129	1.31	1698	193.9	8.76	0.15	2.89	10029827	1296	92	23.0
3	7.26	4.5	128	1.27	1660	188.4	8.81	0.14	2.89	10029827	1307	91	22.8
4	7.26	4.6	132	1.23	1560	186.2	8.38	0.15	2.88	10029827	1268	89	22.1
5	7.26	3.9	133	1.25	1576	196.0	8.04	0.16	2.89	10029827	1261	89	22.2
6	7.26	3.8	129	1.27	1651	197.8	8.35	0.15	2.88	10029827	1300	87	21.7
7	7.26	4.4	133	1.22	1537	188.6	8.15	0.15	2.85	10029827	1260	100	24.6
8	7.25	5.0	123	1.18	1606	179.3	8.96	0.13	2.89	10029827	1361	84	21.0
9	7.23	6.3	126	1.17	1553	162.5	9.56	0.12	2.90	10029827	1327	89	22.4
10	7.25	4.1	146	1.24	1417	192.3	7.37	0.17	2.89	10029827	1143	88	22.0
11	7.25	4.7	133	1.26	1582	184.9	8.55	0.15	2.85	10029827	1255	91	22.5
12	7.25	4.3	140	1.18	1413	188.3	7.51	0.16	2.87	10029827	1198	90	22.3
13	7.26	4.5	145	1.28	1473	188.7	7.81	0.16	2.89	10029827	1150	85	21.3
14	7.28	4.4	124	1.75	2367	200.6	11.80	0.15	2.91	10029827	1352	84	21.0
15	7.28	5.3	130	1.26	1622	179.4	9.04	0.14	2.89	10029827	1287	91	22.6
16	7.28	5.3	118	1.17	1657	177.4	9.34	0.13	2.92	10029827	1417	82	20.7
17	7.28	5.2	121	1.20	1658	179.3	9.25	0.13	2.91	10029827	1382	85	21.2
18	7.29	5.5	125	1.26	1690	177.6	9.52	0.13	2.74	10029827	1341	81	19.1
19	7.30	5.0	129	1.24	1604	184.1	8.72	0.14	2.62	10029827	1294	85	19.1
20	7.28	5.2	154	1.31	1418	181.7	7.80	0.17	2.99	10029827	1082	85	21.8
21	7.30	5.5	125	1.28	1710	178.6	9.57	0.13	2.88	10029827	1336	86	21.5
22	7.31	5.5	130	1.28	1641	179.3	9.15	0.14	2.95	10029827	1282	84	21.4
23	7.33	5.9	133	1.32	1660	176.5	9.41	0.14	2.83	10029827	1258	86	21.0
24	7.33	5.9	140	1.33	1586	176.7	8.98	0.15	3.06	10029827	1193	81	21.5
25	7.34	5.9	135	1.26	1558	175.9	8.86	0.14	3.24	10029827	1236	89	24.9
26	7.34	5.3	134	1.30	1616	184.2	8.77	0.15	3.35	10029827	1243	85	24.7
27	6.92	5.3	141	1.25	1481	156.3	9.48	0.13	2.87	10029827	1185	88	21.7
28	7.35	5.0	137	1.36	1664	190.1	8.76	0.16	2.77	10029827	1224	90	21.0
29	7.38	5.4	131	1.98	2528	197.8	12.78	0.15	2.86	10029827	1277	86	21.3
30	7.39	5.9	122	1.99	2722	191.9	14.19	0.14	2.90	10029827	1368	88	21.9
31	7.38	5.8	139	1.81	2172	189.8	11.45	0.16	3.16	10029827	1200	92	25.0
Averages	7.28	5.01	131.758	1.34	1781	184.6	9.78	0.14	2.94	10029827	1260.0	85.91	21.80

5.0 ULTRAVIOLET DISINFECTION

Total Water Treated:	231,877 m^3	100.00%
On-Spec Water:	231,877 m^3	100.00%
Off-Spec Water:	0 m^3	0.00%

Average monthly chlorine residual before UV Treatment was 1.29 mg/L
The average monthly chlorine residual after UV treatment and re-chlorination was 1.42 mg/L.

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

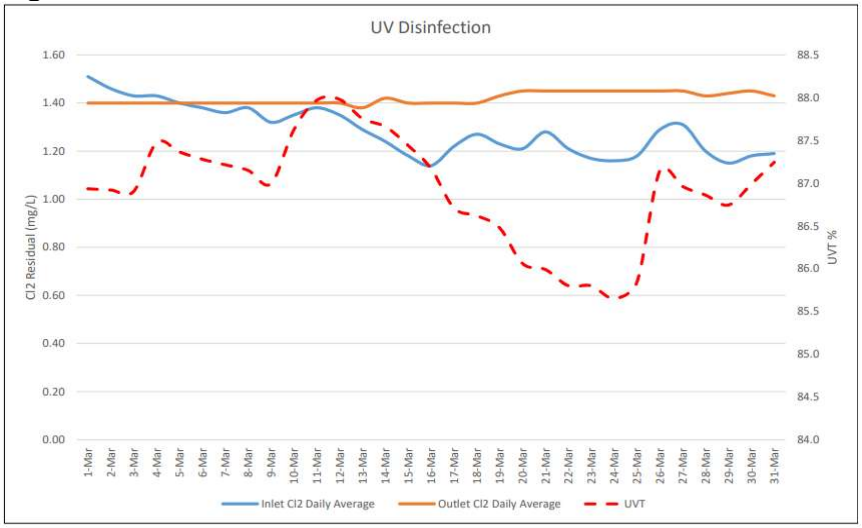


Table 5.2 - UV Disinfection Table – Mission Creek Source

	Inlet Cl2 Daily	Outlet Cl2 Daily	UVT	Turbidity		In Spec Water Volume	Off Spec Water Volume	Off Spec % of Water
Date	mg/L	mg/L	% T	NTU		Cubic Meters	Cubic Meters	Percentage
1-Mar	1.51	1.40	86.9	0.51		7141.4	0	0.00%
2-Mar	1.46	1.40	86.9	0.53		7833.1	0	0.00%
3-Mar	1.43	1.40	86.9	0.56		7777.4	0	0.00%
4-Mar	1.43	1.40	87.5	0.57		7555.0	0	0.00%
5-Mar	1.40	1.40	87.4	0.58		7621.3	0	0.00%
6-Mar	1.38	1.40	87.3	0.62		7439.4	0	0.00%
7-Mar	1.36	1.40	87.2	0.64		8464.0	0	0.00%
8-Mar	1.38	1.40	87.2	0.66		7163.7	0	0.00%
9-Mar	1.32	1.40	87.0	0.68		7340.8	0	0.00%
10-Mar	1.35	1.40	87.6	0.69		7582.7	0	0.00%
11-Mar	1.38	1.40	88.0	0.69		7520.5	0	0.00%
12-Mar	1.35	1.40	88.0	0.69		7743.5	0	0.00%
13-Mar	1.29	1.38	87.8	0.71		7630.5	0	0.00%
14-Mar	1.24	1.42	87.7	0.70		7206.3	0	0.00%
15-Mar	1.18	1.40	87.4	0.72		7494.4	0	0.00%
16-Mar	1.14	1.40	87.2	0.74		7719.6	0	0.00%
17-Mar	1.22	1.40	86.7	0.76		6985.8	0	0.00%
18-Mar	1.27	1.40	86.6	0.76		7203.8	0	0.00%
19-Mar	1.23	1.43	86.5	0.77		7017.1	0	0.00%
20-Mar	1.21	1.45	86.1	1.00		7198.2	0	0.00%
21-Mar	1.28	1.45	86.0	0.82		7363.0	0	0.00%
22-Mar	1.21	1.45	85.8	0.82		7140.0	0	0.00%
23-Mar	1.17	1.45	85.8	0.82		7311.7	0	0.00%
24-Mar	1.16	1.45	85.7	0.82		7337.5	0	0.00%
25-Mar	1.18	1.45	85.8	0.83		7519.3	0	0.00%
26-Mar	1.29	1.45	87.1	0.84		7296.9	0	0.00%
27-Mar	1.31	1.45	87.0	0.83		7518.1	0	0.00%
28-Mar	1.20	1.43	86.9	0.81		7681.7	0	0.00%
29-Mar	1.15	1.44	86.7	0.84		7350.9	0	0.00%
30-Mar	1.18	1.45	87.0	0.80		7555.0	0	0.00%
31-Mar	1.19	1.43	87.2	0.79		8164.5	0	0.00%
Average	1.29	1.42	86.9		Total	231,877.10	0	0.000%

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
- 30 samples were found to be absent of Coliforms.
- 30 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 #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
3-Feb-25	0	0	0	0							0	0			0	0	0	0	0	0
10-Feb-25			0	0			0	0	0	0			0	0	0	0				
18-Feb-25	0	0	0	0							0	0			0	0	0	0	0	0
24-Feb-25			0	0			0	0	0	0			0	0	0	0				
3-Mar-25	0	0	0	0							0	0			0	0	0	0	0	0
10-Mar-25			0	0	0	0	0	0	0	0			0	0	0	0				
17-Mar-25	0	0	0	0							0	0			0	0	0	0	0	0
24-Mar-25			0	0	0	0	0	0	0	0			0	0	0	0				
31-Mar-25	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 11 samples were found to be absent of both *Total Coliforms* and *E.Coli*.

Table 6.2 - BMID In-house Testing – Presence Absence

Location	3/3/2025				3/10/2025				3/17/2025				3/24/2025				3/31/2025			
	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.	Cl2	Temp.	Pres.	Abs.
Sylvania Cres									0.85	13.0	-	X								
170 Kneller Rd									0.89	10.6	-	X								
2105 Morrison	0.82	8.2	-	X									0.74	10.8	-	X				
Staymen Rd	0.91	8.4	-	X									0.76	10.6	-	X				
260 Campion Rd					0.71	7.6	-	X									0.58	9.8	-	X
Fenwick Rd					0.57	8.8	-	X									0.59	10.2	-	X
Solly Ct									0.94	9.2	-	X								

7.0 WELL #6 POTENTIAL POTABILITY 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