

SUBURBAN LABORATORIES, Inc.



1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
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www.suburbanlabs.com

July 28, 2023

Mike Carpanzano
Village of Melrose Park Drinking Water
1002 North 27th Avenue
Melrose Park, IL 60160

Workorder: 2307712

EPA EDD:100225_072823DBP945.cs

TEL: (708) 531-5360

FAX: (708) 345-1391

RE: Disinfectant Byproducts

Dear Mike Carpanzano:

Suburban Laboratories, Inc. received 2 sample(s) on 7/12/2023 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Allison Phillips
Project Manager
(708) 544-3260 ext 211
aphillips@suburbanlabs.com





Client: Village of Melrose Park Drinking Water

Date: July 28, 2023

Project: Disinfectant Byproducts

PO #:

WorkOrder: 2307712

QC Level: LEVEL I

Temperature of samples upon receipt at SLI: C

Chain of Custody #:

General Comments:

- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:

- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS: (Surrogate Standard): Quality control compound added to the sample by the lab.
- LA: Lab Accident - No valid data to report.
- VO: Insufficient Volume provided
- BR: Received broken
- IP: Invalid Sampling

Method References:

For a complete list of method references please contact us.

- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:



Suburban Laboratories, Inc.

1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Village of Melrose Park Drinking Water

Report Date: July 28, 2023

Project Name: Disinfectant Byproducts

Workorder: 2307712

Client Sample ID: S2HT1

Matrix: DRINKING WATER

Lab ID: 2307712-001

Date Received: 07/12/2023 12:15 PM

Collection Date: 07/12/2023 7:30 AM

Parameter	Result	Report Limit	MCL	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
TRICHALOMETHANES (THM)			Method: EPA-524.2-Rev 4.1, 1995			Analyst: RWM		
Chloroform	26.2	0.031			µg/L	1	07/12/2023 7:26 PM	R164718
Bromodichloromethane	12.0	0.031			µg/L	1	07/12/2023 7:26 PM	R164718
Dibromochloromethane	5.94	0.040			µg/L	1	07/12/2023 7:26 PM	R164718
Bromoform	ND	0.138			µg/L	1	07/12/2023 7:26 PM	R164718
Total Trihalomethanes (TTHMS)	44.1	1.00	80.0		µg/L	1	07/12/2023 7:26 PM	R164718
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	109	70-130			%Rec	1	07/12/2023 7:26 PM	R164718
SS: 4-Bromofluorobenzene	113	70-130			%Rec	1	07/12/2023 7:26 PM	R164718
HALOACETIC ACIDS (HAA5)			Method: EPA-552.3-Rev 1.0, July 2003			Analyst: RHY		
Chloroacetic acid	1.15	0.160		J	µg/L	1	07/20/2023 1:15 AM	91101
Dichloroacetic acid	12.3	0.310			µg/L	1	07/20/2023 1:15 AM	91101
Trichloroacetic acid	10.5	0.330			µg/L	1	07/20/2023 1:15 AM	91101
Bromoacetic acid	0.340	0.170			µg/L	1	07/20/2023 1:15 AM	91101
Dibromoacetic acid	1.50	0.360			µg/L	1	07/20/2023 1:15 AM	91101
Total Haloacetic Acids (HAA5)	25.8	0.160	60.0		µg/L	1	07/20/2023 1:15 AM	91101
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	123	70-130			%Rec	1	07/20/2023 1:15 AM	91101



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Laboratory Results

Client ID: Village of Melrose Park Drinking Water

Report Date: July 28, 2023

Project Name: Disinfectant Byproducts

Workorder: 2307712

Client Sample ID: S2HT2

Matrix: DRINKING WATER

Lab ID: 2307712-002

Date Received: 07/12/2023 12:15 PM

Collection Date: 07/12/2023 8:00 AM

Parameter	Result	Report Limit	MCL	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
TRihalOMETHANES (THM)		Method: EPA-524.2-Rev 4.1, 1995			Analyst: RWM			
Chloroform	17.5	0.031			µg/L	1	07/12/2023 7:57 PM	R164718
Bromodichloromethane	10.5	0.031			µg/L	1	07/12/2023 7:57 PM	R164718
Dibromochloromethane	5.25	0.040			µg/L	1	07/12/2023 7:57 PM	R164718
Bromoform	ND	0.138			µg/L	1	07/12/2023 7:57 PM	R164718
Total Trihalomethanes (TTHMS)	33.3	1.00	80.0		µg/L	1	07/12/2023 7:57 PM	R164718
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	108	70-130			%Rec	1	07/12/2023 7:57 PM	R164718
SS: 4-Bromofluorobenzene	111	70-130			%Rec	1	07/12/2023 7:57 PM	R164718
HALOACETIC ACIDS (HAA5)		Method: EPA-552.3-Rev 1.0, July 2003			Analyst: RHY			
Chloroacetic acid	1.51	0.160		J	µg/L	1	07/20/2023 1:58 AM	91101
Dichloroacetic acid	9.67	0.310			µg/L	1	07/20/2023 1:58 AM	91101
Trichloroacetic acid	9.53	0.330			µg/L	1	07/20/2023 1:58 AM	91101
Bromoacetic acid	0.424	0.170			µg/L	1	07/20/2023 1:58 AM	91101
Dibromoacetic acid	1.46	0.360			µg/L	1	07/20/2023 1:58 AM	91101
Total Haloacetic Acids (HAA5)	22.6	0.160	60.0		µg/L	1	07/20/2023 1:58 AM	91101
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	124	70-130			%Rec	1	07/20/2023 1:58 AM	91101



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Laboratory Results

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Project Name: Disinfectant Byproducts

Report Date: July 28, 2023
Workorder: 2307712

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Lab ID: 2307712-002

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Matrix: DRINKING WATER
Collection Date: 07/12/2023 8:00 AM

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PREP DATES REPORT

Client: Village of Melrose Park Drinking Water
Project: Disinfectant Byproducts

Report Date: July 28, 2023
Lab Order: 2307712

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2307712-001B	7/12/2023 7:30:00 AM	91101	AQPREP: HAAs		7/19/2023
2307712-002B	7/12/2023 8:00:00 AM	91101	AQPREP: HAAs		7/19/2023



Stage 2 DBP Operational Evaluation Level (OEL) Report

Village of Melrose Park Drinking Water
Disinfectant Byproducts

Workorder: 2307712

Total Haloacetic Acids (HAA5)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	13.50	10.40	25.80	18.88	No
S2HT2	13.50	8.64	22.60	16.84	No

Note: Operational Evaluation required if any site's calculated OEL exceeds 60 ug/l. All results above are ug/l.

Data Source

S2HT1	2301469 1/2023	2304A3 4/2023	2307712 7/2023
S2HT2	2301469 1/2023	2304A3 4/2023	2307712 7/2023

Total Trihalomethanes (TTHMS)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	22.80	25.00	44.10	34.00	No
S2HT2	24.50	19.80	33.20	27.68	No

Note: Operational Evaluation required if any site's calculated OEL exceeds 80 ug/l. All results above are ug/l.

Data Source

S2HT1	2301469 1/2023	2304A3 4/2023	2307712 7/2023
S2HT2	2301469 1/2023	2304A3 4/2023	2307712 7/2023

According to the DBP Stage 2 regulations EPA 815-R-08-018 if the water system exceeds the OEL on any sample site for either Total Haloacetic Acid (HHA5) or Total Trihalomethanes (TTHM) an Operational Evaluation must be done. The evaluation must include an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to HHA(5) and/or TTHM formation. Guidance for the OEL Evaluation can be found at:

http://www.epa.gov/ogwdw/disinfection/stage2/pdfs/draft_guide_stage2_operationalevaluation.pdf

The Operational Evaluation report (not this Operational Evaluation Level report) must be submitted no later than 90 days after being notified of the analytical result that causes the water system to exceed the OEL.

The water system may request to limit the scope of the evaluation if the system is able to identify the cause of the OEL exceedance. The request to limit the scope of the evaluation does not extend the reporting of the evaluation report, and IEPA must approve the limited scope of the evaluation in writing. The supply must keep the IEPA approval letter limiting the scope of the evaluation with the completed report. The written report must also be made available to the public on request.

