

SUBURBAN LABORATORIES, Inc.



1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

April 24, 2019

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

Workorder: 1904B56

TEL: (708) 531-5360
FAX: (708) 345-1391
RE: Disinfectant Byproducts

Dear Mike Carpanzano:

Suburban Laboratories, Inc. received 2 sample(s) on 4/15/2019 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,

Pat Rodriguez
Project Manager
708-544-3260 ext 214
pat@suburbanlabs.com





Client: Village of Melrose Park Drinking Water

Date: April 24, 2019

Project: Disinfectant Byproducts

PO #:

WorkOrder: 1904B56

QC Level: LEVEL I

Temperature of samples upon receipt at SLI: 5 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.

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: April 24, 2019

Project Name: Disinfectant Byproducts

Workorder: 1904B56

Client Sample ID: S2HT1

Matrix: DRINKING WATER

Lab ID: 1904B56-001

Date Received: 04/15/2019 12:25 PM

Collection Date: 04/15/2019 8:30 AM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
TRICHALOMETHANES (THM)		Method: EPA-524.2-Rev 4.1, 1995			Analyst: CY			
Chloroform	11.3		1.00		µg/L	1	04/17/2019 1:57 PM	R107112
Bromodichloromethane	7.00		1.00		µg/L	1	04/17/2019 1:57 PM	R107112
Dibromochloromethane	4.06		1.00		µg/L	1	04/17/2019 1:57 PM	R107112
Bromoform	ND		1.00		µg/L	1	04/17/2019 1:57 PM	R107112
Total Trihalomethanes (TTHMS)	22.4	80.0	1.00		µg/L	1	04/17/2019 1:57 PM	R107112
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	107		70-130		%Rec	1	04/17/2019 1:57 PM	R107112
SS: 4-Bromofluorobenzene	107		70-130		%Rec	1	04/17/2019 1:57 PM	R107112
HALOACETIC ACIDS (HAA5)		Method: EPA-552.3-Rev 1.0, July 2003			Analyst: ES			
Chloroacetic acid	2.65		2.00		µg/L	1	04/22/2019 10:35 PM	58734
Dichloroacetic acid	7.85		0.200		µg/L	1	04/22/2019 10:35 PM	58734
Trichloroacetic acid	4.40		0.500		µg/L	1	04/22/2019 10:35 PM	58734
Bromoacetic acid	0.519		0.300		µg/L	1	04/22/2019 10:35 PM	58734
Dibromoacetic acid	1.13		0.300		µg/L	1	04/22/2019 10:35 PM	58734
Total Haloacetic Acids (HAA5)	16.5	60.0	0.200		µg/L	1	04/22/2019 10:35 PM	58734
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	104		70-130		%Rec	1	04/22/2019 10:35 PM	58734



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: April 24, 2019

Project Name: Disinfectant Byproducts

Workorder: 1904B56

Client Sample ID: S2HT2

Matrix: DRINKING WATER

Lab ID: 1904B56-002

Date Received: 04/15/2019 12:25 PM

Collection Date: 04/15/2019 9:00 AM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
TRICHALOMETHANES (THM)			Method: EPA-524.2-Rev 4.1, 1995			Analyst: CY		
Chloroform	7.93		1.00		µg/L	1	04/17/2019 2:26 PM	R107112
Bromodichloromethane	6.52		1.00		µg/L	1	04/17/2019 2:26 PM	R107112
Dibromochloromethane	4.09		1.00		µg/L	1	04/17/2019 2:26 PM	R107112
Bromoform	ND		1.00		µg/L	1	04/17/2019 2:26 PM	R107112
Total Trihalomethanes (TTHMS)	18.5	80.0	1.00		µg/L	1	04/17/2019 2:26 PM	R107112
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	114		70-130		%Rec	1	04/17/2019 2:26 PM	R107112
SS: 4-Bromofluorobenzene	111		70-130		%Rec	1	04/17/2019 2:26 PM	R107112
HALOACETIC ACIDS (HAA5)			Method: EPA-552.3-Rev 1.0, July 2003			Analyst: ES		
Chloroacetic acid	2.36		2.00		µg/L	1	04/22/2019 11:17 PM	58734
Dichloroacetic acid	5.77		0.200		µg/L	1	04/22/2019 11:17 PM	58734
Trichloroacetic acid	3.65		0.500		µg/L	1	04/22/2019 11:17 PM	58734
Bromoacetic acid	0.426		0.300		µg/L	1	04/22/2019 11:17 PM	58734
Dibromoacetic acid	1.00		0.300		µg/L	1	04/22/2019 11:17 PM	58734
Total Haloacetic Acids (HAA5)	13.2	60.0	0.200		µg/L	1	04/22/2019 11:17 PM	58734
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	104		70-130		%Rec	1	04/22/2019 11:17 PM	58734



Suburban Laboratories, Inc.

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

PREP DATES REPORT

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

Report Date: April 24, 2019
Lab Order: 1904B56

Sample ID	Collection Date	Batch ID	Prep Method	Prep Test Name	TCLP Date	Prep Date
1904B56-001B	4/15/2019 8:30:00 A	58734	552PR	AQPREP: HAAs		4/16/2019
1904B56-002B	4/15/2019 9:00:00 A	58734	552PR	AQPREP: HAAs		4/16/2019



Qualifiers:

- * /x Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- C Value is below Minimum Concentration Limit
- c Analyte not in SLI scope of accreditation
- E Estimated, detected above quantitation range
- G Refer to case narrative page for specific comments
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limit (QL)
- N Tentatively identified compounds
- ND Not Detected at the Reporting Limit
- P Present
- Q Accreditation is not available from Wisconsin
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- T Analyte detected in sample trip blank
- V EPA requires field analysis/filtration. Lab analysis would be considered past hold time.



Stage 2 DBP Operational Evaluation Level (OEL) Report

Village of Melrose Park Drinking Water
Disinfectant Byproducts

Workorder: 1904B56

Total Haloacetic Acids (HAA5)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	14.80	17.50	16.50	16.33	No
S2HT1	12.90	17.50	16.50	15.85	No
S2HT2	13.10	13.20	13.20	13.18	No
S2HT2	15.10	13.20	13.20	13.68	No

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

Data Source

S2HT1	1810L34 10/2018	1901A4 1/2019	1904B56 4/2019
S2HT1	1810D95 10/2018	1901A4 1/2019	1904B56 4/2019
S2HT2	1810L34 10/2018	1901A4 1/2019	1904B56 4/2019
S2HT2	1810D95 10/2018	1901A4 1/2019	1904B56 4/2019

Total Trihalomethanes (TTHMS)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	35.60	22.20	22.40	25.65	No
S2HT2	28.00	16.90	18.50	20.48	No

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

Data Source

S2HT1	1810D95 10/2018	1901A4 1/2019	1904B56 4/2019
S2HT2	1810D95 10/2018	1901A4 1/2019	1904B56 4/2019





Stage 2 DBP Operational Evaluation Level (OEL) Report

Village of Melrose Park Drinking Water
Disinfectant Byproducts

Workorder: 1904B56

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.





Suburban Laboratories, Inc.

1950 S. Batavia Ave., Suite 150, Geneva, Illinois 60134
Tel. (708) 544-3260 Toll Free (800) 783-LABS Fax (708) 544-8587
www.suburbanlabs.com



IEPA #100225 IDPH #17585

Chain of Custody for Drinking Water Compliance Testing

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

Phone: (708) 531-5360
Project ID: 0311860 - DBP
Collection Month: April 2019

Collected By: Michael Carpanzano

Stage 2 DBP Sample Between: 4/1/2019 and 4/30/2019

IMPORTANT: Verify Sampling dates and sampling sites with IEPA Demand Notice

Workorder Lab Use Only
1904BSL
Lab Sample Number

Table with 6 columns: Sample Point, # Bott, Analysis, Date Collect, Time Collect, Lab Sample Number. Contains 4 rows of sample data.

Relinquished By: [Signature] Date/Time _____

Received By: [Signature] Date/Time 4-15-19 11:05

Please provide any contact or address changes as needed.

Lab Use Only
Received on Ice: Yes / No
Received Temperature: 5 C
Received By: [Signature]
Date Received: 4-15-19 Time Received: 12:25
Lab Delivery: [Checked] SLI Client UPS FedEx Mail Other