## 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 29, 2020

Mike Carpanzano Village of Melrose Park Drinking Water 1002 North 27th Avenue Melrose Park, IL 60160 Workorder: 2004A93 EPA EDD:100225\_042920DBP35.csv

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

Dear Mike Carpanzano:

Suburban Laboratories, Inc. received 2 sample(s) on 4/15/2020 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,

Kebecca Linker

Rebecca Linker Project Manager (708) 544-3260 rebeccal@suburbanlabs.com





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

Client: Village of Melrose Park Drinking Water Project: Disinfectant Byproducts WorkOrder: 2004A93

Temperature of samples upon receipt at SLI: 9 C

Date: April 29, 2020 PO #: QC Level: LEVEL I Chain of Custody #: PP

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:



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## Laboratory Results

## Client ID: Village of Melrose Park Drinking Water

**Project Name:** Disinfectant Byproducts

#### Client Sample ID: S2HT1

Lab ID: 2004A93-001

Report Date: April 29, 2020

Workorder: 2004A93

#### Matrix: DRINKING WATER Collection Date: 04/15/2020 9:00 AM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
TRIHALOMETHANES (THM)			Method	: EPA-524.2-Rev 4	.1, 1995		Analyst: RWM	
Chloroform	14.0		1.00		µg/L	1	04/20/2020 6:53 PM	R118983
Bromodichloromethane	9.09		1.00		µg/L	1	04/20/2020 6:53 PM	R118983
Dibromochloromethane	4.88		1.00		µg/L	1	04/20/2020 6:53 PM	R118983
Bromoform	ND		1.00		µg/L	1	04/20/2020 6:53 PM	R118983
Total Trihalomethanes (TTHMS)	28.0	80.0	1.00		µg/L	1	04/20/2020 6:53 PM	R118983
Internal Quality Control Compounds								
SS: 1,2-Dichlorobenzene-d4	108		70-130		%Rec	1	04/20/2020 6:53 PM	R118983
SS: 4-Bromofluorobenzene	99.8		70-130		%Rec	1	04/20/2020 6:53 PM	R118983
HALOACETIC ACIDS (HAA5)			Method	EPA-552.3-Rev 1	.0, July 2003		Analyst: ES	
Chloroacetic acid	3.13		2.00		µg/L	1	04/28/2020 8:38 AM	65709
Dichloroacetic acid	9.37		0.200		µg/L	1	04/28/2020 8:38 AM	65709
Trichloroacetic acid	6.00		0.500		µg/L	1	04/28/2020 8:38 AM	65709
Bromoacetic acid	0.506		0.300		µg/L	1	04/28/2020 8:38 AM	65709
Dibromoacetic acid	1.23		0.300		µg/L	1	04/28/2020 8:38 AM	65709
Total Haloacetic Acids (HAA5)	20.2	60.0	0.200		µg/L	1	04/28/2020 8:38 AM	65709
Internal Quality Control Compounds								
SS: 2-Bromobutanoic acid	102		70-130		%Rec	1	04/28/2020 8:38 AM	65709

Date Received: 04/15/2020 4:20 PM



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19.8

103

60.0

0.200

70-130

## Laboratory Results

## Client ID: Village of Melrose Park Drinking Water

Project Name: Disinfectant Byproducts

#### **Client Sample ID: S2HT2**

Total Haloacetic Acids (HAA5)

Internal Quality Control Compounds SS: 2-Bromobutanoic acid

Lah ID: 2004A93-002

Report Date: April 29, 2020

Workorder: 2004A93

µg/L

%Rec

1

1

04/28/2020 7:56 AM

04/28/2020 7:56 AM

#### Matrix: DRINKING WATER 04/15/2020 8.20 AM ... -

Date Received: 04/15/2020 4:20 PM

Date Received: 04/15/2020 4:20 PM			Collection Date: 04/15/2020 8:30 AM				
Report							
Result	MCL I	Limit	Qual.	Units	Factor	Date Analyzed	Batch ID
		Method: E	PA-524.2-Rev	4.1, 1995		Analyst: RWM	
14.0		1.00		µg/L	1	04/20/2020 7:22 PM	R118983
9.08		1.00		µg/L	1	04/20/2020 7:22 PM	R118983
4.86		1.00		µg/L	1	04/20/2020 7:22 PM	R118983
ND		1.00		µg/L	1	04/20/2020 7:22 PM	R118983
28.0	80.0	1.00		µg/L	1	04/20/2020 7:22 PM	R118983
111		70-130		%Rec	1	04/20/2020 7:22 PM	R118983
101		70-130		%Rec	1	04/20/2020 7:22 PM	R118983
		Method: E	PA-552.3-Rev	1.0, July 2003		Analyst: ES	
2.73		2.00		µg/L	1	04/28/2020 7:56 AM	65709
9.33		0.200		µg/L	1	04/28/2020 7:56 AM	65709
5.99		0.500		µg/L	1	04/28/2020 7:56 AM	65709
0.466		0.300		µg/L	1	04/28/2020 7:56 AM	65709
1.23		0.300		µg/L	1	04/28/2020 7:56 AM	65709
	Result   14.0   9.08   4.86   ND   28.0   111   101   2.73   9.33   5.99   0.466	Result MCL I   14.0 9.08   4.86 ND   28.0 80.0   111 101   2.73 9.33   5.99 0.466	Result Report MCL Limit   14.0 1.00   9.08 1.00   4.86 1.00   4.86 1.00   28.0 80.0 1.00   111 70-130 1.00   101 70-130 Method: E   2.73 2.00 9.33 0.200   5.99 0.500 0.300 1.00	Result Report MCL Limit Qual.   14.0 1.00   9.08 1.00   4.86 1.00   A.86 1.00   1.00 1.00   28.0 80.0 1.00   111 70-130   101 70-130   Method: EPA-552.3-Rev   2.73 2.00   9.33 0.200   5.99 0.500   0.466 0.300	Result MCL Limit Qual. Units   14.0 1.00 µg/L 9.08 1.00 µg/L 9.05 9.05 9.05 9.05 9.05 9.05 9.05 9.05 9.05 9.05 9.05 µg/L 10.05 µg/L 10.05 µg/L 10.05	Result Report MCL Qual. Units Dilution Factor   14.0 1.00 µg/L 1   9.08 1.00 µg/L 1   9.08 1.00 µg/L 1   4.86 1.00 µg/L 1   ND 1.00 µg/L 1   14.0 1.00 µg/L 1   9.08 1.00 µg/L 1   14.86 1.00 µg/L 1   101 70-130 %Rec 1   101 70-130 %Iec 1   101 70-130 ½Iec 1   101 70-130 µg/L 1   9.33 0.200 µg/L 1   9.99 0.500 µg/L 1	Result Report MCL Limit Qual. Units Factor Date Analyzed   14.0 1.00 µg/L 1 04/20/2020 7:22 PM Analyst: RWM   14.0 1.00 µg/L 1 04/20/2020 7:22 PM Analyst: RWM   14.0 1.00 µg/L 1 04/20/2020 7:22 PM Analyst: RWM   14.86 1.00 µg/L 1 04/20/2020 7:22 PM Analyst: RWM   14.86 1.00 µg/L 1 04/20/2020 7:22 PM Analyst: RWM   110 7.00 µg/L 1 04/20/2020 7:22 PM Analyst: ES   28.0 80.0 1.00 µg/L 1 04/20/2020 7:22 PM   101 70-130 %Rec 1 04/20/2020 7:22 PM   101 70-130 %Rec 1 04/20/2020 7:22 PM   Method: EPA-552.3-Rev 1.0, July 2003 Analyst: ES 2.73 2.00 µg/L 1 04/28/2020 7:56 AM   9.33 0.200 µg/L 1 04/28/2020 7:56 AM 0.300 µg/L

65709

65709



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## PREP DATES REPORT

Client: Project:	Village of Melrose Park Drinking Water Disinfectant Byproducts		<b>Report Date:</b> April 29, 2020 <b>Lab Order: 2004A93</b>				
Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date		
2004A93-001B	4/15/2020 9:00:00 AM	65709	AQPREP: HAAs		4/21/2020		
2004A93-002B	4/15/2020 8:30:00 AM	65709	AQPREP: HAAs		4/21/2020		



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WO#: **2004A93** Date: **4/29/2020** 

### **Qualifiers:**

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



3rd Most

## **Stage 2 DBP Operational Evaluation Level (OEL) Report**

Village of Melrose Park Drinking Water Disinfectant Byproducts

Sample

#### **Total Haloacetic Acids (HAA5)**

	Site	Recent	Recent	Result	OEL	Exceeded	
	S2HT1	24.00	19.30	20.20	20.93	No	
	S2HT2	21.00	15.30	19.80	18.98	No	
Note: Oper	ational Evaluati	on required if any	site's calculated (	OEL exceeds 60 uູ	g/I. All results a	bove are ug/l.	
Data Source	e						
	S2HT1	1910844 10/2019	2001A4 1/2020	2004A93 4/2020			
	S2HT2	1910844 10/2019	2001A4 1/2020	2004A93 4/2020			
Total Trihalomethar	nes (TTHMS)						
	Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded	
	S2HT1	34.80	22.60	28.00	28.35	No	
	S2HT2	26.50	17.00	28.00	24.88	No	

2nd Most

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

Data Source

S2HT1	1910844 10/2019	2001A4 1/2020	2004A93 4/2020
S2HT2	1910844 10/2019	2001A4 1/2020	2004A93 4/2020

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 sumbitted no later than 90 days after being notifed 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 reoprt. The written report must also be made available to the public on request.





Workorder: 2004A93

Calculated

Most Recent

OEL



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## **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 2020

Collected By: M. LANPOINZONU

#### Stage 2 DBP Sample Between: 4/1/2020 and 4/30/2020

IMPORTANT: Verify Sam	Workorder Lab Use Only				
Sample Point	# Bo	ott Analysis	Date Collect	Time Collect	Lab Sample Number
S2HT1 1748 N. 14TH AVE.	2	524THM	4-15-20	9 <sub>AM</sub>	001A
S2HT1 1748 N. 14TH AVE.	2	552	4-15-20	9 AM	ODIB
S2HT2 3150 HIRSCH AVE.	2	552	4/15/ 20	8:30 AM	002B
S2HT2 3150 HIRSCH AVE.	2	524THM	4-15-20	8:30 AN	002A
Relinquished By: <u>M.CAJ panz</u> Received By: RL	ono	<u>4-15-9000</u> Date/Time <u>/0:40 am</u> Date/Time_ <u>1 15</u> [20	Received Received - Date Rece	on Ice: Yes /No Temperatue: By: eived://S	Se Only $\begin{array}{c}                             $

Please provide any contact or address changes as needed.