### SUBURBAN LABORATORIES, Inc.



May 30, 2018

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

Workorder: 1804C87

EPA EDD:100225\_053018DBP1.csv

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

TEL: (708) 531-5360 FAX: (708) 345-1391

**RE**: Disinfectant By Products

Dear Mike Carpanzano:

Suburban Laboratories, Inc. received 2 sample(s) on 4/18/2018 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,

Patrick Liberg
Project Manager

(708) 544-3260 ext 213

patl@suburbanlabs.com





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

**Case Narrative** 

Client: Village of Melrose Park Drinking Water Date: May 30, 2018

Project: Disinfectant By Products PO #:

WorkOrder: 1804C87 QC Level: LEVEL I

Temperature of samples upon receipt at SLI: 6 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:

Page 2 of 8



**Laboratory Results** 

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

Client ID: Village of Melrose Park Drinking Water Report Date: May 30, 2018

Project Name: Disinfectant By Products Workorder: 1804C87

Client Sample ID: S2HT1

 mple ID: S2HT1
 Matrix: DRINKING WATER

 Lab ID: 1804C87-001
 Date Received: 04/18/2018 11:30 AM
 Collection Date: 04/18/2018 9:00 AM

Report Dilution

			Report			Dilution		
Parameter	Result	MCL	. Limit	Qual.	Units	Factor	Date Analyzed	Batch ID
TRIHALOMETHANES (THM)			Method:	EPA-524.2-Rev	4.1, 1995		Analyst: mkl	
Chloroform	11.1		1.00		μg/L	1	04/23/2018 1:20 PM	R95182
Bromodichloromethane	7.80		1.00		μg/L	1	04/23/2018 1:20 PM	R95182
Dibromochloromethane	4.02		1.00		μg/L	1	04/23/2018 1:20 PM	R95182
Bromoform	ND		1.00		μg/L	1	04/23/2018 1:20 PM	R95182
Total Trihalomethanes (TTHMS)	22.9	80.0	1.00		μg/L	1	04/23/2018 1:20 PM	R95182
Internal Quality Control Compounds								
SS: 1,2-Dichlorobenzene-d4	105		70-130		%Rec	1	04/23/2018 1:20 PM	R95182
SS: 4-Bromofluorobenzene	102		70-130		%Rec	1	04/23/2018 1:20 PM	R95182
HALOACETIC ACIDS (HAA5)			Method:	EPA-552.3-Rev	1.0, July 2003		Analyst: mn	
Chloroacetic acid	ND		2.00		μg/L	1	04/28/2018 5:06 AM	51918
Dichloroacetic acid	7.31		0.200		μg/L	1	04/28/2018 5:06 AM	51918
Trichloroacetic acid	7.22		0.500		μg/L	1	04/28/2018 5:06 AM	51918
Bromoacetic acid	ND		0.300		μg/L	1	04/28/2018 5:06 AM	51918
Dibromoacetic acid	1.43		0.300		μg/L	1	04/28/2018 5:06 AM	51918
Total Haloacetic Acids (HAA5)	16.0	60.0	0.200		μg/L	1	04/28/2018 5:06 AM	51918
Internal Quality Control Compounds								
SS: 2-Bromobutanoic acid	106		70-130		%Rec	1	04/28/2018 5:06 AM	51918

Created: 5/30/2018 1:20:43 PM



**Laboratory Results** 

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

Client ID: Village of Melrose Park Drinking Water

**Client Sample ID: S2HT2** 

Matrix: DRINKING WATER

Report Date: May 30, 2018

Workorder: 1804C87

**Lab ID:** 1804C87-002

**Project Name:** Disinfectant By Products

**Date Received:** 04/18/2018 11:30 AM **Collection Date:** 04/18/2018 9:30 AM

Report Dilution

			Keport	Diution				
Parameter	Result	MCL	Limit	Qual.	Units	Factor	Date Analyzed	Batch ID
TRIHALOMETHANES (THM)			Method:	EPA-524.2-Rev	4.1, 1995		Analyst: mkl	
Chloroform	8.82		1.00		μg/L	1	04/23/2018 1:48 PM	R95182
Bromodichloromethane	6.68		1.00		μg/L	1	04/23/2018 1:48 PM	R95182
Dibromochloromethane	3.72		1.00		μg/L	1	04/23/2018 1:48 PM	R95182
Bromoform	ND		1.00		μg/L	1	04/23/2018 1:48 PM	R95182
Total Trihalomethanes (TTHMS)	19.2	80.0	1.00		μg/L	1	04/23/2018 1:48 PM	R95182
Internal Quality Control Compounds								
SS: 1,2-Dichlorobenzene-d4	99.4		70-130		%Rec	1	04/23/2018 1:48 PM	R95182
SS: 4-Bromofluorobenzene	98.0		70-130		%Rec	1	04/23/2018 1:48 PM	R95182
HALOACETIC ACIDS (HAA5)			Method:	EPA-552.3-Rev	1.0, July 2003		Analyst: mn	
Chloroacetic acid	ND		2.00		μg/L	1	04/28/2018 5:32 AM	51918
Dichloroacetic acid	4.85		0.200		μg/L	1	04/28/2018 5:32 AM	51918
Trichloroacetic acid	5.86		0.500		μg/L	1	04/28/2018 5:32 AM	51918
Bromoacetic acid	ND		0.300		μg/L	1	04/28/2018 5:32 AM	51918
Dibromoacetic acid	1.16		0.300		μg/L	1	04/28/2018 5:32 AM	51918
Total Haloacetic Acids (HAA5)	11.9	60.0	0.200		μg/L	1	04/28/2018 5:32 AM	51918
Internal Quality Control Compounds								
SS: 2-Bromobutanoic acid	100		70-130		%Rec	1	04/28/2018 5:32 AM	51918

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## PREP DATES REPORT

Client:Village of Melrose Park Drinking WaterReport Date: May 30, 2018Project:Disinfectant By ProductsLab Order: 1804C87

Sample ID **Collection Date Batch ID Prep Method Prep Test Name TCLP Date Prep Date** 1804C87-001B 4/18/2018 9:00:00 A 51918 552PR AQPREP: HAAs 4/27/2018 1804C87-002B 4/18/2018 9:30:00 A 51918 552PR AQPREP: HAAs 4/27/2018

Page 5 of 8
Created: 5/30/2018 1:20:43 PM



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# **Qualifier Definitions**

WO#: **1804C87**Date: **5/30/2018** 

### **Qualifiers:**

*/X	Value exceeds Maximum Contaminant Level
В	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
Н	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.

Created: 5/30/2018 1:20:43 PM

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

# Report Date: May 30, 2018

# Stage 2 DBP Operational Evaluation Level (OEL) Report

Village of Melrose Park Drinking Water

Disinfectant By Products

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

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	13.70	9.61	16.00	13.83	No
S2HT2	13.80	8.02	11.90	11.41	No

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

**Data Source** 

1710H36 10/2017 180122 1/2018 S2HT1 1804C87 4/2018 S2HT2 1710H36 10/2017 180122 1/2018 1804C87 4/2018

#### **Total Trihalomethanes (TTHMS)**

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	42.60	17.50	22.90	26.48	No
S2HT2	42.20	13.70	19.20	23.58	No

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

**Data Source** 

S2HT1 1710H36 10/2017 180122 1/2018 1804C87 4/2018 S2HT2 1710H36 10/2017 180122 1/2018 1804C87 4/2018

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: 1804C87



Report To:

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# **Chain of Custody for Drinking Water Compliance Testing**

Report To: Mike Carpanzano Village of Melrose Park Drinkir 1002 North 27th Avenue Melrose Park, IL 60160  Collected By: Michael  IMPORTANT: Verify Sar	(Arp	<u>anz</u> ano 2 DBP Sample B		Collectio		DBP
Sample Point	# Bot			Date Collect		Lab Sample Number
S2HT1 1748 N. 14TH AVE.	2	552		4-18-18	94M	1804 C87-001B
S2HT1 1748 N. 14TH AVE.	2	524THM		4-18-18	9AM	001#
S2HT2 3150 HIRSCH AVE.	2	552		4-18-18	9:30 AM	WB
S2HT2 3150 HIRSCH AVE.	2	524THM		4-18-18	9:30	WA
Received By: Annual Please provide any contact or address			1/18/18 10:45 Am 118/18/11:30	Received 1 Received E Date Rece	on Ice: (es DNo Temperatue: By: ived:	See Only  C C Time Received: 11.30 UPS FedEx Mail Other