

# SUBURBAN LABORATORIES, Inc.



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July 26, 2016

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

**Workorder: 1607761**

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

Dear Mike Carpanzano:

Suburban Laboratories, Inc. received 2 sample(s) on 7/12/2016 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  
Logistics Manager  
708-544-3260 ext 214  
pat@suburbanlabs.com





**Client:** Village of Melrose Park Drinking Water

**Date:** July 26, 2016

**Project:** Disinfectant By Products

**PO #:**

**WorkOrder:** 1607761

**QC Level:** LEVEL I

**Temperature of samples upon receipt at SLI:** 12 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 water analyses that are required to be performed in the field (e.g., pH, residual chlorine, sulfite, temperature, etc.) but are analyzed in the lab are identified as "in lab" and are considered past holding time. Following industry practices these results do not contain an "H" flag but are qualified as being analyzed in the lab.
- 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:**



Client ID: Village of Melrose Park Drinking Water

Report Date: July 26, 2016

Project Name: Disinfectant By Products

Workorder: 1607761

Client Sample ID: S2HT1

Matrix: DRINKING WATER

Lab ID: 1607761-001

Date Received: 07/12/2016 10:50 AM

Collection Date: 07/12/2016 10:00 AM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
<b>TRICHALOMETHANES (THM)</b>			Method: EPA-524.2-Rev 4.1, 1995			Analyst: nrp		
Chloroform	26.6		1.00		µg/L	1	07/14/2016 10:23 AM	R74045
Bromodichloromethane	12.7		1.00		µg/L	1	07/14/2016 10:23 AM	R74045
Dibromochloromethane	6.01		1.00		µg/L	1	07/14/2016 10:23 AM	R74045
Bromoform	ND		1.00		µg/L	1	07/14/2016 10:23 AM	R74045
Total Trihalomethanes (TTHMS)	45.3	80.0	1.00		µg/L	1	07/14/2016 10:23 AM	R74045
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	108		70-130		%Rec	1	07/14/2016 10:23 AM	R74045
SS: 4-Bromofluorobenzene	112		70-130		%Rec	1	07/14/2016 10:23 AM	R74045
<b>HALOACETIC ACIDS (HAA5)</b>			Method: EPA-552.3-Rev 1.0, July 2003			Analyst: mn		
Chloroacetic acid	ND		2.00		µg/L	1	07/13/2016 11:05 PM	38108
Dichloroacetic acid	11.0		1.00		µg/L	1	07/13/2016 11:05 PM	38108
Trichloroacetic acid	9.75		1.00		µg/L	1	07/13/2016 11:05 PM	38108
Bromoacetic acid	ND		1.00		µg/L	1	07/13/2016 11:05 PM	38108
Dibromoacetic acid	1.47		1.00		µg/L	1	07/13/2016 11:05 PM	38108
Total Haloacetic Acids (HAA5)	22.3	60.0			µg/L	1	07/13/2016 11:05 PM	38108
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	108		70-130		%Rec	1	07/13/2016 11:05 PM	38108



# Suburban Laboratories, Inc.

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## Laboratory Results

**Client ID:** Village of Melrose Park Drinking Water

**Report Date:** July 26, 2016

**Project Name:** Disinfectant By Products

**Workorder:** 1607761

**Client Sample ID:** S2HT2

**Matrix:** DRINKING WATER

**Lab ID:** 1607761-002

**Date Received:** 07/12/2016 10:50 AM

**Collection Date:** 07/12/2016 10:15 AM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
<b>TRICHALOMETHANES (THM)</b>			Method: EPA-524.2-Rev 4.1, 1995			Analyst: nrp		
Chloroform	18.5		1.00		µg/L	1	07/14/2016 10:52 AM	R74045
Bromodichloromethane	10.9		1.00		µg/L	1	07/14/2016 10:52 AM	R74045
Dibromochloromethane	5.16		1.00		µg/L	1	07/14/2016 10:52 AM	R74045
Bromoform	ND		1.00		µg/L	1	07/14/2016 10:52 AM	R74045
Total Trihalomethanes (TTHMS)	34.6	80.0	1.00		µg/L	1	07/14/2016 10:52 AM	R74045
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	101		70-130		%Rec	1	07/14/2016 10:52 AM	R74045
SS: 4-Bromofluorobenzene	104		70-130		%Rec	1	07/14/2016 10:52 AM	R74045
<b>HALOACETIC ACIDS (HAA5)</b>			Method: EPA-552.3-Rev 1.0, July 2003			Analyst: mn		
Chloroacetic acid	ND		2.00		µg/L	1	07/13/2016 11:21 PM	38108
Dichloroacetic acid	10.3		1.00		µg/L	1	07/13/2016 11:21 PM	38108
Trichloroacetic acid	8.70		1.00		µg/L	1	07/13/2016 11:21 PM	38108
Bromoacetic acid	6.04		1.00		µg/L	1	07/13/2016 11:21 PM	38108
Dibromoacetic acid	1.61		1.00		µg/L	1	07/13/2016 11:21 PM	38108
Total Haloacetic Acids (HAA5)	26.6	60.0			µg/L	1	07/13/2016 11:21 PM	38108
<u>Internal Quality Control Compounds</u>								
SS: 2-Bromobutanoic acid	115		70-130		%Rec	1	07/13/2016 11:21 PM	38108



## Suburban Laboratories, Inc.

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# PREP DATES REPORT

**Client:** Village of Melrose Park Drinking Water  
**Project:** Disinfectant By Products

**Report Date:** July 26, 2016  
**Lab Order:** 1607761

Sample ID	Collection Date	Batch ID	Prep Method	Prep Test Name	TCLP Date	Prep Date
1607761-001B	7/12/2016 10:00:10 A	38108	552PR	AQPREP: HAAs		7/13/2016
1607761-002B	7/12/2016 10:15:10 A	38108	552PR	AQPREP: HAAs		7/13/2016



**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



# Stage 2 DBP Operational Evaluation Level (OEL) Report

Village of Melrose Park Drinking Water  
Disinfectant By Products

Workorder: 1607761

## Total Haloacetic Acids (HAA5)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	9.24	11.10	22.30	16.24	No
S2HT2	8.13	10.10	26.60	17.86	No

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

Data Source

<b>S2HT1</b>	1601767 1/2016	160489 4/2016	1607761 7/2016
<b>S2HT2</b>	1601767 1/2016	160489 4/2016	1607761 7/2016

## Total Trihalomethanes (TTHMS)

Sample Site	3rd Most Recent	2nd Most Recent	Most Recent Result	Calculated OEL	OEL Exceeded
S2HT1	20.60	16.30	45.30	31.88	No
S2HT2	20.00	20.00	34.60	27.30	No

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

Data Source

<b>S2HT1</b>	1601767 1/2016	160489 4/2016	1607761 7/2016
<b>S2HT2</b>	1601767 1/2016	160489 4/2016	1607761 7/2016

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](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.





# 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: July 2016

Collected By: Michael Carpanzano

**Stage 2 DBP Sample Between: 7/4/2016 and 7/8/2016**

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

Workorder Lab Use Only  
1607761  
 Lab Sample Number

Sample Point	# Bott	Analysis	Date Collect	Time Collect	Lab Sample Number
S2HT1 1748 N. 14TH AVE.	2	552	7/12/16	10:AM	001 B
S2HT1 1748 N. 14TH AVE.	2	524THM	7/12/16	10AM	001 A
S2HT2 3150 HIRSCH AVE.	2	552	7/12/16	10:15AM	002 B
S2HT2 3150 HIRSCH AVE.	2	524THM	7/12/16	10:15AM	002 A

Relinquished By: Michael Carpanzano Date/Time 7/12/16 10<sup>50</sup>  
 Received By: Bill John Date/Time 7/12/16 10<sup>50</sup>

Lab Use Only  
 Received on Ice: Yes / No  
 Received Temperature: 12 C  
 Received By: BJ  
 Date Received: 7/12/16 Time Received: 10<sup>50</sup>  
 Lab Delivery: SLI Client UPS FedEx Mail Other

Please provide any contact or address changes as needed.