

SUBURBAN LABORATORIES, Inc.



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

January 05, 2018

Terry McGhee
Du Page Water Commission
600 E. Butterfield Road
Elmhurst, IL 60126-4642

Workorder: 1712F41

TEL: (630) 340-0100

FAX: (630) 340-0120

RE: Non-Compliance Drinking Water Analysis

Dear Terry McGhee:

Suburban Laboratories, Inc. received 1 sample(s) on 12/20/2017 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: Du Page Water Commission

Date: January 05, 2018

Project: Non-Compliance Drinking Water Analysis

PO #: MW001

WorkOrder: 1712F41

QC Level: LEVEL I

Temperature of samples upon receipt at SLI: 3 C

Chain of Custody #: ELEC

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:

1712F41-001A was preserved in the lab.



Suburban Laboratories, Inc.

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Laboratory Results

Client ID: Du Page Water Commission

Report Date: January 05, 2018

Project Name: Non-Compliance Drinking Water Analysis

Workorder: 1712F41

Client Sample ID: 1-6

Matrix: DRINKING WATER

Lab ID: 1712F41-001

Date Received: 12/20/2017 2:10 PM

Collection Date: 12/20/2017 1:30 PM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP								
				Method: EPA-200.7-Rev 4.4, 1994			Analyst: src	
Calcium	32,500		50.0		µg/L	1	12/21/2017 2:53 PM	49522
Hardness, Ca/Mg (As CaCO3)	126,000		0		µg/L	1	12/21/2017 2:53 PM	49522
Iron	ND	1,000	50.0		µg/L	1	12/21/2017 2:53 PM	49522
Magnesium	10,800		50.0	c	µg/L	1	12/21/2017 2:53 PM	49522
Sodium	7,750		300		µg/L	1	12/21/2017 2:53 PM	49522
METALS BY ICPMS								
				Method: EPA-200.8-Rev 5.4, 1994			Analyst: mjs	
Antimony	ND	6.00	2.00		µg/L	1	01/05/2018 12:30 PM	49522
Arsenic	0.622	10.0	0.500		µg/L	1	01/05/2018 12:30 PM	49522
Barium	23.5	2,000	5.00		µg/L	1	01/05/2018 12:30 PM	49522
Beryllium	ND	4.00	1.00		µg/L	1	01/05/2018 12:30 PM	49522
Cadmium	ND	5.00	3.00		µg/L	1	01/05/2018 12:30 PM	49522
Chromium	ND	100	5.00		µg/L	1	01/05/2018 12:30 PM	49522
Copper	ND	1,300	100		µg/L	1	01/05/2018 12:30 PM	49522
Lead	ND	15.0	2.00		µg/L	1	01/05/2018 12:30 PM	49522
Mercury	ND	2.00	0.100		µg/L	1	01/05/2018 12:30 PM	49522
Selenium	ND	50.0	5.00		µg/L	1	01/05/2018 12:30 PM	49522
Thallium	ND	2.00	2.00		µg/L	1	01/05/2018 12:30 PM	49522
VOLATILE ORGANIC COMPOUNDS (REGULATED)								
				Method: EPA-524.2-Rev R4.1			Analyst: SJ	
Benzene	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Carbon tetrachloride	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Chlorobenzene	ND	100	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,4-Dichlorobenzene	ND	75.0	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,2-Dichlorobenzene	ND	600	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,2-Dichloroethane	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,1-Dichloroethene	ND	7.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
cis-1,2-Dichloroethene	ND	70.0	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
trans-1,2-Dichloroethene	ND	100	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,2-Dichloropropane	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Ethylbenzene	ND	700	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Methylene chloride	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Styrene	ND	100	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Tetrachloroethene	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Toluene	ND	1,000	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,2,4-Trichlorobenzene	ND	70.0	0.500		µg/L	1	12/22/2017 10:56 AM	R91411



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Laboratory Results

Client ID: Du Page Water Commission

Report Date: January 05, 2018

Project Name: Non-Compliance Drinking Water Analysis

Workorder: 1712F41

Client Sample ID: 1-6

Matrix: DRINKING WATER

Lab ID: 1712F41-001

Date Received: 12/20/2017 2:10 PM

Collection Date: 12/20/2017 1:30 PM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS (REGULATED)			Method: EPA-524.2-Rev R4.1			Analyst: SJ		
Trichloroethene	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,1,1-Trichloroethane	ND	200	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
1,1,2-Trichloroethane	ND	5.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Vinyl chloride	ND	2.00	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
m,p-Xylene	ND		0.500		µg/L	1	12/22/2017 10:56 AM	R91411
o-Xylene	ND		0.500		µg/L	1	12/22/2017 10:56 AM	R91411
Total Xylenes	ND	10,000	0.500		µg/L	1	12/22/2017 10:56 AM	R91411
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	103		70-130		%Rec	1	12/22/2017 10:56 AM	R91411
SS: 4-Bromofluorobenzene	99.8		70-130		%Rec	1	12/22/2017 10:56 AM	R91411
VOLATILE ORGANIC COMPOUNDS (UNREGULATED)			Method: EPA-524.2-Rev 4.1, 1995			Analyst: SJ		
Methyl tert-butyl ether	ND		0.500		µg/L	1	12/22/2017 10:56 AM	R91411
<u>Internal Quality Control Compounds</u>								
SS: 1,2-Dichlorobenzene-d4	103		70-130		%Rec	1	12/22/2017 10:56 AM	R91411
SS: 4-Bromofluorobenzene	99.8		70-130		%Rec	1	12/22/2017 10:56 AM	R91411
PESTICIDE COMPOUNDS			Method: EPA-525.2-Rev 2.0, 1995			Analyst: mn		
Alachlor	ND	2.00	0.200		µg/L	1	12/29/2017 9:16 AM	49591
Atrazine	ND	3.00	0.200		µg/L	1	12/29/2017 9:16 AM	49591
Simazine	ND	4.00	0.200		µg/L	1	12/29/2017 9:16 AM	49591
<u>Internal Quality Control Compounds</u>								
SS: 1,3-Dimethyl-2-nitrobenzene	96.6		60.3-130		%Rec	1	12/29/2017 9:16 AM	49591
SS: Perylene-d12	87.3		26-125		%Rec	1	12/29/2017 9:16 AM	49591
SS: Triphenyl phosphate	108		50.9-181		%Rec	1	12/29/2017 9:16 AM	49591
ALKALINITY, TOTAL			Method: SM-2320B-Rev 21st Ed, 1997			Analyst: RH		
Alkalinity, Total(As CaCO3)	102		20.0		mg/L CaCO3	1	12/28/2017 3:21 PM	R91463
TOTAL NITRATES (NITRATE+NITRITE)			Method:			Analyst: pel		
Total Nitrates (as N)	ND	10.0	0		mg/L	1	01/04/2018 4:15 PM	R91597
PH METHOD 9041A (IN LABORATORY)			Method: EPA-9041A-Rev 1, Jul-92			Analyst: pel		
pH	6.0			V c	pH Units	1	01/04/2018 4:20 PM	R91598
COLIFORM, PRESENCE-ABSENCE-COLILERT			Method: SM-9223B-PA-Rev 1997 Rev. Online			Analyst: MMM		



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Workorder: 1712F41

Client Sample ID: 1-6

Matrix: DRINKING WATER

Lab ID: 1712F41-001

Date Received: 12/20/2017 2:10 PM

Collection Date: 12/20/2017 1:30 PM

Parameter	Result	MCL	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
COLIFORM, PRESENCE-ABSENCE-COLILERT		Method: SM-9223B-PA-Rev 1997 Rev. Online			Analyst: MMM			
E. coli	0	0			CFU/100ml	1	12/20/2017 4:40 PM	49506
Total Coliform	0	0			CFU/100ml	1	12/20/2017 4:40 PM	49506
TURBIDITY		Method: EPA-180.1-Rev 2.0, Aug-93			Analyst: src			
Turbidity	0.390	0.100		c	NTU	1	12/20/2017 5:00 PM	R91308



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PREP DATES REPORT

Client: DuPage Water Commission
Project: Non-Compliance Drinking Water

Report Date: January 05, 2018
Lab Order: 1712F41

Sample ID	Collection Date	Batch ID	Prep Method	Prep Test Name	TCLP Date	Prep Date
1712F41-001A	12/20/2017 1:30:00 P	49522	TURB_METALS	Turbidity Check		12/21/2017
		49701	TURB_METALS	Turbidity Check		1/4/2018
1712F41-001D		49506	T_COLI_PR	Total Coliform Prep		12/20/2017
1712F41-001F		49591	525_DW_PR	525 Prep Code		12/28/2017



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.



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CHAIN OF CUSTODY RECORD

Electronic Version

Company Name: DUPAGE WATER Commission

Company Address: 600 E. BUTTERFIELD RD.

City: ELMHURST State: IL Zip: 60126

Phone: 630-834-0100 Fax: 630-834-0120 Fax Report

Email Address: McGhee@dpuwc.org

Project ID / Location: Safe Water Test Package 1

Project Manager (Report to): TERRY MCGHEE

Sample Collector(s): JASON UNGER

TURNAROUND TIME REQUESTED

Normal RUSH* *Additional Rush Charges Approved.

Date & Time Needed: _____

Normal TAT is 5-7 work days for most work. Rush work must be pre-approved and additional charges apply.

Specify Regulatory Program: (Required) None/Info only

LUST SRP SDWA

503 Sludge NPDES MWRDGC

Disposal Other *Please specify in comment section below.

ANALYSIS & METHOD REQUESTED

Enter an "X" in box below for request

SAFE WATER TEST PACKAGE 1

Page _____ of _____

PO No. MW004

Shipping Method _____

QC Reporting Level 1 2 3

LAB USE ONLY

SLI Order No. 1712F41

Sample containers supplied by customer? Yes

Temperature of Received Samples 3 °C

Samples received within 24 hours of collection? Yes

SAMPLE IDENTIFICATION	COLLECTION		MATRIX	GRAB/COMP.	CONTAINERS		PRESERVATIVE		LAB USE ONLY			
	DATE	TIME			Qty	SIZE & TYPE			R	Condition	Split	LAB #
1	#1	12/20/17 13:05	DW	G	1	1 Liter Plastic	HNO3	X				001A
2	#2	12/20/17 13:10	DW	G	2	40 mL Glass Vial	HCl	X				001B
3	#3	12/20/17 13:15	DW	G	2	1 Liter Amber Glass	Na2SO3/HCl	X				001F
4	#4	12/20/17 13:20	DW	G	1	8 oz Plastic	Unpreserved	X				001D
5	#5	12/20/17 13:25	DW	G	1	1 Liter Plastic	Unpreserved	X				001E
6	#6	12/20/17 13:30	DW	G	1	120 mL Plastic	Na2S2O3	X				001D
7												
8												
9												
10												
11												
12												

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water (SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) CONTAINER: 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) PRESERVATIVE: H₂SO₄, HCl, HNO₃, Methanol (MeOH), NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

PLEASE COMPLETE THE HIGHLIGHTED SECTIONS

\$449.00

COLLECT ALL BOTTLES AND VIALS FROM THE SAME TAP

FILL EACH VIAL WITHOUT AIR BUBBLES - DO NOT OVERFLOW AND SPILL HCl PRESERVATIVE

ADD ONE 7 ML HCl FIELD PRESERVATION VIAL TO EACH OF THE LITER AMBER BOTTLES AFTER SAMPLE COLLECTION

CONDITION CODES

- Improper/damaged container/cap
- Improper preservation
- Insufficient sample volume
- Headspace/air bubbles for VOCs
- Received past holding time
- Received frozen
- Label conflicts with COC

1. Relinquished By: <u>JASON UNGER</u>	Date: <u>12/20/17</u>	2. Relinquished By: <u>[Signature]</u>	Date: <u>12-20-17</u>	3. Relinquished By: <u>[Signature]</u>	Date: <u>12-20-17</u>	4. Relinquished By: _____	Date: _____
Received By: <u>[Signature]</u>	Time: <u>14:10</u>	Received By: <u>[Signature]</u>	Time: <u>15:40</u>	Received By: <u>[Signature]</u>	Time: <u>16:22</u>	Received By: _____	Time: _____