

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

December 30, 2016

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

Workorder: 1611194

TEL: (630) 340-0100

FAX: (630) 340-0120

RE: 600 E Butterfield Non-Compliance Drinking Water Analysis

Dear Terry McGhee:

Suburban Laboratories, Inc. received 1 sample(s) on 11/30/2016 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
Project Manager
708-544-3260 ext 214
pat@suburbanlabs.com





Suburban Laboratories, Inc.

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

Case Narrative

Client: Du Page Water Commission

Date: December 30, 2016

Project: 600 E Butterfield Non-Compliance Drinking Wa

PO #:

WorkOrder: 1611I94

QC Level: LEVEL I

Temperature of samples upon receipt at SLI: 10 C

Chain of Custody #: 135111

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:

Copper:

Sample 1611I94-001A: S=The MS percent recovery (226.4%) was outside laboratory control limits (70.0% - 130.0%).



Suburban Laboratories, Inc.

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

Laboratory Results

Client ID: Du Page Water Commission

Report Date: December 30, 2016

Project Name: 600 E Butterfield Non-Compliance Drinking Wat

Workorder: 1611194

Client Sample ID: Pump Station

Matrix: DRINKING WATER

Lab ID: 1611194-001

Date Received: 11/30/2016 1:35 PM

Collection Date: 11/30/2016 10:30 AM

Parameter	Result	Report MCL	Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-200.7-Rev 4.4, 1994			Analyst: jmk			
Calcium	34,300		50.0		µg/L	1	12/09/2016 4:21 PM	42050
Hardness, Ca/Mg (As CaCO3)	135,000		0		µg/L	1	12/09/2016 4:21 PM	42050
Iron	ND	1,000	50.0		µg/L	1	12/09/2016 4:21 PM	42050
Magnesium	11,900		50.0	c	µg/L	1	12/09/2016 4:21 PM	42050
Sodium	7,010		300		µg/L	1	12/09/2016 4:21 PM	42050
METALS BY ICPMS		Method: EPA-200.8-Rev 5.4, 1994			Analyst: mjs			
Antimony	ND	6.00	2.00		µg/L	1	12/06/2016 4:38 PM	42050
Arsenic	0.502	10.0	0.500		µg/L	1	12/06/2016 4:38 PM	42050
Barium	19.3	2,000	5.00		µg/L	1	12/06/2016 4:38 PM	42050
Beryllium	ND	4.00	1.00		µg/L	1	12/06/2016 4:38 PM	42050
Cadmium	ND	5.00	3.00		µg/L	1	12/06/2016 4:38 PM	42050
Chromium	ND	100	5.00		µg/L	1	12/06/2016 4:38 PM	42050
Copper	ND	1,300	100	S	µg/L	1	12/07/2016 1:29 PM	42050
Lead	ND	15.0	5.00		µg/L	1	12/06/2016 4:38 PM	42050
Mercury	ND	2.00	0.100		µg/L	1	12/06/2016 4:38 PM	42050
Selenium	ND	50.0	2.00		µg/L	1	12/06/2016 4:38 PM	42050
Thallium	ND	2.00	2.00		µg/L	1	12/06/2016 4:38 PM	42050
VOLATILE ORGANIC COMPOUNDS (REGULATED)		Method: EPA-524.2-Rev R4.1			Analyst: mkl			
Benzene	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Carbon tetrachloride	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Chlorobenzene	ND	100	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,4-Dichlorobenzene	ND	75.0	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,2-Dichlorobenzene	ND	600	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,2-Dichloroethane	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,1-Dichloroethene	ND	7.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
cis-1,2-Dichloroethene	ND	70.0	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
trans-1,2-Dichloroethene	ND	100	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,2-Dichloropropane	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Ethylbenzene	ND	700	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Methylene chloride	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Styrene	ND	100	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Tetrachloroethene	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
Toluene	ND	1,000	0.500		µg/L	1	12/02/2016 11:26 AM	R78951
1,2,4-Trichlorobenzene	ND	70.0	0.500		µg/L	1	12/02/2016 11:26 AM	R78951



Suburban Laboratories, Inc.

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

Laboratory Results

Client ID: Du Page Water Commission

Report Date: December 30, 2016

Project Name: 600 E Butterfield Non-Compliance Drinking Wat

Workorder: 1611194

Client Sample ID: Pump Station

Matrix: DRINKING WATER

Lab ID: 1611194-001

Date Received: 11/30/2016 1:35 PM

Collection Date: 11/30/2016 10:30 AM

Parameter	Result	Report MCL	Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID	
VOLATILE ORGANIC COMPOUNDS (REGULATED)		Method: EPA-524.2-Rev R4.1			Analyst: mkl				
Trichloroethene	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
1,1,1-Trichloroethane	ND	200	0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
1,1,2-Trichloroethane	ND	5.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
Vinyl chloride	ND	2.00	0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
m,p-Xylene	ND		0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
o-Xylene	ND		0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
Total Xylenes	ND	10,000	0.500		µg/L	1	12/02/2016 11:26 AM	R78951	
<u>Internal Quality Control Compounds</u>									
SS: 1,2-Dichlorobenzene-d4	88.2		70-130		%Rec	1	12/02/2016 11:26 AM	R78951	
SS: 4-Bromofluorobenzene	92.8		70-130		%Rec	1	12/02/2016 11:26 AM	R78951	
VOLATILE ORGANIC COMPOUNDS (UNREGULATED)		Method: EPA-524.2-Rev 4.1, 1995			Analyst: mkl				
Methyl tert-butyl ether	ND		0.500		µg/L	1	12/07/2016 3:15 PM	R79019	
<u>Internal Quality Control Compounds</u>									
SS: 1,2-Dichlorobenzene-d4	88.6		70-130		%Rec	1	12/07/2016 3:15 PM	R79019	
SS: 4-Bromofluorobenzene	88.6		70-130		%Rec	1	12/07/2016 3:15 PM	R79019	
PESTICIDE COMPOUNDS		Method: EPA-525.2-Rev 2.0, 1995			Analyst: ls				
Alachlor	ND	2.00	0.200		µg/L	1	12/14/2016 5:50 AM	42097	
Atrazine	ND	3.00	0.200		µg/L	1	12/14/2016 5:50 AM	42097	
Simazine	ND	4.00	0.200		µg/L	1	12/14/2016 5:50 AM	42097	
<u>Internal Quality Control Compounds</u>									
SS: 1,3-Dimethyl-2-nitrobenzene	92.8		60.3-130		%Rec	1	12/14/2016 5:50 AM	42097	
SS: Perylene-d12	72.2		26-125		%Rec	1	12/14/2016 5:50 AM	42097	
SS: Triphenyl phosphate	116		50.9-181		%Rec	1	12/14/2016 5:50 AM	42097	
ALKALINITY, TOTAL		Method: SM-2320B-Rev 18Ed, 1992, 21Ed, 1997			Analyst: src				
Alkalinity, Total(As CaCO3)	106		20.0		mg/L CaCO3	1	12/05/2016 3:21 PM	R78897	
TOTAL NITRATES (NITRATE+NITRITE)		Method:			Analyst: pgr				
Total Nitrates (as N)	.5	10.0	0		mg/L	1	12/30/2016 2:40 PM	R79657	
PH METHOD 9041A (IN LABORATORY)		Method: EPA-9041A-Rev 1, Jul-92			Analyst: pgr				
pH	7			V c	pH Units	1	12/30/2016 2:40 PM	R79657	
COLIFORM, PRESENCE-ABSENCE-COLILERT		Method: SM-9223B-PA-Rev 1997 Rev. Online			Analyst: emk				



Suburban Laboratories, Inc.

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

Laboratory Results

Client ID: Du Page Water Commission

Report Date: December 30, 2016

Project Name: 600 E Butterfield Non-Compliance Drinking Wat

Workorder: 1611194

Client Sample ID: Pump Station

Matrix: DRINKING WATER

Lab ID: 1611194-001

Date Received: 11/30/2016 1:35 PM

Collection Date: 11/30/2016 10:30 AM

Parameter	Result	Report MCL Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
COLIFORM, PRESENCE-ABSENCE-COLILERT		Method: SM-9223B-PA-Rev 1997 Rev. Online		Analyst: emk			
E. Coli	0	0		CFU/100ml	1	11/30/2016 4:45 PM	41950
Total Coliform	0	0		CFU/100ml	1	11/30/2016 4:45 PM	41950
TURBIDITY		Method: EPA-180.1-Rev 2.0, Aug-93		Analyst: jtl			
Turbidity	ND	0.100		NTU	1	12/01/2016 3:45 PM	R78808



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

PREP DATES REPORT

Client: DuPage Water Commission
Project: 600 E Butterfield Non-Compliance

Report Date: December 30, 2016
Lab Order: 1611I94

Sample ID	Collection Date	Batch ID	Prep Method	Prep Test Name	TCLP Date	Prep Date
1611I94-001A	11/30/2016 10:30:00	42050	TURB_METALS	Turbidity Check		12/6/2016
1611I94-001D		41950	T_COLI_PR	Total Coliform Prep		11/30/2016
1611I94-001F		42097	525_DW_PR	525 Prep Code		12/8/2016



Suburban Laboratories, Inc.

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

Qualifier Definitions

WO#: 1611194

Date: 12/30/2016

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
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.



SUBURBAN LABORATORIES, Inc.

CHAIN OF CUSTODY RECORD

1950 S. Batavia Ave., Ste 150, Geneva, IL 60134 Tel. 708.544.3260 Fax: 708.544.8587 Toll Free: 800.783.LABS www.suburbanlabs.com

#

135111

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 Final Report will be emailed
 Project ID / Location 600 E. BUTTERFIELD
 Project Manager (Report to) T. MCGHEE
 Sample Collector(s) Name J. UNGER

TURNAROUND TIME REQUESTED
 Normal RUSH* *Additional Rush Charges Approved.
 *Date & Time Needed: _____
 Normal TAT is specified on the price quotation or fee schedule. 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

Page 1 of 1
 PO No. _____
 Shipping Method _____
 Reporting Level (at additional charge) 1 2 3 4
LAB USE ONLY
 SLI ORDER No. 1611E94
 Sample containers supplied by customer? Yes
 Temperature of Received Samples 10 °C
 Samples received the same day as collection? Yes

R	Condition	Split	LAB #

SAMPLE IDENTIFICATION	COLLECTION		MATRIX	GRAB/COMP.	CONTAINERS		PRESERVATIVE
	DATE	TIME			Qty	SIZE & TYPE	
1 #1 PUMP STATION	11/30/16	9:45					
2 #2 PUMP STATION	11/30/16	9:45					
3 #3 PUMP STATION	11/30/16	9:45					
4 #4 PUMP STATION	11/30/16	10:00					
5 #5 PUMP STATION	11/30/16	10:00					
6 #6 PUMP STATION	11/30/16	10:05					
7 #7 PUMP STATION	11/30/16	10:15					
8 #8 PUMP STATION	11/30/16	10:30					
9	1	1					
10	1	1					
11	1	1					
12	1	1					

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:
 SAFE WATER - #1

- 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	Date <u>11-30-16</u>	2. Relinquished By _____	Date _____	3. Relinquished By _____	Date _____	4. Relinquished By _____	Date _____
Received By <input checked="" type="checkbox"/> Ice present	Time <u>1:35</u>	Received By _____ <input type="checkbox"/> Ice present	Time _____	Received By _____ <input type="checkbox"/> Ice present	Time _____	Received By _____ <input type="checkbox"/> Ice present	Time _____