

*Arnold F. Fleming, P.E.*

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*Environmental Management & Consulting*

*Sent via electronic mail (michael.maccabe@dec.ny.gov)*

June 5, 2018

Michael D. MacCabe, P.E.  
Senior Environmental Engineer  
Division of Environmental Remediation  
NYS Department of Environmental Conservation  
625 Broadway, 12th Floor  
Albany, NY 12233-7016

Re: **Semi-Annual Groundwater Monitoring Report – June 2018**  
**388 Bridge Street Site - Brooklyn, New York**  
**BCP Site #C224134**

Dear Mr. MacCabe:

Fleming-Lee Shue Inc. (FLS) presents this Semi-Annual Groundwater Monitoring Report for the 388 Bridge Street property (Site). The groundwater monitoring program was implemented to monitor natural attenuation of volatile organic compounds (VOC) in the groundwater following the downsizing of the soil vapor extraction (SVE) system. The SVE system, installed in 2013, was downsized and modified in 2016 to target the area where the bulk of the contaminant mass remains, primarily in the area of SVE well 2 (SVE-2). Selected soil vapor extraction wells were converted to monitoring wells and included in the groundwater monitoring program. The Site Location Map is included as Figure 1.

### **Background**

Results from subsurface investigations performed by FLS from 2008 to 2010 detected tetrachloroethene (PCE) in both soil and groundwater. The Site was accepted into the NYSDEC Brownfields Cleanup Program (BCP) in August 2009. Remedial activities were conducted in accordance with the NYSDEC-approved Remedial Action Work Plan dated April 2012. The BCP Volunteer achieved a Track 2 remedy at the Site. After completion of the remedial work, residual contamination remained on-Site. Therefore, institutional and engineering controls were incorporated into the Site remedy to control exposure to the remaining contamination.

In June 2013, the SVE system was installed to remove VOCs from soil gas beneath the building slab. The system operated from 2013 through 2016 and included six extraction points (SVE-1, SVE-2, SVE-3, SVE-4, SVE-5 and SVE-6).

In 2016, after monitoring of PCE concentrations and prior approval of NYSDEC, the 2013 SVE system was downsized to limit extraction where the bulk of the PCE mass remains (SVE-2). Each of the vapor extraction points, except for one location (SVE-2), were converted into groundwater

monitoring wells (SVE-MW-1, SVE-MW-3, SVE-MW 4, SVE-MW-5 and SVE-MW-6) to monitor natural attenuation of VOCs.

In July 2016 and with the prior approval of NYSDEC (dated July 29, 2016), SVE-MW-3 and SVE-MW-6 were abandoned because they did not extend into the groundwater table and were therefore not usable as groundwater monitoring wells. Off-Site monitoring wells, MW-3 and MW-7, were destroyed during construction activities.

Once remediation is completed, extraction well SVE-2 will be converted to a groundwater monitoring well and serve as the downgradient well. Figure 2 presents the well locations and results from the last three rounds of groundwater sampling.

### **Groundwater Monitoring Program**

The semi-annual groundwater sampling events started in March 2016. The objectives of the groundwater monitoring program include the following:

- Provide a current round of groundwater analytical data from the monitoring wells;
- Evaluate the existing and time-based groundwater conditions at the Site; and
- Evaluate the time-based trends of VOCs.

The groundwater monitoring program involves the following activities:

- Measurement of groundwater field parameters including pH, dissolved oxygen (DO), total dissolved solids (TDS), conductivity, oxidation-reduction potential (ORP), turbidity, salinity, and temperature to determine groundwater conditions;
- Collection of groundwater samples for VOCs to evaluate chlorinated VOC concentration trends and monitor natural attenuation;
- Collection of groundwater samples for geochemical parameters including nitrate, nitrite, sulfate, iron (II), total organic carbon, and dissolved organic carbon to evaluate evidence supporting natural attenuation.

### **Groundwater Sampling Procedures**

On March 14, 2018, groundwater samples were collected from the three on-Site monitoring wells (SVE-MW-1, SVE-MW 4, and SVE-MW-5). Groundwater samples were collected using the low-flow sampling method (EPA Low-Flow Groundwater Sampling Procedures, April 1996). Each monitoring well was purged prior to sampling using a peristaltic pump until groundwater parameters (temperature, pH, DO, conductivity, ORP, TDS, and turbidity) stabilized. Water-quality measurements were monitored using a Horiba U-52 multi-parameter water-quality meter. The monitoring well purging logs are included in Appendix A.

After the stabilization of the groundwater parameters, samples were collected via dedicated pump tubing directly into laboratory-supplied containers. After sample collection each container was labeled, placed on ice in an insulated cooler and transported under chain-of-custody protocol to SGS Accutest Laboratories of Dayton, New Jersey, a New York Environmental Laboratory

Approval Program Certified Laboratory. The groundwater samples were analyzed for Target Compounds List VOCs by EPA Method 8260B and several geochemical parameters.

### Summary of Analytical Results

The groundwater analytical results, from all five sampling rounds, were compared to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values (TOGS) and are summarized in Table 1. The laboratory data report is provided in Appendix B.

The groundwater analytical results indicate that PCE is present in concentrations that exceed the TOGS of 5 µg/L in each of the monitoring wells sampled: SVE-MW-1 (7.4 µg/L), SVE-MW-4 (28.7 µg/L), and SVE-MW-5 (21.5 µg/L). Trichloroethene (TCE) was detected at a concentration below the TOGS in all three monitoring wells. There were no other exceedances of the Site's contaminants of concern (PCE and its breakdown products, TCE and cis-1,2-dichloroethene). See the attached graphs for an overview of PCE and TCE concentrations since semi-annual groundwater monitoring began in March 2016.

In addition, analytical results indicate chloroform concentration above the TOGS in one of the monitoring wells (SVE-MW-5) and nitrogen, nitrate + nitrite concentrations above the TOGS in SVE-MW-1.

### Conclusions and Recommendations

The only contaminant of concern detected above the TOGS is PCE, which was detected above TOGS in each of the three monitoring wells sampled. No other contaminants of concern (TCE and cis-1,2-dichloroethene) were detected at concentration above the TOGS. During this monitoring event, PCE concentrations in each well were higher than in previous sampling events. However, PCE concentrations continue to decline overall compared to pre-remediation concentrations.

FLS recommends continuing the groundwater monitoring on a semi-annual basis to further assess groundwater quality. The next groundwater monitoring event is scheduled for September 2018.

Please contact us with any comments or questions.

Sincerely,

Fleming-Lee Shue, Inc.



Adam Conti, E.I.T.  
Environmental Engineer



Mark Hutson  
Director

cc:

Roger Fortune	Stahl Realty
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enc:

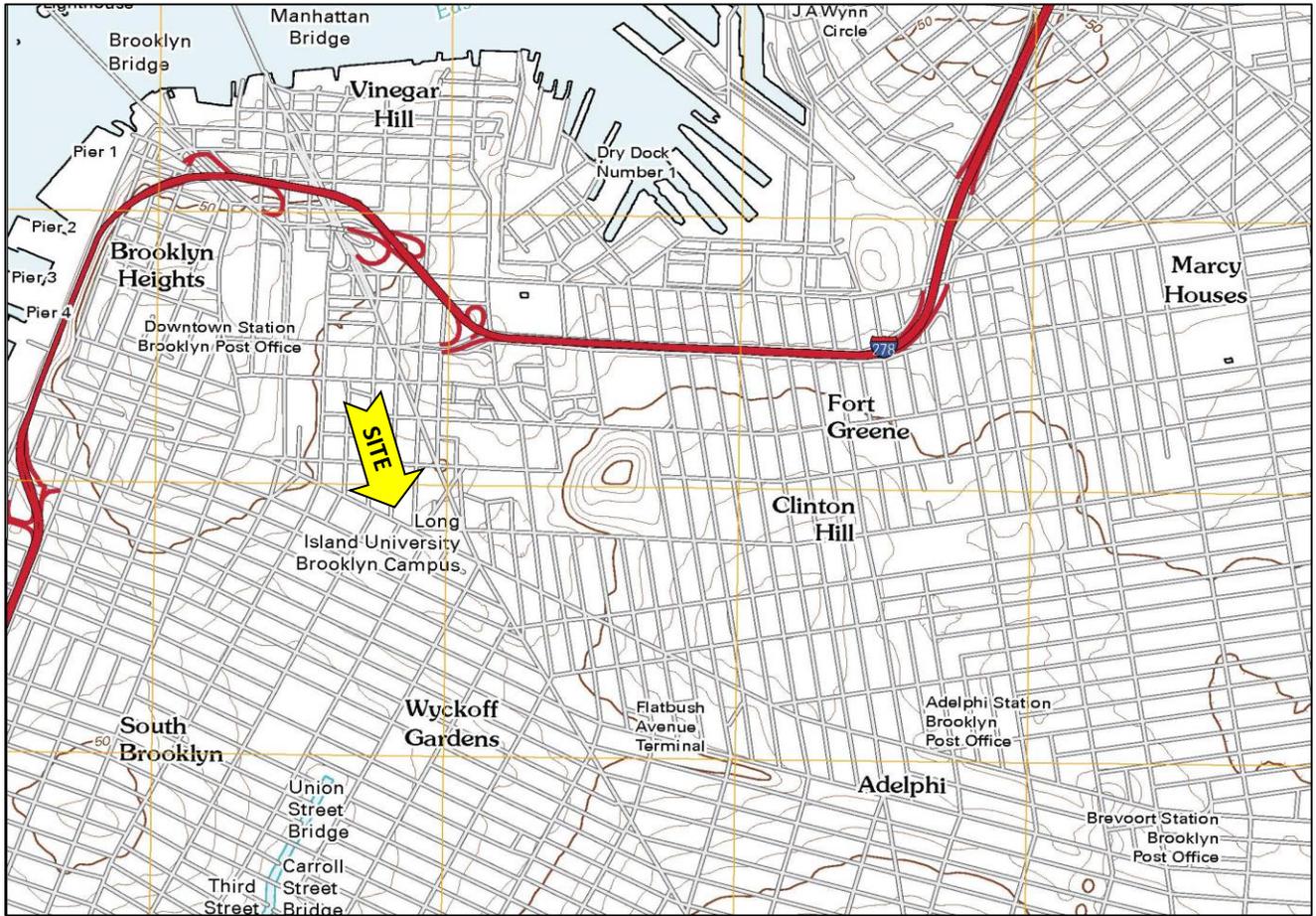
Table 1	Groundwater Sampling Analytical Results
Figure 1	Site Location Map
Figure 2	Site Plan and Groundwater Sampling Results
Graphs	PCE and TCE Concentration Trends
Appendix A	Monitoring Well Purge Logs
Appendix B	Laboratory Analytical Data Report

# Tables

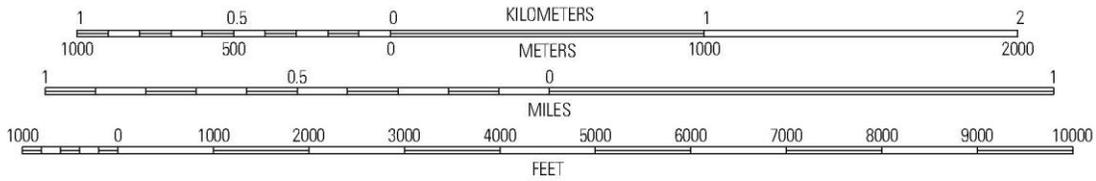
Table 1 - Groundwater Sampling Analytical Results  
Semi-Annual Groundwater Report  
388 Bridge Street, Brooklyn NY

Client Sample ID:	Units	NY TOGS Class GA GW Standards	SVE-MW-1					SVE-MW-4					SVE-MW-5				
			JC17514-1 3/31/2016	JC28127-3 9/20/2016	JC39116-1 3/17/2017	JC51891-1 9/26/2017	JC62395-1 3/14/2018	JC17514-2 3/31/2016	JC28127-2 9/20/2016	JC39116-2 3/17/2017	JC51891-2 9/26/2017	JC62395-3 3/14/2018	JC17514-3 3/31/2016	JC28127-1 9/20/2016	JC39116-3 3/17/2017	JC51891-3 9/26/2017	JC62395-2 3/14/2018
Lab Sample ID:			Groundwater														
Date Sampled:			Groundwater														
Matrix:			Groundwater														
GC/MS Volatiles (SW846 8260C)																	
Acetone	ug/l	-	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (3.3)	ND (5.0)	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)				
Benzene	ug/l	1	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)
Bromochloromethane	ug/l	5	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.24)	ND (0.46)	ND (0.46)	ND (0.38)
Bromodichloromethane	ug/l	-	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)
Bromoform	ug/l	-	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)
Bromomethane	ug/l	5	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)
2-Butanone (MEK)	ug/l	-	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (4.8)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)
Carbon disulfide	ug/l	60	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)
Carbon tetrachloride	ug/l	5	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)
Chlorobenzene	ug/l	5	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)
Chloroethane	ug/l	5	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) <sup>a</sup>	ND (0.59)	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) <sup>a</sup>	ND (0.59)	ND (0.59)	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) <sup>a</sup>
Chloroform	ug/l	7	1.7	1	1.3	ND (0.29)	1.2	0.89 J	1.3	0.93 J	3.6	10.7	0.79 J	0.85 J	0.71 J	9.9	9.9
Chloromethane	ug/l	5	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) <sup>a</sup>	ND (0.53)	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) <sup>a</sup>	ND (0.53)	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) <sup>a</sup>	ND (0.53)
Cyclohexane	ug/l	-	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.04	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.99)	ND (0.69)	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)				
Dibromochloromethane	ug/l	-	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)
1,2-Dibromoethane	ug/l	0.0006	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)
1,2-Dichlorobenzene	ug/l	3	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)
1,3-Dichlorobenzene	ug/l	3	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)
1,4-Dichlorobenzene	ug/l	3	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)
Dichlorodifluoromethane	ug/l	5	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) <sup>a</sup>	ND (1.9)	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) <sup>a</sup>	ND (1.9)	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) <sup>a</sup>	ND (1.9)
1,1-Dichloroethane	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	0.6	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)
1,1-Dichloroethene	ug/l	5	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	5	ND (0.27)	ND (0.31)	ND (0.31)	ND (0.50)	ND (0.50)	0.85 J	1.6	0.79 J	1.3	0.68 J	0.34 J	ND (0.31)	ND (0.31)	1.4	0.52 J
trans-1,2-Dichloroethene	ug/l	5	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)
1,2-Dichloropropane	ug/l	1	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)
1,4-Dioxane	ug/l	-	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)
Ethylbenzene	ug/l	5	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)
Freon 113	ug/l	5	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
2-Hexanone	ug/l	-	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)
Isopropylbenzene	ug/l	5	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)
Methyl Acetate	ug/l	-	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)
Methylcyclohexane	ug/l	-	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	0.31 J	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	10	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	0.24 J	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)
Methylene chloride	ug/l	5	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	ug/l	5	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)
Tetrachloroethene	ug/l	5	11.9	11.8	9.7	2.4	7.4	12.5	11.9	11.6	34.6	28.7	12.1	11.3	6.6	32	21.5
Toluene	ug/l	5	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)
1,2,3-Trichlorobenzene	ug/l	5	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	5	ND (0.21)	ND (0.25)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.25)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	ug/l	5	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)
1,1,2-Trichloroethane	ug/l	1	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)
Trichloroethene	ug/l	5	0.49 J	0.40 J	0.46 J	ND (0.27)	0.28 J	7.8	8.8	7.2	2	1.9	3.3	2.6	1.4	2.9	1.7
Trichlorofluoromethane	ug/l	5	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)
Vinyl chloride	ug/l	2	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) <sup>a</sup>	ND (0.62)	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) <sup>a</sup>	ND (0.62)	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) <sup>a</sup>	ND (0.62)
m,p-Xylene	ug/l	-	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)
o-Xylene	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)
Xylene (total)	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)
<b>General Chemistry</b>																	
Dissolved Organic Carbon	mg/l	-	-	<1.0	-	1.5	1.2	-	<1.0	-	1.4	1.4	-	<1.0	-	1.4	<1.0
Iron, Ferrous	mg/l	-	-	<0.20	<0.20 <sup>a</sup>	-	<0.20	-	<0.20	<0.20 <sup>a</sup>	-	<0.20	-	<0.20	<0.20 <sup>a</sup>	-	<0.20
Nitrogen, Nitrate	mg/l	10	-	12.2	10.3 <sup>b</sup>	15.8 <sup>b</sup>	10.6	-	6.7	8.1 <sup>b</sup> </							

# Figures



SCALE 1:24 000



CONTOUR INTERVAL 10 FEET

Obtained from United States Geological Survey topography compiled 2010

## Figure 1: Site Location Map

**Fleming  
Lee Shue**

SITE: 388 Bridge Street  
Brooklyn, New York

*Environmental Management & Consulting, 158 West 29<sup>th</sup> Street, 9<sup>th</sup> Fl., New York, NY 10001*



Environmental Management & Consulting

158 West 29th Street, 9th Fl.  
New York, NY 10001

388 Bridge Street  
Brooklyn, NY  
BCP Site # C224134

### Figure 2

## Site Plan and Chlorinated VOCs in Groundwater

May 2018

Project Number  
**10149-001**

### LEGEND

- Site Boundary
- Active SVE Well
- Groundwater Monitoring Well
- Vacuum Monitoring Point

Saint Joseph High School



Bridge St.

SVE-MW-4	3/17/2017	9/26/2017	3/14/2018
Tetrachloroethene	11.6	34.6	28.7
Trichloroethene	7.2	2	1.9
cis-1,2-Dichloroethene	0.79 J	1.3	0.68 J
Chloroform	0.93 J	3.6	10.7

SVE-MW-6  
(Abandoned)

MP-3

CELLAR LEVEL

MP-6

SUB CELLAR LEVEL

SVE-MW-4

SVE-MW-3  
(Abandoned)

SVE-2

SVE-MW-5

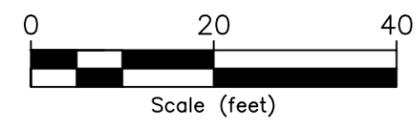
SVE-MW-5	3/17/2017	9/26/2017	3/14/2018
Tetrachloroethene	6.6	32	21.5
Trichloroethene	1.4	2.9	1.7
cis-1,2-Dichloroethene	ND (0.31)	1.4	0.52 J
Chloroform	0.71 J	9.9	9.9

SVE-MW-1	3/17/2017	9/26/2017	3/14/2018
Tetrachloroethene	9.7	2.4	7.4
Trichloroethene	0.46 J	ND (0.27)	0.28 J
cis-1,2-Dichloroethene	ND (0.31)	ND (0.50)	ND (0.50)
Chloroform	1.3	ND (0.29)	1.2

SVE-MW-1

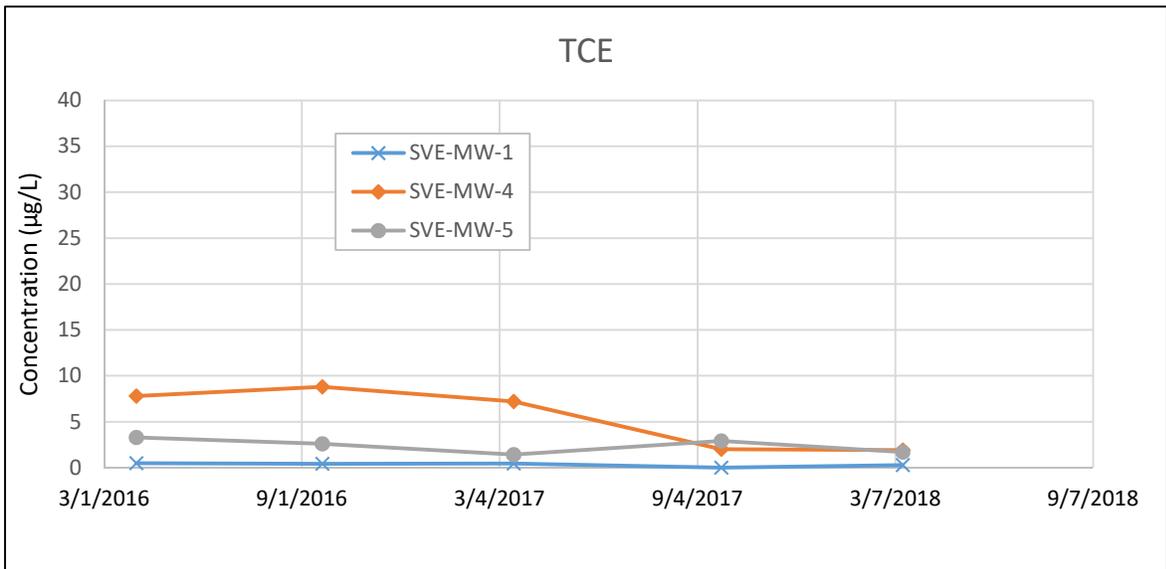
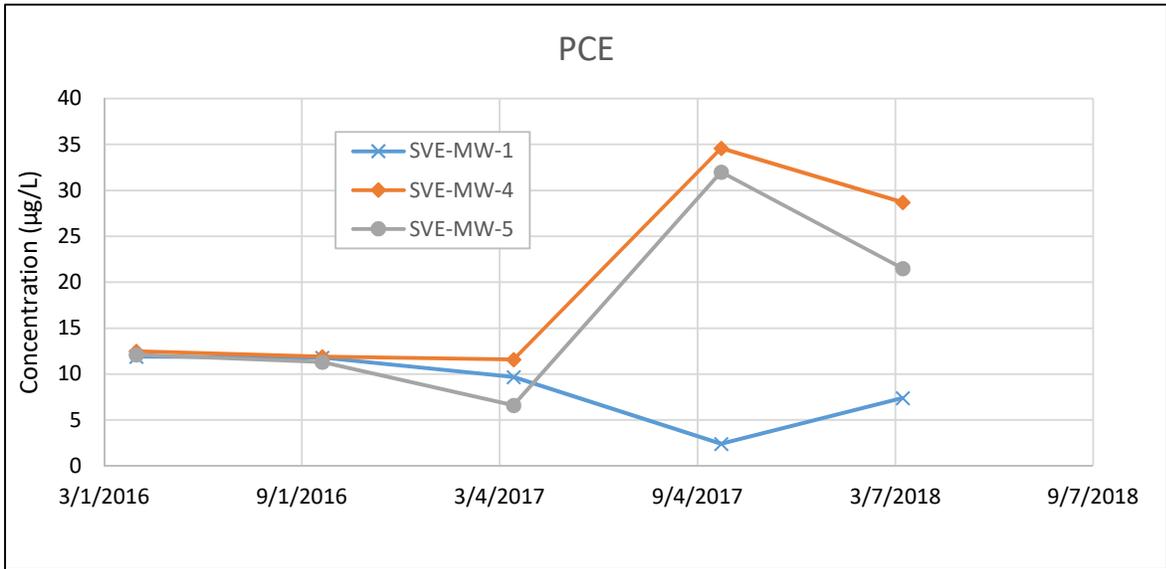
Compound	TOGS
Tetrachloroethene	5
Trichloroethene	5
cis-1,2-Dichloroethene	5
Chloroform	7

Notes:  
 Concentrations in ug/L  
 Concentrations in excess of TOGS standards highlighted in blue  
 J - estimated concentration (detection limit)  
 ND - not detected (detection limit)



# Graphs

Graphs – Contaminant Concentration Trends  
Semi-Annual Groundwater Report  
388 Bridge Street, Brooklyn, NY



# Appendix A

## Monitoring Well Purge Logs







# Appendix B

## Laboratory Analytical Data Report

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

**Fleming-Lee Shue, Inc.**

**388 Bridge Street, Brooklyn, NY**

**10165-001-1 PO# FP1251**

**SGS Job Number: JC62395**

**Sampling Date: 03/14/18**



### Report to:

**Fleming-Lee Shue, Inc.**

**adam@flemingleeshue.com**

**ATTN: Adam Conti**

**Total number of pages in report: 22**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

**Nancy Cole**  
**Laboratory Director**

**Client Service contact: Tammy McCloskey 732-329-0200**

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.  
Test results relate only to samples analyzed.

# Table of Contents

-1-

<b>Section 1: Sample Summary</b> .....	<b>3</b>
<b>Section 2: Case Narrative/Conformance Summary</b> .....	<b>4</b>
<b>Section 3: Summary of Hits</b> .....	<b>6</b>
<b>Section 4: Sample Results</b> .....	<b>7</b>
<b>4.1:</b> JC62395-1: SVE-MW-1 .....	8
<b>4.2:</b> JC62395-1F: SVE-MW-1 .....	11
<b>4.3:</b> JC62395-2: SVE-MW-5 .....	12
<b>4.4:</b> JC62395-2F: SVE-MW-5 .....	15
<b>4.5:</b> JC62395-3: SVE-MW-4 .....	16
<b>4.6:</b> JC62395-3F: SVE-MW-4 .....	19
<b>Section 5: Misc. Forms</b> .....	<b>20</b>
<b>5.1:</b> Chain of Custody .....	21

1

2

3

4

5



## Sample Summary

**Fleming-Lee Shue, Inc.**

**Job No: JC62395**

**388 Bridge Street, Brooklyn, NY**  
**Project No: 10165-001-1 PO# FP1251**

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC62395-1	03/14/18	12:29 SS	03/15/18	AQ	Ground Water	SVE-MW-1
JC62395-1F	03/14/18	12:29 SS	03/15/18	AQ	Groundwater Filtered	SVE-MW-1
JC62395-2	03/14/18	13:11 SS	03/15/18	AQ	Ground Water	SVE-MW-5
JC62395-2F	03/14/18	13:11 SS	03/15/18	AQ	Groundwater Filtered	SVE-MW-5
JC62395-3	03/14/18	14:20 SS	03/15/18	AQ	Ground Water	SVE-MW-4
JC62395-3F	03/14/18	14:20 SS	03/15/18	AQ	Groundwater Filtered	SVE-MW-4

## CASE NARRATIVE / CONFORMANCE SUMMARY

2

**Client:** Fleming-Lee Shue, Inc.

**Job No** JC62395

**Site:** 388 Bridge Street, Brooklyn, NY

**Report Date** 3/29/2018 6:01:16 PM

On 03/15/2018, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 4.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC62395 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

### MS Volatiles By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** V2B7083

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62401-8MS, JC62401-8MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 1,2-Dibromo-3-chloropropane are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- Matrix Spike Duplicate Recovery(s) for Benzene, Ethylbenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JC62395-3 for 1,2-Dibromo-3-chloropropane: Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JC62395-2 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC62395-1 for 1,2-Dibromo-3-chloropropane: Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high.
- JC62395-1 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC62395-3 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC62395-2 for 1,2-Dibromo-3-chloropropane: Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

### General Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP11845

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62415-2DUP, JC62415-2MS were used as the QC samples for Sulfate.

### General Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP12047

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62365-3DUP, JC62365-3MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- Matrix Spike Recovery(s) for Nitrogen, Nitrate + Nitrite are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Thursday, March 29, 2018

Page 1 of 2

### General Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ                      **Batch ID:** R168809

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC62395-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ                      **Batch ID:** R168810

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC62395-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ                      **Batch ID:** R168811

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC62395-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

### General Chemistry By Method SM3500FE B-11

**Matrix:** AQ                      **Batch ID:** GN77475

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62307-1DUP, JC62307-1MS, JC62307-1MSD were used as the QC samples for Iron, Ferrous.
- JC62395-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.
- JC62395-2 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.
- JC62395-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

### General Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ                      **Batch ID:** GN77464

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62365-2DUP, JC62365-2MS were used as the QC samples for Nitrogen, Nitrite.

### General Chemistry By Method SM5310 B-11

**Matrix:** AQ                      **Batch ID:** GP11967

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62395-2MS, JC62395-2MSD were used as the QC samples for Total Organic Carbon.

**Matrix:** AQ                      **Batch ID:** GP11993

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC62395-2FMS, JC62395-2FMSD were used as the QC samples for Dissolved Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Thursday, March 29, 2018

Page 2 of 2

## Summary of Hits

Job Number: JC62395  
 Account: Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY  
 Collected: 03/14/18



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JC62395-1 SVE-MW-1

Chloroform	1.2	1.0	0.29	ug/l	SW846 8260C
Tetrachloroethene	7.4	1.0	0.50	ug/l	SW846 8260C
Trichloroethene	0.28 J	1.0	0.27	ug/l	SW846 8260C
Nitrogen, Nitrate <sup>a</sup>	10.6	0.31		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	10.6	0.30		mg/l	EPA 353.2/LACHAT
Sulfate	114	2.0		mg/l	EPA 300/SW846 9056A
Total Organic Carbon	1.2	1.0		mg/l	SM5310 B-11

JC62395-1F SVE-MW-1

Dissolved Organic Carbon	1.2	1.0		mg/l	SM5310 B-11
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JC62395-2 SVE-MW-5

Chloroform	9.9	1.0	0.29	ug/l	SW846 8260C
cis-1,2-Dichloroethene	0.52 J	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene	21.5	1.0	0.50	ug/l	SW846 8260C
Trichloroethene	1.7	1.0	0.27	ug/l	SW846 8260C
Nitrogen, Nitrate <sup>a</sup>	5.7	0.21		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	5.7	0.20		mg/l	EPA 353.2/LACHAT
Sulfate	40.8	2.0		mg/l	EPA 300/SW846 9056A

JC62395-2F SVE-MW-5

No hits reported in this sample.

JC62395-3 SVE-MW-4

Chloroform	10.7	1.0	0.29	ug/l	SW846 8260C
cis-1,2-Dichloroethene	0.68 J	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene	28.7	1.0	0.50	ug/l	SW846 8260C
Trichloroethene	1.9	1.0	0.27	ug/l	SW846 8260C
Nitrogen, Nitrate <sup>a</sup>	4.9	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	4.9	0.10		mg/l	EPA 353.2/LACHAT
Sulfate	40.9	2.0		mg/l	EPA 300/SW846 9056A
Total Organic Carbon	1.6	1.0		mg/l	SM5310 B-11

JC62395-3F SVE-MW-4

Dissolved Organic Carbon	1.4	1.0		mg/l	SM5310 B-11
--------------------------	-----	-----	--	------	-------------

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID: SVE-MW-1	Date Sampled: 03/14/18
Lab Sample ID: JC62395-1	Date Received: 03/15/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B159138.D	1	03/24/18 00:40	SS	n/a	n/a	V2B7083
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform <sup>a</sup>	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	1.2	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	SVE-MW-1	Date Sampled:	03/14/18
Lab Sample ID:	JC62395-1	Date Received:	03/15/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	388 Bridge Street, Brooklyn, NY		

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	7.4	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	0.28	1.0	0.27	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	117%		81-124%
2037-26-5	Toluene-D8	92%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-1	<b>Date Sampled:</b> 03/14/18
<b>Lab Sample ID:</b> JC62395-1	<b>Date Received:</b> 03/15/18
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> 388 Bridge Street, Brooklyn, NY	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous <sup>a</sup>	< 0.20	0.20	mg/l	1	03/15/18 21:45	LS	SM3500FE B-11
Nitrogen, Nitrate <sup>b</sup>	10.6	0.31	mg/l	1	03/29/18 14:00	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	10.6	0.30	mg/l	3	03/29/18 14:00	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	03/15/18 19:35	LS	SM4500NO2 B-11
Sulfate	114	2.0	mg/l	1	03/21/18 10:53	NV	EPA 300/SW846 9056A
Total Organic Carbon	1.2	1.0	mg/l	1	03/27/18 00:42	CD	SM5310 B-11

(a) Field analysis required. Received out of hold time and analyzed by request.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-1	<b>Date Sampled:</b> 03/14/18
<b>Lab Sample ID:</b> JC62395-1F	<b>Date Received:</b> 03/15/18
<b>Matrix:</b> AQ - Groundwater Filtered	<b>Percent Solids:</b> n/a
<b>Project:</b> 388 Bridge Street, Brooklyn, NY	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	1.2	1.0	mg/l	1	03/27/18 19:21	CD	SM5310 B-11

RL = Reporting Limit

4.2  
4

## Report of Analysis

Client Sample ID: SVE-MW-5	Date Sampled: 03/14/18
Lab Sample ID: JC62395-2	Date Received: 03/15/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B159139.D	1	03/24/18 01:10	SS	n/a	n/a	V2B7083
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform <sup>a</sup>	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	9.9	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.52	1.0	0.50	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	SVE-MW-5	Date Sampled:	03/14/18
Lab Sample ID:	JC62395-2	Date Received:	03/15/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	388 Bridge Street, Brooklyn, NY		

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	21.5	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	1.7	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	117%		81-124%
2037-26-5	Toluene-D8	93%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-5 <b>Lab Sample ID:</b> JC62395-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> 388 Bridge Street, Brooklyn, NY	<b>Date Sampled:</b> 03/14/18 <b>Date Received:</b> 03/15/18 <b>Percent Solids:</b> n/a
---	---

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous <sup>a</sup>	< 0.20	0.20	mg/l	1	03/15/18 21:45	LS	SM3500FE B-11
Nitrogen, Nitrate <sup>b</sup>	5.7	0.21	mg/l	1	03/29/18 14:05	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	5.7	0.20	mg/l	2	03/29/18 14:05	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	03/15/18 19:41	LS	SM4500NO2 B-11
Sulfate	40.8	2.0	mg/l	1	03/21/18 11:17	NV	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	03/27/18 01:16	CD	SM5310 B-11

(a) Field analysis required. Received out of hold time and analyzed by request.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

---

RL = Reporting Limit

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-5	<b>Date Sampled:</b> 03/14/18
<b>Lab Sample ID:</b> JC62395-2F	<b>Date Received:</b> 03/15/18
<b>Matrix:</b> AQ - Groundwater Filtered	<b>Percent Solids:</b> n/a
<b>Project:</b> 388 Bridge Street, Brooklyn, NY	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	< 1.0	1.0	mg/l	1	03/27/18 19:39	CD	SM5310 B-11

RL = Reporting Limit

4.4  
4

## Report of Analysis

Client Sample ID: SVE-MW-4	Date Sampled: 03/14/18
Lab Sample ID: JC62395-3	Date Received: 03/15/18
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B159143.D	1	03/24/18 03:11	SS	n/a	n/a	V2B7083
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform <sup>a</sup>	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	10.7	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.68	1.0	0.50	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	SVE-MW-4	Date Sampled:	03/14/18
Lab Sample ID:	JC62395-3	Date Received:	03/15/18
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	388 Bridge Street, Brooklyn, NY		

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	28.7	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	1.9	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	114%		81-124%
2037-26-5	Toluene-D8	93%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-4	<b>Date Sampled:</b> 03/14/18
<b>Lab Sample ID:</b> JC62395-3	<b>Date Received:</b> 03/15/18
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> 388 Bridge Street, Brooklyn, NY	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous <sup>a</sup>	< 0.20	0.20	mg/l	1	03/15/18 21:45	LS	SM3500FE B-11
Nitrogen, Nitrate <sup>b</sup>	4.9	0.11	mg/l	1	03/29/18 12:25	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	4.9	0.10	mg/l	1	03/29/18 12:25	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	03/15/18 19:41	LS	SM4500NO2 B-11
Sulfate	40.9	2.0	mg/l	1	03/21/18 11:41	NV	EPA 300/SW846 9056A
Total Organic Carbon	1.6	1.0	mg/l	1	03/27/18 01:49	CD	SM5310 B-11

(a) Field analysis required. Received out of hold time and analyzed by request.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SVE-MW-4	<b>Date Sampled:</b> 03/14/18
<b>Lab Sample ID:</b> JC62395-3F	<b>Date Received:</b> 03/15/18
<b>Matrix:</b> AQ - Groundwater Filtered	<b>Percent Solids:</b> n/a
<b>Project:</b> 388 Bridge Street, Brooklyn, NY	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	1.4	1.0	mg/l	1	03/27/18 20:13	CD	SM5310 B-11

RL = Reporting Limit

**Misc. Forms**

**Custody Documents and Other Forms**

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**Includes the following where applicable:**

- Chain of Custody



ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #
Bottle Order Control # SW031218-122
SGS Accutest Quote #
SGS Accutest Job # JC62395

Client/Reporting Information, Project Information, Requested Analysis (see TEST CODE sheet), Matrix Code, Collection table with columns for Date, Time, Sampled by, Matrix, # of bottles, and various chemical analysis codes.

Turnaround Time (Business days), Data Deliverable Information, Comments / Special Instructions

Turnaround Time options (Std. 10 Business Days, 5 Day RUSH, etc.), Approved By (SGS Accutest PM) / Date, Commercial/NIASP categories, and Sample inventory verification notes.

Chain of Custody table with columns for Relinquished by, Date/Time, Received By, and Date/Time, including handwritten signatures and dates.

Form:SM088-01C Rev.Date:9/13/16

## SGS Sample Receipt Summary

**Job Number:** JC62395

**Client:** FLEMING-LEE SHUE, INC.

**Project:** 388 BRIDGE STREET, BROOKLYN, NY

**Date / Time Received:** 3/15/2018 5:34:00 PM

**Delivery Method:**

**Airbill #s:**

**Cooler Temps (Raw Measured) °C:** Cooler 1: (3.4);

**Cooler Temps (Corrected) °C:** Cooler 1: (4.9);

**Cooler Security**

- |                           | <u>Y or N</u>                       |                          |                       | <u>Y or N</u>                       |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

- |                              | <u>Y or N</u>                       |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**

- |                                 | <u>Y</u>                            | <u>or</u> | <u>N</u>                            | <u>N/A</u>               |
|---------------------------------|-------------------------------------|-----------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  | <u>Y or N</u>                       |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  | <u>Y or N</u>                       |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

- |   | <u>Y</u>                            | <u>or</u> | <u>N</u>                            | <u>N/A</u>                          |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 216017	pH 12+: 208717	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

**JC62395: Chain of Custody**

Page 2 of 2

5.1  
5