Environmental Engineering, Civil Engineering
Forensic Engineering, Construction Services

NOTICE OF INTENT FOR DISCHARGE PURSUANT TO MASSACHUSETTS REMEDIATION GENERAL PERMIT MAG9100000

For Property Located at:

50 Symphony Road
Boston, MA 02115

Prepared For:

50 Symphony LLC
1167 Broadway
Somerville, MA 02144

Prepared By:

FSL Associates, Inc.
358 Chestnut Hill Avenue, 1st Floor
Boston, MA 02135

April 11, 2018

FSL ASSOCIATES

Environmental Engineering, Civil Engineering
Forensic Engineering, Construction Services

Environmental Engineering *Forensic Engineering* *Civil Engineering* *Construction Services*

April 11, 2018

U.S. Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square – Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

And

Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue
Roxbury, MA 02119

RE: Notice of Intent for Discharge Pursuant to
Massachusetts Remediation General Permit MAG9100000
50 Symphony Road, Boston, MA 02115
MADEP Release Tracking Number (RTN) 3-34506

To Whom It May Concern:

On behalf of 50 Symphony LLC, FSL Associates, Inc. ("FSL") has prepared the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into the Charles River via the City of Boston storm drainage system. Temporary construction dewatering discharge is scheduled to occur during the construction of a 5-story residential apartment building with a full basement. The development project is to take place at 50 Symphony Road in the Fenway neighborhood of Boston, Massachusetts (the subject site). Refer to the attached **Figure 1** for the site locus.

This permit application was prepared by FSL Associates, Inc. ("FSL") on behalf of 50 Symphony LLC, the owner of the subject property with an address of 1167 Broadway, Somerville, MA 02144. The required Notice of Intent Form contained in the RGP permit and Boston Water and Sewer Dewatering Discharge Permit Application are included in **Appendix A** and all supporting documentation is included in **Appendix B** and **Appendix C**. A Best Management Practice Plan (BMPP) is contained in **Appendix D**. This project is considered Activity Category I as defined in the RGP. Category I is defined as Petroleum-Related Site Remediation. Based on historical and current soil and groundwater analysis completed at the site and constituents of concern detected under Subcategories A (lead, mercury, cadmium, chromium), B (acetone, benzene), D (total group 1 polycyclic aromatic hydrocarbons (PAHs) and total group 2 PAHs),

and F (extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) in soil and oil & grease in groundwater), Technology Based Effluent Limitations (TBELs) and Water Quality Based Effluent Limitations (WQBELs) for Type A, B, D, and F contamination apply.

Applicant

50 Symphony LLC
1167 Broadway
Somerville, MA 02144

Attention: Mr. Charles Aggouras
Telephone: (847) 241-8857

Contractor

Sterling Construction
134 Heywood Road
Sterling, MA 01564

Attn: Mr. Nathan Pfleegor
Phone: (978) 793-6429

1.0 BACKGROUND AND SITE HISTORY

The site is an approximately 6,000 square foot parcel of land located at 50 Symphony Road in a residential area of the Fenway neighborhood of Boston, Massachusetts. Historically the site has been used as a vehicle parking lot since the late 1970s. The site had formerly been improved with a three-story residential apartment building from approximately 1905 until the building was razed following a fire circa 1976. Following the demolition of the former residential apartment building on the site, the site was filled to grade sometime between 1976 and 1978 and subsequently covered with asphalt pavement.

2.0 EXISTING CONDITIONS

The site is currently unimproved and surrounded by construction fencing. The site has been vacant and surrounded by construction fencing since September 2016. The asphalt pavement had been removed at the time construction fencing was initially erected in September 2016. The adjoining properties consist of multi-story residential apartment buildings to the northeast, southeast, and southwest. Symphony Road abuts the site immediately to the northeast while Public Alley 810 abuts the site immediately to the southwest. The Symphony Community Garden abuts the site to the northwest.

Site grades slope downward from elevation 16.5+/- at the northeast portion of the site to about elevation 12.0+/- at the southwest portion of the site. FSL utilized the benchmark indicated as *DH Set in Cem. Conc. = El. +16.54* on the site survey drawing prepared by Boston Surveying and Engineering dated January 15, 2014.

Elevations cited herein are in feet and are referenced to the North American Vertical Datum of 1988 (NAVD88).

3.0 PROPOSED SCOPE OF SITE DEVELOPMENT

The proposed development is understood to consist of a building which will occupy the entirety of the 6,000 square foot property parcel. The building will consist of five (5) stories above-grade and a basement underneath. The maximum depth of excavation for the construction of the building foundation will be nine (9) feet below-grade along the Symphony Road portion of the property and five (5) feet below grade along the Public Alley 810 portion of the property. The excavation for the elevator pit for the proposed building will be advanced to a maximum depth of twelve (12) feet below-grade. The elevator pit is located adjacent to the southeastern abutting residential apartment building. The excavation for the elevator pit is scheduled to be the source of the discharge.

4.0 SITE ENVIRONMENTAL SETTING

A review of the current Massachusetts Department of Environmental Protection (MADEP) Priority Resource Map indicates that the subject site is not located within Zone II of a public water supply, an Interim Wellhead Protection Area or Zone A of a Class A surface water supply reservoir. There are no known private or public drinking water supply wells located within the site boundaries, nor within a half mile of the site. Site groundwater is not classified as a current or potential drinking water source. The nearest surface water body is the Back Bay Fens, located approximately 600 feet to the west-southwest of the property.

The site is located within 500 feet of a residentially zoned area. In accordance with 310 CMR 40.0361, the applicable soil reporting category for this site is RCS-1. In accordance with 310 CMR 40.0362, the

applicable groundwater reporting category for this site is RCGW-2. A copy of the MADEP Phase I Site Assessment Map is included in **Appendix B**.

5.0 SUBSURFACE CONDITIONS

A geotechnical investigation was conducted on the subject site on January 25, 2018 and January 29, 2018. The investigation included the advancement of five (5) soil borings and the installation of three (3) groundwater monitoring wells. The boreholes were advanced using hollow-stem augers and samples were recovered at each borehole using a standard split spoon sampler driven in accordance with ASTM D-1556. Environmental investigations conducted in order to characterize site soil for off-site disposal as part of construction, including a test pit program and drilling program, were conducted in September 2016 and January 2018, respectively. Refer to the attached **Figure 2** for soil boring, groundwater monitoring well, and test pit locations.

The general subsurface profile at the site includes: A.) Urban fill ranging in thickness from approximately 5 feet to 8 feet across the site, which is underlain by; B.) Peat ranging in thickness from approximately 6 feet to 11 feet, which is underlain by; C.) Sand ranging in thickness from approximately 22 feet to 28 feet, which is underlain by; D.) Boston Blue Clay. The urban fill layer is predominantly granular with some organic silt with brick and ash. The peat layer consists of very soft peat organics. The sand layer consists of medium dense to very dense, coarse to fine sand with traces of inorganic silt and fine gravel. The Boston Blue Clay layer features medium stiff to soft clay with numerous traces of silt.

Groundwater levels were measured at depths of between 5.2 feet and 12 feet below the ground surface (bgs). FSL expects that there is perched water from the former building foundation which remains in the subsurface. The excavation for the elevator pit is scheduled to be the source of the discharge (refer to **Figure 3**).

6.0 MCP REGULATORY STATUS

The site is currently listed as a MADEP disposal site under release tracking number (RTN) 3-34506 due to reportable concentrations of the heavy metal lead detected in soil. Lead was detected at a maximum concentration of 4,900 parts per million (ppm) in soil during the test pit program conducted in September 2016. A Release Notification Form (RNF) was submitted to MADEP on September 25, 2017 on behalf of the current owner of the property. Reportable concentrations of petroleum and PAHs were also subsequently identified in the subsurface, specifically: extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), and PAH constituents naphthalene, 2-methylnaphthalene, acenaphthylene, acenaphthene, phenanthrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and dibenzo(a,h)anthracene. The petroleum impacted soil layer is located at a depth of between 7.5 feet and 9 feet bgs. Refer to **Table S1** for a summary of this soil data.

7.0 GROUNDATER ANALYTICAL DATA

Three (3) separate groundwater sampling events were conducted during the process of preparing this application. Each of the three sampling events consisted of sampling the two (2) groundwater monitoring wells located on the subject site (monitoring wells “MW-1” and “MW-3”, which are depicted on the attached **Figure 2**), while the final sampling event also consisted of collecting a sample of the receiving water from the Charles River in the vicinity of BWSC Outfall No. CSO-023. Monitoring wells MW-1 and MW-3 on the subject site were sampled between February 7, 2018 and March 30, 2018 and analyzed for the following: oil & grease, total petroleum hydrocarbons (TPH), extractable petroleum hydrocarbons

(EPH), pH, hardness, alkalinity, ammonia, chloride, total suspended solids (TSS), total dissolved solids (TSS), total metals (antimony, arsenic, lead, cyanide, iron, selenium, thallium, beryllium, cadmium, chromium III, chromium VI, total chromium, copper, mercury, nickel, silver, and zinc), dissolved metals (antimony, arsenic, lead, iron, selenium, thallium, beryllium, cadmium, total chromium, copper, mercury, nickel, silver, and zinc), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), EPH, and pesticides.

Several of these parameters were determined to be at elevated levels which require treatment before discharge under the RGP. These include: TSS, lead, mercury, cadmium, chromium, acetone, benzene, naphthalene, zinc, and PAHs. Pesticide constituent 4,4'-DDT (none of the constituents of which are included in the RGP) was detected at a concentration of 0.049 parts per billion (ppb), just above the laboratory detection limit of 0.040 ppb for 4,4'-DDT. No other pesticide constituents were detected. Refer to the attached **Table 1** for a summary of groundwater analytical data collected from the subject site.

Receiving water from the Charles River in the vicinity of the Outfall No. CSO-023 was sampled on March 30, 2018 and analyzed for the following: oil & grease, TPH, pH, hardness, alkalinity, ammonia, chloride, TSS, TSS, total metals (antimony, arsenic, lead, cyanide, iron, selenium, thallium, beryllium, cadmium, chromium III, chromium VI, total chromium, mercury, nickel, silver, and zinc), VOCs, SVOCs, PCBs, and pesticides. TPH, ammonia, TSS, antimony, arsenic, cyanide, selenium, thallium, beryllium, cadmium, chromium VI, chromium III, mercury, nickel, and silver were all below the laboratory detection limits. All VOCs, SVOCs, PCBs, and pesticides were also below the laboratory detection limits. Remaining receiving waters analytical data are summarized in the attached **Table 2**.

8.0 GROUNDWATER TREATMENT SYSTEM

Based on the groundwater analytical data collected from the site, raw discharged groundwater is expected to contain TSS, heavy metals, VOCs, SVOCs, and oil & grease. MADEP has approved a dilution factor of 111.8 (based upon a 7Q10 downstream flow of 15.96 million gallons per day (MGD)). This dilution factor and the analytical data collected from the site and receiving waters were used to calculate Water Quality Based Effluent Limitations (WQBELs). It was determined that Technology Based Effluent Limitations (TBELs) apply for all Inorganics, VOCs, SVOCs, and Fuels Parameters, with the exception of: the heavy metal lead and PAH constituents benzo(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene, and chrysene. WQBELs will apply for lead, benzo(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene, and chrysene. The WQBEL calculation spreadsheet and TBEL and WQBEL effluent limitations are included in **Appendix B**.

Based upon the soil and groundwater analytical data collected to-date, the proposed groundwater treatment system for this project consists of an influent Oil Water Separator (OWS) tank, bag filters, organoclay media, and liquid-phase activated carbon adsorbers. Based upon the total metals and dissolved metals analytical data, it is assumed that any metals present in the raw water are associated with the Total Suspended Solids (TSS) and can be removed by settling followed by mechanical filtration such as bag filtration. If base treatment system components cannot lower metals concentrations below discharge limits, an Ion Resin Exchange Filter will be employed to ensure discharged groundwater meets all applicable TBELs and WQBELs. The treatment system schematic is depicted on **Drawing No. QT-147977-LYT01**.

9.0 GROUNDWATER DISCHARGE

Dewatering activities are anticipated to be required based upon the maximum depth of excavation (12 feet bgs) and the high groundwater level measured on the subject site during assessment activities (5.2 feet bgs). On-site recharge of groundwater collected during construction activities at this site is anticipated to be unfeasible. Therefore, groundwater will be required to be discharged off-site via the municipal storm drain. Correspondence with personnel at BWSC indicates that the storm drainage system that services Symphony Road ultimately discharges via Outfall No. CSO-023 into the Charles River. Outfall No. CSO-023 is approximately 500 meters (1,640 feet) to the north-northwest of the subject site. The location of Outfall No. CSO-023 is depicted on **Figure 4**. The latitude and longitude coordinates of Outfall No. CSO-023 are 42.351760 North and 71.092320 West. The latitude and longitude coordinates of the storm drain grate in Symphony Road (the primary groundwater discharge point for this project) is 42.343015 West and 71.088971 West.

10.0 SUMMARY

FSL is pleased to submit this application on behalf of 50 Symphony LLC for the purpose of obtaining authorization to discharge groundwater from the project construction site under the provisions of the Massachusetts Remediation General Permit MAG9100000.

Based upon the soil and groundwater analytical data collected to-date, treatment of encountered groundwater will need to be treated prior to discharge in order to meet the requisite TBELs and WQBELs. The proposed groundwater treatment system for this project consists of an influent Oil Water Separator (OWS) tank, bag filters, organoclay media, and liquid-phase activated carbon adsorbers. Based upon the total metals and dissolved metals analytical data, it is assumed that any metals present in the raw water are associated with the Total Suspended Solids (TSS) and can be removed by settling followed by mechanical filtration such as bag filtration. If base treatment system components cannot lower metals concentrations below discharge limits, an Ion Resin Exchange Filter will be employed to ensure discharged groundwater meets all applicable TBELs and WQBELs.

Thank you for the opportunity to provide you with this application. Please feel free to contact the undersigned should you have any questions.

Sincerely,

Jarod R. Cournoyer, E.I.T.
Vice President: Environmental
FSL Associates, Inc.

GENERAL TERMS AND CONDITIONS

The terms and conditions set forth herein are attached to and form an integral part of the Agreement between FSL Associates, Inc. (the "Company") and **50 Symphony LLC** (the "Client") regarding certain engineering services ("this Agreement" or the "Agreement"). This attachment contains clauses that limit the Company's liability to Client and require Client to indemnify Company for some claims for damages. The entire Agreement should be reviewed carefully, and Client may choose to consult with an attorney. Company and Client agree as follows:

Section 1. Services

Company shall provide Client with the Services described in the scope of services hereto attached with respect to the property herein above identified in this Agreement (the "Site" or "On-Site"), under the terms and conditions set forth herein. Company's Services will be performed on behalf of and solely for the exclusive use of Client for the purposes set forth in this Agreement and for no other purpose. Client acknowledges that Company's Services require decisions, which are based upon judgment stemming from limited data rather than upon scientific certainties. Client acknowledges the inherent risks to Client and its property associated with the work described in this Agreement and with underground work in general. Company reserves the right to refuse to undertake services that it determines may involve risks or activities beyond those currently contemplated. Client acknowledges that other qualified persons and entities may be available to carry out such services. No attempt will be made to determine compliance of present or former owners or operators of the Site with federal, state or municipal environmental or land use laws or regulations. The Services do not include directly or indirectly storing, arranging for or actually transporting, disposing, treating or monitoring oils or hazardous materials, unless otherwise expressly specified in this Agreement.

Section 2. Billing and Payment

Client will pay Company for services performed in accordance with the rates and charges set forth in this Agreement. Client will pay all invoices submitted by the Company for the Services in accordance with the terms specified in the invoice(s). Invoice balances remaining unpaid after the due date provided in the invoice will bear interest from invoice date at 1.5 percent per month or at the maximum lawful interest rate, if such lawful rate is less than 1.5 percent per month, except for charges disputed in good faith. If Client fails to pay undisputed invoice charges in full within forty-five (45) days after invoice date, Company may, at any time, and without waiving any other rights or claims against Client and without thereby incurring any liability to Client, elect to terminate performance of the Services upon ten (10) days prior written notice by Company to Client.

Notwithstanding any termination of Services by Company for non-payment of invoices, Client shall pay Company in full for all Services rendered in accordance with this Agreement and its terms and conditions by Company to the date of termination of Services plus all interest, termination costs and expenses incurred by Company and related to such termination. Client shall be liable to reimburse Company for all costs and expenses of collection, including reasonable attorneys' fees for such Services. The failure to exercise any rights or remedies, whether specified herein or otherwise provided by law, shall not be deemed a waiver of any such rights or remedies, nor preclude the exercise of such rights or other rights and remedies under this instrument, or at law.

Section 3. Right of Entry

Client hereby grants to Company permission for Right of Entry from time to time, by Company, its agents, staff, consultants, and subcontractors, upon the Site for the purpose of performing the Basic Services (as described in this Agreement), including without limitation, the making of test borings, installation of wells, trenches, and other subsurface and surface structures, the installation and operation of equipment and the removal of treatment system(s), pursuant to the Scope of Services.

Section 4. Site Work

a. Normal Disturbance. Client hereby recognizes that the use of exploration, excavation, construction, and other heavy equipment may unavoidably affect, alter or damage the terrain and affect vegetation, buildings, structures and equipment in, at or upon the Site. Client accepts the fact that this is inherent in Company's work. Reasonable care will be exercised in locating underground structures in the vicinity of proposed subsurface work. Company will take reasonable precautions to limit damage to Site. If Company is required to restore the land to its former conditions, this will be accomplished and the cost will be added to our fee unless such restoration is specifically included in the Scope of Services or is due to damage caused by the negligence or willful misconduct of Company or its officers, employees or subcontractors.

b. Damage to Latent Subterranean Structures. Company will exercise due and reasonable care in locating subterranean structures in the vicinity where proposed excavations will take place and will contact appropriate public utilities and review plans provided by Client and/or the Owner of the Site relating to the locations of subterranean structures. Provided Company has proceeded with due and reasonable care, Company will not be liable for damages or injury arising from damage to or interference with subterranean structures (including, without limitation, pipes, tanks, telephone cables, etc.) which are not called to Company's attention and/or not correctly shown on the plans furnished by Client or others in connection with work performed under this Agreement. The Client will be named as an additional insured on the drilling insurance policy of Company and/or its subcontractors.

Section 5. Sample Disposition

Company will preserve such soil, water, and other samples, if any obtained from the Site for such period of time, as Company in its sole

discretion deems appropriate. No such samples will be discarded before thirty (30) days after completion of the work without prior written notice to Client, provided, however, that samples on which soil or chemical laboratory testing has been performed may be thereafter discarded by Company without such notification. Samples will be available at Company's office for inspection by Client and others authorized by Client; samples will be shipped to a location selected by Client at Client's expense.

Section 6. Standard of Care

Client agrees that Company's services are on behalf of and for the exclusive use of Client for the purposes set forth in this Agreement. Client recognizes that Company's services require decisions, which are not based upon pure science but rather upon judgmental considerations, including without limitation, the economic feasibility of alternate designs. Company will perform Services in accordance with generally accepted practices of engineers and geohydrologists undertaking similar studies or actions in the same locale under like or identical circumstances. Client agrees that such services will be rendered without any other warranty, expressed or implied, except as otherwise provided in this Agreement. In providing reports, Company may review and interpret certain information provided to it by third parties. Company will not conduct an independent evaluation of the accuracy or completeness of such information. It is understood and agreed that in seeking the professional services of Company under this Agreement, the Client is requesting Company to undertake uninsured obligations for the Client's benefit involving the presence or potential presence of oil or hazardous materials. The Client hereby explicitly recognizes that even a comprehensive sampling and testing program implemented with the appropriate equipment and experienced personnel under the direction of a trained professional who functions in accordance with a professional standard of practice may fail to detect certain conditions, because they are hidden and, therefore, cannot be considered in development of subsequent subsurface exploration programs. Further, because geological and soil formations are inherently random, variable and indeterminate (heterogenous) in nature, the Professional Services and opinions provided by Company under this Agreement are not guaranteed to be a representation of complete site conditions, which are subject to change with time as a result of natural or man-made processes. Although the Services are extensive, findings and conclusions are limited to and by the information obtained. Company makes no expressed or implied representations or warranties regarding any changes in condition of the Site after the date of the on-site inspections(s).

Section 7. Insurance

The Company shall obtain and maintain for as long as the Company has obligations under this Agreement, at its sole cost and expense, the following insurance with a financially sound and responsible insurance company or companies authorized to do business in the Commonwealth of Massachusetts under generally accepted and practiced forms of policy:

(A) Worker's Compensation Insurance, including occupational disease benefits, as prescribed by applicable law.

(B) Commercial General Liability Insurance including blanket contractual liability sufficient to address the indemnification obligations of Company under this Agreement, if any. The following minimum limits of liability shall be maintained: One Million ($1,000,000) Dollars each occurrence; One Million ($1,000,000) Dollars personal and advertising injury; Two Million ($2,000,000) Dollars general policy aggregate.

(C) Automobile, Bodily Injury and Property Damage Liability Insurance in an amount not less than the compulsory coverage required by applicable law. Such insurance shall extend to owned and leased automobiles used in the performance of the activities under this Agreement.

(D) Professional Liability (errors and omissions) Insurance including coverage for bodily injury and/or property damage arising out of the negligent acts, errors and omissions of the Company in the performance of the professional services under this Agreement and coverage for contractual liability assumed under this Agreement, if any. The limits of liability of such insurance shall be not less than One Million ($1,000,000) Dollars for each claim and Two Million $2,000,000) Dollars in the aggregate.

The above insurance shall be standard policies written on an occurrence basis (except for the Professional Liability/Contractors Pollution Insurance which shall be on a claims made basis). The insurance specified above shall provide that such insurance is primary coverage with respect to Company's activities hereunder. Said policies shall name Client as an additional insured and/or loss payee, as appropriate, and shall contain a provision stating that the insurer shall endeavor to provide at least twenty (20) days prior written notice to the Client before such coverage is cancelled, reduced or otherwise materially altered.

Certificates of Insurance showing such insurance coverage as required by this Section will be forwarded to Client under separate cover.

To the extent allowed under all applicable law, Company hereby waives and relinquishes, and agrees to request of all its subcontractors to waive and relinquish, any right of subrogation it might have against Client under the provisions of the Workers' Compensation Act in Massachusetts on account of any injury to its employees or employees of its subcontractors caused in whole or in part by any negligent or wrongful act or omission of Client, so long as such waiver shall not affect the applicable insurance policy or any right, claim or defense hereunder or the premium therefore.

Client hereby releases Company and all its subcontractors from any and all liability for any loss or damage caused by any of the so-called broad form coverage casualties, even if such casualty shall be brought about by the fault or negligence of Company or any of its subcontractors. Client agrees that its property casualty insurance policies will include such a release or waiver of subrogation clause.

Section 8. Client's Duty to Notify Company of Hazards
Client represents and warrants that it will provide Company with any and all information known to or suspected by Client with respect to (1) the existence or possible existence at, on or under the Site of any hazardous materials, pollutants or asbestos as defined in the Federal Water Pollution Control Act, the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Resource Conservation and Recovery Act of 1976, or under the provisions of federal, state and local laws of similar import now or hereafter existing; (2) any condition known to Client to exist in, on, under or in the vicinity of the Site which might present a potential safety hazard or danger to human health or the environment; or (3) any permit, manifest, title record or other record of compliance or non-compliance with any federal, state or local laws relating in any way, directly or indirectly, to the past or present environmental conditions at the Site. Company acknowledges that Client makes no representations or warranties as to the accuracy or completeness of information contained in materials provided to the Company by the Client and prepared by third parties.

Section 9. Hazardous Materials; Pollutants; Asbestos
If unanticipated, potentially hazardous materials, pollutants or asbestos are encountered during the course of the work, Company shall have the right (1) to suspend its work immediately and (2) to terminate the work described in the Scope of Services upon ten (10) days written notice of intent to terminate, unless Company and Client agree upon a mutually satisfactory amendment to this Agreement that may include a revision of the Scope of Services, adjustment of budget estimates, revised Terms and Conditions, and revised fees. Client shall remain liable for and shall pay all fees and charges incurred in accordance with the provisions of this Agreement through the date of termination, notwithstanding Client and Company not having reached a new, mutually satisfactory, revision of this Agreement.

Section 10. Confidentiality
Company will not disclose information regarding this Agreement, Company's Services or its Report, except (1) to Client; (2) to parties designated by Client; or (3) as provided in Section 11 below. Information which is in the public domain or which is provided to the Company by third parties is accepted from the foregoing non-disclosure agreement.

Section 11. Public Responsibility
Client acknowledges that the Client or the Site owner, as the case may be, is now and shall remain in control of the Site for all purposes at all times. Company does not undertake to report to any Federal, state, county or local public agencies having jurisdiction over the subject matter any conditions existing at the Site from time to time which may present a potential danger to public health, safety or the environment. Client agrees that Client will timely notify each appropriate Federal, state, county and local public agency, as required by law, of the existence of any condition at the Site, which may present a potential danger to public health, safety or the environment. Company will promptly notify Client when such condition becomes evident. It is understood, however, that this is not a contract for the rendition of legal services and no opinions, advice, counseling or any other assistance pertaining to the rendering of legal advice will be provided by Company. Client specifically acknowledges responsibility to notify appropriate authorities if same is recommended by Company, and further releases and holds Company harmless from any responsibility pertaining to such notification.

Notwithstanding the provisions of Section 10 and this Section 11, Company will comply with judicial orders or governmental directives, and federal, state, county and local laws, regulations and ordinances and applicable codes regarding the reporting to the appropriate public agencies of findings with respect to potential dangers to public health, safety or the environment, but Company shall have no liability to Client or to any other person or entity from the failure so to comply. To the extent feasible, Company will provide Client with prior notice of Company's proposed reporting, if any. Company shall have no liability or responsibility to Client or to any other person or entity for reports or disclosures made in accordance with such statutory or other lawful requirements.

Section 12. General Indemnity
The Client agrees to hold harmless, indemnify, and defend Company and its officers and employees from and against any and all claims, losses, damages, liability and costs, including but not limited to, costs of defense, arising out of or in any way connected with (i) any breach by Client or its officers, employees, agents, or subcontractors of the terms and conditions of this Agreement; (ii) any act, omission or negligence of Client or its officers, employees, agents, or subcontractors; or (iii) the presence, release, or migration of contaminants of any kind on or about the Site. Furthermore, the Client hereby agrees to indemnify and hold Company harmless against any and all claims that may arise from reliance on services beyond the Scope of Services described herein, from third parties' reliance upon same or from reliance on said services, from any party, whether party to this Agreement or not, unless Company has failed to exercise the prevailing standard of care for similarly situated professionals, and further against the negligence of private subcontractors pertaining to the Services rendered pursuant to this Agreement. This indemnity in no way limits any potential cause of action the Client may have against such private subcontractors.

Section 13. Limitation of Professional Liability
The Client hereby agrees that to the fullest extent permitted by law, Company's total liability to the Client for any and all liability, claims and losses, expenses, damages or claimed expenses whatsoever arising out of or in any way related to this Agreement from any cause or causes, including, but not limited to, Company's negligence, errors, omissions, strict liability or breach of warranty or contract, shall not exceed $50,000.00.

Section 14. Delays
In the event that Company is obstructed or delayed in the completion of the Services by any act of the Client or the Client's agents or by any act beyond the control of Company, including, but not limited to, inclement weather, illness, strikes, failure of equipment, unanticipated degree of difficulty encountered in performing the Services, or delay created within or by approving agencies, then the time herein fixed for the

completion of the Services shall be extended for a period of time equivalent to the time lost by reason of any or all of the aforementioned causes.

Section 15. Ownership of Documents
All documents, including original field notes and data, are and shall remain the sole and exclusive property of Company as instruments of service. The Client may, at its expense, obtain copies, in consideration of which the Client will use them solely in connection with the above-described project.

Section 16. Disputes
If a dispute arises out of or relates to this Agreement, or the performance or breach thereof, the parties agree first to try in good faith to settle the dispute by mediation under the commercial Mediation Rules of the American Arbitration Association, before resorting to arbitration. Thereafter, any remaining unresolved controversy or claim arising out of or relating to this Agreement, or the performance or breach thereof, shall be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association, conducted in Boston, Massachusetts. The sole Arbitrator shall be a retired or former Judge of the Trial Court of Massachusetts. Judgment upon the award rendered by the Arbitrator may be entered in any court having jurisdiction thereof.

Section 17. Authorization
Each of the signatories to this Agreement hereby certifies that he/she is presently authorized to enter into this Agreement on behalf of the Company or the Client, as the case may be, and to bind such party to all terms, representations, and agreements herein contained.

Section 18. Construction of Agreement
This instrument, which may be executed in multiple counterparts, constitutes a legal and binding contract, is to take effect as a sealed instrument, sets forth the entire contract between the parties hereto and their respective heirs, legal representatives, successors and assigns, supersedes all prior proposals, purchase orders, or agreements between the parties with respect to the subject matter hereof, and may be canceled, modified or amended only by a written instrument duly executed by both the Client and Company. The Client hereby agrees that he/she/it has read and understands all the terms of this Agreement and either has reviewed this Agreement with legal counsel or knowingly declined such review after having a reasonable opportunity to seek the same.

If any section, subsection, sentence or clause of this Agreement shall be adjudged illegal, invalid or unenforceable, such illegality or unenforceability shall not effect the legality, validity or enforceability of the Agreement as a whole or of any section, subsection, sentence or clause hereof not so adjudged. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts.

Section 19. Fiduciary Responsibility
Client confirms that neither Company nor any of Company's subconsultants or subcontractors has offered any fiduciary service to Client and no fiduciary responsibility shall be owned to Client by Company or any of Company's subconsultants or subcontractors, as a consequence of Company's entering into this Agreement with Client.

Section 20. Use of Licensed Site Professionals
In accordance with Massachusetts General Laws Chapter 21E, the performance of the Services contained in this Agreement may require the engagement of a Licensed Site Professional ("LSP") registered with the Commonwealth of Massachusetts under Massachusetts General Laws Chapter 21A and the regulations promulgated by the Massachusetts Department of Environmental Protection ("DEP") thereunder (collectedly the "LSP Program"). Accordingly, Client recognizes and agrees to the following:

(i) The LSP Program places upon the LSP certain professional obligations owed to the public, including, in some instances, a duty to disclose and report the existence of certain environmental contaminants to the DEP. In the event the LSP's obligations under the LSP Program conflict with the interests of the Client, the Client accepts that the LSP is bound by law to comply with the requirements of the LSP Program.

(ii) The Client recognizes that the LSP shall be immune from all civil liability resulting from any alleged conflict between the interests of the Client and the investigatory, reporting, and disclosure requirements placed upon the LSP pursuant to 310 CMR 40.0000 and the rules promulgated thereunder.

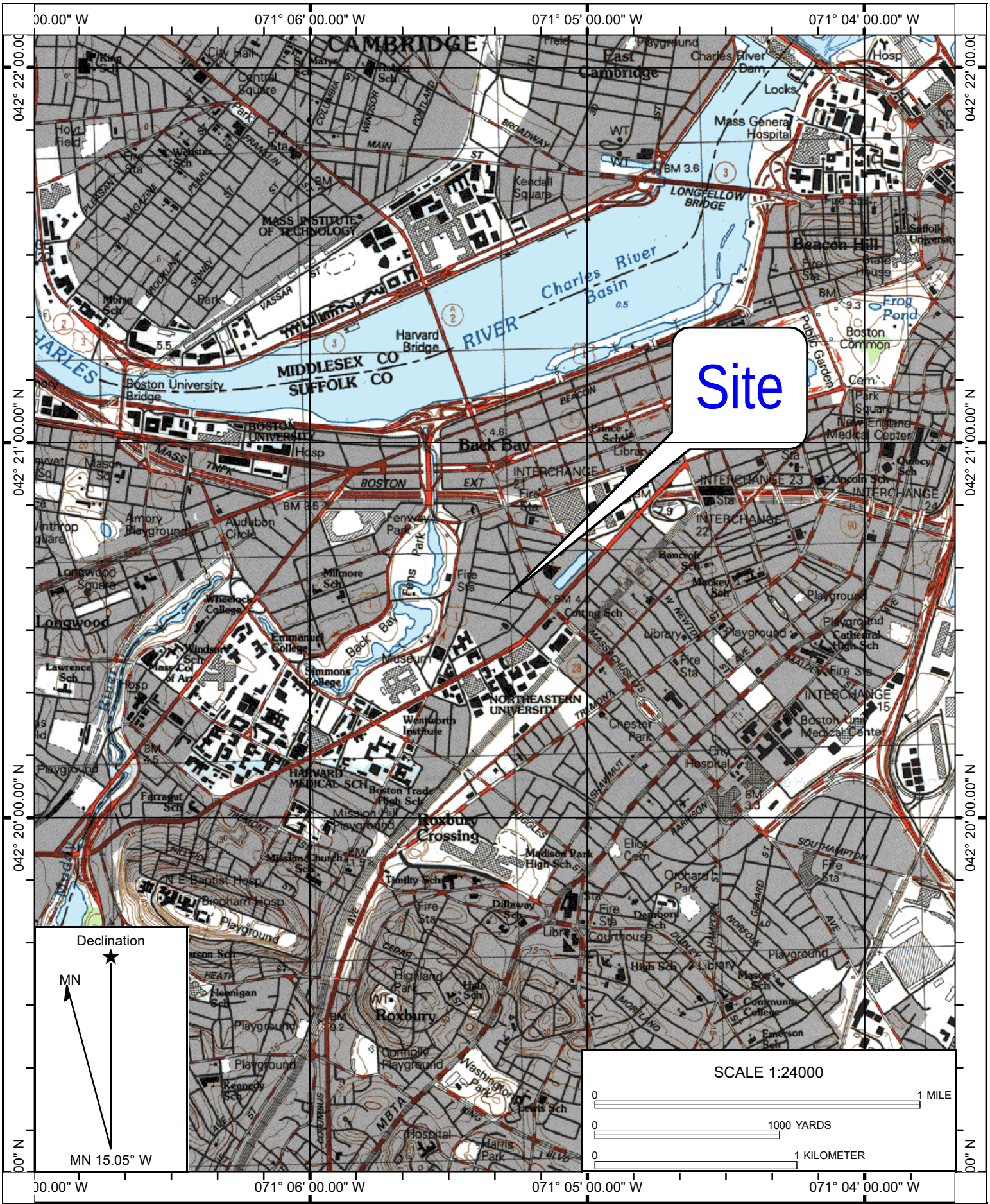
(iii) Under the LSP Program, the LSP is required to provide professional opinions ("Opinions") at various stages of an environmental assessment/remediation project. The LSP shall be entitled to request performance of any additional investigations, tests, or other services which, in the LSP's professional judgment, are necessary to permit the LSP to render Opinions required under the LSP Program.

(iv) At all times, the LSP shall exercise independent professional judgment in the rendering of Opinions and requests for additional investigations, tests, or other services which, in the LSP's professional judgment, are necessary to permit the LSP to render Opinions.

(v) As part of the LSP Program, the DEP may randomly audit the services performed by the LSP. The Client recognizes that such an audit is part of the regulatory process imposed by the LSP Program, and is in no way associated with, or the result of, any act of the LSP or Company. The Client agrees that any services requested of the LSP or Company in connection with any regulatory audit shall

be additional services, and Company shall be compensated at then existing rates or as otherwise agreed by Client and Company.

(vi) Notwithstanding the provisions of the LSP Program, any Opinions rendered pursuant to this Agreement are for the sole and exclusive use of Client, and are not intended for the use of or reliance upon by any third parties without the prior written approval of Company. Accordingly, Client agrees to indemnify, hold harmless, and defend Company, and the LSP individually, to the fullest extent permitted by law for any claims, losses, or damages allegedly suffered by third parties due to Client's unauthorized release or publication of any Opinion provided hereunder.

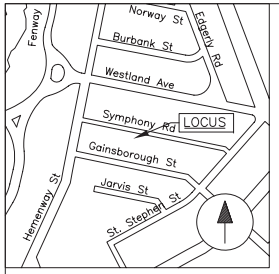


Name: Figure 1 - USGS Topographic Map
Date: 09/13/16
Scale: 1 inch = 2,000 feet

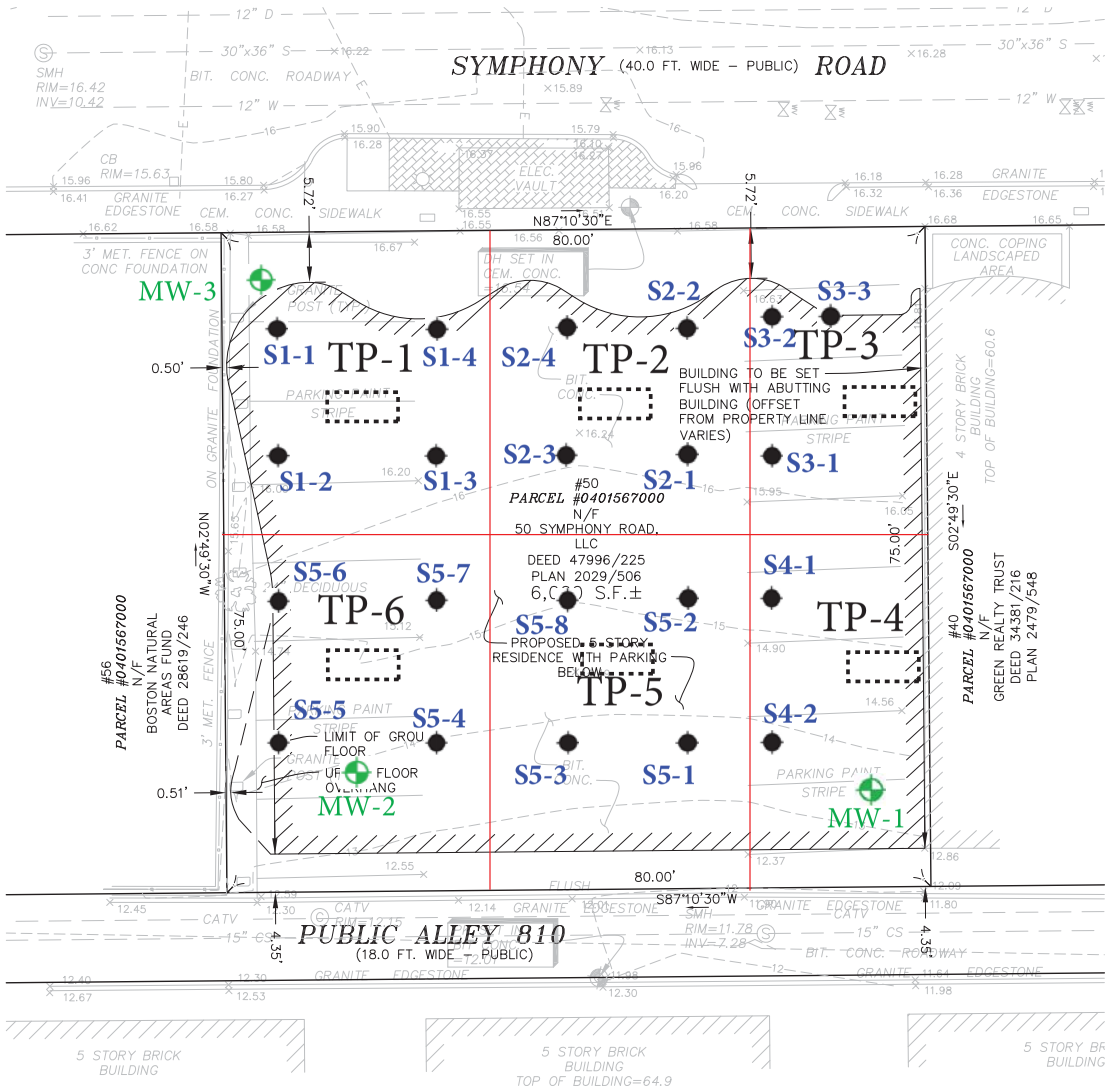
Location: 042° 20' 34.32" N 071° 05' 20.05" W

Datum: NAD27

Figure 2 - January 2018 Sampling Event Locations



LOCUS MAP
N.T.S



Test Pit Advanced September 21, 2016

Soil Boring Advanced January 18-January 19, 2018

Groundwater Monitoring Well Installed January 25-January 29, 2018

SCALED

0 5 10 20 40

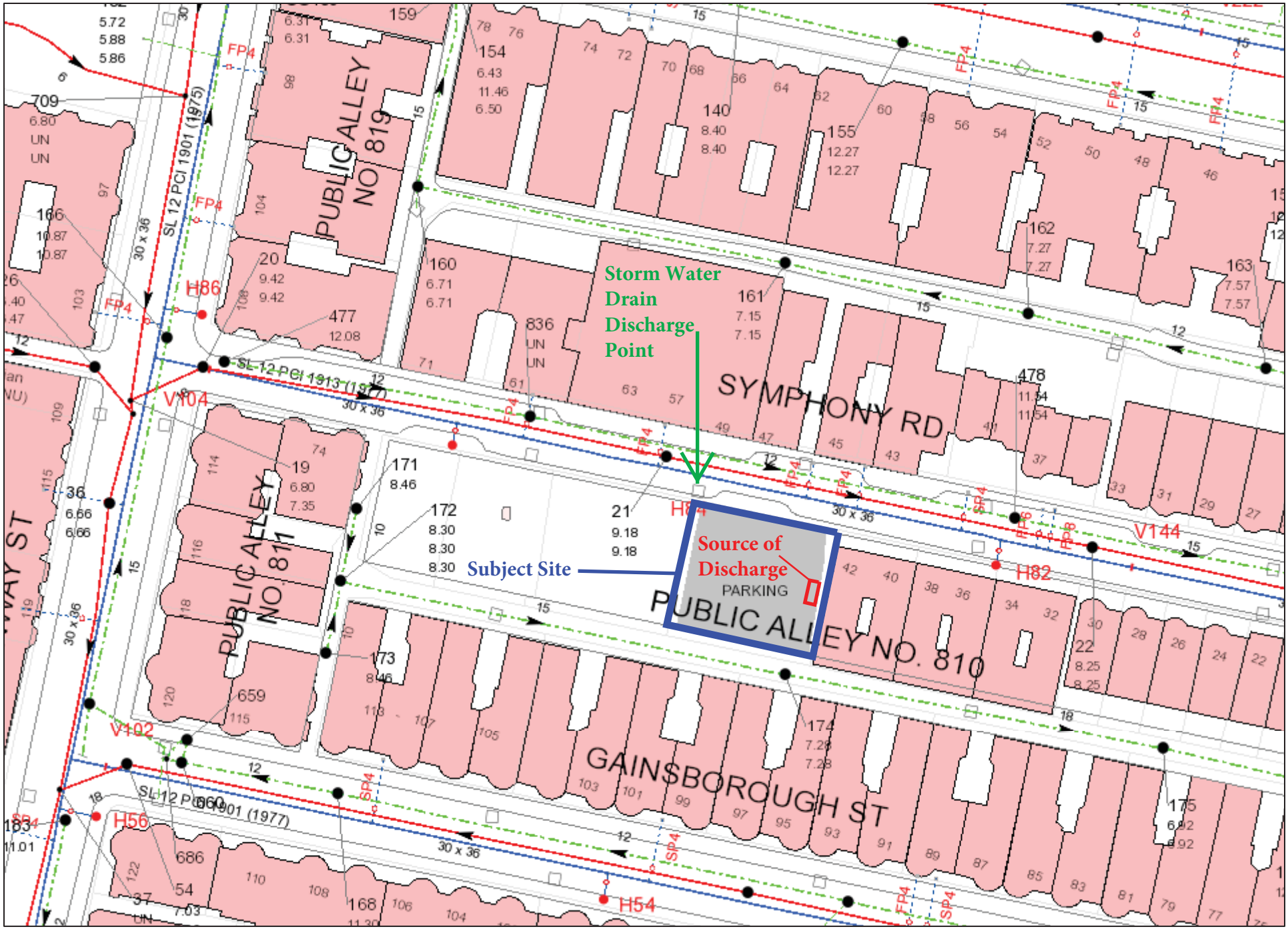
SCALE: 1"=10'

PLAN OF PROPOSED CONSTRUCTION
50 SYMPHONY ROAD
BOSTON, MASSACHUSETTS
(BOSTON PROPER DISTRICT)

PREPARED FOR
ANDREW WEESNER
URBANICA DESIGN AND DEVELOPMENT
1412 BERKLEY STREET
BOSTON, MA 02116

GREATER BOSTON SURVEYING AND ENGINEERING
19 FREDITH ROAD
WEYMOUTH, MA 02189
(781) 331-6128

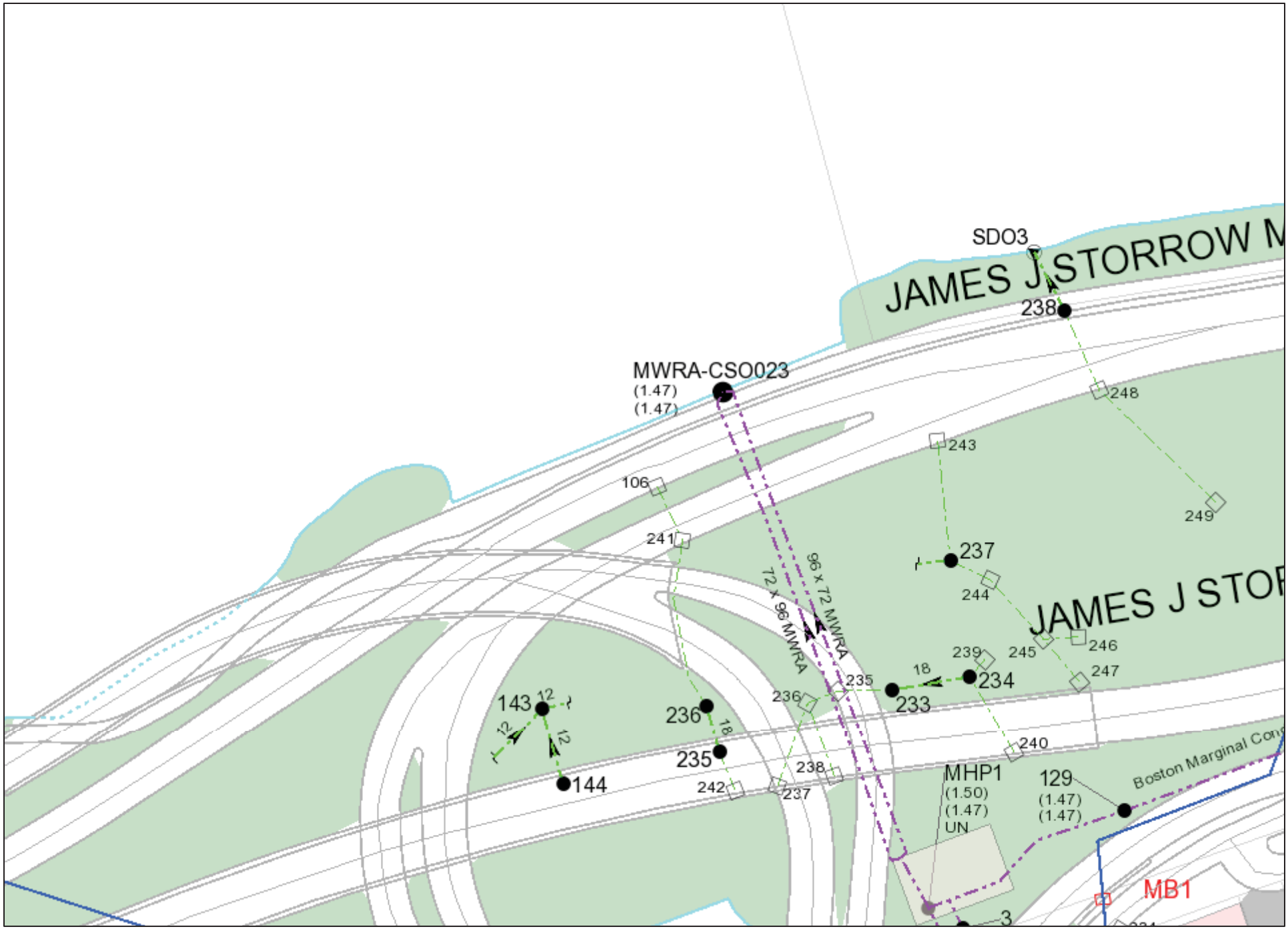
CALC BY: PJT	DATE: SEPTEMBER 11, 2013	SCALE: 1"=10'



N W E S

0 15 30 60 90 120 Feet

Figure 4 - Discharge Point

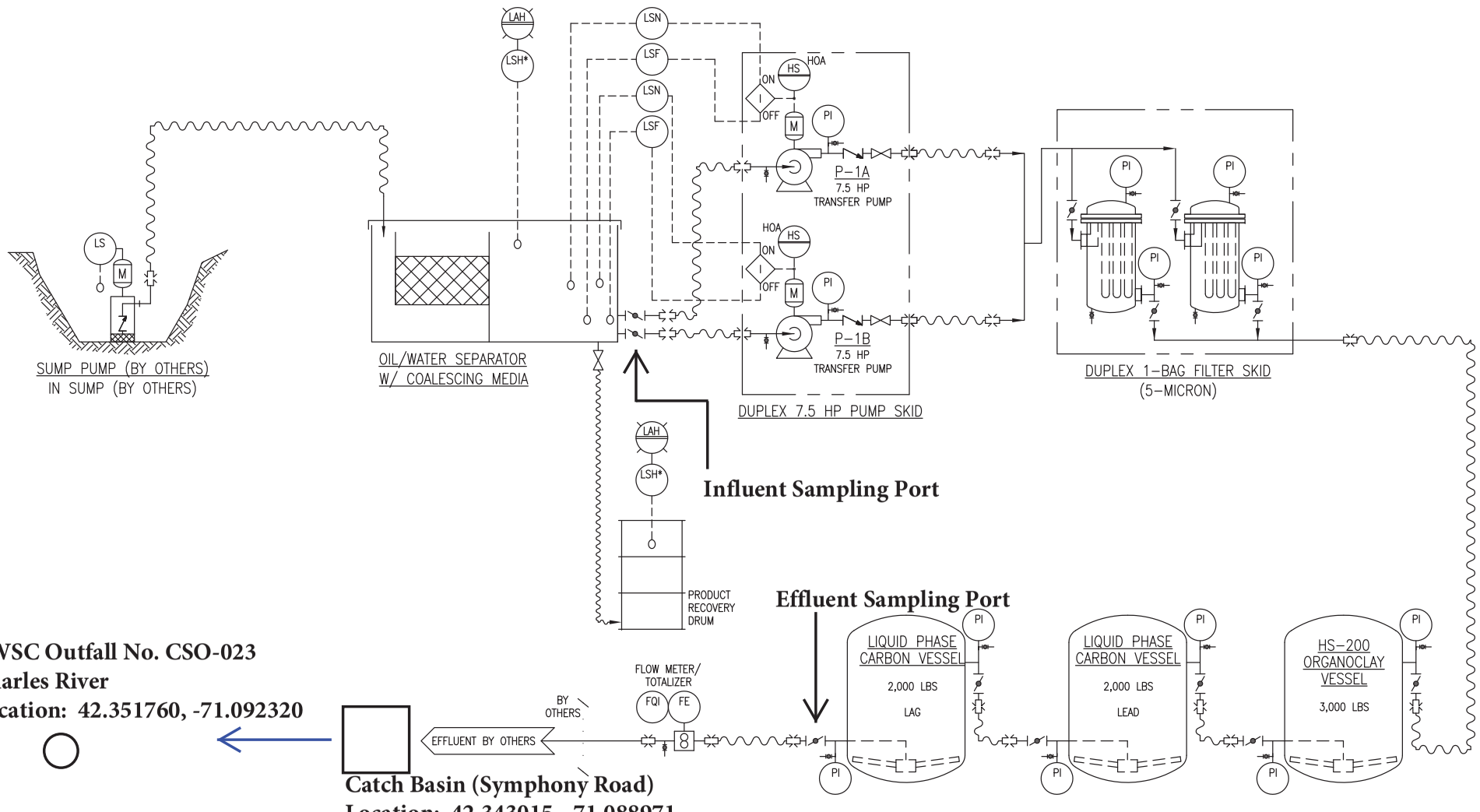


BOSTON WATER AND SEWER

N
W E
S

0 15 30 60 90 120
Feet

Figure 4 - CS0-023 Outfall



NOTES:

1. DESIGN FLOW RATE: 100 GPM
2. SYSTEM FOOTPRINT APPROXIMATELY 10'x30'
3. NOT ALL VALVES, CONNECTIONS, ETC. SHOWN FOR CLARITY
4. GENERATOR BY OTHERS – 480V, 3ϕ, 60 AMPS
5. HIGH LEVEL IN OWS AND HIGH LEVEL IN PRODUCT RECOVERY DRUM WILL HAVE A DRY CONTACT WITHIN THE CP TO BE INTEGRATED WITH THE CONTRACTORS SUMP PUMP. THE HIGH LEVEL ALARMS WILL TRIGGER A STROBE LIGHT AND SIGNAL THE SUMP PUMP TO SHUTDOWN.

ID – C:\Cad Files\QUOTES\Q-7900s\Q-7977 50 Symphony Rd\Working CAD\QT-147977-PID01(C).dwg – Thu, 29 Mar 2018 – 11:20

REV.	DATE	BY	REMARKS
C	03/29/18	RS	CHANGED INFLUENT TANK, ADDED PRODUCT RECOVERY DRUM
B	03/26/18	RS	ADDED SUMP PUMP, ORGANOCLAY VESSEL
A	03/06/18	RS	PRELIMINARY DESIGN FOR REVIEW

CUSTOMER: STERLING CONSTRUCTION

SITE: 50 SYMPHONY ROAD
BOSTON, MA

TITLE: PROCESS AND INSTRUMENTATION DIAGRAM
100 GPM
TEMPORARY TREATMENT SYSTEM

SCALE: NTS

DRAWN BY: RS DATE: 03/06/18

APPROVED BY: TJM DATE: 03/06/18

GWTT Ground/Water Treatment & Technology, LLC
627 MOUNT HOPE ROAD · WHARTON, NJ 07885
PHONE: 973-983-0901 · FAX: 973-983-0903
www.gwttllc.com

DWG SIZE: B | SHEET: 1 OF 1 | DRAWING NO.: QT-147977-LYT01 | C

Table S1. Analytical Results - Petroleum Impacted Soil Layer

50 Symphony Road

Boston, MA 02115

MADEP RTN 3-34506

Sample Identification	MADEP Reportable Concentration RCS-1	Average	Max Value	S1-1	S2-1	S2-2	S5-3	S2-3	S3-1	S3-2	S3-3
Depth				9-12'	9-10'	9-10'	5-7'	8-12'	8-11'	7.5-11'	9-10'
Sample Date	N/A			01/18/18	01/18/18	01/18/18	01/18/18	01/18/18	01/18/18	01/18/18	01/18/18
Units	mg/kg			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EPH/PAH											
C9-C18 Aliphatics	1,000	1,087.1	2,000.0	**1,300.0**	660.0	310.0	<36	**2,000.0**	**1,400.0**	**1,400.0**	540.0
C19-C36 Aliphatics	3,000	1,380.0	4,200.0	300.0	140.0	350.0	<36	310.0	**4,200.0**	**4,200.0**	160.0
C11-C22 Aromatics	1,000	1,097.1	2,200.0	970.0	390.0	380.0	<36	**1,200.0**	**2,200.0**	**2,200.0**	340.0
Naphthalene	4	3.1	4.5	**4.5**	<0.4	<0.5	<0.6	<0.5	0.8	**4.1**	<0.5
2-Methylnaphthalene	0.7	1.8	4.6	**1.9**	0.6	<0.5	<0.6	**2.5**	**0.7**	**4.6**	0.5
Acenaphthylene	1	4.3	13.0	0.8	<0.4	<0.5	<0.6	**2.7**	0.8	**13.0**	<0.5
Acenaphthene	4	2.9	5.9	**5.9**	0.5	<0.5	<0.6	2.9	0.7	**4.7**	<0.5
Fluorene	1,000	2.8	6.4	6.4	1.3	0.7	<0.6	5.1	2.3	<0.5	0.9
Phenanthrene	10	7.4	34.0	**34.0**	0.9	3.8	<0.6	3.8	0.8	1.1	<0.5
Anthracene	1,000	2.1	4.6	4.6	<0.4	0.8	<0.6	1.8	<0.5	1.2	<0.5
Fluoranthene	1,000	8.6	37.0	37.0	0.6	3.5	<0.6	7.4	0.7	2.5	<0.5
Pyrene	1,000	9.5	28.0	28.0	0.5	3.4	<0.6	6.2	<0.5	<0.5	<0.5
Benzo(a)anthracene	7	5.9	17.0	**17.0**	<0.4	1.7	<0.6	3.3	1.5	<0.5	<0.5
Chrysene	70	5.3	19.0	19.0	<0.4	2.3	<0.6	3.8	0.7	0.7	<0.5
Benzo(b)fluoranthene	7	5.5	12.0	**12.0**	<0.4	1.0	<0.6	3.4	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	70	5.1	12.0	12.0	<0.4	1.2	<0.6	2.2	<0.5	<0.5	<0.5
Benzo(a)pyrene	2	4.8	10.0	**10.0**	<0.4	1.5	<0.6	**2.9**	<0.5	<0.5	<0.5
Indeno(1,2,3-cd)pyrene	7	2.8	6.3	6.3	<0.4	0.7	<0.6	1.4	<0.5	<0.5	<0.5
Dibenzo(a,h)anthracene	0.7	1.2	2.4	**2.4**	<0.4	<0.5	0.6	0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	1,000	2.4	5.2	5.2	<0.4	0.7	<0.6	1.2	<0.5	<0.5	<0.5
VPH											
C5-C8 Aliphatics	100	<14	<14	<8.6	<9.2	<10	<14	<9.1	<11	<12	<11
C9-C12 Aliphatics	1,000	108.3	210.0	<8.6	**120.0**	46.0	<14	**210.0**	54.0	**100.0**	**120.0**
C9-C10 Aromatics	100	82.1	150.0	**110.0**	81.0	35.0	<14	**150.0**	41.0	62.0	96.0
Methyl-tert-butylether (MTBE)	0.1	<0.14	<0.14	<0.086	<0.092	<0.10	<0.14	<0.091	<0.11	<0.12	<0.11
Benzene	2	<0.70	<0.70	<0.43	<0.46	<0.52	<0.70	<0.46	<0.56	<0.59	<0.55
Toluene	30	<0.70	<0.70	<0.43	<0.46	<0.52	<0.70	<0.46	<0.56	<0.59	<0.55
Ethylbenzene	40	<0.70	<0.70	<0.43	<0.46	<0.52	<0.70	<0.46	<0.56	<0.59	<0.55
m,p-Xylene	100	<1.4	<1.4	<0.86	<0.92	<1.0	<1.4	<0.91	<1.1	<1.2	<1.1
o-Xylene	100	<0.70	<0.70	<0.43	<0.46	<0.52	<0.70	<0.46	<0.56	<0.59	<0.55
Naphthalene	4	3.7	3.7	3.7	<0.46	<0.52	<0.70	<0.46	<0.56	<0.59	<0.55

Prepared by J.Cournoyer

Values in **bold** exceed the MADEP Reportable Concentration RCS-1

-- Not Analyzed

NS No Standard

NA Not Applicable

ND Non Detect

Additional Non-Detect (ND) analytes may not have been included in this table

1 = The Massachusetts Contingency Plan, 310 CMR 40.1600, Massachusetts OHM List, April 25, 2014

2 = The Massachusetts Contingency Plan, 310 CMR 40.0975(6)(a-c): Tables 2-4, April 25, 2014

Table 1. Groundwater Analytical

50 Symphony Road
Boston, MA 02115
MADEP RTN 3-34506

Sample Location	MW-1	MW-3	MW-1	MW-3	MW-1	MW-3	Max Value	NPDES MAG910000 Discharge Limitations[2]		Average
Sample Date	02/07/18	02/08/18	03/16/18	03/16/18	03/30/18	03/30/18		TBEL	WQBEL	
Groundwater Category	GW-2/GW-3	GW-2/GW-3	GW-2/GW-3	GW-2/GW-3	GW-2/GW-3	GW-2/GW-3				
General Chemistry and Miscellaneous										
Oil & Grease	**10**	**11**	NT	NT	NT	NT	11.0	NS	NS	10.5
Total Petroleum Hydrocarbons (TPH)	NT	NT	NT	NT	<4.00	<4.00	NT	***5.0***	NS	<4.00
pH (Standard Units)	7.0	7.3	6.9	7.4	NT	NT	7.4	***6.5 - 8.3***	***6.5 - 8.3***	7.2
Hardness	NT	NT	854.0	459.0	NT	NT	854.0	NS	NS	656.5
Alkalinity	NT	NT	1,010.0	308.0	NT	NT	1,010.0	NS	NS	659.0
Ammonia	NT	NT	NT	NT	9.74	2.21	9.74	Report Results	NS	6.0
TRC (mg/L [TBEL] and ug/L [WQBEL])	NT	NT	NT	NT	NT	NT	NT	***0.2***	1.230	NT
Chloride (ug/L)	NT	NT	NT	NT	850,000	398,000	850,000.0	Report Results	NS	624,000.0
Total Suspended Solids (TSS)	**730.0**	**310.0**	**1,100.0**	**320.0**	NT	NT	1,100.0	***30***	NS	615.0
Total Dissolved Solids (TDS)	NT	NT	**3,000.0**	**800.0**	NT	NT	3,000.0	***30***	NS	1,900.0
Inorganics (Total Metals)										
Antimony	<0.050	<0.050	<0.004	0.0075	NT	NT	0.0075	***0.2060***	71.5730	0.0075
Arsenic	0.015	0.020	0.0062	0.0094	NT	NT	0.0200	***0.1040***	1.1180	0.0126
Lead	**0.3030**	**0.6150**	**0.5223**	**0.2572**	NT	NT	0.6150	0.1600	***0.15068***	0.4244
Cyanide	NT	NT	NT	NT	<0.005	<0.005	<0.005	***178.0***	0.5815	<0.005
Iron	NT	NT	NT	NT	37.8	25.7	37.8	***5.0000***	71.823	31.7500
Selenium	0.0130	<0.010	<0.005	<0.005	NT	NT	0.0130	***0.2358***	0.5592	0.0130
Thallium	<0.020	<0.020	<0.001	<0.001	NT	NT	<0.001	NS	NS	<0.020
Beryllium	<0.005	<0.005	<0.001	<0.001	NT	NT	<0.001	NS	NS	<0.005
Cadmium	<0.005	<0.005	0.00021	0.00022	NT	NT	0.00022	***0.0102***	0.0273	0.000215
Chromium Total	0.0540	0.0300	0.0207	0.0136	0.06488	0.02270	0.06488	***0.3230***	1.2788	0.0343
Chromium VI	NT	NT	NT	NT	<0.010	<0.010	<0.010	***0.3230***	1.2788	<0.010
Chromium III	NT	NT	NT	NT	0.0650	0.0230	0.0650	***0.3230***	8.6005	0.0440
Copper	0.0470	0.0510	0.0067	0.0238	NT	NT	0.0510	***0.2420***	0.9264	0.0321
Mercury	<0.0002	**0.00106**	<0.0002	<0.0002	NT	NT	0.00106	***0.000739***	0.10131	0.0011
Nickel	0.0290	<0.025	0.0099	0.0079	NT	NT	0.0290	***1.4500***	5.1862	0.0156
Silver	<0.007	<0.007	<0.0004	<0.0004	NT	NT	<0.007	***0.0351***	0.3332	<0.007
Zinc	0.1380	0.3360	0.1166	0.1148	NT	NT	0.3360	***0.4200***	10.3588	0.1764
Inorganics (Dissolved Metals)										
Antimony	NT	NT	<0.004	0.0051	NT	NT	0.0051	***0.2060***	71.5730	0.0051
Arsenic	NT	NT	0.0024	0.0028	NT	NT	0.0028	***0.1040***	1.1180	0.0026
Lead	NT	NT	0.0029	0.0491	NT	NT	0.0491	0.1600	***0.00267***	0.0260
Cyanide	NT	NT	NT	NT	NT	NT	NT	***178.0***	0.5815	NT
Iron	NT	NT	NT	NT	0.0660	<0.050	0.0660	***5.0000***	71.823	0.0660
Selenium	NT	NT	<0.005	<0.005	NT	NT	<0.005	***0.2358***	0.5592	<0.005
Thallium	NT	NT	<0.001	<0.001	NT	NT	<0.001	NS	NS	<0.001
Beryllium	NT	NT	<0.001	<0.001	NT	NT	<0.001	NS	NS	<0.001
Cadmium	NT	NT	<0.0002	<0.0002	NT	NT	<0.0002	***0.0102***	0.0273	<0.0002
Chromium Total	NT	NT	0.0020	0.0020	0.0017	<0.0010	0.0020	***0.3230***	1.2788	0.0019
Chromium VI	NT	NT	NT	NT	NT	NT	NT	***0.3230***	1.2788	NT
Chromium III	NT	NT	NT	NT	NT	NT	NT	***0.3230***	7.4922	NT
Copper	NT	NT	<0.001	0.0074	NT	NT	0.0074	***0.2420***	0.9264	0.0074
Mercury	NT	NT	<0.0002	<0.0002	NT	NT	<0.0002	***0.000739***	0.10131	<0.0002
Nickel	NT	NT	<0.002	0.0022	NT	NT	0.0022	***1.4500***	5.1862	0.0022
Silver	NT	NT	<0.0004	<0.0004	NT	NT	<0.0004	***0.0351***	0.3332	<0.0004
Zinc	NT	NT	<0.010	0.0225	NT	NT	0.0225	***0.4200***	10.3588	0.0225
Volatile Organic Compounds (Non-Halogenated)										
Acetone	0.5600	<0.020	NT	NT	NT	NT	0.5600	***7.970***	NS	0.5600
Benzene	<0.001	**0.0057**	NT	NT	NT	NT	0.0057	***0.0050***	NS	0.0057
Volatile Organic Compounds (Halogenated)										
All Constituents	ND	ND	NT	NT	NT	NT	ND	N/A	N/A	ND
Semi-Volatile Organic Compounds										
Acenaphthene (Group 2)	<0.0020	0.0074	NT	NT	NT	NT	0.0074	NS	NS	0.0074
Fluoranthene (Group 2)	<0.0020	0.0060	NT	NT	NT	NT	0.0060	NS	NS	0.0060
Naphthalene (Group 2)	<0.0020	**0.0650**	NT	NT	NT	NT	0.0650	***0.0200***	NS	0.0650
Benzo(a)anthracene (Group 1)	<0.0020	0.0027	NT	NT	NT	NT	0.0027	0.0010	***0.000425***	0.0027
Benzo(a)pyrene (Group 1)	<0.0020	0.0022	NT	NT	NT	NT	0.0022	0.0010	***0.000425***	0.0022
Benzo(b)fluoranthene (Group 1)	<0.0020	0.0029	NT	NT	NT	NT	0.0029	0.0010	***0.000425***	0.0029
Chrysene (Group 1)	<0.0020	0.0024	NT	NT	NT	NT	0.0024	0.0010	***0.000425***	0.0024
Acenaphthylene (Group 2)	<0.0020	0.0087	NT	NT	NT	NT	0.0087	NS	NS	0.0087
Anthracene (Group 2)	<0.0020	0.0030	NT	NT	NT	NT	0.0030	NS	NS	0.0030
Fluorene (Group 2)	<0.0020	0.0081	NT	NT	NT	NT	0.0081	NS	NS	0.0081
Phenanthrene (Group 2)	<0.0020	0.0110	NT	NT	NT	NT	0.0110	NS	NS	0.0110
Pyrene (Group 2)	<0.0020	0.0053	NT	NT	NT	NT	0.0053	NS	NS	0.0053
Dibenzofuran	<0.0020	0.0068	NT	NT	NT	NT	0.0068	NS	NS	0.0068
2-Methylnaphthalene	<0.0020	0.0100	NT	NT	NT	NT	0.0100	NS	NS	0.0100
2,4-Dimethylphenol	<0.0050	0.0520	NT	NT	NT	NT	0.0520	NS	NS	0.0520
Phenol	<0.0050	0.0200	NT	NT	NT	NT	0.0200	***1.0800***	33.5500	0.0200
2-Methylphenol	<0.0050	0.0380	NT	NT	NT	NT	0.0380	NS	NS	0.0380
3-Methylphenol/4-Methylphenol	<0.0050	0.0790	NT	NT	NT	NT	0.0790	NS	NS	0.0790
Total Group I PAHs	ND	**0.0102**	N/A	N/A	NT	NT	0.0102	***0.0010***	NS	0.0102
Total Group II PAHs	ND	**0.1071**	N/A	N/A	NT	NT	0.1071	***0.1000***	0.1000	0.1071
Extractable Petroleum Hydrocarbons										
All Constituents	ND	ND	NT	NT	NT	NT	ND	N/A	N/A	ND
Polychlorinated Biphenyls (PCBs)										
All Constituens	<0.000250	<0.000250	NT	NT	NT	NT	ND	***0.000000064***	NS	<0.000250
Pesticides										
4,4'-DDT	<0.000040	0.000049	NT	NT	NT	NT	0.000049	NS	NS	0.000049

Prepared by: J.Cournoyer
All results in mg/L unless indicated otherwise
Values in **bold** exceed applicable NPDES Permit No. MAG910000 Discharge Limitations
Values in ***bold*** are the controlling discharge limitations for each parameter
-- = Not Analyzed
NT = Not Tested
NS = No Standard
NA = Not Applicable
Non-detect (ND) analytes have not been included in this table
1 = The Massachusetts Contingency Plan, 310 CMR 40.1600, Massachusetts OHM List April 25, 2014
2 = NPDES Permit No. MAG910000

Table 2. Receiving Waters Analytical

50 Symphony Road
Boston, MA 02115
MADEP RTN 3-34506

Sample Location		**Charles River CSO-023**
Sample Date		03/30/18
Groundwater Category		GW-3
General Chemistry and Miscellaneous		
Oil & Grease		NT
Total Petroleum Hydrocarbons (TPH)		<4.00
pH (Standard Units)		7.2
Temparature (Celsius)		11.0
Hardness		80.1
Alkalinity		27.3
Ammonia		<0.075
TRC		NT
Chloride (ug/L)		186,000.0
Total Suspended Solids (TSS)		<5.0
Total Dissolved Solids (TDS)		410.0
Inorganics (Total Metals)		
Antimony		<0.004
Arsenic		<0.001
Lead		0.00130
Barium		0.059
Cyanide		<0.005
Iron		0.361
Selenium		<0.005
Thallium		<0.001
Beryllium		<0.001
Cadmium		<0.0002
Chromium Total		0.00104
Chromium VI		<0.010
Chromium III		<0.010
Mercury		<0.0002
Nickel		<0.002
Silver		<0.0004
Zinc		0.014
Volatile Organic Compounds (Non-Halogenated)		
Acetone		<0.010
Benzene		<0.001
Volatile Organic Compounds (Halogenated)		
All Constituents		ND
Semi-Volatile Organic Compounds		
Acenaphthene	(Group 2)	<0.00010
Fluoranthene	(Group 2)	<0.00010
Naphthalene	(Group 2)	<0.00010
Benzo(a)anthracene	(Group 1)	<0.00010
Benzo(a)pyrene	(Group 1)	<0.00010
Benzo(b)fluoranthene	(Group 1)	<0.00010
Chrysene	(Group 1)	<0.00010
Acenaphthylene	(Group 2)	<0.00010
Anthracene	(Group 2)	<0.00010
Fluorene	(Group 2)	<0.00010
Phenanthrene	(Group 2)	<0.00010
Pyrene	(Group 2)	<0.00010
Dibenzofuran		<0.0020
2-Methylnaphthalene		<0.0020
2,4-Dimethylphenol		<0.0050
Phenol		<0.0050
2-Methylphenol		<0.0050
3-Methylphenol/4-Methylphenol		<0.0050
Total Group I PAHs		ND
Total Group II PAHs		ND
Polychlorinated Biphenyls (PCBs)		
All Constituents		ND
Pesticides		
All Constituents		ND

Prepared by: J.Cournoyer
All results in mg/L unless indicated otherwise
-- = Not Analyzed
NT = Not Tested
NS = No Standard
NA = Not Applicable
Non-detect (ND) analytes have not been included

APPENDIX A – NOTICE OF INTENT AND BWSC DEWATERING DISCHARGE PERMIT APPLICATION

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
50 Symphony Road</td><td colspan="3">Site address: 50 Symphony Road
Street:</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02115</td></tr>
<tr><td rowspan="4">2. Site owner
50 Symphony LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Charles Aggouras</td></tr>
<tr><td colspan="2">Telephone: (847) 241-8857</td><td>Email: charles@gfcdevelopment.com</td></tr>
<tr><td colspan="3">Mailing address: 1167 Broadway
Street:</td></tr>
<tr><td>City: Somerville</td><td>State: MA</td><td>Zip: 02144</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Sterling Construction</td><td colspan="3">Contact Person: Nathan Pfleegor</td></tr>
<tr><td colspan="2">Telephone: (978) 793-6429</td><td>Email: npfleegor@sterlingconstruct.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 134 Heywood Road</td></tr>
<tr><td>City: Sterling</td><td>State: MA</td><td>Zip: 01564</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ■ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s): 3-34506
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Charles River	MA72-36	B

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. The Charles River is identified as Segment ID MA72-36 and MA72-38 by MassDEP per CWA Section 303(d). Refer to enclosed Appendix B.

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	15.96
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	111.8

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received: Confirmation received from MassDEP via email on April 5, 2018.

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Chloride, Ammonia, TSS, Lead, Mercury, Cadmium, Chromium, Acetone, Benzene, Naphthalene, Zinc, and PAHs	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ■ Yes ☐ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): CSO-023	Outfall location(s): (Latitude, Longitude) 42.351726, -71.092511
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge to municipal (BWSC) storm drain outfall indirectly into the Charles River. ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ■ No, if so, explain, with an estimated timeframe for obtaining permission: Documentation has been submitted to BWSC in tandem with this NOI. Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ■ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): May 2018 - April 2019 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="5">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
■ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
■ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
■ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✓	2	4500B	75	9,740	9,740	Report mg/L	---
Chloride		✓	2	300.0	12,500	850,000	850,000	Report µg/l	---
Total Residual Chlorine	✓		0	N/A	N/A	N/A	N/A	0.2 mg/L	1.230
Total Suspended Solids		✓	4	2540D	20,000	1,100	1,100	30 mg/L	---
Antimony		✓	4	200.8	4	7.5	7.5	206 µg/L	71.5730
Arsenic		✓	4	200.7	5	20	12.6	104 µg/L	1.118
Cadmium		✓	4	200.8	0.20	0.22	0.215	10.2 µg/L	27.30
Chromium III		✓	2	200.8	10	65	44.0	323 µg/L	8,600.5
Chromium VI	✓		2	7196A	10	<DL	<DL	323 µg/L	1278.8
Copper		✓	4	200.7	10	51.0	32.1	242 µg/L	926.4
Iron		✓	2	200.7	50	37,800	31,750	5,000 µg/L	71,823
Lead		✓	4	200.7	10	615	424.4	160 µg/L	150.68
Mercury		✓	4	245.1	0.2	1.06	1.06	0.739 µg/L	101.31
Nickel		✓	4	200.7	25	29	15.6	1,450 µg/L	5,186.2
Selenium		✓	4	200.7	10	13	13	235.8 µg/L	559.2
Silver	✓		4	200.8	0.4	<DL	<DL	35.1 µg/L	333.2
Zinc		✓	4	200.7	10	336.0	176.4	420 µg/L	10,358.8
Cyanide	✓		2	4500CN	5	<DL	<DL	178 mg/L	581.5
B. Non-Halogenated VOCs									
Total BTEX		✓	2	624	2.0	5.7	5.7	100 µg/L	---
Benzene		✓	2	624	1.0	5.7	5.7	5.0 µg/L	---
1,4 Dioxane	✓		2	624	2,000	<DL	<DL	200 µg/L	---
Acetone		✓	2	624	10	0.560	0.560	7.97 mg/L	---
Phenol		✓	2	625	5	20	20	1,080 µg/L	33,550

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✓		2	624	2.0	<DL	<DL	4.4 µg/L	178.9
1,2 Dichlorobenzene	✓		2	624	10	<DL	<DL	600 µg/L	---
1,3 Dichlorobenzene	✓		2	624	10	<DL	<DL	320 µg/L	---
1,4 Dichlorobenzene	✓		2	624	10	<DL	<DL	5.0 µg/L	---
Total dichlorobenzene	✓		2	624	10	<DL	<DL	763 µg/L in NH	---
1,1 Dichloroethane	✓		2	624	3.0	<DL	<DL	70 µg/L	---
1,2 Dichloroethane	✓		2	624	3.0	<DL	<DL	5.0 µg/L	---
1,1 Dichloroethylene	✓		2	624	2.0	<DL	<DL	3.2 µg/L	---
Ethylene Dibromide	✓		0					0.05 µg/L	---
Methylene Chloride	✓		2	624	10	<DL	<DL	4.6 µg/L	---
1,1,1 Trichloroethane	✓		2	624	4.0	<DL	<DL	200 µg/L	---
1,1,2 Trichloroethane	✓		2	624	3.0	<DL	<DL	5.0 µg/L	---
Trichloroethylene	✓		2	624	2.0	<DL	<DL	5.0 µg/L	---
Tetrachloroethylene	✓		2	624	3.0	<DL	<DL	5.0 µg/L	369.1
cis-1,2 Dichloroethylene	✓		2	624	2.0	<DL	<DL	70 µg/L	---
Vinyl Chloride	✓		2	624	2.0	<DL	<DL	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✓		2	625	5	<DL	<DL	190 µg/L	
Diethylhexyl phthalate	✓		0					101 µg/L	246.0
Total Group I PAHs		✓	2	625	2	10.2	10.2	1.0 µg/L	---
Benzo(a)anthracene		✓	2	625	1.9	2.7	2.7	As Total PAHs	0.4250
Benzo(a)pyrene		✓	2	625	1.9	2.2	2.2		0.4250
Benzo(b)fluoranthene		✓	2	625	1.9	2.9	2.9		0.4250
Benzo(k)fluoranthene	✓		2	625	1.9	<DL	<DL		0.4250
Chrysene		✓	2	625	1.9	2.4	2.4		0.4250
Dibenzo(a,h)anthracene	✓		2	625	1.9	<DL	<DL		0.4250
Indeno(1,2,3-cd)pyrene	✓		2	625	1.9	<DL	<DL		0.4250

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs		✓	2	625	1.9	107.1	107.1	100 µg/L	---
Naphthalene		✓	2	625	1.9	65	65	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✓		2	5,608	0.250	<DL	<DL	0.000064 µg/L	---
Pentachlorophenol	✓		2	625	4.8	<DL	<DL	1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✓	4	1664A	4	<DL	<DL	5.0 mg/L	---
Ethanol	✓		0					Report mg/L	---
Methyl-tert-Butyl Ether	✓		2	624	10	<DL	<DL	70 µg/L	2,237
tert-Butyl Alcohol	✓		2	624	100	<DL	<DL	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✓		0	624	20	<DL	<DL	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH		✓	4	4500H+B	N/A	7.4	7.2		
Temperature		✓	1	YSI	N/A	11	11		
Hardness		✓	2	200.7	660	854,000	656,500		
Alkalinity		✓	2	2320B	10,000	1,010,000	659,000		
Oil & Grease		✓	2	1664A	4	10,000	10,500		
4,4'-DDT		✓	2	608	0.040	0.049	0.049		
Dibenzofuran		✓	2	625	2	6.8	6.8		
2-Methylnaphthalene		✓	2	625	2	10	10		
2,4-Dimethylphenol		✓	2	625	5	52	52		
Phenol		✓	2	625	5	20	20		
2-Methylphenol		✓	2	625	5	38	38		
3-Methylphenol/4-Methylphen		✓	2	625	5	79	79		

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
■ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ■ Other; if so, specify:
Organoclay media

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Oil Water Separator (OWS) tank, bag filters, organoclay media, liquid phase activated carbon adsorbers. And (if necessary): Ion exchange resin filter.

Identify each major treatment component (check any that apply):
☐ Fractionation tanks☐ Equalization tank ■ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ■ Other; if so, specify: Organoclay media.

Indicate if either of the following will occur (check any that apply): And (if necessary): Ion Exchange Resin Filter.
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Equalization tank Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	100
Provide the proposed maximum effluent flow in gpm.	100
Provide the average effluent flow in gpm.	50
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive? (check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ☐ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ☐ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

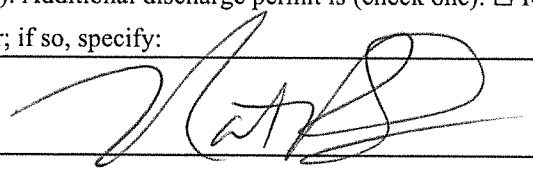
N/A

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement: A BMPP has been prepared in accordance with Section 2.5 of the Remediation General Permit. The BMPP is to be implemented at the start of discharge activities.	
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ■ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ■ No ☐ NA ☐
Signature: 	Date: 04/26/18
Print Name and Title: Nathan Pfleegor, Sterling Construction Principle	

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Sterling Construction Address: 134 Heywood Road

Phone number: (978) 757-9898 Fax number: _____

Contact person name: Nathan Pfleegor Title: Principle

Cell number: (978) 793-6429 Email address: npfleegor@sterlingconstruct.com

Permit Request (check one): ☒ New Application ☐ Permit Extension ☐ Other (Specify): _____

Owner's Information (if different from above):

Owner of property being dewatered: 50 Symphony LLC

Owner's mailing address: 1167 Broadway, Somerville, MA 02144 Phone number: (847) 241-8857

Location of Discharge & Proposed Treatment System(s):

Street number and name: 50 Symphony Road Neighborhood Fenway

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer ☒ Storm Drain ☐ Other (specify): _____

Describe Proposed Pre-Treatment System(s): O/W Separator, bag filters, organoclay media, activated carbon - ION exchange resin filter (if necessary)

BWSC Outfall No. CSO-023 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From May 2018 To April 2019

☐ Groundwater Remediation	☐ Tank Removal/Installation	☒ Foundation Excavation
☐ Utility/Manhole Pumping	☐ Test Pipe	☐ Trench Excavation
☐ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

---

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges. Refer to **Figure 3**. Meter N/A
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information. NOI Application Enclosed
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

Signature of Authorized Representative for Property Owner: _____ Manager Date: 3/8/18

APPENDIX B – NOTICE OF INTENT SUPPORTING DOCUMENTATION

MassDEP - Bureau of Waste Site Cleanup

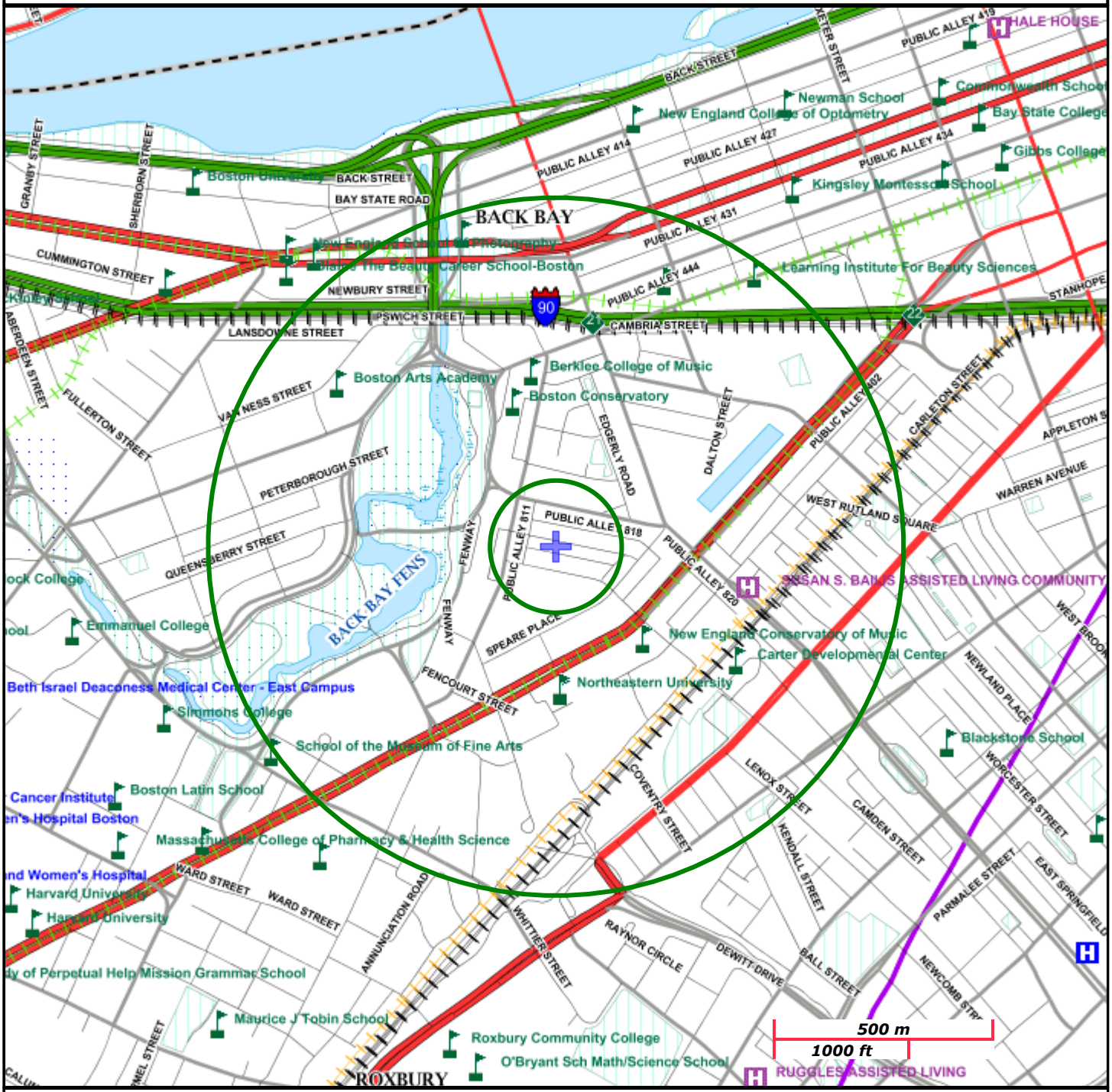
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

50 SYMPHONY ROAD BOSTON, MA
3-000034506
NAD83 UTM Meters:
4689961mN , 327931mE (Zone: 19)
March 22, 2018

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

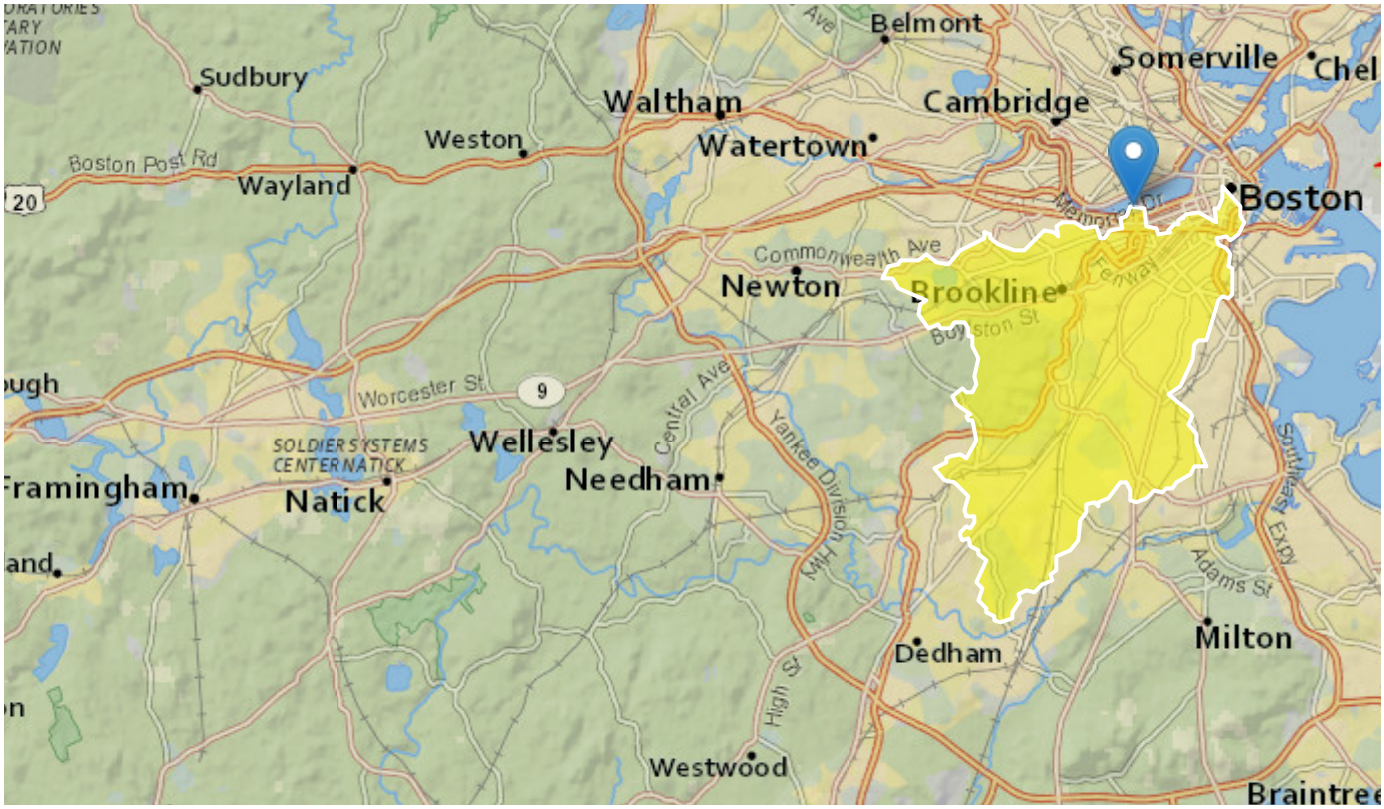
FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

StreamStats Report

Region ID: MA
Workspace ID: MA20180403204654061000
Clicked Point (Latitude, Longitude): 42.35349, -71.09369
Time: 2018-04-03 16:47:15 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	24	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	2.521	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	1.79	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	24	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	2.521	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	1.79	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

Low-Flow Statistics Disclaimers [Statewide Low Flow WRIR00 4135]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report [Statewide Low Flow WRIR00 4135]

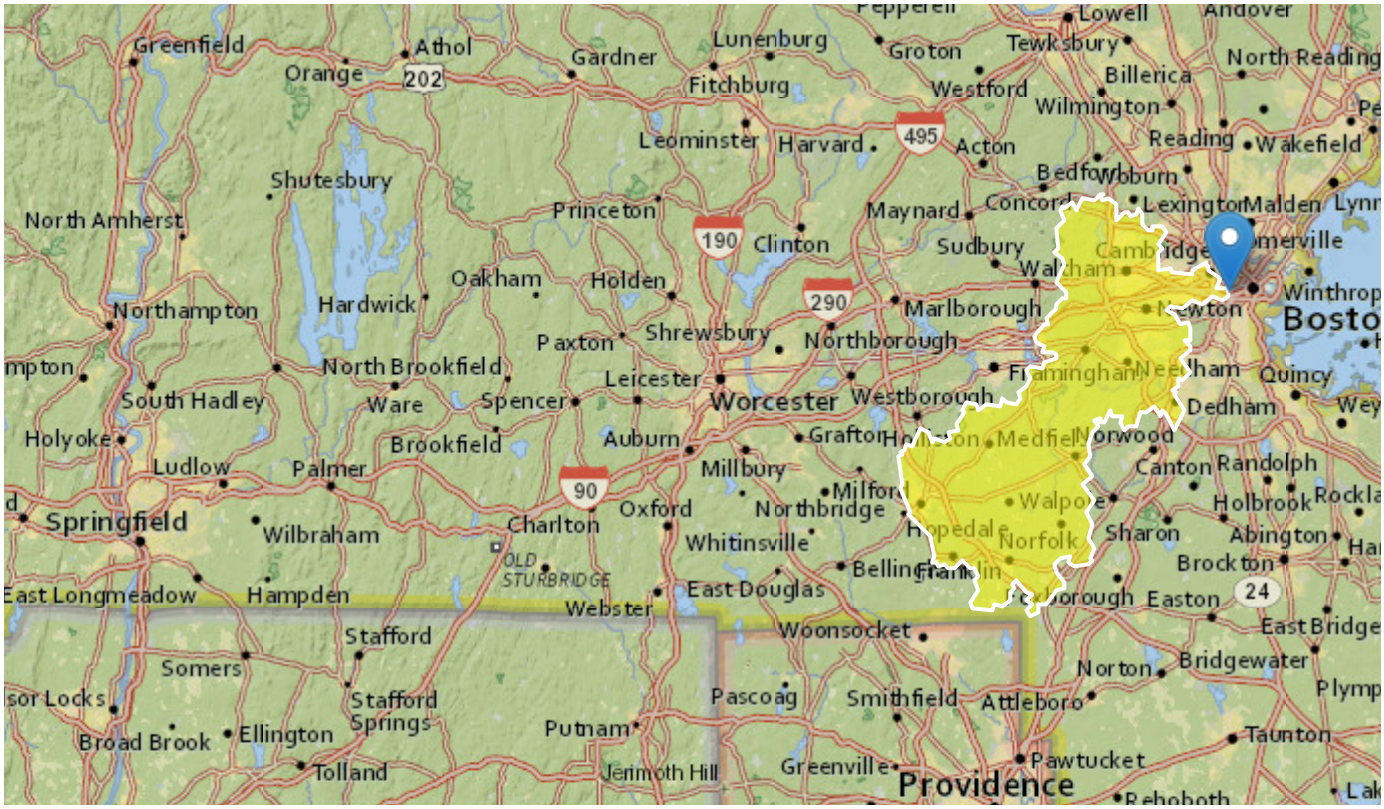
Statistic	Value	Unit
7 Day 2 Year Low Flow	13.9	ft^3/s
7 Day 10 Year Low Flow	11.2	ft^3/s

Low-Flow Statistics Citations

Ries, K.G., III,2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (http://pubs.usgs.gov/wri/wri004135/)

StreamStats Report

Region ID: MA
Workspace ID: MA20180403210244704000
Clicked Point (Latitude, Longitude): 42.35404, -71.09416
Time: 2018-04-03 17:03:04 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	283	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	2.326	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.23	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	283	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	2.326	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.23	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

Low-Flow Statistics Disclaimers [Statewide Low Flow WRIR00 4135]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
7 Day 2 Year Low Flow	49.6	ft^3/s
7 Day 10 Year Low Flow	24.7	ft^3/s

Low-Flow Statistics Citations

Ries, K.G., III,2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (http://pubs.usgs.gov/wri/wri004135/)

Enter number values in green boxes below

Enter values in the units specified

↓

15.96	Q_R = Enter upstream flow in **MGD**
0.144	Q_P = Enter discharge flow in **MGD**
	Downstream 7Q10

Enter a dilution factor, if other than zero

↓

111.8

Enter values in the units specified

↓

854	C_d = Enter influent hardness in **mg/L** $CaCO_3$
80.1	C_s = Enter receiving water hardness in **mg/L** $CaCO_3$

Enter **receiving water** concentrations in the units specified

↓

7.2	pH in **Standard Units**
11	Temperature in **°C**
0	Ammonia in **mg/L**
80.1	Hardness in **mg/L** $CaCO_3$
0	Salinity in **ppt**
0	Antimony in **µg/L**
0	Arsenic in **µg/L**
0	Cadmium in **µg/L**
0	Chromium III in **µg/L**
0	Chromium VI in **µg/L**
0	Copper in **µg/L**
361	Iron in **µg/L**
1.33	Lead in **µg/L**
0	Mercury in **µg/L**
0	Nickel in **µg/L**
0	Selenium in **µg/L**
0	Silver in **µg/L**
14	Zinc in **µg/L**

Enter **influent** concentrations in the units specified

↓

0	TRC in **µg/L**
9.74	Ammonia in **mg/L**
7.5	Antimony in **µg/L**
20	Arsenic in **µg/L**
0.2	Cadmium in **µg/L**
65	Chromium III in **µg/L**
0	Chromium VI in **µg/L**
51	Copper in **µg/L**
37,800	Iron in **µg/L**
615	Lead in **µg/L**
1.06	Mercury in **µg/L**
29	Nickel in **µg/L**
13	Selenium in **µg/L**
0	Silver in **µg/L**
336	Zinc in **µg/L**
0	Cyanide in **µg/L**
20	Phenol in **µg/L**
0	Carbon Tetrachloride in **µg/L**
0	Tetrachloroethylene in **µg/L**
0	Total Phthalates in **µg/L**
0	Diethylhexylphthalate in **µg/L**
2.7	Benzo(a)anthracene in **µg/L**
2.2	Benzo(a)pyrene in **µg/L**
2.9	Benzo(b)fluoranthene in **µg/L**
0	Benzo(k)fluoranthene in **µg/L**
2.4	Chrysene in **µg/L**
0	Dibenzo(a,h)anthracene in **µg/L**
0	Indeno(1,2,3-cd)pyrene in **µg/L**
0	Methyl-tert butyl ether in **µg/L**

Dilution Factor	111.8			
A. Inorganics	TBEL applies if bolded		WQBEL applies if bolded	
Ammonia	**Report**	mg/L	---	
Chloride	**Report**	µg/L	---	
Total Residual Chlorine	**0.2**	mg/L	1230	µg/L
Total Suspended Solids	**30**	mg/L	---	
Antimony	**206**	µg/L	71573	µg/L
Arsenic	**104**	µg/L	1118	µg/L
Cadmium	**10.2**	µg/L	27.3023	µg/L
Chromium III	**323**	µg/L	8600.5	µg/L
Chromium VI	**323**	µg/L	1278.8	µg/L
Copper	**242**	µg/L	926.4	µg/L
Iron	**5000**	µg/L	71823	µg/L
Lead	160	µg/L	**150.68**	µg/L
Mercury	**0.739**	µg/L	101.31	µg/L
Nickel	**1450**	µg/L	5186.2	µg/L
Selenium	**235.8**	µg/L	559.2	µg/L
Silver	**35.1**	µg/L	333.2	µg/L
Zinc	**420**	µg/L	10358.8	µg/L
Cyanide	**178**	mg/L	581.5	µg/L
B. Non-Halogenated VOCs				
Total BTEX	**100**	µg/L	---	
Benzene	**5.0**	µg/L	---	
1,4 Dioxane	**200**	µg/L	---	
Acetone	**7970**	µg/L	---	
Phenol	**1,080**	µg/L	33550	µg/L
C. Halogenated VOCs				
Carbon Tetrachloride	**4.4**	µg/L	178.9	µg/L
1,2 Dichlorobenzene	**600**	µg/L	---	
1,3 Dichlorobenzene	**320**	µg/L	---	
1,4 Dichlorobenzene	**5.0**	µg/L	---	
Total dichlorobenzene	**---**	µg/L	---	
1,1 Dichloroethane	**70**	µg/L	---	
1,2 Dichloroethane	**5.0**	µg/L	---	
1,1 Dichloroethylene	**3.2**	µg/L	---	
Ethylene Dibromide	**0.05**	µg/L	---	
Methylene Chloride	**4.6**	µg/L	---	
1,1,1 Trichloroethane	**200**	µg/L	---	
1,1,2 Trichloroethane	**5.0**	µg/L	---	
Trichloroethylene	**5.0**	µg/L	---	
Tetrachloroethylene	**5.0**	µg/L	369.1	µg/L
cis-1,2 Dichloroethylene	**70**	µg/L	---	

Vinyl Chloride	**2.0**	µg/L	---	
D. Non-Halogenated SVOCs				
Total Phthalates	**190**	µg/L	---	µg/L
Diethylhexyl phthalate	**101**	µg/L	246.0	µg/L
Total Group I Polycyclic Aromatic Hydrocarbons	**1.0**	µg/L	---	
Benzo(a)anthracene	1.0	µg/L	**0.4250**	µg/L
Benzo(a)pyrene	1.0	µg/L	**0.4250**	µg/L
Benzo(b)fluoranthene	1.0	µg/L	**0.4250**	µg/L
Benzo(k)fluoranthene	**1.0**	µg/L	0.4250	µg/L
Chrysene	1.0	µg/L	**0.4250**	µg/L
Dibenzo(a,h)anthracene	**1.0**	µg/L	0.4250	µg/L
Indeno(1,2,3-cd)pyrene	**1.0**	µg/L	0.4250	µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	**100**	µg/L	---	
Naphthalene	**20**	µg/L	---	
E. Halogenated SVOCs				
Total Polychlorinated Biphenyls	**0.000064**	µg/L	---	
Pentachlorophenol	**1.0**	µg/L	---	
F. Fuels Parameters				
Total Petroleum Hydrocarbons	**5.0**	mg/L	---	
Ethanol	**Report**	mg/L	---	
Methyl-tert-Butyl Ether	**70**	µg/L	2237	µg/L
tert-Butyl Alcohol	**120**	µg/L	---	
tert-Amyl Methyl Ether	**90**	µg/L	---	

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2018-SLI-1380
Event Code: 05E1NE00-2018-E-03146
Project Name: 50 Symphony Road

March 23, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-1380

Event Code: 05E1NE00-2018-E-03146

Project Name: 50 Symphony Road

Project Type: DEVELOPMENT

Project Description: Construction project to build a 5-story multi-family residential building with a basement. Groundwater dewatering will be required while excavating soil from the foundation excavation (which is being advanced to a maximum depth of 12 feet below ground surface). The property is currently vacant and surrounded by construction fencing and was most recently used as a vehicle parking lot for several decades. "(CGP)"

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.34288119547322N71.08889643747848W

Counties: Suffolk, MA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Place: Fenway; Street No: 50; Street Name: Symphony Rd; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

APPENDIX C – GROUNDWATER AND RECEIVING WATER ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L1804229
Client:	FSL Associates 358 Chestnut Hill Ave. Brighton, MA 02135
ATTN:	Jarod Cournoyer
Phone:	(617) 232-0001
Project Name:	50 SYMPHONY RD.
Project Number:	50 SYMPHONY RD.
Report Date:	02/14/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1804229-01	MW-1	WATER	50 SYMPHONY RD.	02/07/18 09:00	02/07/18
L1804229-02	MW-3	WATER	50 SYMPHONY RD.	02/08/18 12:30	02/09/18
L1804229-03	MW-1	WATER	50 SYMPHONY RD.	02/08/18 13:00	02/09/18
L1804229-04	TRIP BLANK	WATER	50 SYMPHONY RD.	02/08/18 00:00	02/09/18

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1804229
Project Number:	50 SYMPHONY RD.	**Report Date:**	02/14/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1804229
Project Number:	50 SYMPHONY RD.	**Report Date:**	02/14/18

Case Narrative (continued)

Sample Receipt

L1804229-04: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody. This sample was not analyzed.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

Non MCP Related Narratives

Volatile Organics by Method 624

L1804229-02: The sample has elevated detection limits due to the dilution required by the sample matrix. Sample has particles.

The WG1088358-3 LCS recovery for 2-chloroethylvinyl ether (125%) associated with L1804229-01, is outside Alpha's acceptance criteria, but within the acceptance criteria specified in the method.

The WG1088550-3 LCS recovery for bromomethane (60%), associated with L1804229-02, is outside Alpha's acceptance criteria, but within the acceptance criteria specified in the method.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 02/14/18

ORGANICS

VOLATILES

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,624
Analytical Date: 02/09/18 14:15
Analyst: GT

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	5.0	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01 Date Collected: 02/07/18 09:00

Client ID: MW-1 Date Received: 02/07/18

Sample Location: 50 SYMPHONY RD. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene[1]	ND		ug/l	2.0	--	1
o-xylene[1]	ND		ug/l	1.0	--	1
Xylenes, Total[1]	ND		ug/l	1.0	--	1
Styrene[1]	ND		ug/l	1.0	--	1
Acetone[1]	560		ug/l	10	--	1
Carbon disulfide[1]	ND		ug/l	5.0	--	1
2-Butanone[1]	ND		ug/l	10	--	1
Vinyl acetate[1]	ND		ug/l	10	--	1
4-Methyl-2-pentanone[1]	ND		ug/l	10	--	1
2-Hexanone[1]	ND		ug/l	10	--	1
Acrolein[1]	ND		ug/l	8.0	--	1
Acrylonitrile[1]	ND		ug/l	10	--	1
Dibromomethane[1]	ND		ug/l	1.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	105		80-120
Fluorobenzene	100		80-120
4-Bromofluorobenzene	95		80-120

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02 D
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,624
Analytical Date: 02/10/18 12:19
Analyst: BD

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	10	--	2
1,1-Dichloroethane	ND		ug/l	3.0	--	2
Chloroform	ND		ug/l	3.0	--	2
Carbon tetrachloride	ND		ug/l	2.0	--	2
1,2-Dichloropropane	ND		ug/l	7.0	--	2
Dibromochloromethane	ND		ug/l	2.0	--	2
1,1,2-Trichloroethane	ND		ug/l	3.0	--	2
2-Chloroethylvinyl ether	ND		ug/l	20	--	2
Tetrachloroethene	ND		ug/l	3.0	--	2
Chlorobenzene	ND		ug/l	7.0	--	2
Trichlorofluoromethane	ND		ug/l	10	--	2
1,2-Dichloroethane	ND		ug/l	3.0	--	2
1,1,1-Trichloroethane	ND		ug/l	4.0	--	2
Bromodichloromethane	ND		ug/l	2.0	--	2
trans-1,3-Dichloropropene	ND		ug/l	3.0	--	2
cis-1,3-Dichloropropene	ND		ug/l	3.0	--	2
Bromoform	ND		ug/l	2.0	--	2
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	--	2
Benzene	5.7		ug/l	2.0	--	2
Toluene	ND		ug/l	2.0	--	2
Ethylbenzene	ND		ug/l	2.0	--	2
Chloromethane	ND		ug/l	10	--	2
Bromomethane	ND		ug/l	10	--	2
Vinyl chloride	ND		ug/l	2.0	--	2
Chloroethane	ND		ug/l	4.0	--	2
1,1-Dichloroethene	ND		ug/l	2.0	--	2
trans-1,2-Dichloroethene	ND		ug/l	3.0	--	2
cis-1,2-Dichloroethene[1]	ND		ug/l	2.0	--	2
Trichloroethene	ND		ug/l	2.0	--	2

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02 D
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	10	--	2
1,3-Dichlorobenzene	ND		ug/l	10	--	2
1,4-Dichlorobenzene	ND		ug/l	10	--	2
p/m-Xylene[1]	ND		ug/l	4.0	--	2
o-xylene[1]	ND		ug/l	2.0	--	2
Xylenes, Total[1]	ND		ug/l	2.0	--	2
Styrene[1]	ND		ug/l	2.0	--	2
Acetone[1]	ND		ug/l	20	--	2
Carbon disulfide[1]	ND		ug/l	10	--	2
2-Butanone[1]	ND		ug/l	20	--	2
Vinyl acetate[1]	ND		ug/l	20	--	2
4-Methyl-2-pentanone[1]	ND		ug/l	20	--	2
2-Hexanone[1]	ND		ug/l	20	--	2
Acrolein[1]	ND		ug/l	16	--	2
Acrylonitrile[1]	ND		ug/l	20	--	2
Dibromomethane[1]	ND		ug/l	2.0	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		80-120
Fluorobenzene	101		80-120
4-Bromofluorobenzene	94		80-120

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 02/09/18 12:02
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1088358-4					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	5.0	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 02/09/18 12:02
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1088358-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene[1]	ND		ug/l	2.0	--
o-xylene[1]	ND		ug/l	1.0	--
Xylenes, Total[1]	ND		ug/l	1.0	--
Styrene[1]	ND		ug/l	1.0	--
Acetone[1]	ND		ug/l	10	--
Carbon disulfide[1]	ND		ug/l	5.0	--
2-Butanone[1]	ND		ug/l	10	--
Vinyl acetate[1]	ND		ug/l	10	--
4-Methyl-2-pentanone[1]	ND		ug/l	10	--
2-Hexanone[1]	ND		ug/l	10	--
Acrolein[1]	ND		ug/l	8.0	--
Acrylonitrile[1]	ND		ug/l	10	--
Methyl tert butyl ether[1]	ND		ug/l	10	--
Dibromomethane[1]	ND		ug/l	1.0	--
1,4-Dioxane[1]	ND		ug/l	2000	--
Tert-Butyl Alcohol[1]	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether[1]	ND		ug/l	20	--
Dichlorodifluoromethane[1]	ND		ug/l	1.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	105		80-120
Fluorobenzene	100		80-120
4-Bromofluorobenzene	94		80-120

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 02/10/18 10:06
Analyst: BD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1088550-4					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	5.0	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 02/10/18 10:06
Analyst: BD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1088550-4					
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene[1]	ND		ug/l	2.0	--
o-xylene[1]	ND		ug/l	1.0	--
Xylenes, Total[1]	ND		ug/l	1.0	--
Styrene[1]	ND		ug/l	1.0	--
Acetone[1]	ND		ug/l	10	--
Carbon disulfide[1]	ND		ug/l	5.0	--
2-Butanone[1]	ND		ug/l	10	--
Vinyl acetate[1]	ND		ug/l	10	--
4-Methyl-2-pentanone[1]	ND		ug/l	10	--
2-Hexanone[1]	ND		ug/l	10	--
Acrolein[1]	ND		ug/l	8.0	--
Acrylonitrile[1]	ND		ug/l	10	--
Methyl tert butyl ether[1]	ND		ug/l	10	--
Dibromomethane[1]	ND		ug/l	1.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		80-120
Fluorobenzene	101		80-120
4-Bromofluorobenzene	94		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1088358-3								
Methylene chloride	100		-		70-111	-		30
1,1-Dichloroethane	105		-		78-116	-		30
Chloroform	100		-		86-111	-		30
Carbon tetrachloride	80		-		60-112	-		30
1,2-Dichloropropane	100		-		83-113	-		30
Dibromochloromethane	85		-		58-129	-		30
1,1,2-Trichloroethane	95		-		80-118	-		30
2-Chloroethylvinyl ether	**125**	Q	-		69-124	-		30
Tetrachloroethene	105		-		80-126	-		30
Chlorobenzene	95		-		80-126	-		30
Trichlorofluoromethane	100		-		83-128	-		30
1,2-Dichloroethane	100		-		82-110	-		30
1,1,1-Trichloroethane	90		-		72-109	-		30
Bromodichloromethane	95		-		71-120	-		30
trans-1,3-Dichloropropene	85		-		73-106	-		30
cis-1,3-Dichloropropene	95		-		78-111	-		30
Bromoform	75		-		45-131	-		30
1,1,2,2-Tetrachloroethane	90		-		81-122	-		30
Benzene	100		-		84-116	-		30
Toluene	105		-		83-121	-		30
Ethylbenzene	95		-		84-123	-		30
Chloromethane	110		-		70-144	-		30
Bromomethane	85		-		63-141	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1088358-3								
Vinyl chloride	105		-		56-118	-		30
Chloroethane	110		-		74-130	-		30
1,1-Dichloroethene	100		-		77-116	-		30
trans-1,2-Dichloroethene	100		-		81-121	-		30
cis-1,2-Dichloroethene[1]	100		-		85-110	-		30
Trichloroethene	100		-		84-118	-		30
1,2-Dichlorobenzene	90		-		78-128	-		30
1,3-Dichlorobenzene	95		-		77-125	-		30
1,4-Dichlorobenzene	95		-		77-125	-		30
p/m-Xylene[1]	98		-		81-121	-		30
o-xylene[1]	95		-		81-124	-		30
Styrene[1]	95		-		84-133	-		30
Acetone[1]	90		-		40-160	-		30
Carbon disulfide[1]	95		-		54-134	-		30
2-Butanone[1]	90		-		57-116	-		30
Vinyl acetate[1]	78		-		40-160	-		30
4-Methyl-2-pentanone[1]	94		-		79-125	-		30
2-Hexanone[1]	96		-		78-120	-		30
Acrolein[1]	70		-		40-160	-		30
Acrylonitrile[1]	92		-		66-123	-		30
Methyl tert butyl ether[1]	90		-		57-126	-		30
Dibromomethane[1]	90		-		65-126	-		30
1,4-Dioxane[1]	95		-		74-121	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1088358-3								
Tert-Butyl Alcohol[1]	60		-		52-114	-		30
Tertiary-Amyl Methyl Ether[1]	90		-		66-111	-		30
Dichlorodifluoromethane[1]	105		-		70-130	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	106				80-120
Fluorobenzene	99				80-120
4-Bromofluorobenzene	95				80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088550-3								
Methylene chloride	100		-		70-111	-		30
1,1-Dichloroethane	100		-		78-116	-		30
Chloroform	100		-		86-111	-		30
Carbon tetrachloride	85		-		60-112	-		30
1,2-Dichloropropane	105		-		83-113	-		30
Dibromochloromethane	90		-		58-129	-		30
1,1,2-Trichloroethane	100		-		80-118	-		30
2-Chloroethylvinyl ether	120		-		69-124	-		30
Tetrachloroethene	100		-		80-126	-		30
Chlorobenzene	95		-		80-126	-		30
Trichlorofluoromethane	95		-		83-128	-		30
1,2-Dichloroethane	100		-		82-110	-		30
1,1,1-Trichloroethane	90		-		72-109	-		30
Bromodichloromethane	95		-		71-120	-		30
trans-1,3-Dichloropropene	90		-		73-106	-		30
cis-1,3-Dichloropropene	95		-		78-111	-		30
Bromoform	80		-		45-131	-		30
1,1,2,2-Tetrachloroethane	90		-		81-122	-		30
Benzene	100		-		84-116	-		30
Toluene	100		-		83-121	-		30
Ethylbenzene	95		-		84-123	-		30
Chloromethane	100		-		70-144	-		30
Bromomethane	**60**	Q	-		63-141	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088550-3								
Vinyl chloride	95		-		56-118	-		30
Chloroethane	105		-		74-130	-		30
1,1-Dichloroethene	95		-		77-116	-		30
trans-1,2-Dichloroethene	95		-		81-121	-		30
cis-1,2-Dichloroethene[1]	95		-		85-110	-		30
Trichloroethene	95		-		84-118	-		30
1,2-Dichlorobenzene	90		-		78-128	-		30
1,3-Dichlorobenzene	90		-		77-125	-		30
1,4-Dichlorobenzene	90		-		77-125	-		30
p/m-Xylene[1]	95		-		81-121	-		30
o-xylene[1]	95		-		81-124	-		30
Styrene[1]	90		-		84-133	-		30
Acetone[1]	92		-		40-160	-		30
Carbon disulfide[1]	90		-		54-134	-		30
2-Butanone[1]	92		-		57-116	-		30
Vinyl acetate[1]	80		-		40-160	-		30
4-Methyl-2-pentanone[1]	94		-		79-125	-		30
2-Hexanone[1]	96		-		78-120	-		30
Acrolein[1]	75		-		40-160	-		30
Acrylonitrile[1]	95		-		66-123	-		30
Methyl tert butyl ether[1]	90		-		57-126	-		30
Dibromomethane[1]	90		-		65-126	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088550-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	106				80-120
Fluorobenzene	99				80-120
4-Bromofluorobenzene	95				80-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-6 QC Sample: L1804508-02 Client ID: MS Sample												
Methylene chloride	ND	200	200	100		-	-		70-111	-		30
1,1-Dichloroethane	ND	200	210	105		-	-		78-116	-		30
Chloroform	ND	200	200	100		-	-		86-111	-		30
Carbon tetrachloride	ND	200	170	85		-	-		60-112	-		30
1,2-Dichloropropane	ND	200	200	100		-	-		83-113	-		30
Dibromochloromethane	ND	200	170	85		-	-		58-129	-		30
1,1,2-Trichloroethane	ND	200	190	95		-	-		80-118	-		30
2-Chloroethylvinyl ether	ND	200	230	115		-	-		69-124	-		30
Tetrachloroethene	ND	200	200	100		-	-		80-126	-		30
Chlorobenzene	ND	200	190	95		-	-		80-126	-		30
Trichlorofluoromethane	ND	200	200	100		-	-		83-128	-		30
1,2-Dichloroethane	ND	200	200	100		-	-		82-110	-		30
1,1,1-Trichloroethane	ND	200	180	90		-	-		72-109	-		30
Bromodichloromethane	ND	200	180	90		-	-		71-120	-		30
trans-1,3-Dichloropropene	ND	200	160	80		-	-		73-106	-		30
cis-1,3-Dichloropropene	ND	200	150	**75**	Q	-	-		78-111	-		30
Bromoform	ND	200	140	70		-	-		45-131	-		30
1,1,2,2-Tetrachloroethane	ND	200	180	90		-	-		81-122	-		30
Benzene	ND	200	200	100		-	-		84-116	-		30
Toluene	ND	200	200	100		-	-		83-121	-		30
Ethylbenzene	ND	200	190	95		-	-		84-123	-		30
Chloromethane	ND	200	210	105		-	-		70-144	-		30
Bromomethane	ND	200	74	**37**	Q	-	-		63-141	-		30
Vinyl chloride	ND	200	210	105		-	-		56-118	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-6 QC Sample: L1804508-02 Client ID: MS Sample												
Chloroethane	ND	200	220	110		-	-		74-130	-		30
1,1-Dichloroethene	ND	200	200	100		-	-		77-116	-		30
trans-1,2-Dichloroethene	ND	200	200	100		-	-		81-121	-		30
cis-1,2-Dichloroethene[1]	ND	200	200	100		-	-		85-110	-		30
Trichloroethene	ND	200	190	95		-	-		84-118	-		30
1,2-Dichlorobenzene	ND	200	170	85		-	-		78-128	-		30
1,3-Dichlorobenzene	ND	200	180	90		-	-		77-125	-		30
1,4-Dichlorobenzene	ND	200	180	90		-	-		77-125	-		30
p/m-Xylene[1]	ND	400	390	98		-	-		81-121	-		30
o-Xylene[1]	ND	200	190	95		-	-		81-124	-		30
Styrene[1]	ND	200	180	90		-	-		84-133	-		30
Acetone[1]	ND	500	470	94		-	-		40-160	-		30
Carbon disulfide[1]	ND	200	180	90		-	-		54-134	-		30
2-Butanone[1]	ND	500	480	96		-	-		57-116	-		30
Vinyl acetate[1]	ND	400	330	82		-	-		40-160	-		30
4-Methyl-2-pentanone[1]	ND	500	470	94		-	-		79-125	-		30
2-Hexanone[1]	ND	500	490	98		-	-		78-120	-		30
Acrolein[1]	ND	400	290	72		-	-		40-160	-		30
Acrylonitrile[1]	ND	400	390	98		-	-		66-123	-		30
Dibromomethane[1]	ND	200	180	90		-	-		65-126	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-6 QC Sample: L1804508-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	94				80-120
Fluorobenzene	100				80-120
Pentafluorobenzene	106				80-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-6 QC Sample: L1804312-02 Client ID: MS Sample												
Methylene chloride	ND	200	210	105		-	-		70-111	-		30
1,1-Dichloroethane	ND	200	230	115		-	-		78-116	-		30
Chloroform	ND	200	220	110		-	-		86-111	-		30
Carbon tetrachloride	ND	200	200	100		-	-		60-112	-		30
1,2-Dichloropropane	ND	200	230	**115**	Q	-	-		83-113	-		30
Dibromochloromethane	ND	200	190	95		-	-		58-129	-		30
1,1,2-Trichloroethane	ND	200	200	100		-	-		80-118	-		30
2-Chloroethylvinyl ether	ND	200	250	**125**	Q	-	-		69-124	-		30
Tetrachloroethene	ND	200	230	115		-	-		80-126	-		30
Chlorobenzene	ND	200	200	100		-	-		80-126	-		30
Trichlorofluoromethane	ND	200	220	110		-	-		83-128	-		30
1,2-Dichloroethane	ND	200	210	105		-	-		82-110	-		30
1,1,1-Trichloroethane	ND	200	210	105		-	-		72-109	-		30
Bromodichloromethane	ND	200	210	105		-	-		71-120	-		30
trans-1,3-Dichloropropene	ND	200	190	95		-	-		73-106	-		30
cis-1,3-Dichloropropene	ND	200	200	100		-	-		78-111	-		30
Bromoform	ND	200	140	70		-	-		45-131	-		30
1,1,2,2-Tetrachloroethane	ND	200	180	90		-	-		81-122	-		30
Benzene	ND	200	220	110		-	-		84-116	-		30
Toluene	ND	200	230	115		-	-		83-121	-		30
Ethylbenzene	ND	200	200	100		-	-		84-123	-		30
Chloromethane	ND	200	230	115		-	-		70-144	-		30
Bromomethane	ND	200	100	**50**	Q	-	-		63-141	-		30
Vinyl chloride	ND	200	230	115		-	-		56-118	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-6 QC Sample: L1804312-02 Client ID: MS Sample												
Chloroethane	ND	200	240	120		-	-		74-130	-		30
1,1-Dichloroethene	ND	200	220	110		-	-		77-116	-		30
trans-1,2-Dichloroethene	ND	200	220	110		-	-		81-121	-		30
cis-1,2-Dichloroethene[1]	ND	200	210	105		-	-		85-110	-		30
Trichloroethene	ND	200	210	105		-	-		84-118	-		30
1,2-Dichlorobenzene	ND	200	180	90		-	-		78-128	-		30
1,3-Dichlorobenzene	ND	200	180	90		-	-		77-125	-		30
1,4-Dichlorobenzene	ND	200	180	90		-	-		77-125	-		30
p/m-Xylene[1]	ND	400	400	100		-	-		81-121	-		30
o-Xylene[1]	ND	200	190	95		-	-		81-124	-		30
Styrene[1]	ND	200	190	95		-	-		84-133	-		30
Acetone[1]	3000	500	3700	140		-	-		40-160	-		30
Carbon disulfide[1]	ND	200	200	100		-	-		54-134	-		30
2-Butanone[1]	ND	500	500	100		-	-		57-116	-		30
Vinyl acetate[1]	ND	400	370	92		-	-		40-160	-		30
4-Methyl-2-pentanone[1]	ND	500	490	98		-	-		79-125	-		30
2-Hexanone[1]	ND	500	510	102		-	-		78-120	-		30
Acrolein[1]	ND	400	190	48		-	-		40-160	-		30
Acrylonitrile[1]	ND	400	390	98		-	-		66-123	-		30
Dibromomethane[1]	ND	200	190	95		-	-		65-126	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-6 QC Sample: L1804312-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	92				80-120
Fluorobenzene	101				80-120
Pentafluorobenzene	105				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-5 QC Sample: L1804508-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30
Toluene	ND	ND	ug/l	NC		30
Ethylbenzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-5 QC Sample: L1804508-02 Client ID: DUP Sample						
Chloromethane	ND	ND	ug/l	NC		30
Bromomethane	ND	ND	ug/l	NC		30
Vinyl chloride	ND	ND	ug/l	NC		30
Chloroethane	ND	ND	ug/l	NC		30
1,1-Dichloroethene	ND	ND	ug/l	NC		30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC		30
cis-1,2-Dichloroethene[1]	ND	ND	ug/l	NC		30
Trichloroethene	ND	ND	ug/l	NC		30
1,2-Dichlorobenzene	ND	ND	ug/l	NC		30
1,3-Dichlorobenzene	ND	ND	ug/l	NC		30
1,4-Dichlorobenzene	ND	ND	ug/l	NC		30
p/m-Xylene[1]	ND	ND	ug/l	NC		30
o-Xylene[1]	ND	ND	ug/l	NC		30
Xylene (Total)[1]	ND	ND	ug/l	NC		30
Styrene[1]	ND	ND	ug/l	NC		30
Acetone[1]	ND	ND	ug/l	NC		30
Carbon disulfide[1]	ND	ND	ug/l	NC		30
2-Butanone[1]	ND	ND	ug/l	NC		30
Vinyl acetate[1]	ND	ND	ug/l	NC		30
4-Methyl-2-pentanone[1]	ND	ND	ug/l	NC		30
2-Hexanone[1]	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1088358-5 QC Sample: L1804508-02 Client ID: DUP Sample						
Acrolein[1]	ND	ND	ug/l	NC		30
Acrylonitrile[1]	ND	ND	ug/l	NC		30
Dibromomethane[1]	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	107		107		80-120
Fluorobenzene	101		101		80-120
4-Bromofluorobenzene	95		94		80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-5 QC Sample: L1804312-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30
Toluene	ND	ND	ug/l	NC		30
Ethylbenzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-5 QC Sample: L1804312-02 Client ID: DUP Sample						
Chloromethane	ND	ND	ug/l	NC		30
Bromomethane	ND	ND	ug/l	NC		30
Vinyl chloride	ND	ND	ug/l	NC		30
Chloroethane	ND	ND	ug/l	NC		30
1,1-Dichloroethene	ND	ND	ug/l	NC		30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC		30
cis-1,2-Dichloroethene[1]	ND	ND	ug/l	NC		30
Trichloroethene	ND	ND	ug/l	NC		30
1,2-Dichlorobenzene	ND	ND	ug/l	NC		30
1,3-Dichlorobenzene	ND	ND	ug/l	NC		30
1,4-Dichlorobenzene	ND	ND	ug/l	NC		30
p/m-Xylene[1]	ND	ND	ug/l	NC		30
o-Xylene[1]	ND	ND	ug/l	NC		30
Xylene (Total)[1]	ND	ND	ug/l	NC		30
Styrene[1]	ND	ND	ug/l	NC		30
Acetone[1]	3000	3000	ug/l	0		30
Carbon disulfide[1]	ND	ND	ug/l	NC		30
2-Butanone[1]	ND	ND	ug/l	NC		30
Vinyl acetate[1]	ND	ND	ug/l	NC		30
4-Methyl-2-pentanone[1]	ND	ND	ug/l	NC		30
2-Hexanone[1]	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088550-5 QC Sample: L1804312-02 Client ID: DUP Sample						
Acrolein[1]	ND	ND	ug/l	NC		30
Acrylonitrile[1]	ND	ND	ug/l	NC		30
Dibromomethane[1]	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	104		105		80-120
Fluorobenzene	99		100		80-120
4-Bromofluorobenzene	93		93		80-120

SEMIVOLATILES

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,625
Analytical Date: 02/11/18 04:11
Analyst: SZ

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Extraction Method: EPA 625
Extraction Date: 02/08/18 16:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
Benzidine[1]	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene[1]	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether[1]	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA[1]	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01 Date Collected: 02/07/18 09:00

Client ID: MW-1 Date Received: 02/07/18

Sample Location: 50 SYMPHONY RD. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
4-Chloroaniline[1]	ND		ug/l	5.0	--	1
Dibenzofuran[1]	ND		ug/l	2.0	--	1
2-Methylnaphthalene[1]	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	5.0	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol[1]	ND		ug/l	10	--	1
Pentachlorophenol	ND		ug/l	5.0	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol[1]	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--	1
Benzoic Acid[1]	ND		ug/l	50	--	1
Benzyl Alcohol[1]	ND		ug/l	2.0	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01 Date Collected: 02/07/18 09:00

Client ID: MW-1 Date Received: 02/07/18

Sample Location: 50 SYMPHONY RD. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	103		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	107		33-120

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,625
Analytical Date: 02/11/18 07:52
Analyst: SZ

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 625
Extraction Date: 02/10/18 02:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	7.4		ug/l	1.9	--	1
Benzidine[1]	ND		ug/l	19	--	1
1,2,4-Trichlorobenzene	ND		ug/l	4.8	--	1
Hexachlorobenzene	ND		ug/l	1.9	--	1
Bis(2-chloroethyl)ether	ND		ug/l	1.9	--	1
2-Chloronaphthalene	ND		ug/l	1.9	--	1
3,3'-Dichlorobenzidine	ND		ug/l	4.8	--	1
2,4-Dinitrotoluene	ND		ug/l	4.8	--	1
2,6-Dinitrotoluene	ND		ug/l	4.8	--	1
Azobenzene[1]	ND		ug/l	1.9	--	1
Fluoranthene	6.0		ug/l	1.9	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	1.9	--	1
4-Bromophenyl phenyl ether[1]	ND		ug/l	1.9	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	1.9	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.8	--	1
Hexachlorobutadiene	ND		ug/l	1.9	--	1
Hexachlorocyclopentadiene[1]	ND		ug/l	9.7	--	1
Hexachloroethane	ND		ug/l	1.9	--	1
Isophorone	ND		ug/l	4.8	--	1
Naphthalene	65		ug/l	1.9	--	1
Nitrobenzene	ND		ug/l	1.9	--	1
NDPA/DPA[1]	ND		ug/l	1.9	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	4.8	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.9	--	1
Butyl benzyl phthalate	ND		ug/l	4.8	--	1
Di-n-butylphthalate	ND		ug/l	4.8	--	1
Di-n-octylphthalate	ND		ug/l	4.8	--	1
Diethyl phthalate	ND		ug/l	4.8	--	1
Dimethyl phthalate	ND		ug/l	4.8	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02 Date Collected: 02/08/18 12:30

Client ID: MW-3 Date Received: 02/09/18

Sample Location: 50 SYMPHONY RD. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	2.7		ug/l	1.9	--	1
Benzo(a)pyrene	2.2		ug/l	1.9	--	1
Benzo(b)fluoranthene	2.9		ug/l	1.9	--	1
Benzo(k)fluoranthene	ND		ug/l	1.9	--	1
Chrysene	2.4		ug/l	1.9	--	1
Acenaphthylene	8.7		ug/l	1.9	--	1
Anthracene	3.0		ug/l	1.9	--	1
Benzo(ghi)perylene	ND		ug/l	1.9	--	1
Fluorene	8.1		ug/l	1.9	--	1
Phenanthrene	11		ug/l	1.9	--	1
Dibenzo(a,h)anthracene	ND		ug/l	1.9	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	1.9	--	1
Pyrene	5.3		ug/l	1.9	--	1
4-Chloroaniline[1]	ND		ug/l	4.8	--	1
Dibenzofuran[1]	6.8		ug/l	1.9	--	1
2-Methylnaphthalene[1]	10		ug/l	1.9	--	1
n-Nitrosodimethylamine[1]	ND		ug/l	1.9	--	1
2,4,6-Trichlorophenol	ND		ug/l	4.8	--	1
p-Chloro-m-cresol[1]	ND		ug/l	1.9	--	1
2-Chlorophenol	ND		ug/l	1.9	--	1
2,4-Dichlorophenol	ND		ug/l	4.8	--	1
2,4-Dimethylphenol	52		ug/l	4.8	--	1
2-Nitrophenol	ND		ug/l	4.8	--	1
4-Nitrophenol	ND		ug/l	9.7	--	1
2,4-Dinitrophenol	ND		ug/l	19	--	1
4,6-Dinitro-o-cresol[1]	ND		ug/l	9.7	--	1
Pentachlorophenol	ND		ug/l	4.8	--	1
Phenol	20		ug/l	4.8	--	1
2-Methylphenol[1]	38		ug/l	4.8	--	1
3-Methylphenol/4-Methylphenol[1]	79		ug/l	4.8	--	1
2,4,5-Trichlorophenol[1]	ND		ug/l	4.8	--	1
Benzoic Acid[1]	ND		ug/l	48	--	1
Benzyl Alcohol[1]	ND		ug/l	1.9	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02 Date Collected: 02/08/18 12:30

Client ID: MW-3 Date Received: 02/09/18

Sample Location: 50 SYMPHONY RD. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	97		33-120

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/09/18 21:31
Analyst: EK

Extraction Method: EPA 625
Extraction Date: 02/08/18 16:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1087709-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine[1]	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene[1]	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether[1]	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA[1]	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/09/18 21:31
Analyst: EK

Extraction Method: EPA 625
Extraction Date: 02/08/18 16:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1087709-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
4-Chloroaniline[1]	ND		ug/l	5.0	--
Dibenzofuran[1]	ND		ug/l	2.0	--
2-Methylnaphthalene[1]	ND		ug/l	2.0	--
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	5.0	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol[1]	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	5.0	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol[1]	ND		ug/l	5.0	--

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/09/18 21:31
Analyst: EK

Extraction Method: EPA 625
Extraction Date: 02/08/18 16:20

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1087709-1					
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--
Benzoic Acid[1]	ND		ug/l	50	--
Benzyl Alcohol[1]	ND		ug/l	2.0	--
Tentatively Identified Compounds					
Aldol Condensates	9.40	J	ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	103		33-120

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/10/18 23:35
Analyst: KR

Extraction Method: EPA 625
Extraction Date: 02/09/18 20:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1088108-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine[1]	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene[1]	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether[1]	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA[1]	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/10/18 23:35
Analyst: KR

Extraction Method: EPA 625
Extraction Date: 02/09/18 20:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1088108-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
4-Chloroaniline[1]	ND		ug/l	5.0	--
Dibenzofuran[1]	ND		ug/l	2.0	--
2-Methylnaphthalene[1]	ND		ug/l	2.0	--
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	5.0	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol[1]	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	5.0	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol[1]	ND		ug/l	5.0	--

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,625
Analytical Date: 02/10/18 23:35
Analyst: KR

Extraction Method: EPA 625
Extraction Date: 02/09/18 20:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1088108-1					
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--
Benzoic Acid[1]	ND		ug/l	50	--
Benzyl Alcohol[1]	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	92		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1087709-2								
Acenaphthene	87		-		47-145	-		30
1,2,4-Trichlorobenzene	65		-		44-142	-		30
Hexachlorobenzene	87		-		1-152	-		30
Bis(2-chloroethyl)ether	84		-		12-158	-		30
2-Chloronaphthalene	80		-		60-118	-		30
3,3'-Dichlorobenzidine	42		-		1-262	-		30
2,4-Dinitrotoluene	104		-		39-139	-		30
2,6-Dinitrotoluene	101		-		50-158	-		30
Fluoranthene	95		-		26-137	-		30
4-Chlorophenyl phenyl ether	87		-		25-158	-		30
4-Bromophenyl phenyl ether[1]	91		-		53-127	-		30
Bis(2-chloroisopropyl)ether	98		-		36-166	-		30
Bis(2-chloroethoxy)methane	94		-		33-184	-		30
Hexachlorobutadiene	58		-		24-116	-		30
Hexachloroethane	61		-		40-113	-		30
Isophorone	100		-		21-196	-		30
Naphthalene	74		-		21-133	-		30
Nitrobenzene	91		-		35-180	-		30
n-Nitrosodi-n-propylamine	102		-		1-230	-		30
Bis(2-Ethylhexyl)phthalate	110		-		8-158	-		30
Butyl benzyl phthalate	101		-		1-152	-		30
Di-n-butylphthalate	101		-		1-118	-		30
Di-n-octylphthalate	108		-		4-146	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1087709-2								
Diethyl phthalate	94		-		1-114	-		30
Dimethyl phthalate	94		-		1-112	-		30
Benzo(a)anthracene	97		-		33-143	-		30
Benzo(a)pyrene	98		-		17-163	-		30
Benzo(b)fluoranthene	94		-		24-159	-		30
Benzo(k)fluoranthene	96		-		11-162	-		30
Chrysene	90		-		17-168	-		30
Acenaphthylene	91		-		33-145	-		30
Anthracene	94		-		27-133	-		30
Benzo(ghi)perylene	96		-		1-219	-		30
Fluorene	92		-		59-121	-		30
Phenanthrene	90		-		54-120	-		30
Dibenzo(a,h)anthracene	98		-		1-227	-		30
Indeno(1,2,3-cd)Pyrene	104		-		1-171	-		30
Pyrene	92		-		52-115	-		30
2,4,6-Trichlorophenol	100		-		37-144	-		30
P-Chloro-M-Cresol[1]	105		-		22-147	-		30
2-Chlorophenol	84		-		23-134	-		30
2,4-Dichlorophenol	100		-		39-135	-		30
2,4-Dimethylphenol	92		-		32-119	-		30
2-Nitrophenol	100		-		29-182	-		30
4-Nitrophenol	60		-		1-132	-		30
2,4-Dinitrophenol	82		-		1-191	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1087709-2								
4,6-Dinitro-o-cresol[1]	96		-		1-181	-		30
Pentachlorophenol	76		-		14-176	-		30
Phenol	44		-		5-112	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60				21-120
Phenol-d6	49				10-120
Nitrobenzene-d5	99				23-120
2-Fluorobiphenyl	95				15-120
2,4,6-Tribromophenol	101				10-120
4-Terphenyl-d14	107				33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088108-2								
Acenaphthene	86		-		47-145	-		30
1,2,4-Trichlorobenzene	68		-		44-142	-		30
Hexachlorobenzene	89		-		1-152	-		30
Bis(2-chloroethyl)ether	86		-		12-158	-		30
2-Chloronaphthalene	79		-		60-118	-		30
3,3'-Dichlorobenzidine	39		-		1-262	-		30
2,4-Dinitrotoluene	104		-		39-139	-		30
2,6-Dinitrotoluene	100		-		50-158	-		30
Fluoranthene	99		-		26-137	-		30
4-Chlorophenyl phenyl ether	87		-		25-158	-		30
4-Bromophenyl phenyl ether[1]	92		-		53-127	-		30
Bis(2-chloroisopropyl)ether	96		-		36-166	-		30
Bis(2-chloroethoxy)methane	94		-		33-184	-		30
Hexachlorobutadiene	62		-		24-116	-		30
Hexachloroethane	64		-		40-113	-		30
Isophorone	98		-		21-196	-		30
Naphthalene	77		-		21-133	-		30
Nitrobenzene	94		-		35-180	-		30
n-Nitrosodi-n-propylamine	102		-		1-230	-		30
Bis(2-Ethylhexyl)phthalate	107		-		8-158	-		30
Butyl benzyl phthalate	104		-		1-152	-		30
Di-n-butylphthalate	102		-		1-118	-		30
Di-n-octylphthalate	112		-		4-146	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088108-2								
Diethyl phthalate	95		-		1-114	-		30
Dimethyl phthalate	94		-		1-112	-		30
Benzo(a)anthracene	98		-		33-143	-		30
Benzo(a)pyrene	103		-		17-163	-		30
Benzo(b)fluoranthene	100		-		24-159	-		30
Benzo(k)fluoranthene	99		-		11-162	-		30
Chrysene	93		-		17-168	-		30
Acenaphthylene	90		-		33-145	-		30
Anthracene	95		-		27-133	-		30
Benzo(ghi)perylene	99		-		1-219	-		30
Fluorene	93		-		59-121	-		30
Phenanthrene	92		-		54-120	-		30
Dibenzo(a,h)anthracene	102		-		1-227	-		30
Indeno(1,2,3-cd)Pyrene	110		-		1-171	-		30
Pyrene	95		-		52-115	-		30
2,4,6-Trichlorophenol	101		-		37-144	-		30
P-Chloro-M-Cresol[1]	106		-		22-147	-		30
2-Chlorophenol	90		-		23-134	-		30
2,4-Dichlorophenol	102		-		39-135	-		30
2,4-Dimethylphenol	94		-		32-119	-		30
2-Nitrophenol	104		-		29-182	-		30
4-Nitrophenol	56		-		1-132	-		30
2,4-Dinitrophenol	82		-		1-191	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1088108-2								
4,6-Dinitro-o-cresol[1]	96		-		1-181	-		30
Pentachlorophenol	77		-		14-176	-		30
Phenol	45		-		5-112	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60				21-120
Phenol-d6	47				10-120
Nitrobenzene-d5	97				23-120
2-Fluorobiphenyl	91				15-120
2,4,6-Tribromophenol	98				10-120
4-Terphenyl-d14	103				33-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Semivolatile Organics by GC/MS - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1087709-3	QC Sample: L1800002-26	Client ID: MS Sample								
Acenaphthene	ND	40	32	80		-	-		47-145	-		30
1,2,4-Trichlorobenzene	ND	40	23	58		-	-		44-142	-		30
Hexachlorobenzene	ND	40	34	85		-	-		1-152	-		30
Bis(2-chloroethyl)ether	ND	40	32	80		-	-		12-158	-		30
2-Chloronaphthalene	ND	40	27	68		-	-		60-118	-		30
3,3'-Dichlorobenzidine	ND	80	28	35		-	-		1-262	-		30
2,4-Dinitrotoluene	ND	40	40	100		-	-		39-139	-		30
2,6-Dinitrotoluene	ND	40	38	95		-	-		50-158	-		30
Fluoranthene	ND	40	38	95		-	-		26-137	-		30
4-Chlorophenyl phenyl ether	ND	40	33	83		-	-		25-158	-		30
4-Bromophenyl phenyl ether[1]	ND	40	35	88		-	-		53-127	-		30
Bis(2-chloroisopropyl)ether	ND	40	36	90		-	-		36-166	-		30
Bis(2-chloroethoxy)methane	ND	40	35	88		-	-		33-184	-		30
Hexachlorobutadiene	ND	40	19	48		-	-		24-116	-		30
Hexachloroethane	ND	40	22	55		-	-		40-113	-		30
Isophorone	ND	40	38	95		-	-		21-196	-		30
Naphthalene	ND	40	27	68		-	-		21-133	-		30
Nitrobenzene	ND	40	35	88		-	-		35-180	-		30
n-Nitrosodi-n-propylamine	ND	40	38	95		-	-		1-230	-		30
Bis(2-Ethylhexyl)phthalate	ND	40	42	110		-	-		8-158	-		30
Butyl benzyl phthalate	ND	40	41	100		-	-		1-152	-		30
Di-n-butylphthalate	ND	40	40	100		-	-		1-118	-		30
Di-n-octylphthalate	ND	40	43	110		-	-		4-146	-		30
Diethyl phthalate	ND	40	37	93		-	-		1-114	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-3 QC Sample: L1800002-26 Client ID: MS Sample												
Dimethyl phthalate	ND	40	36	90		-	-		1-112	-		30
Benzo(a)anthracene	ND	40	38	95		-	-		33-143	-		30
Benzo(a)pyrene	ND	40	40	100		-	-		17-163	-		30
Benzo(b)fluoranthene	ND	40	39	98		-	-		24-159	-		30
Benzo(k)fluoranthene	ND	40	37	93		-	-		11-162	-		30
Chrysene	ND	40	36	90		-	-		17-168	-		30
Acenaphthylene	ND	40	33	83		-	-		33-145	-		30
Anthracene	ND	40	36	90		-	-		27-133	-		30
Benzo(ghi)perylene	ND	40	38	95		-	-		1-219	-		30
Fluorene	ND	40	36	90		-	-		59-121	-		30
Phenanthrene	ND	40	35	88		-	-		54-120	-		30
Dibenzo(a,h)anthracene	ND	40	39	98		-	-		1-227	-		30
Indeno(1,2,3-cd)Pyrene	ND	40	42	110		-	-		1-171	-		30
Pyrene	ND	40	37	93		-	-		52-115	-		30
2,4,6-Trichlorophenol	ND	40	38	95		-	-		37-144	-		30
P-Chloro-M-Cresol[1]	ND	40	40	100		-	-		22-147	-		30
2-Chlorophenol	ND	40	33	83		-	-		23-134	-		30
2,4-Dichlorophenol	ND	40	39	98		-	-		39-135	-		30
2,4-Dimethylphenol	ND	40	32	80		-	-		32-119	-		30
2-Nitrophenol	ND	40	39	98		-	-		29-182	-		30
4-Nitrophenol	ND	40	23	58		-	-		1-132	-		30
2,4-Dinitrophenol	ND	40	33	83		-	-		1-191	-		30
4,6-Dinitro-o-cresol[1]	ND	40	37	93		-	-		1-181	-		30
Pentachlorophenol	ND	40	30	75		-	-		14-176	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-3 QC Sample: L1800002-26 Client ID: MS Sample												
Phenol	ND	40	17	43		-	-		5-112	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	99				10-120
2-Fluorobiphenyl	89				15-120
2-Fluorophenol	58				21-120
4-Terphenyl-d14	104				33-120
Nitrobenzene-d5	95				23-120
Phenol-d6	47				10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088108-3 QC Sample: L1804649-01 Client ID: MS Sample												
1,2,4-Trichlorobenzene	ND	200	140	70		-	-		44-142	-		30
Naphthalene	ND	200	160	80		-	-		21-133	-		30
Bis(2-Ethylhexyl)phthalate	ND	200	230	120		-	-		8-158	-		30
Phenol	44	200	140	48		-	-		5-112	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	102				10-120
2-Fluorobiphenyl	93				15-120
2-Fluorophenol	61				21-120
4-Terphenyl-d14	105				33-120
Nitrobenzene-d5	95				23-120
Phenol-d6	50				10-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-4 QC Sample: L1800002-26 Client ID: DUP Sample						
Acenaphthene	ND	ND	ug/l	NC		30
Benzidine[1]	ND	ND	ug/l	NC		30
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC		30
Hexachlorobenzene	ND	ND	ug/l	NC		30
Bis(2-chloroethyl)ether	ND	ND	ug/l	NC		30
2-Chloronaphthalene	ND	ND	ug/l	NC		30
3,3'-Dichlorobenzidine	ND	ND	ug/l	NC		30
2,4-Dinitrotoluene	ND	ND	ug/l	NC		30
2,6-Dinitrotoluene	ND	ND	ug/l	NC		30
Azobenzene[1]	ND	ND	ug/l	NC		30
Fluoranthene	ND	ND	ug/l	NC		30
4-Chlorophenyl phenyl ether	ND	ND	ug/l	NC		30
4-Bromophenyl phenyl ether[1]	ND	ND	ug/l	NC		30
Bis(2-chloroisopropyl)ether	ND	ND	ug/l	NC		30
Bis(2-chloroethoxy)methane	ND	ND	ug/l	NC		30
Hexachlorobutadiene	ND	ND	ug/l	NC		30
Hexachlorocyclopentadiene[1]	ND	ND	ug/l	NC		30
Hexachloroethane	ND	ND	ug/l	NC		30
Isophorone	ND	ND	ug/l	NC		30
Naphthalene	ND	ND	ug/l	NC		30
Nitrobenzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-4 QC Sample: L1800002-26 Client ID: DUP Sample						
NitrosoDiPhenylAmine(NDPA)/DPA[1]	ND	ND	ug/l	NC		30
n-Nitrosodi-n-propylamine	ND	ND	ug/l	NC		30
Bis(2-Ethylhexyl)phthalate	ND	ND	ug/l	NC		30
Butyl benzyl phthalate	ND	ND	ug/l	NC		30
Di-n-butylphthalate	ND	ND	ug/l	NC		30
Di-n-octylphthalate	ND	ND	ug/l	NC		30
Diethyl phthalate	ND	ND	ug/l	NC		30
Dimethyl phthalate	ND	ND	ug/l	NC		30
Benzo(a)anthracene	ND	ND	ug/l	NC		30
Benzo(a)pyrene	ND	ND	ug/l	NC		30
Benzo(b)fluoranthene	ND	ND	ug/l	NC		30
Benzo(k)fluoranthene	ND	ND	ug/l	NC		30
Chrysene	ND	ND	ug/l	NC		30
Acenaphthylene	ND	ND	ug/l	NC		30
Anthracene	ND	ND	ug/l	NC		30
Benzo(ghi)perylene	ND	ND	ug/l	NC		30
Fluorene	ND	ND	ug/l	NC		30
Phenanthrene	ND	ND	ug/l	NC		30
Dibenzo(a,h)anthracene	ND	ND	ug/l	NC		30
Indeno(1,2,3-cd)Pyrene	ND	ND	ug/l	NC		30
Pyrene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-4 QC Sample: L1800002-26 Client ID: DUP Sample						
Biphenyl[1]	ND	ND	ug/l	NC		30
Aniline[1]	ND	ND	ug/l	NC		30
4-Chloroaniline[1]	ND	ND	ug/l	NC		30
1-Methylnaphthalene[1]	ND	ND	ug/l	NC		30
2-Nitroaniline[1]	ND	ND	ug/l	NC		30
3-Nitroaniline[1]	ND	ND	ug/l	NC		30
4-Nitroaniline[1]	ND	ND	ug/l	NC		30
Dibenzofuran[1]	ND	ND	ug/l	NC		30
2-Methylnaphthalene[1]	ND	ND	ug/l	NC		30
Acetophenone[1]	ND	ND	ug/l	NC		30
n-Nitrosodimethylamine[1]	ND	ND	ug/l	NC		30
2,4,6-Trichlorophenol	ND	ND	ug/l	NC		30
P-Chloro-M-Cresol[1]	ND	ND	ug/l	NC		30
2-Chlorophenol	ND	ND	ug/l	NC		30
2,4-Dichlorophenol	ND	ND	ug/l	NC		30
2,4-Dimethylphenol	ND	ND	ug/l	NC		30
2-Nitrophenol	ND	ND	ug/l	NC		30
4-Nitrophenol	ND	ND	ug/l	NC		30
2,4-Dinitrophenol	ND	ND	ug/l	NC		30
4,6-Dinitro-o-cresol[1]	ND	ND	ug/l	NC		30
Pentachlorophenol	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087709-4 QC Sample: L1800002-26 Client ID: DUP Sample						
Phenol	ND	ND	ug/l	NC		30
2-Methylphenol[1]	ND	ND	ug/l	NC		30
3-Methylphenol/4-Methylphenol[1]	ND	ND	ug/l	NC		30
2,4,5-Trichlorophenol[1]	ND	ND	ug/l	NC		30
Benzoic Acid[1]	ND	ND	ug/l	NC		30
Benzyl Alcohol[1]	ND	ND	ug/l	NC		30
Carbazole[1]	ND	ND	ug/l	NC		30
Pyridine[1]	ND	ND	ug/l	NC		30
n-Decane[1]	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		54		21-120
Phenol-d6	37		39		10-120
Nitrobenzene-d5	89		92		23-120
2-Fluorobiphenyl	89		88		15-120
2,4,6-Tribromophenol	98		101		10-120
4-Terphenyl-d14	111		108		33-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Acid Extractables by GC/MS - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088108-4 QC Sample: L1804649-02 Client ID: DUP Sample						
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC		30
Naphthalene	ND	ND	ug/l	NC		30
Bis(2-Ethylhexyl)phthalate	ND	ND	ug/l	NC		30
Phenol	390	380	ug/l	3		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		60		21-120
Phenol-d6	44		43		10-120
Nitrobenzene-d5	93		98		23-120
2-Fluorobiphenyl	88		92		15-120
2,4,6-Tribromophenol	100		102		10-120
4-Terphenyl-d14	105		105		33-120

PETROLEUM HYDROCARBONS

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID:	L1804229-01			Date Collected:	02/07/18 09:00
Client ID:	MW-1			Date Received:	02/07/18
Sample Location:	50 SYMPHONY RD.			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1			Extraction Date:	02/08/18 22:29
Analytical Date:	02/10/18 22:19	M.S. Analytical Date:	02/11/18 20:00	Cleanup Method1:	EPH-04-1
Analyst:	NS	M.S. Analyst:	KL	Cleanup Date1:	02/10/18

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.400	--	1
2-Methylnaphthalene	ND		ug/l	0.400	--	1
Acenaphthylene	ND		ug/l	0.400	--	1
Acenaphthene	ND		ug/l	0.400	--	1
Fluorene	ND		ug/l	0.400	--	1
Phenanthrene	ND		ug/l	0.400	--	1
Anthracene	ND		ug/l	0.400	--	1
Fluoranthene	ND		ug/l	0.400	--	1
Pyrene	ND		ug/l	0.400	--	1
Benzo(a)anthracene	ND		ug/l	0.400	--	1
Chrysene	ND		ug/l	0.400	--	1
Benzo(b)fluoranthene	ND		ug/l	0.400	--	1
Benzo(k)fluoranthene	ND		ug/l	0.400	--	1
Benzo(a)pyrene	ND		ug/l	0.200	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--	1
Benzo(ghi)perylene	ND		ug/l	0.400	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID:	L1804229-01	Date Collected:	02/07/18 09:00
Client ID:	MW-1	Date Received:	02/07/18
Sample Location:	50 SYMPHONY RD.	Field Prep:	Not Specified
Sample Depth:			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	63		40-140
2-Fluorobiphenyl	68		40-140
2-Bromonaphthalene	66		40-140
O-Terphenyl-MS	78		40-140

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID:	L1804229-02			Date Collected:	02/08/18 12:30
Client ID:	MW-3			Date Received:	02/09/18
Sample Location:	50 SYMPHONY RD.			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Water			Extraction Method:	EPA 3510C
Analytical Method:	98,EPH-04-1.1			Extraction Date:	02/10/18 11:39
Analytical Date:	02/11/18 14:13	M.S. Analytical Date:	02/12/18 17:44	Cleanup Method1:	EPH-04-1
Analyst:	DG	M.S. Analyst:	KL	Cleanup Date1:	02/11/18

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/MS Targets - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	0.449	--	1
2-Methylnaphthalene	ND		ug/l	0.449	--	1
Acenaphthylene	ND		ug/l	0.449	--	1
Acenaphthene	ND		ug/l	0.449	--	1
Fluorene	ND		ug/l	0.449	--	1
Phenanthrene	ND		ug/l	0.449	--	1
Anthracene	ND		ug/l	0.449	--	1
Fluoranthene	ND		ug/l	0.449	--	1
Pyrene	ND		ug/l	0.449	--	1
Benzo(a)anthracene	ND		ug/l	0.449	--	1
Chrysene	ND		ug/l	0.449	--	1
Benzo(b)fluoranthene	ND		ug/l	0.449	--	1
Benzo(k)fluoranthene	ND		ug/l	0.449	--	1
Benzo(a)pyrene	ND		ug/l	0.225	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.449	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.449	--	1
Benzo(ghi)perylene	ND		ug/l	0.449	--	1

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID:	L1804229-02	Date Collected:	02/08/18 12:30
Client ID:	MW-3	Date Received:	02/09/18
Sample Location:	50 SYMPHONY RD.	Field Prep:	Not Specified
Sample Depth:			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/MS Targets - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	45		40-140
o-Terphenyl	66		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	79		40-140
O-Terphenyl-MS	76		40-140

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 02/10/18 21:15
Analyst: NS

M.S. Analytical Date: 02/11/18 18:21
M.S. Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 02/08/18 19:25
Cleanup Method: EPH-04-1
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1087779-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 02/10/18 21:15 02/11/18 18:21
Analyst: NS KL

Extraction Method: EPA 3510C
Extraction Date: 02/08/18 19:25
Cleanup Method: EPH-04-1
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 01 Batch: WG1087779-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	67		40-140
o-Terphenyl	73		40-140
2-Fluorobiphenyl	79		40-140
2-Bromonaphthalene	76		40-140
O-Terphenyl-MS	72		40-140

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 02/11/18 13:27
Analyst: DG

M.S. Analytical Date: 02/11/18 17:18
M.S. Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 02/10/18 10:01
Cleanup Method: EPH-04-1
Cleanup Date: 02/11/18

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 02 Batch: WG1088202-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	0.400	--
2-Methylnaphthalene	ND		ug/l	0.400	--
Acenaphthylene	ND		ug/l	0.400	--
Acenaphthene	ND		ug/l	0.400	--
Fluorene	ND		ug/l	0.400	--
Phenanthrene	ND		ug/l	0.400	--
Anthracene	ND		ug/l	0.400	--
Fluoranthene	ND		ug/l	0.400	--
Pyrene	ND		ug/l	0.400	--
Benzo(a)anthracene	ND		ug/l	0.400	--
Chrysene	ND		ug/l	0.400	--
Benzo(b)fluoranthene	ND		ug/l	0.400	--
Benzo(k)fluoranthene	ND		ug/l	0.400	--
Benzo(a)pyrene	ND		ug/l	0.200	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.400	--
Dibenzo(a,h)anthracene	ND		ug/l	0.400	--
Benzo(ghi)perylene	ND		ug/l	0.400	--

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 02/11/18 13:27 02/11/18 17:18
Analyst: DG KL

Extraction Method: EPA 3510C
Extraction Date: 02/10/18 10:01
Cleanup Method: EPH-04-1
Cleanup Date: 02/11/18

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/MS Targets - Westborough Lab for sample(s): 02 Batch: WG1088202-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	78		40-140
O-Terphenyl-MS	79		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1087779-2 WG1087779-3								
C9-C18 Aliphatics	63		64		40-140	2		25
C19-C36 Aliphatics	77		80		40-140	4		25
C11-C22 Aromatics	74		64		40-140	14		25
Naphthalene	52		57		40-140	9		25
2-Methylnaphthalene	56		60		40-140	7		25
Acenaphthylene	70		74		40-140	6		25
Acenaphthene	66		70		40-140	6		25
Fluorene	84		88		40-140	5		25
Phenanthrene	63		66		40-140	5		25
Anthracene	83		88		40-140	6		25
Fluoranthene	83		88		40-140	6		25
Pyrene	83		88		40-140	6		25
Benzo(a)anthracene	74		79		40-140	7		25
Chrysene	74		78		40-140	5		25
Benzo(b)fluoranthene	76		82		40-140	8		25
Benzo(k)fluoranthene	80		83		40-140	4		25
Benzo(a)pyrene	82		87		40-140	6		25
Indeno(1,2,3-cd)Pyrene	83		87		40-140	5		25
Dibenzo(a,h)anthracene	81		84		40-140	4		25
Benzo(ghi)perylene	68		70		40-140	3		25
Nonane (C9)	43		45		30-140	5		25
Decane (C10)	52		54		40-140	4		25
Dodecane (C12)	61		61		40-140	0		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 01 Batch: WG1087779-2 WG1087779-3								
Tetradecane (C14)	63		65		40-140	3		25
Hexadecane (C16)	68		70		40-140	3		25
Octadecane (C18)	73		75		40-140	3		25
Nonadecane (C19)	73		76		40-140	4		25
Eicosane (C20)	74		77		40-140	4		25
Docosane (C22)	75		78		40-140	4		25
Tetracosane (C24)	76		79		40-140	4		25
Hexacosane (C26)	76		79		40-140	4		25
Octacosane (C28)	76		79		40-140	4		25
Triacontane (C30)	75		78		40-140	4		25
Hexatriacontane (C36)	74		78		40-140	5		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	70		70		40-140
o-Terphenyl	76		65		40-140
2-Fluorobiphenyl	76		64		40-140
2-Bromonaphthalene	75		62		40-140
O-Terphenyl-MS	84		86		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 02 Batch: WG1088202-2 WG1088202-3								
C9-C18 Aliphatics	66		72		40-140	9		25
C19-C36 Aliphatics	70		74		40-140	6		25
C11-C22 Aromatics	82		84		40-140	2		25
Naphthalene	75		77		40-140	3		25
2-Methylnaphthalene	75		78		40-140	4		25
Acenaphthylene	92		96		40-140	4		25
Acenaphthene	84		89		40-140	6		25
Fluorene	89		93		40-140	4		25
Phenanthrene	72		78		40-140	8		25
Anthracene	106		112		40-140	6		25
Fluoranthene	102		95		40-140	7		25
Pyrene	102		94		40-140	8		25
Benzo(a)anthracene	90		94		40-140	4		25
Chrysene	97		101		40-140	4		25
Benzo(b)fluoranthene	89		95		40-140	7		25
Benzo(k)fluoranthene	104		107		40-140	3		25
Benzo(a)pyrene	104		108		40-140	4		25
Indeno(1,2,3-cd)Pyrene	106		110		40-140	4		25
Dibenzo(a,h)anthracene	100		105		40-140	5		25
Benzo(ghi)perylene	99		101		40-140	2		25
Nonane (C9)	49		56		30-140	13		25
Decane (C10)	58		64		40-140	10		25
Dodecane (C12)	66		70		40-140	6		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/MS Targets - Westborough Lab Associated sample(s): 02 Batch: WG1088202-2 WG1088202-3								
Tetradecane (C14)	67		72		40-140	7		25
Hexadecane (C16)	68		74		40-140	8		25
Octadecane (C18)	68		75		40-140	10		25
Nonadecane (C19)	67		74		40-140	10		25
Eicosane (C20)	66		74		40-140	11		25
Docosane (C22)	66		74		40-140	11		25
Tetracosane (C24)	66		73		40-140	10		25
Hexacosane (C26)	65		72		40-140	10		25
Octacosane (C28)	65		72		40-140	10		25
Triacontane (C30)	66		72		40-140	9		25
Hexatriacontane (C36)	65		71		40-140	9		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	53		58		40-140
o-Terphenyl	73		75		40-140
2-Fluorobiphenyl	82		79		40-140
2-Bromonaphthalene	81		75		40-140
O-Terphenyl-MS	88		91		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

PCBS

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 02/09/18 13:59
Analyst: HT

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Extraction Method: EPA 608
Extraction Date: 02/08/18 21:15
Cleanup Method: EPA 3665A
Cleanup Date: 02/09/18
Cleanup Method: EPA 3660B
Cleanup Date: 02/09/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	55		30-150	A

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 02/12/18 11:27
Analyst: HT

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 608
Extraction Date: 02/10/18 03:10
Cleanup Method: EPA 3665A
Cleanup Date: 02/10/18
Cleanup Method: EPA 3660B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	B
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	76		30-150	A

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 02/09/18 14:36
Analyst: HT

Extraction Method: EPA 608
Extraction Date: 02/08/18 21:15
Cleanup Method: EPA 3665A
Cleanup Date: 02/09/18
Cleanup Method: EPA 3660B
Cleanup Date: 02/09/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1087792-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	93		30-150	A

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 02/12/18 12:29
Analyst: HT

Extraction Method: EPA 608
Extraction Date: 02/10/18 03:10
Cleanup Method: EPA 3665A
Cleanup Date: 02/10/18
Cleanup Method: EPA 3660B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1088148-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	98		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1087792-2									
Aroclor 1016	79		-		30-150	-		30	A
Aroclor 1260	76		-		30-150	-		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83				30-150	A
Decachlorobiphenyl	87				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1088148-2									
Aroclor 1016	81		-		30-150	-		30	A
Aroclor 1260	78		-		30-150	-		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81				30-150	A
Decachlorobiphenyl	85				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087792-3 QC Sample: L1800002-28 Client ID: MS Sample													
Aroclor 1016	ND	3.12	2.59	83		-	-		40-126	-		30	A
Aroclor 1260	ND	3.12	2.54	81		-	-		40-127	-		30	A

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*	*Column*
2,4,5,6-Tetrachloro-m-xylene	86				30-150	A
Decachlorobiphenyl	90				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088148-3 QC Sample: L1800002-34 Client ID: MS Sample													
Aroclor 1016	ND	3.12	2.88	92		-	-		40-126	-		30	A
Aroclor 1260	ND	3.12	2.70	86		-	-		40-127	-		30	A

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*	*Column*
2,4,5,6-Tetrachloro-m-xylene	92				30-150	A
Decachlorobiphenyl	99				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087792-4 QC Sample: L1800002-28 Client ID: DUP Sample							
Aroclor 1016	ND	ND	ug/l	NC		30	A
Aroclor 1221	ND	ND	ug/l	NC		30	A
Aroclor 1232	ND	ND	ug/l	NC		30	A
Aroclor 1242	ND	ND	ug/l	NC		30	A
Aroclor 1248	ND	ND	ug/l	NC		30	A
Aroclor 1254	ND	ND	ug/l	NC		30	A
Aroclor 1260	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		86		30-150	A
Decachlorobiphenyl	85		96		30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088148-4 QC Sample: L1800002-34 Client ID: DUP Sample							
Aroclor 1016	ND	ND	ug/l	NC		30	A
Aroclor 1221	ND	ND	ug/l	NC		30	A
Aroclor 1232	ND	ND	ug/l	NC		30	A
Aroclor 1242	ND	ND	ug/l	NC		30	A
Aroclor 1248	ND	ND	ug/l	NC		30	A
Aroclor 1254	ND	ND	ug/l	NC		30	A
Aroclor 1260	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		87		30-150	A
Decachlorobiphenyl	91		96		30-150	A

PESTICIDES

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 02/12/18 16:39
Analyst: KEG

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Extraction Method: EPA 608
Extraction Date: 02/08/18 21:20
Cleanup Method: EPA 3620B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	--	1	A
Lindane	ND		ug/l	0.020	--	1	A
Alpha-BHC	ND		ug/l	0.020	--	1	A
Beta-BHC	ND		ug/l	0.020	--	1	A
Heptachlor	ND		ug/l	0.020	--	1	A
Aldrin	ND		ug/l	0.020	--	1	A
Heptachlor epoxide	ND		ug/l	0.020	--	1	A
Endrin	ND		ug/l	0.040	--	1	A
Endrin aldehyde	ND		ug/l	0.040	--	1	A
Endrin ketone[1]	ND		ug/l	0.040	--	1	A
Dieldrin	ND		ug/l	0.040	--	1	A
4,4'-DDE	ND		ug/l	0.040	--	1	A
4,4'-DDD	ND		ug/l	0.040	--	1	A
4,4'-DDT	ND		ug/l	0.040	--	1	A
Endosulfan I	ND		ug/l	0.020	--	1	A
Endosulfan II	ND		ug/l	0.040	--	1	A
Endosulfan sulfate	ND		ug/l	0.040	--	1	A
Methoxychlor[1]	ND		ug/l	0.100	--	1	A
Toxaphene	ND		ug/l	0.400	--	1	A
Chlordane	ND		ug/l	0.200	--	1	A
cis-Chlordane[1]	ND		ug/l	0.020	--	1	A
trans-Chlordane[1]	ND		ug/l	0.020	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		30-150	A
Decachlorobiphenyl	110		30-150	A

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 02/12/18 13:15
Analyst: KEG

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Extraction Method: EPA 608
Extraction Date: 02/10/18 03:13
Cleanup Method: EPA 3620B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	--	1	A
Lindane	ND		ug/l	0.020	--	1	A
Alpha-BHC	ND		ug/l	0.020	--	1	A
Beta-BHC	ND		ug/l	0.020	--	1	A
Heptachlor	ND		ug/l	0.020	--	1	A
Aldrin	ND		ug/l	0.020	--	1	A
Heptachlor epoxide	ND		ug/l	0.020	--	1	A
Endrin	ND		ug/l	0.040	--	1	A
Endrin aldehyde	ND		ug/l	0.040	--	1	A
Endrin ketone[1]	ND		ug/l	0.040	--	1	A
Dieldrin	ND		ug/l	0.040	--	1	A
4,4'-DDE	ND		ug/l	0.040	--	1	A
4,4'-DDD	ND		ug/l	0.040	--	1	A
4,4'-DDT	0.049		ug/l	0.040	--	1	A
Endosulfan I	ND		ug/l	0.020	--	1	A
Endosulfan II	ND		ug/l	0.040	--	1	A
Endosulfan sulfate	ND		ug/l	0.040	--	1	A
Methoxychlor[1]	ND		ug/l	0.100	--	1	A
Toxaphene	ND		ug/l	0.400	--	1	A
Chlordane	ND		ug/l	0.200	--	1	A
cis-Chlordane[1]	ND		ug/l	0.020	--	1	A
trans-Chlordane[1]	ND		ug/l	0.020	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	119		30-150	A
Decachlorobiphenyl	117		30-150	A

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 02/12/18 16:01
Analyst: KEG

Extraction Method: EPA 608
Extraction Date: 02/08/18 21:20
Cleanup Method: EPA 3620B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1087794-1						
Delta-BHC	ND		ug/l	0.020	--	A
Lindane	ND		ug/l	0.020	--	A
Alpha-BHC	ND		ug/l	0.020	--	A
Beta-BHC	ND		ug/l	0.020	--	A
Heptachlor	ND		ug/l	0.020	--	A
Aldrin	ND		ug/l	0.020	--	A
Heptachlor epoxide	ND		ug/l	0.020	--	A
Endrin	ND		ug/l	0.040	--	A
Endrin aldehyde	ND		ug/l	0.040	--	A
Endrin ketone[1]	ND		ug/l	0.040	--	A
Dieldrin	ND		ug/l	0.040	--	A
4,4'-DDE	ND		ug/l	0.040	--	A
4,4'-DDD	ND		ug/l	0.040	--	A
4,4'-DDT	ND		ug/l	0.040	--	A
Endosulfan I	ND		ug/l	0.020	--	A
Endosulfan II	ND		ug/l	0.040	--	A
Endosulfan sulfate	ND		ug/l	0.040	--	A
Methoxychlor[1]	ND		ug/l	0.100	--	A
Toxaphene	ND		ug/l	0.400	--	A
Chlordane	ND		ug/l	0.200	--	A
cis-Chlordane[1]	ND		ug/l	0.020	--	A
trans-Chlordane[1]	ND		ug/l	0.020	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	114		30-150	A

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 02/12/18 12:50
Analyst: KEG

Extraction Method: EPA 608
Extraction Date: 02/10/18 03:13
Cleanup Method: EPA 3620B
Cleanup Date: 02/10/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1088149-1						
Delta-BHC	ND		ug/l	0.020	--	A
Lindane	ND		ug/l	0.020	--	A
Alpha-BHC	ND		ug/l	0.020	--	A
Beta-BHC	ND		ug/l	0.020	--	A
Heptachlor	ND		ug/l	0.020	--	A
Aldrin	ND		ug/l	0.020	--	A
Heptachlor epoxide	ND		ug/l	0.020	--	A
Endrin	ND		ug/l	0.040	--	A
Endrin aldehyde	ND		ug/l	0.040	--	A
Endrin ketone[1]	ND		ug/l	0.040	--	A
Dieldrin	ND		ug/l	0.040	--	A
4,4'-DDE	ND		ug/l	0.040	--	A
4,4'-DDD	ND		ug/l	0.040	--	A
4,4'-DDT	ND		ug/l	0.040	--	A
Endosulfan I	ND		ug/l	0.020	--	A
Endosulfan II	ND		ug/l	0.040	--	A
Endosulfan sulfate	ND		ug/l	0.040	--	A
Methoxychlor[1]	ND		ug/l	0.100	--	A
Toxaphene	ND		ug/l	0.400	--	A
Chlordane	ND		ug/l	0.200	--	A
cis-Chlordane[1]	ND		ug/l	0.020	--	A
trans-Chlordane[1]	ND		ug/l	0.020	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	94		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1087794-2									
Delta-BHC	114		-		30-150	-		30	A
Lindane	107		-		30-150	-		30	A
Alpha-BHC	110		-		30-150	-		30	A
Beta-BHC	111		-		30-150	-		30	A
Heptachlor	130		-		30-150	-		30	A
Aldrin	114		-		30-150	-		30	A
Heptachlor epoxide	132		-		30-150	-		30	A
Endrin	124		-		30-150	-		30	A
Endrin aldehyde	111		-		30-150	-		30	A
Endrin ketone[1]	140		-		30-150	-		30	A
Dieldrin	132		-		30-150	-		30	A
4,4'-DDE	118		-		30-150	-		30	A
4,4'-DDD	123		-		30-150	-		30	A
4,4'-DDT	134		-		30-150	-		30	A
Endosulfan I	124		-		30-150	-		30	A
Endosulfan II	132		-		30-150	-		30	A
Endosulfan sulfate	132		-		30-150	-		30	A
Methoxychlor[1]	136		-		30-150	-		30	A
cis-Chlordane[1]	110		-		30-150	-		30	A
trans-Chlordane[1]	84		-		30-150	-		30	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1087794-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101				30-150	A
Decachlorobiphenyl	134				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1088149-2									
Delta-BHC	105		-		30-150	-		30	A
Lindane	99		-		30-150	-		30	A
Alpha-BHC	102		-		30-150	-		30	A
Beta-BHC	105		-		30-150	-		30	A
Heptachlor	109		-		30-150	-		30	A
Aldrin	97		-		30-150	-		30	A
Heptachlor epoxide	114		-		30-150	-		30	A
Endrin	109		-		30-150	-		30	A
Endrin aldehyde	107		-		30-150	-		30	A
Endrin ketone[1]	123		-		30-150	-		30	A
Dieldrin	119		-		30-150	-		30	A
4,4'-DDE	105		-		30-150	-		30	A
4,4'-DDD	109		-		30-150	-		30	A
4,4'-DDT	126		-		30-150	-		30	A
Endosulfan I	113		-		30-150	-		30	A
Endosulfan II	121		-		30-150	-		30	A
Endosulfan sulfate	117		-		30-150	-		30	A
Methoxychlor[1]	130		-		30-150	-		30	A
cis-Chlordane[1]	98		-		30-150	-		30	A
trans-Chlordane[1]	85		-		30-150	-		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1088149-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84				30-150	A
Decachlorobiphenyl	108				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087794-3 QC Sample: L1800002-28 Client ID: MS Sample													
Delta-BHC	ND	0.5	0.439	88		-	-		19-140	-		30	A
Lindane	ND	0.5	0.413	83		-	-		56-123	-		30	A
Alpha-BHC	ND	0.5	0.423	85		-	-		37-134	-		30	A
Beta-BHC	ND	0.5	0.427	85		-	-		17-147	-		30	A
Heptachlor	ND	0.5	0.512	102		-	-		40-111	-		30	A
Aldrin	ND	0.5	0.436	87		-	-		40-120	-		30	A
Heptachlor epoxide	ND	0.5	0.506	101		-	-		37-142	-		30	A
Endrin	ND	0.5	0.481	96		-	-		56-121	-		30	A
Endrin aldehyde	ND	0.5	0.438	88		-	-		42-122	-		30	A
Endrin ketone[1]	ND	0.5	0.552	110		-	-		30-150	-		30	A
Dieldrin	ND	0.5	0.504	101		-	-		52-126	-		30	A
4,4'-DDE	ND	0.5	0.449	90		-	-		30-145	-		30	A
4,4'-DDD	ND	0.5	0.473	95		-	-		31-141	-		30	A
4,4'-DDT	ND	0.5	0.518	104		-	-		38-127	-		30	A
Endosulfan I	ND	0.5	0.473	95		-	-		45-153	-		30	A
Endosulfan II	ND	0.5	0.504	101		-	-		.1-202	-		30	A
Endosulfan sulfate	ND	0.5	0.524	105		-	-		26-144	-		30	A
Methoxychlor[1]	ND	0.5	0.524	105		-	-		30-150	-		30	A
cis-Chlordane[1]	ND	0.5	0.412	82		-	-		30-150	-		30	A
trans-Chlordane[1]	ND	0.5	0.336	67		-	-		30-150	-		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087794-3 QC Sample: L1800002-28 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79				30-150	A
Decachlorobiphenyl	112				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088149-3 QC Sample: L1800002-34 Client ID: MS Sample													
Delta-BHC	ND	0.5	0.548	110		-	-		19-140	-		30	A
Lindane	ND	0.5	0.522	104		-	-		56-123	-		30	A
Alpha-BHC	ND	0.5	0.547	109		-	-		37-134	-		30	A
Beta-BHC	ND	0.5	0.534	107		-	-		17-147	-		30	A
Heptachlor	ND	0.5	0.578	**116**	Q	-	-		40-111	-		30	A
Aldrin	ND	0.5	0.498	100		-	-		40-120	-		30	A
Heptachlor epoxide	ND	0.5	0.620	124		-	-		37-142	-		30	A
Endrin	ND	0.5	0.579	116		-	-		56-121	-		30	A
Endrin aldehyde	ND	0.5	0.482	96		-	-		42-122	-		30	A
Endrin ketone[1]	ND	0.5	0.617	123		-	-		30-150	-		30	A
Dieldrin	ND	0.5	0.611	122		-	-		52-126	-		30	A
4,4'-DDE	ND	0.5	0.542	108		-	-		30-145	-		30	A
4,4'-DDD	ND	0.5	0.528	106		-	-		31-141	-		30	A
4,4'-DDT	ND	0.5	0.616	123		-	-		38-127	-		30	A
Endosulfan I	ND	0.5	0.583	117		-	-		45-153	-		30	A
Endosulfan II	ND	0.5	0.594	119		-	-		.1-202	-		30	A
Endosulfan sulfate	ND	0.5	0.579	116		-	-		26-144	-		30	A
Methoxychlor[1]	ND	0.5	0.604	121		-	-		30-150	-		30	A
cis-Chlordane[1]	ND	0.5	0.501	100		-	-		30-150	-		30	A
trans-Chlordane[1]	ND	0.5	0.462	92		-	-		30-150	-		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088149-3 QC Sample: L1800002-34 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88				30-150	A
Decachlorobiphenyl	116				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087794-4 QC Sample: L1800002-28 Client ID: DUP Sample							
Delta-BHC	ND	ND	ug/l	NC		30	A
Lindane	ND	ND	ug/l	NC		30	A
Alpha-BHC	ND	ND	ug/l	NC		30	A
Beta-BHC	ND	ND	ug/l	NC		30	A
Heptachlor	ND	ND	ug/l	NC		30	A
Aldrin	ND	ND	ug/l	NC		30	A
Heptachlor epoxide	ND	ND	ug/l	NC		30	A
Endrin	ND	ND	ug/l	NC		30	A
Endrin aldehyde	ND	ND	ug/l	NC		30	A
Endrin ketone[1]	ND	ND	ug/l	NC		30	A
Dieldrin	ND	ND	ug/l	NC		30	A
4,4'-DDE	ND	ND	ug/l	NC		30	A
4,4'-DDD	ND	ND	ug/l	NC		30	A
4,4'-DDT	ND	ND	ug/l	NC		30	A
Endosulfan I	ND	ND	ug/l	NC		30	A
Endosulfan II	ND	ND	ug/l	NC		30	A
Endosulfan sulfate	ND	ND	ug/l	NC		30	A
Methoxychlor[1]	ND	ND	ug/l	NC		30	A
Toxaphene	ND	ND	ug/l	NC		30	A
Chlordane	ND	ND	ug/l	NC		30	A
cis-Chlordane[1]	ND	ND	ug/l	NC		30	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087794-4 QC Sample: L1800002-28 Client ID: DUP Sample							
trans-Chlordane[1]	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		77		30-150	A
Decachlorobiphenyl	133		85		30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088149-4 QC Sample: L1800002-34 Client ID: DUP Sample							
Delta-BHC	ND	ND	ug/l	NC		30	A
Lindane	ND	ND	ug/l	NC		30	A
Alpha-BHC	ND	ND	ug/l	NC		30	A
Beta-BHC	ND	ND	ug/l	NC		30	A
Heptachlor	ND	ND	ug/l	NC		30	A
Aldrin	ND	ND	ug/l	NC		30	A
Heptachlor epoxide	ND	ND	ug/l	NC		30	A
Endrin	ND	ND	ug/l	NC		30	A
Endrin aldehyde	ND	ND	ug/l	NC		30	A
Endrin ketone[1]	ND	ND	ug/l	NC		30	A
Dieldrin	ND	ND	ug/l	NC		30	A
4,4'-DDE	ND	ND	ug/l	NC		30	A
4,4'-DDD	ND	ND	ug/l	NC		30	A
4,4'-DDT	ND	ND	ug/l	NC		30	A
Endosulfan I	ND	ND	ug/l	NC		30	A
Endosulfan II	ND	ND	ug/l	NC		30	A
Endosulfan sulfate	ND	ND	ug/l	NC		30	A
Methoxychlor[1]	ND	ND	ug/l	NC		30	A
Toxaphene	ND	ND	ug/l	NC		30	A
Chlordane	ND	ND	ug/l	NC		30	A
cis-Chlordane[1]	ND	ND	ug/l	NC		30	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1088149-4 QC Sample: L1800002-34 Client ID: DUP Sample							
trans-Chlordane[1]	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	107		84		30-150	A
Decachlorobiphenyl	117		113		30-150	A

METALS

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.050	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Arsenic, Total	0.015		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Beryllium, Total	ND		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Cadmium, Total	ND		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Chromium, Total	0.054		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Copper, Total	0.047		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Lead, Total	0.303		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Mercury, Total	ND		mg/l	0.00020	--	1	02/09/18 10:41	02/09/18 18:47	EPA 245.1	3,245.1	EA
Nickel, Total	0.029		mg/l	0.025	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Selenium, Total	0.013		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Silver, Total	ND		mg/l	0.007	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Thallium, Total	ND		mg/l	0.020	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB
Zinc, Total	0.138		mg/l	0.050	--	1	02/09/18 11:30	02/13/18 18:53	EPA 3005A	19,200.7	AB

Project Name: 50 SYMPHONY RD.
Lab Number: L1804229
Project Number: 50 SYMPHONY RD.
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.050	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Arsenic, Total	0.020		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Beryllium, Total	ND		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Cadmium, Total	ND		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Chromium, Total	0.030		mg/l	0.010	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Copper, Total	0.051		mg/l	0.010	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Lead, Total	0.615		mg/l	0.010	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Mercury, Total	0.00106		mg/l	0.00020	--	1	02/12/18 11:00	02/12/18 15:23	EPA 245.1	3,245.1	MG
Nickel, Total	ND		mg/l	0.025	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Selenium, Total	ND		mg/l	0.010	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Silver, Total	ND		mg/l	0.007	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Thallium, Total	ND		mg/l	0.020	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC
Zinc, Total	0.336		mg/l	0.050	--	1	02/10/18 07:27	02/12/18 13:05	EPA 3005A	19,200.7	LC

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1087948-1										
Mercury, Total	ND		mg/l	0.00020	--	1	02/09/18 10:41	02/09/18 18:30	3,245.1	EA

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1087958-1										
Antimony, Total	ND		mg/l	0.050	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Arsenic, Total	ND		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Beryllium, Total	ND		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Cadmium, Total	ND		mg/l	0.005	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Chromium, Total	ND		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Copper, Total	ND		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Lead, Total	ND		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Nickel, Total	ND		mg/l	0.025	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Selenium, Total	ND		mg/l	0.010	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Silver, Total	ND		mg/l	0.007	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Thallium, Total	ND		mg/l	0.020	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB
Zinc, Total	ND		mg/l	0.050	--	1	02/09/18 11:30	02/13/18 18:26	19,200.7	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1088165-1										
Antimony, Total	ND		mg/l	0.050	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Arsenic, Total	ND		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Beryllium, Total	ND		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Cadmium, Total	ND		mg/l	0.005	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Chromium, Total	ND		mg/l	0.010	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC

Project Name: 50 SYMPHONY RD. **Lab Number:** L1804229

Project Number: 50 SYMPHONY RD. **Report Date:** 02/14/18

Method Blank Analysis
Batch Quality Control

Copper, Total	ND	mg/l	0.010	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Lead, Total	ND	mg/l	0.010	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Nickel, Total	ND	mg/l	0.025	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Selenium, Total	ND	mg/l	0.010	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Silver, Total	ND	mg/l	0.007	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Thallium, Total	ND	mg/l	0.020	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC
Zinc, Total	ND	mg/l	0.050	--	1	02/10/18 07:27	02/12/18 11:53	19,200.7	LC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1088503-1										
Mercury, Total	ND		mg/l	0.0002	--	1	02/12/18 11:00	02/12/18 15:03	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1087948-2								
Mercury, Total	94		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1087958-2								
Antimony, Total	107		-		85-115	-		
Arsenic, Total	112		-		85-115	-		
Beryllium, Total	104		-		85-115	-		
Cadmium, Total	113		-		85-115	-		
Chromium, Total	106		-		85-115	-		
Copper, Total	103		-		85-115	-		
Lead, Total	109		-		85-115	-		
Nickel, Total	104		-		85-115	-		
Selenium, Total	105		-		85-115	-		
Silver, Total	105		-		85-115	-		
Thallium, Total	111		-		85-115	-		
Zinc, Total	111		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1088165-2					
Antimony, Total	90	-	85-115	-	
Arsenic, Total	108	-	85-115	-	
Beryllium, Total	88	-	85-115	-	
Cadmium, Total	97	-	85-115	-	
Chromium, Total	90	-	85-115	-	
Copper, Total	90	-	85-115	-	
Lead, Total	104	-	85-115	-	
Nickel, Total	91	-	85-115	-	
Selenium, Total	111	-	85-115	-	
Silver, Total	91	-	85-115	-	
Thallium, Total	107	-	85-115	-	
Zinc, Total	95	-	85-115	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1088503-2					
Mercury, Total	101	-	85-115	-	

INORGANICS
&
MISCELLANEOUS

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 02/07/18 09:00
Date Received: 02/07/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.0		SU	-	NA	1	-	02/08/18 18:47	121,4500H+-B	AS
Oil & Grease, Hem-Grav	10.		mg/l	4.0	--	1	02/08/18 16:30	02/08/18 17:45	74,1664A	ML

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 02/08/18 12:30
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	310		mg/l	20	NA	4	-	02/13/18 04:50	121,2540D	JT
pH (H)	7.3		SU	-	NA	1	-	02/09/18 23:03	121,4500H+-B	AS
Oil & Grease, Hem-Grav	11.		mg/l	4.4	--	1.1	02/09/18 17:00	02/09/18 18:00	74,1664A	ML

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804229-03
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 02/08/18 13:00
Date Received: 02/09/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	730		mg/l	20	NA	4	-	02/13/18 04:50	121,2540D	JT

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.
Lab Number: L1804229
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1087714-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	02/08/18 16:30	02/08/18 17:45	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1088061-1										
Oil & Grease, Hem-Grav	ND		mg/l	4.0	--	1	02/09/18 17:00	02/09/18 18:00	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 02-03 Batch: WG1088455-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	02/13/18 04:50	121,2540D	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1804229

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1087714-2								
Oil & Grease, Hem-Grav	94		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1087771-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1088061-2								
Oil & Grease, Hem-Grav	92		-		78-114	-		18
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1088119-1								
pH	101		-		99-101	-		5

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087771-2 QC Sample: L1804229-01 Client ID: MW-1						
pH (H)	7.0	7.0	SU	0		5

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
A1	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804229-01A	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		624(3)
L1804229-01B	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		624(3)
L1804229-01C	Vial Na2S2O3 preserved	A	NA		4.5	Y	Absent		624(3)
L1804229-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.5	Y	Absent		NI-UI(180),SB-UI(180),AG-UI(180),ZN-UI(180),SE-UI(180),HG-U(28),CD-UI(180),BE-UI(180),CR-UI(180),AS-UI(180),CU-UI(180),PB-UI(180),TL-UI(180)
L1804229-01E	Plastic 60ml unpreserved	A	7	7	4.5	Y	Absent		PH-4500(.01)
L1804229-01F	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		625(7)
L1804229-01G	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		625(7)
L1804229-01H	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		PESTICIDE-608(7)
L1804229-01I	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		PESTICIDE-608(7)
L1804229-01J	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		PCB-608(7)
L1804229-01K	Amber 1000ml Na2S2O3	A	7	7	4.5	Y	Absent		PCB-608(7)
L1804229-01L	Amber 1000ml HCl preserved	A	NA		4.5	Y	Absent		OG-1664(28)
L1804229-01M	Amber 1000ml HCl preserved	A	NA		4.5	Y	Absent		OG-1664(28)
L1804229-01N	Amber 1000ml HCl preserved	A	<2	<2	4.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1804229-01O	Amber 1000ml HCl preserved	A	<2	<2	4.5	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1804229-02A	Vial Na2S2O3 preserved	A1	NA		2.9	Y	Absent		624(3)
L1804229-02B	Vial Na2S2O3 preserved	A1	NA		2.9	Y	Absent		624(3)
L1804229-02C	Vial Na2S2O3 preserved	A1	NA		2.9	Y	Absent		624(3)
L1804229-02D	Plastic 60ml unpreserved	A1	7	7	2.9	Y	Absent		PH-4500(.01)

*Values in parentheses indicate holding time in days

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1804229
Report Date: 02/14/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804229-02E	Plastic 250ml HNO3 preserved	A1	<2	<2	2.9	Y	Absent		NI-UI(180),SB-UI(180),AG-UI(180),ZN-UI(180),SE-UI(180),HG-U(28),CD-UI(180),BE-UI(180),CR-UI(180),AS-UI(180),CU-UI(180),PB-UI(180),TL-UI(180)
L1804229-02F	Amber 1000ml unpreserved	A1	7	7	2.9	Y	Absent		TSS-2540(7)
L1804229-02G	Amber 1000ml HCl preserved	A1	NA		2.9	Y	Absent		OG-1664(28)
L1804229-02H	Amber 1000ml HCl preserved	A1	NA		2.9	Y	Absent		OG-1664(28)
L1804229-02I	Amber 1000ml HCl preserved	A1	<2	<2	2.9	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1804229-02J	Amber 1000ml HCl preserved	A1	<2	<2	2.9	Y	Absent		EPH-MS-10(14),EPHD-GC-10(14)
L1804229-02L	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		625(7)
L1804229-02M	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		625(7)
L1804229-02N	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		PCB-608(7)
L1804229-02O	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		PESTICIDE-608(7)
L1804229-02P	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		PESTICIDE-608(7)
L1804229-02Q	Amber 1000ml Na2S2O3	A1	7	7	2.9	Y	Absent		PCB-608(7)
L1804229-03A	Amber 1000ml unpreserved	A1	7	7	2.9	Y	Absent		TSS-2540(7)
L1804229-04A	Vial Na2S2O3 preserved	A1	NA		2.9	Y	Absent		ARCHIVE()
L1804229-04B	Vial Na2S2O3 preserved	A1	NA		2.9	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1804229
Project Number:	50 SYMPHONY RD.	**Report Date:**	02/14/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1804229
Project Number:	50 SYMPHONY RD.	**Report Date:**	02/14/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1804229
Project Number:	50 SYMPHONY RD.	**Report Date:**	02/14/18

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

MANSFIELD CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/7/18

ALPHA Job #: L1804229

Client Information

Client: FSL Associates, Inc
Address: 338 Chestnut Hill Ave Boston, MA 02135
Phone: (617)232-0001
Fax: (617)232-7800
Email: jarod@fslassociates.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 50 Symphony Rd
Project Location: 50 Symphony Rd
Project #: 50 Symphony Rd.
Project Manager: Jarod Dousmoyer
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 2/14/18 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA MCP	GW-1

Other Project Specific Requirements/Comments/Detection Limits:

PLEASE NOTE
MS/MSD (at unit cost) will be omitted unless you check here: ☐

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOCs 624	SVOC ABN	Metals PP13	PCB 608	Pesticide 608	MADEP EPH	TCL Extr. Oil & Grease	pH	Total Suspended Solids	SAMPLE HANDLING	TOTAL # BOTTLES
04229-01	MW-1	2/7/18	9:00	GW	JC	X	X	X	X	X	X	X	X	X		

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)
Sample Specific Comments

Container Type	V	A	P	A	A	A	A	A	P	P
Preservative	H									A

Relinquished By:	Date/Time	Received By:	Date/Time
	2/7/18 1309	KAL	2/7/18 1309
	2/7/18		2/8/18 0645
	2/08/18 0747		2/8/18 0747

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/9/18

ALPHA Job #: L1804229

Project Information

Project Name: 50 Symphony Road

Project Location: 50 Symphony Road

Project #: 50 Symphony Road

Project Manager: Jarod Cournoyer

ALPHA Quote #:

Client Information

Client: FSL Associates, Inc.

Address: 358 Chestnut Hill Ave, 1st Floor

Boston, MA 02135

Phone: (617) 232-0001

Fax: (617) 232-7800

Email: jarod@fslassociates.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: 02/14/18 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #: 50Symphony

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MA MCP	GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes	☐ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 624	SVOC ABN (625)	Metals PP13 (200.7)	PCB (608)	Pesticide (608)	MADEP EPH	Total fats, oil, & grease	pH	Total Suspended Solids			
04229 - 02	MW-3	02/08/18	1230	water	JRC	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐
03	MW-1	02/08/18	1300	water	JRC	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Container Type	V	A	P	A	A	A	A	P	A	-	-	-					
Preservative	-	-	-	-	-	-	-	-	-	-	-	-					

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) REV: 5-JAN-12

Relinquished By:	Date/Time	Received By:	Date/Time
	2/9/18 1155	MAL	2/9/18 1155
	2/9/18 1800	Danielle Wyatt	2/9/18 18:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

ANALYTICAL REPORT

Lab Number:	L1809196
Client:	FSL Associates 358 Chestnut Hill Ave. Brighton, MA 02135
ATTN:	Jarod Cournoyer
Phone:	(617) 232-0001
Project Name:	50 SYMPHONY RD.
Project Number:	50 SYMPHONY RD.
Report Date:	03/20/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1809196-01	MW-1	WATER	50 SYMPHONY RD.	03/16/18 13:23	03/16/18
L1809196-02	MW-3	WATER	50 SYMPHONY RD.	03/16/18 12:45	03/16/18

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

Case Narrative (continued)

Report Submission

March 20, 2018: This final report includes the results of all requested analyses.

March 19, 2018: This is a preliminary report.

MCP Related Narratives

Total Metals

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question H:

The WG1098075-3 MS recovery, performed on L1809196-01, is outside the acceptance criteria for mercury (47%). A post digestion spike was performed and was within acceptance criteria.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

Dissolved Metals

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question H:

The WG1098074-3 MS recovery, performed on L1809196-01, is outside the acceptance criteria for mercury (49%). A post digestion spike was performed and was within acceptance criteria.

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Cripps

Title: Technical Director/Representative Date: 03/20/18

METALS

Project Name: 50 SYMPHONY RD.
Lab Number: L1809196
Project Number: 50 SYMPHONY RD.
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 03/16/18 13:23
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Arsenic, Total	0.00617		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Cadmium, Total	0.00021		mg/l	0.00020	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Chromium, Total	0.02068		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Copper, Total	0.00666		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Lead, Total	0.5223		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:32	EPA 245.1	3,245.1	MG
Nickel, Total	0.00985		mg/l	0.00200	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Thallium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Zinc, Total	0.1166		mg/l	0.01000	--	1	03/17/18 10:15	03/19/18 10:41	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	854		mg/l	0.660	NA	1	03/17/18 10:15	03/19/18 11:37	EPA 3005A	19,200.7	PS
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.0040	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Arsenic, Dissolved	0.0024		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Beryllium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Chromium, Dissolved	0.0020		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Copper, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Lead, Dissolved	0.0029		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Mercury, Dissolved	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:46	EPA 245.1	3,245.1	MG
Nickel, Dissolved	ND		mg/l	0.0020	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Selenium, Dissolved	ND		mg/l	0.0050	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Silver, Dissolved	ND		mg/l	0.0004	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM

Project Name: 50 SYMPHONY RD.
Lab Number: L1809196
Project Number: 50 SYMPHONY RD.
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 03/16/18 13:23
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Thallium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM
Zinc, Dissolved	ND		mg/l	0.0100	--	1	03/17/18 10:35	03/19/18 11:18	EPA 3005A	3,200.8	AM

Project Name: 50 SYMPHONY RD.
Lab Number: L1809196
Project Number: 50 SYMPHONY RD.
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 03/16/18 12:45
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00751		mg/l	0.00400	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Arsenic, Total	0.00937		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Cadmium, Total	0.00022		mg/l	0.00020	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Chromium, Total	0.01359		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Copper, Total	0.02384		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Lead, Total	0.2572		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:38	EPA 245.1	3,245.1	MG
Nickel, Total	0.00794		mg/l	0.00200	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Thallium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Zinc, Total	0.1148		mg/l	0.01000	--	1	03/17/18 10:15	03/19/18 10:45	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	459		mg/l	0.660	NA	1	03/17/18 10:15	03/19/18 12:00	EPA 3005A	19,200.7	PS
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.0051		mg/l	0.0040	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Arsenic, Dissolved	0.0028		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Beryllium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Chromium, Dissolved	0.0020		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Copper, Dissolved	0.0074		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Lead, Dissolved	0.0491		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Mercury, Dissolved	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:51	EPA 245.1	3,245.1	MG
Nickel, Dissolved	0.0022		mg/l	0.0020	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Selenium, Dissolved	ND		mg/l	0.0050	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Silver, Dissolved	ND		mg/l	0.0004	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM

Project Name: 50 SYMPHONY RD.
Lab Number: L1809196
Project Number: 50 SYMPHONY RD.
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.
Sample Depth:
Matrix: Water

Date Collected: 03/16/18 12:45
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Thallium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM
Zinc, Dissolved	0.0225		mg/l	0.0100	--	1	03/17/18 10:35	03/19/18 11:22	EPA 3005A	3,200.8	AM

Project Name: 50 SYMPHONY RD. **Lab Number:** L1809196

Project Number: 50 SYMPHONY RD. **Report Date:** 03/20/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-02 Batch: WG1098043-1										
Hardness	ND		mg/l	0.660	NA	1	03/17/18 10:15	03/19/18 11:28	19,200.7	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1098045-1										
Antimony, Total	ND		mg/l	0.00400	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Arsenic, Total	ND		mg/l	0.0010	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Lead, Total	ND		mg/l	0.00050	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Thallium, Total	ND		mg/l	0.00100	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	03/17/18 10:15	03/19/18 09:14	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1098049-1										
Antimony, Dissolved	ND		mg/l	0.0040	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Arsenic, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Beryllium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Chromium, Dissolved	ND		mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM

Project Name: 50 SYMPHONY RD. **Lab Number:** L1809196

Project Number: 50 SYMPHONY RD. **Report Date:** 03/20/18

Method Blank Analysis
Batch Quality Control

Copper, Dissolved	ND	mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Lead, Dissolved	ND	mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Nickel, Dissolved	ND	mg/l	0.0020	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Selenium, Dissolved	ND	mg/l	0.0050	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Silver, Dissolved	ND	mg/l	0.0004	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Thallium, Dissolved	ND	mg/l	0.0010	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM
Zinc, Dissolved	ND	mg/l	0.0100	--	1	03/17/18 10:35	03/19/18 09:56	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1098074-1										
Mercury, Dissolved	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:39	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1098075-1										
Mercury, Total	ND		mg/l	0.00020	--	1	03/17/18 11:45	03/17/18 16:29	3,245.1	MG

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1809196

Report Date: 03/20/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 Batch: WG1098043-2								
Hardness	102		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1098045-2								
Antimony, Total	96		-		85-115	-		
Arsenic, Total	108		-		85-115	-		
Beryllium, Total	105		-		85-115	-		
Cadmium, Total	113		-		85-115	-		
Chromium, Total	109		-		85-115	-		
Copper, Total	110		-		85-115	-		
Lead, Total	107		-		85-115	-		
Nickel, Total	110		-		85-115	-		
Selenium, Total	112		-		85-115	-		
Silver, Total	102		-		85-115	-		
Thallium, Total	90		-		85-115	-		
Zinc, Total	114		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1809196

Report Date: 03/20/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1098049-2					
Antimony, Dissolved	98	-	85-115	-	
Arsenic, Dissolved	106	-	85-115	-	
Beryllium, Dissolved	107	-	85-115	-	
Cadmium, Dissolved	107	-	85-115	-	
Chromium, Dissolved	111	-	85-115	-	
Copper, Dissolved	107	-	85-115	-	
Lead, Dissolved	104	-	85-115	-	
Nickel, Dissolved	108	-	85-115	-	
Selenium, Dissolved	109	-	85-115	-	
Silver, Dissolved	100	-	85-115	-	
Thallium, Dissolved	102	-	85-115	-	
Zinc, Dissolved	112	-	85-115	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1098074-2					
Mercury, Dissolved	92	-	85-115	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1098075-2					
Mercury, Total	91	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098043-7 QC Sample: L1809196-01 Client ID: MW-1												
Hardness	854	66.2	905	77		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098045-5 QC Sample: L1809196-01 Client ID: MW-1												
Antimony, Total	ND	0.5	0.6421	128		-	-		70-130	-		20
Arsenic, Total	0.00617	0.12	0.1381	110		-	-		70-130	-		20
Beryllium, Total	ND	0.05	0.05267	105		-	-		70-130	-		20
Cadmium, Total	0.00021	0.051	0.05442	106		-	-		70-130	-		20
Chromium, Total	0.02068	0.2	0.2255	102		-	-		70-130	-		20
Copper, Total	0.00666	0.25	0.2638	103		-	-		70-130	-		20
Lead, Total	0.5223	0.51	0.9724	88		-	-		70-130	-		20
Nickel, Total	0.00985	0.5	0.5207	102		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1365	114		-	-		70-130	-		20
Silver, Total	ND	0.05	0.04940	99		-	-		70-130	-		20
Thallium, Total	ND	0.12	0.1134	94		-	-		70-130	-		20
Zinc, Total	0.1166	0.5	0.6768	112		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098049-3 QC Sample: L1809196-01 Client ID: MW-1										
Antimony, Dissolved	ND	0.5	0.6220	124		-	-	70-130	-	20
Arsenic, Dissolved	0.0024	0.12	0.1401	115		-	-	70-130	-	20
Beryllium, Dissolved	ND	0.05	0.0554	111		-	-	70-130	-	20
Cadmium, Dissolved	ND	0.051	0.0540	106		-	-	70-130	-	20
Chromium, Dissolved	0.0020	0.2	0.2206	109		-	-	70-130	-	20
Copper, Dissolved	ND	0.25	0.2680	107		-	-	70-130	-	20
Lead, Dissolved	0.0029	0.51	0.5549	108		-	-	70-130	-	20
Nickel, Dissolved	ND	0.5	0.5467	109		-	-	70-130	-	20
Selenium, Dissolved	ND	0.12	0.1418	118		-	-	70-130	-	20
Silver, Dissolved	ND	0.05	0.0507	101		-	-	70-130	-	20
Thallium, Dissolved	ND	0.12	0.1264	105		-	-	70-130	-	20
Zinc, Dissolved	ND	0.5	0.5174	103		-	-	70-130	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098074-3 QC Sample: L1809196-01 Client ID: MW-1										
Mercury, Dissolved	ND	0.005	0.00244	**49**	Q	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098075-3 QC Sample: L1809196-01 Client ID: MW-1										
Mercury, Total	ND	0.005	0.00236	**47**	Q	-	-	70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098043-8 QC Sample: L1809196-01 Client ID: MW-1						
Hardness	854	858	mg/l	0		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098045-6 QC Sample: L1809196-01 Client ID: MW-1						
Antimony, Total	ND	0.00521	mg/l	NC		20
Arsenic, Total	0.00617	0.0062	mg/l	0		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	0.00021	0.00022	mg/l	7		20
Chromium, Total	0.02068	0.01997	mg/l	3		20
Copper, Total	0.00666	0.00657	mg/l	1		20
Lead, Total	0.5223	0.5176	mg/l	1		20
Nickel, Total	0.00985	0.00952	mg/l	3		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Thallium, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.1166	0.1130	mg/l	3		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098049-4 QC Sample: L1809196-01 Client ID: MW-1					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.0024	0.0023	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	0.0020	0.0021	mg/l	1	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	0.0029	0.0030	mg/l	3	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098074-4 QC Sample: L1809196-01 Client ID: MW-1					
Mercury, Dissolved	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1098075-4 QC Sample: L1809196-01 Client ID: MW-1					
Mercury, Total	ND	ND	mg/l	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-01
Client ID: MW-1
Sample Location: 50 SYMPHONY RD.

Sample Depth:
Matrix: Water

Date Collected: 03/16/18 13:23
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	1010		mg CaCO3/L	10.0	NA	5	-	03/19/18 09:30	121,2320B	BR
Solids, Total Dissolved	3000		mg/l	10	--	1	-	03/19/18 15:30	121,2540C	SD
Solids, Total Suspended	1100		mg/l	34	NA	6.7	-	03/17/18 21:00	121,2540D	CW
pH (H)	6.9		SU	-	NA	1	-	03/16/18 22:46	121,4500H+-B	AS

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

SAMPLE RESULTS

Lab ID: L1809196-02
Client ID: MW-3
Sample Location: 50 SYMPHONY RD.

Sample Depth:
Matrix: Water

Date Collected: 03/16/18 12:45
Date Received: 03/16/18
Field Prep: Field Filtered (Dissolved Metals)

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	308.		mg CaCO3/L	2.00	NA	1	-	03/19/18 09:30	121,2320B	BR
Solids, Total Dissolved	800		mg/l	10	--	1	-	03/19/18 15:30	121,2540C	SD
Solids, Total Suspended	320		mg/l	20	NA	4	-	03/17/18 21:00	121,2540D	CW
pH (H)	7.4		SU	-	NA	1	-	03/16/18 22:46	121,4500H+-B	AS

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.
Lab Number: L1809196
Report Date: 03/20/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1098138-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/17/18 21:00	121,2540D	CW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1098327-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	03/19/18 09:30	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1098459-1										
Solids, Total Dissolved	ND		mg/l	10	--	1	-	03/19/18 15:30	121,2540C	SD

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY RD.

Project Number: 50 SYMPHONY RD.

Lab Number: L1809196

Report Date: 03/20/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1097950-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1098327-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1098459-2								
Solids, Total Dissolved	98		-		80-120	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1097950-2 QC Sample: L1809196-01 Client ID: MW-1						
pH (H)	6.9	6.8	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1098138-2 QC Sample: L1809196-01 Client ID: MW-1						
Solids, Total Suspended	1100	1100	mg/l	0		29

Project Name: 50 SYMPHONY RD.
Project Number: 50 SYMPHONY RD.

Lab Number: L1809196
Report Date: 03/20/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1809196-01A	Plastic 950ml unpreserved	A	7	7	4.7	Y	Absent		TSS-2540(7)
L1809196-01B	Plastic 950ml unpreserved	A	7	7	4.7	Y	Absent		TDS-2540(7)
L1809196-01C	Plastic 250ml unpreserved	A	7	7	4.7	Y	Absent		PH-4500(.01)
L1809196-01D	Plastic 250ml unpreserved/No Headspace	A	NA		4.7	Y	Absent		ALK-T-2320(14)
L1809196-01E	Plastic 250ml HNO3 preserved	A	<2	<2	4.7	Y	Absent		AG-2008S(180),CR-2008S(180),BE-2008S(180),AS-2008S(180),PB-2008S(180),ZN-2008S(180),NI-2008S(180),SE-2008S(180),TL-2008S(180),CD-2008S(180),CU-2008S(180),SB-2008S(180),HG-R(28)
L1809196-01F	Plastic 250ml HNO3 preserved	A	<2	<2	4.7	Y	Absent		CD-2008T(180),NI-2008T(180),BE-2008T(180),ZN-2008T(180),CU-2008T(180),HARDU(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180),TL-2008T(180)
L1809196-02A	Plastic 950ml unpreserved	A	7	7	4.7	Y	Absent		TSS-2540(7)
L1809196-02B	Plastic 950ml unpreserved	A	7	7	4.7	Y	Absent		TDS-2540(7)
L1809196-02C	Plastic 250ml unpreserved	A	7	7	4.7	Y	Absent		PH-4500(.01)
L1809196-02D	Plastic 250ml unpreserved/No Headspace	A	NA		4.7	Y	Absent		ALK-T-2320(14)
L1809196-02E	Plastic 250ml HNO3 preserved	A	<2	<2	4.7	Y	Absent		AG-2008S(180),CR-2008S(180),BE-2008S(180),AS-2008S(180),PB-2008S(180),ZN-2008S(180),NI-2008S(180),SE-2008S(180),TL-2008S(180),CD-2008S(180),CU-2008S(180),SB-2008S(180),HG-R(28)
L1809196-02F	Plastic 250ml HNO3 preserved	A	<2	<2	4.7	Y	Absent		CD-2008T(180),NI-2008T(180),BE-2008T(180),ZN-2008T(180),CU-2008T(180),HARDU(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180),TL-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	50 SYMPHONY RD.	**Lab Number:**	L1809196
Project Number:	50 SYMPHONY RD.	**Report Date:**	03/20/18

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Revised JC/DS 3/16-18

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL 508-898-9220 FAX 508-898-9193
Mansfield, MA TEL 508-822-9300 FAX 508-822-3288

Date Rec'd in Lab: 3/16/18

ALPHA Job #: L1809196

Project Information

Project Name: 50 Symphony Road

Project Location: 50 Symphony Road

Project #: 50 Symphony Road

Project Manager: Jarod Courroyer

ALPHA Quote #:

Client Information

Client: FSL Associates, Inc.

Address: 358 Chestnut Hill Ave, 1st Floor

Boston, MA 02135

Phone: (617) 232-0001

Fax: (617) 232-7800

Email: jarod@fslassociates.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: ASAP Time:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MA MCP	GW-1 (Drinking Water)

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes	☐ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
RUSH X-DAY TURNAROUND

Run Metals by 200.8

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Metals (PP13 200.7)	Dissolved Metals (PP13 200.7)	pH	Hardness	Alkalinity	TDS	TSS						
09196 -01	MW-1	03/16/18	13:23	GW	JC	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	
-02	MW-3	03/16/18	12:45	GW	JC	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Container Type																		
Preservative																		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By	Date/Time	Received By	Date/Time
	03/16/1655		3/16/18 1655
	3/16/18		3-16-18 2030
	3-16-18 2110		3/16/18 2110

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL 508-898-9220 FAX 508-898-9193
Mansfield, MA TEL 508-822-9300 FAX 508-822-3288

Date Rec'd in Lab: 3/16/18

ALPHA Job #: L1809196

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Project Name: 50 Symphony Road

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☐ These samples have been Previously analyzed by Alpha

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☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: ASAP Time:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program: MA MCP

Criteria: GW-1 (Drinking Water)

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
RUSH X-DAY TURNAROUND

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Metals (PP13 200.7)	Dissolved Metals (PP13 200.7)	pH	Hardness	Alkalinity	TDS	TSS						
09196 -01	MW-1	03/16/18		GW	JC	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	
-02	MW-3	03/16/18		GW	JC	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Container Type																		
Preservative																		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By	Date/Time	Received By	Date/Time
	03/16/1655		3/16/18 1655
	3/16/18		3-16-18 2030
	3-16-18 2110		3/16/18 2110

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

ANALYTICAL REPORT

Lab Number:	L1811047
Client:	FSL Associates 358 Chestnut Hill Ave. Brighton, MA 02135
ATTN:	Jarod Cournoyer
Phone:	(617) 232-0001
Project Name:	50 SYMPHONY ROAD
Project Number:	50 SYMPHONY ROAD
Report Date:	04/04/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1811047-01	RECEIVING WATERS CSO-023	WATER	50 SYMPHONY ROAD	03/30/18 07:20	03/30/18
L1811047-02	MW-1	WATER	50 SYMPHONY ROAD	03/30/18 09:40	03/30/18
L1811047-03	MW-3	WATER	50 SYMPHONY ROAD	03/30/18 09:03	03/30/18

Project Name:	50 SYMPHONY ROAD	**Lab Number:**	L1811047
Project Number:	50 SYMPHONY ROAD	**Report Date:**	04/04/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	50 SYMPHONY ROAD	**Lab Number:**	L1811047
Project Number:	50 SYMPHONY ROAD	**Report Date:**	04/04/18

Case Narrative (continued)

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics by Method 624

The WG1102946-9 LCS recoveries for methylene chloride (120%), 1,1-dichloroethane (125%), 1,1,1-trichloroethane (110%), trans-1,2-dichloroethene (125%) and cis-1,2-dichloroethene (115%), associated with L1811047-01, are outside Alpha's acceptance criteria, but within the acceptance criteria specified in the method.

Anions by Ion Chromatography

The WG1103429-3 MS recovery for Chloride (71%), performed on L1811047-01, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps Melissa Cripps

Title: Technical Director/Representative Date: 04/04/18

ORGANICS

VOLATILES

Project Name: 50 SYMPHONY ROAD **Lab Number:** L1811047

Project Number: 50 SYMPHONY ROAD **Report Date:** 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 5,624
Analytical Date: 04/03/18 18:02
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	5.0	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--	1

Project Name: 50 SYMPHONY ROAD **Lab Number:** L1811047

Project Number: 50 SYMPHONY ROAD **Report Date:** 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01 Date Collected: 03/30/18 07:20

Client ID: RECEIVING WATERS CSO-023 Date Received: 03/30/18

Sample Location: 50 SYMPHONY ROAD Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene[1]	ND		ug/l	2.0	--	1
o-xylene[1]	ND		ug/l	1.0	--	1
Xylenes, Total[1]	ND		ug/l	1.0	--	1
Styrene[1]	ND		ug/l	1.0	--	1
Acetone[1]	ND		ug/l	10	--	1
Carbon disulfide[1]	ND		ug/l	5.0	--	1
2-Butanone[1]	ND		ug/l	10	--	1
Vinyl acetate[1]	ND		ug/l	10	--	1
4-Methyl-2-pentanone[1]	ND		ug/l	10	--	1
2-Hexanone[1]	ND		ug/l	10	--	1
Acrylonitrile[1]	ND		ug/l	10	--	1
Dibromomethane[1]	ND		ug/l	1.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		80-120
Fluorobenzene	114		80-120
4-Bromofluorobenzene	**129**	Q	80-120

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 04/03/18 13:19
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102946-10					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	5.0	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene[1]	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 04/03/18 13:19
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102946-10					
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene[1]	ND		ug/l	2.0	--
o-xylene[1]	ND		ug/l	1.0	--
Xylenes, Total[1]	ND		ug/l	1.0	--
Styrene[1]	ND		ug/l	1.0	--
Acetone[1]	ND		ug/l	10	--
Carbon disulfide[1]	ND		ug/l	5.0	--
2-Butanone[1]	ND		ug/l	10	--
Vinyl acetate[1]	ND		ug/l	10	--
4-Methyl-2-pentanone[1]	ND		ug/l	10	--
2-Hexanone[1]	ND		ug/l	10	--
Acrylonitrile[1]	ND		ug/l	10	--
Dibromomethane[1]	ND		ug/l	1.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	104		80-120
Fluorobenzene	97		80-120
4-Bromofluorobenzene	107		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102946-9								
Methylene chloride	**120**	Q	-		70-111	-		30
1,1-Dichloroethane	**125**	Q	-		78-116	-		30
Chloroform	110		-		86-111	-		30
Carbon tetrachloride	100		-		60-112	-		30
1,2-Dichloropropane	110		-		83-113	-		30
Dibromochloromethane	90		-		58-129	-		30
1,1,2-Trichloroethane	95		-		80-118	-		30
2-Chloroethylvinyl ether	85		-		69-124	-		30
Tetrachloroethene	105		-		80-126	-		30
Chlorobenzene	110		-		80-126	-		30
Trichlorofluoromethane	110		-		83-128	-		30
1,2-Dichloroethane	100		-		82-110	-		30
1,1,1-Trichloroethane	**110**	Q	-		72-109	-		30
Bromodichloromethane	95		-		71-120	-		30
trans-1,3-Dichloropropene	90		-		73-106	-		30
cis-1,3-Dichloropropene	95		-		78-111	-		30
Bromoform	90		-		45-131	-		30
1,1,2,2-Tetrachloroethane	100		-		81-122	-		30
Benzene	105		-		84-116	-		30
Toluene	110		-		83-121	-		30
Ethylbenzene	115		-		84-123	-		30
Chloromethane	85		-		70-144	-		30
Bromomethane	65		-		63-141	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102946-9								
Vinyl chloride	100		-		56-118	-		30
Chloroethane	120		-		74-130	-		30
1,1-Dichloroethene	110		-		77-116	-		30
trans-1,2-Dichloroethene	**125**	Q	-		81-121	-		30
cis-1,2-Dichloroethene[1]	**115**	Q	-		85-110	-		30
Trichloroethene	110		-		84-118	-		30
1,2-Dichlorobenzene	105		-		78-128	-		30
1,3-Dichlorobenzene	105		-		77-125	-		30
1,4-Dichlorobenzene	105		-		77-125	-		30
p/m-Xylene[1]	118		-		81-121	-		30
o-xylene[1]	115		-		81-124	-		30
Styrene[1]	115		-		84-133	-		30
Acetone[1]	98		-		40-160	-		30
Carbon disulfide[1]	130		-		54-134	-		30
2-Butanone[1]	100		-		57-116	-		30
Vinyl acetate[1]	108		-		40-160	-		30
4-Methyl-2-pentanone[1]	88		-		79-125	-		30
2-Hexanone[1]	86		-		78-120	-		30
Acrylonitrile[1]	105		-		66-123	-		30
Dibromomethane[1]	100		-		65-126	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102946-9								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	106				80-120
Fluorobenzene	103				80-120
4-Bromofluorobenzene	106				80-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102946-6 QC Sample: L1811238-01 Client ID: MS Sample												
4-Methyl-2-pentanone[1]	ND	100	94	94		-	-		79-125	-		30

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
4-Bromofluorobenzene	103				80-120
Fluorobenzene	110				80-120
Pentafluorobenzene	102				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102946-5 QC Sample: L1811238-01 Client ID: DUP Sample						
4-Methyl-2-pentanone[1]	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	99		102		80-120
Fluorobenzene	109		109		80-120
4-Bromofluorobenzene	101		106		80-120

SEMIVOLATILES

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/04/18 05:41
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Biphenyl	ND		ug/l	2.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1

Project Name: 50 SYMPHONY ROAD **Lab Number:** L1811047

Project Number: 50 SYMPHONY ROAD **Report Date:** 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01 Date Collected: 03/30/18 07:20

Client ID: RECEIVING WATERS CSO-023 Date Received: 03/30/18

Sample Location: 50 SYMPHONY ROAD Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	3.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	115		41-149

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/04/18 14:27
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 02:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.10	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.10	--	1
Benzo(a)anthracene	ND		ug/l	0.10	--	1
Benzo(a)pyrene	ND		ug/l	0.10	--	1
Benzo(b)fluoranthene	ND		ug/l	0.10	--	1
Benzo(k)fluoranthene	ND		ug/l	0.10	--	1
Chrysene	ND		ug/l	0.10	--	1
Acenaphthylene	ND		ug/l	0.10	--	1
Anthracene	ND		ug/l	0.10	--	1
Benzo(ghi)perylene	ND		ug/l	0.10	--	1
Fluorene	ND		ug/l	0.10	--	1
Phenanthrene	ND		ug/l	0.10	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--	1
Pyrene	ND		ug/l	0.10	--	1
1-Methylnaphthalene	ND		ug/l	0.10	--	1
2-Methylnaphthalene	ND		ug/l	0.10	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: 50 SYMPHONY ROAD **Lab Number:** L1811047

Project Number: 50 SYMPHONY ROAD **Report Date:** 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01 Date Collected: 03/30/18 07:20

Client ID: RECEIVING WATERS CSO-023 Date Received: 03/30/18

Sample Location: 50 SYMPHONY ROAD Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	71		41-149

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/18 17:04
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102833-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/18 17:04
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102833-1					
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/18 17:04
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102833-1					
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	3.5	--

Tentatively Identified Compounds

Total TIC Compounds	14.1	J	ug/l
Aldol Condensates	14.1	J	ug/l

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/18 17:04
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1102833-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	105		15-120
2,4,6-Tribromophenol	**123**	Q	10-120
4-Terphenyl-d14	132		41-149

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/04/18 14:01
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1102835-1					
Acenaphthene	ND		ug/l	0.10	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.10	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.10	--
Benzo(a)anthracene	ND		ug/l	0.10	--
Benzo(a)pyrene	ND		ug/l	0.10	--
Benzo(b)fluoranthene	ND		ug/l	0.10	--
Benzo(k)fluoranthene	ND		ug/l	0.10	--
Chrysene	ND		ug/l	0.10	--
Acenaphthylene	ND		ug/l	0.10	--
Anthracene	ND		ug/l	0.10	--
Benzo(ghi)perylene	ND		ug/l	0.10	--
Fluorene	ND		ug/l	0.10	--
Phenanthrene	ND		ug/l	0.10	--
Dibenzo(a,h)anthracene	ND		ug/l	0.10	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	--
Pyrene	ND		ug/l	0.10	--
1-Methylnaphthalene	ND		ug/l	0.10	--
2-Methylnaphthalene	ND		ug/l	0.10	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/04/18 14:01
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/03/18 00:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1102835-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	109		23-120
2-Fluorobiphenyl	110		15-120
2,4,6-Tribromophenol	**121**	Q	10-120
4-Terphenyl-d14	118		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102833-2 WG1102833-3								
Acenaphthene	75		80		37-111	6		30
Benzidine	65		45		10-75	**36**	Q	30
1,2,4-Trichlorobenzene	62		56		39-98	10		30
Hexachlorobenzene	80		90		40-140	12		30
Bis(2-chloroethyl)ether	83		76		40-140	9		30
2-Chloronaphthalene	68		70		40-140	3		30
1,2-Dichlorobenzene	61		54		40-140	12		30
1,3-Dichlorobenzene	59		52		40-140	13		30
1,4-Dichlorobenzene	60		53		36-97	12		30
3,3'-Dichlorobenzidine	81		79		40-140	3		30
2,4-Dinitrotoluene	96		111		48-143	14		30
2,6-Dinitrotoluene	92		106		40-140	14		30
Azobenzene	88		98		40-140	11		30
Fluoranthene	89		103		40-140	15		30
4-Chlorophenyl phenyl ether	76		83		40-140	9		30
4-Bromophenyl phenyl ether	80		89		40-140	11		30
Bis(2-chloroisopropyl)ether	71		65		40-140	9		30
Bis(2-chloroethoxy)methane	89		86		40-140	3		30
Hexachlorobutadiene	51		46		40-140	10		30
Hexachlorocyclopentadiene	**36**	Q	**35**	Q	40-140	3		30
Hexachloroethane	57		49		40-140	15		30
Isophorone	95		95		40-140	0		30
Naphthalene	65		62		40-140	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102833-2 WG1102833-3								
Nitrobenzene	82		78		40-140	5		30
NDPA/DPA	89		99		40-140	11		30
n-Nitrosodi-n-propylamine	93		89		29-132	4		30
Bis(2-ethylhexyl)phthalate	95		111		40-140	16		30
Butyl benzyl phthalate	93		108		40-140	15		30
Di-n-butylphthalate	95		111		40-140	16		30
Di-n-octylphthalate	95		109		40-140	14		30
Diethyl phthalate	90		100		40-140	11		30
Dimethyl phthalate	86		97		40-140	12		30
Benzo(a)anthracene	87		100		40-140	14		30
Benzo(a)pyrene	99		110		40-140	11		30
Benzo(b)fluoranthene	98		109		40-140	11		30
Benzo(k)fluoranthene	91		107		40-140	16		30
Chrysene	84		96		40-140	13		30
Acenaphthylene	80		86		45-123	7		30
Anthracene	86		97		40-140	12		30
Benzo(ghi)perylene	93		105		40-140	12		30
Fluorene	82		90		40-140	9		30
Phenanthrene	81		92		40-140	13		30
Dibenzo(a,h)anthracene	94		107		40-140	13		30
Indeno(1,2,3-cd)pyrene	80		93		40-140	15		30
Pyrene	86		100		26-127	15		30
Biphenyl	69		71		40-140	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102833-2 WG1102833-3								
Aniline	56		44		40-140	24		30
4-Chloroaniline	73		70		40-140	4		30
1-Methylnaphthalene	62		62		41-103	0		30
2-Nitroaniline	96		108		52-143	12		30
3-Nitroaniline	84		88		25-145	5		30
4-Nitroaniline	92		106		51-143	14		30
Dibenzofuran	77		82		40-140	6		30
2-Methylnaphthalene	67		65		40-140	3		30
n-Nitrosodimethylamine	51		46		22-74	10		30
2,4,6-Trichlorophenol	94		99		30-130	5		30
p-Chloro-m-cresol	96		**104**	Q	23-97	8		30
2-Chlorophenol	88		80		27-123	10		30
2,4-Dichlorophenol	95		94		30-130	1		30
2,4-Dimethylphenol	94		94		30-130	0		30
2-Nitrophenol	94		90		30-130	4		30
4-Nitrophenol	59		70		10-80	17		30
2,4-Dinitrophenol	82		98		20-130	18		30
4,6-Dinitro-o-cresol	99		115		20-164	15		30
Pentachlorophenol	74		84		9-103	13		30
Phenol	46		44		12-110	4		30
2-Methylphenol	87		83		30-130	5		30
3-Methylphenol/4-Methylphenol	83		81		30-130	2		30
2,4,5-Trichlorophenol	88		98		30-130	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1102833-2 WG1102833-3								
Benzoic Acid	33		26		10-164	24		30
Benzyl Alcohol	81		77		26-116	5		30
Carbazole	95		110		55-144	15		30
Pyridine	33		27		10-66	20		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		67		21-120
Phenol-d6	57		53		10-120
Nitrobenzene-d5	92		86		23-120
2-Fluorobiphenyl	89		90		15-120
2,4,6-Tribromophenol	101		110		10-120
4-Terphenyl-d14	102		116		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1102835-2 WG1102835-3								
Acenaphthene	89		77		40-140	14		40
2-Chloronaphthalene	94		77		40-140	20		40
Fluoranthene	87		78		40-140	11		40
Hexachlorobutadiene	78		63		40-140	21		40
Naphthalene	92		73		40-140	23		40
Benzo(a)anthracene	96		87		40-140	10		40
Benzo(a)pyrene	102		91		40-140	11		40
Benzo(b)fluoranthene	103		100		40-140	3		40
Benzo(k)fluoranthene	103		88		40-140	16		40
Chrysene	95		87		40-140	9		40
Acenaphthylene	94		78		40-140	19		40
Anthracene	96		85		40-140	12		40
Benzo(ghi)perylene	104		95		40-140	9		40
Fluorene	95		83		40-140	13		40
Phenanthrene	95		85		40-140	11		40
Dibenzo(a,h)anthracene	107		98		40-140	9		40
Indeno(1,2,3-cd)pyrene	104		96		40-140	8		40
Pyrene	96		86		40-140	11		40
1-Methylnaphthalene	91		75		40-140	19		40
2-Methylnaphthalene	93		76		40-140	20		40
Pentachlorophenol	110		106		40-140	4		40
Hexachlorobenzene	91		81		40-140	12		40
Hexachloroethane	80		63		40-140	24		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1102835-2 WG1102835-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	69		53		21-120
Phenol-d6	53		42		10-120
Nitrobenzene-d5	105		85		23-120
2-Fluorobiphenyl	104		88		15-120
2,4,6-Tribromophenol	104		89		10-120
4-Terphenyl-d14	107		96		41-149

PCBS

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/04/18 05:40
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 04/03/18 18:00
Cleanup Method: EPA 3665A
Cleanup Date: 04/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 04/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	74		30-150	A

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/04/18 06:18
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 04/03/18 06:16
Cleanup Method: EPA 3665A
Cleanup Date: 04/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 04/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1102892-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	A
Decachlorobiphenyl	85		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1102892-2									
Aroclor 1016	82		-		30-150	-		30	A
Aroclor 1260	89		-		30-150	-		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102				30-150	A
Decachlorobiphenyl	96				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102892-3 QC Sample: L1800004-03 Client ID: MS Sample													
Aroclor 1016	ND	3.12	2.60	83		-	-		40-126	-		30	A
Aroclor 1260	ND	3.12	2.57	82		-	-		40-127	-		30	A

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*	*Column*
2,4,5,6-Tetrachloro-m-xylene	100				30-150	A
Decachlorobiphenyl	86				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102892-4 QC Sample: L1800004-03 Client ID: DUP Sample							
Aroclor 1016	ND	ND	ug/l	NC		30	A
Aroclor 1221	ND	ND	ug/l	NC		30	A
Aroclor 1232	ND	ND	ug/l	NC		30	A
Aroclor 1242	ND	ND	ug/l	NC		30	A
Aroclor 1248	ND	ND	ug/l	NC		30	A
Aroclor 1254	ND	ND	ug/l	NC		30	A
Aroclor 1260	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		101		30-150	A
Decachlorobiphenyl	98		95		30-150	A

PESTICIDES

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/04/18 13:40
Analyst: KEG

Extraction Method: EPA 608
Extraction Date: 04/03/18 21:17
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	--	1	A
Lindane	ND		ug/l	0.020	--	1	A
Alpha-BHC	ND		ug/l	0.020	--	1	A
Beta-BHC	ND		ug/l	0.020	--	1	A
Heptachlor	ND		ug/l	0.020	--	1	A
Aldrin	ND		ug/l	0.020	--	1	A
Heptachlor epoxide	ND		ug/l	0.020	--	1	A
Endrin	ND		ug/l	0.040	--	1	A
Endrin aldehyde	ND		ug/l	0.040	--	1	A
Endrin ketone[1]	ND		ug/l	0.040	--	1	A
Dieldrin	ND		ug/l	0.040	--	1	A
4,4'-DDE	ND		ug/l	0.040	--	1	A
4,4'-DDD	ND		ug/l	0.040	--	1	A
4,4'-DDT	ND		ug/l	0.040	--	1	A
Endosulfan I	ND		ug/l	0.020	--	1	A
Endosulfan II	ND		ug/l	0.040	--	1	A
Endosulfan sulfate	ND		ug/l	0.040	--	1	A
Methoxychlor[1]	ND		ug/l	0.100	--	1	A
Toxaphene	ND		ug/l	0.400	--	1	A
Chlordane	ND		ug/l	0.200	--	1	A
cis-Chlordane[1]	ND		ug/l	0.020	--	1	A
trans-Chlordane[1]	ND		ug/l	0.020	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	93		30-150	A

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/04/18 13:27
Analyst: KEG

Extraction Method: EPA 608
Extraction Date: 04/03/18 21:17
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1103213-1						
Delta-BHC	ND		ug/l	0.020	--	A
Lindane	ND		ug/l	0.020	--	A
Alpha-BHC	ND		ug/l	0.020	--	A
Beta-BHC	ND		ug/l	0.020	--	A
Heptachlor	ND		ug/l	0.020	--	A
Aldrin	ND		ug/l	0.020	--	A
Heptachlor epoxide	ND		ug/l	0.020	--	A
Endrin	ND		ug/l	0.040	--	A
Endrin aldehyde	ND		ug/l	0.040	--	A
Endrin ketone[1]	ND		ug/l	0.040	--	A
Dieldrin	ND		ug/l	0.040	--	A
4,4'-DDE	ND		ug/l	0.040	--	A
4,4'-DDD	ND		ug/l	0.040	--	A
4,4'-DDT	ND		ug/l	0.040	--	A
Endosulfan I	ND		ug/l	0.020	--	A
Endosulfan II	ND		ug/l	0.040	--	A
Endosulfan sulfate	ND		ug/l	0.040	--	A
Methoxychlor[1]	ND		ug/l	0.100	--	A
Toxaphene	ND		ug/l	0.400	--	A
Chlordane	ND		ug/l	0.200	--	A
cis-Chlordane[1]	ND		ug/l	0.020	--	A
trans-Chlordane[1]	ND		ug/l	0.020	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	83		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1103213-2									
Delta-BHC	93		-		30-150	-		30	A
Lindane	94		-		30-150	-		30	A
Alpha-BHC	89		-		30-150	-		30	A
Beta-BHC	97		-		30-150	-		30	A
Heptachlor	91		-		30-150	-		30	A
Aldrin	77		-		30-150	-		30	A
Heptachlor epoxide	111		-		30-150	-		30	A
Endrin	111		-		30-150	-		30	A
Endrin aldehyde	83		-		30-150	-		30	A
Endrin ketone[1]	109		-		30-150	-		30	A
Dieldrin	107		-		30-150	-		30	A
4,4'-DDE	91		-		30-150	-		30	A
4,4'-DDD	87		-		30-150	-		30	A
4,4'-DDT	91		-		30-150	-		30	A
Endosulfan I	99		-		30-150	-		30	A
Endosulfan II	106		-		30-150	-		30	A
Endosulfan sulfate	99		-		30-150	-		30	A
Methoxychlor[1]	112		-		30-150	-		30	A
cis-Chlordane[1]	89		-		30-150	-		30	A
trans-Chlordane[1]	73		-		30-150	-		30	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1103213-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84				30-150	A
Decachlorobiphenyl	97				30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1103213-3 QC Sample: L1800004-09 Client ID: MS Sample													
Delta-BHC	ND	0.5	0.438	88		-	-		19-140	-		30	A
Lindane	ND	0.5	0.452	90		-	-		56-123	-		30	A
Alpha-BHC	ND	0.5	0.432	86		-	-		37-134	-		30	A
Beta-BHC	ND	0.5	0.473	95		-	-		17-147	-		30	A
Heptachlor	ND	0.5	0.457	91		-	-		40-111	-		30	A
Aldrin	ND	0.5	0.367	73		-	-		40-120	-		30	A
Heptachlor epoxide	ND	0.5	0.503	101		-	-		37-142	-		30	A
Endrin	ND	0.5	0.528	106		-	-		56-121	-		30	A
Endrin aldehyde	ND	0.5	0.386	77		-	-		42-122	-		30	A
Endrin ketone[1]	ND	0.5	0.474	95		-	-		30-150	-		30	A
Dieldrin	ND	0.5	0.510	102		-	-		52-126	-		30	A
4,4'-DDE	ND	0.5	0.432	86		-	-		30-145	-		30	A
4,4'-DDD	ND	0.5	0.415	83		-	-		31-141	-		30	A
4,4'-DDT	ND	0.5	0.433	87		-	-		38-127	-		30	A
Endosulfan I	ND	0.5	0.475	95		-	-		45-153	-		30	A
Endosulfan II	ND	0.5	0.504	101		-	-		.1-202	-		30	A
Endosulfan sulfate	ND	0.5	0.438	88		-	-		26-144	-		30	A
Methoxychlor[1]	ND	0.5	0.525	105		-	-		30-150	-		30	A
cis-Chlordane[1]	ND	0.5	0.429	86		-	-		30-150	-		30	A
trans-Chlordane[1]	ND	0.5	0.363	73		-	-		30-150	-		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1103213-3 QC Sample: L1800004-09 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80				30-150	A
Decachlorobiphenyl	87				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1103213-4 QC Sample: L1800004-09 Client ID: DUP Sample							
Delta-BHC	ND	ND	ug/l	NC		30	A
Lindane	ND	ND	ug/l	NC		30	A
Alpha-BHC	ND	ND	ug/l	NC		30	A
Beta-BHC	ND	ND	ug/l	NC		30	A
Heptachlor	ND	ND	ug/l	NC		30	A
Aldrin	ND	ND	ug/l	NC		30	A
Heptachlor epoxide	ND	ND	ug/l	NC		30	A
Endrin	ND	ND	ug/l	NC		30	A
Endrin aldehyde	ND	ND	ug/l	NC		30	A
Endrin ketone[1]	ND	ND	ug/l	NC		30	A
Dieldrin	ND	ND	ug/l	NC		30	A
4,4'-DDE	ND	ND	ug/l	NC		30	A
4,4'-DDD	ND	ND	ug/l	NC		30	A
4,4'-DDT	ND	ND	ug/l	NC		30	A
Endosulfan I	ND	ND	ug/l	NC		30	A
Endosulfan II	ND	ND	ug/l	NC		30	A
Endosulfan sulfate	ND	ND	ug/l	NC		30	A
Methoxychlor[1]	ND	ND	ug/l	NC		30	A
Toxaphene	ND	ND	ug/l	NC		30	A
Chlordane	ND	ND	ug/l	NC		30	A
cis-Chlordane[1]	ND	ND	ug/l	NC		30	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Organochlorine Pesticides by GC - Westborough Lab Sample	Associated sample(s): 01	QC Batch ID: WG1103213-4		QC Sample: L1800004-09		Client ID: DUP	
trans-Chlordane[1]	ND	ND	ug/l	NC		30	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		86		30-150	A
Decachlorobiphenyl	89		98		30-150	A

METALS

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD
Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Barium, Total	0.05854		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 11:18	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Chromium, Total	0.00104		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Iron, Total	0.361		mg/l	0.050	--	1	04/03/18 15:50	04/04/18 12:06	EPA 3005A	19,200.7	LC
Lead, Total	0.00133		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	--	1	04/04/18 07:50	04/04/18 11:13	EPA 245.1	3,245.1	BV
Nickel, Total	ND		mg/l	0.00200	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Thallium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Vanadium, Total	ND		mg/l	0.00500	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Zinc, Total	0.01381		mg/l	0.01000	--	1	04/03/18 15:50	04/04/18 10:15	EPA 3005A	3,200.8	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	80.1		mg/l	0.660	NA	1	04/03/18 15:50	04/04/18 12:06	EPA 3005A	19,200.7	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		04/04/18 10:15	NA	107,-	

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-02
Client ID: MW-1
Sample Location: 50 SYMPHONY ROAD
Date Collected: 03/30/18 09:40
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.06488		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:19	EPA 3005A	3,200.8	AM
Iron, Total	37.8		mg/l	0.050	--	1	04/03/18 15:50	04/04/18 12:11	EPA 3005A	19,200.7	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.065		mg/l	0.010	--	1		04/04/18 10:19	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	0.0017		mg/l	0.0010	--	1	04/04/18 07:30	04/04/18 12:51	EPA 3005A	3,200.8	AM
Iron, Dissolved	0.066		mg/l	0.050	--	1	04/04/18 07:30	04/04/18 11:57	EPA 3005A	19,200.7	LC

Project Name: 50 SYMPHONY ROAD
Lab Number: L1811047
Project Number: 50 SYMPHONY ROAD
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-03
Client ID: MW-3
Sample Location: 50 SYMPHONY ROAD
Date Collected: 03/30/18 09:03
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	0.02270		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 10:23	EPA 3005A	3,200.8	AM
Iron, Total	25.7		mg/l	0.050	--	1	04/03/18 15:50	04/04/18 12:15	EPA 3005A	19,200.7	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.023		mg/l	0.010	--	1		04/04/18 10:23	NA	107,-	
Dissolved Metals - Mansfield Lab											
Chromium, Dissolved	ND		mg/l	0.0010	--	1	04/04/18 07:30	04/04/18 12:05	EPA 3005A	3,200.8	AM
Iron, Dissolved	ND		mg/l	0.050	--	1	04/04/18 07:30	04/04/18 11:35	EPA 3005A	19,200.7	LC

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1102936-1										
Antimony, Total	ND		mg/l	0.00400	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Barium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Lead, Total	ND		mg/l	0.00050	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Thallium, Total	ND		mg/l	0.00100	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Vanadium, Total	ND		mg/l	0.00500	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	--	1	04/03/18 15:50	04/04/18 09:22	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1102937-1										
Iron, Total	ND		mg/l	0.050	--	1	04/03/18 15:50	04/04/18 11:32	19,200.7	LC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-03 Batch: WG1102937-1										
Hardness	ND		mg/l	0.660	NA	1	04/03/18 15:50	04/04/18 11:32	19,200.7	LC

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 02-03 Batch: WG1103158-1										
Chromium, Dissolved	ND		mg/l	0.0010	--	1	04/04/18 07:30	04/04/18 11:46	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 02-03 Batch: WG1103160-1										
Iron, Dissolved	ND		mg/l	0.050	--	1	04/04/18 07:30	04/04/18 11:27	19,200.7	LC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1103312-1										
Mercury, Total	ND		mg/l	0.00020	--	1	04/04/18 07:50	04/04/18 11:10	3,245.1	BV

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1102936-2								
Antimony, Total	104		-		85-115	-		
Arsenic, Total	107		-		85-115	-		
Barium, Total	100		-		85-115	-		
Beryllium, Total	106		-		85-115	-		
Cadmium, Total	110		-		85-115	-		
Chromium, Total	104		-		85-115	-		
Lead, Total	99		-		85-115	-		
Nickel, Total	104		-		85-115	-		
Selenium, Total	110		-		85-115	-		
Silver, Total	95		-		85-115	-		
Thallium, Total	94		-		85-115	-		
Vanadium, Total	104		-		85-115	-		
Zinc, Total	106		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1102937-2								
Iron, Total	113		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-03 Batch: WG1102937-2								
Hardness	109		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 Batch: WG1103158-2					
Chromium, Dissolved	105	-	85-115	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 Batch: WG1103160-2					
Iron, Dissolved	99	-	85-115	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1103312-2					
Mercury, Total	107	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102936-3 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023												
Antimony, Total	ND	0.5	0.5239	105		-	-		70-130	-		20
Arsenic, Total	ND	0.12	0.1343	112		-	-		70-130	-		20
Barium, Total	0.05854	2	2.023	98		-	-		70-130	-		20
Beryllium, Total	ND	0.05	0.05278	106		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05656	111		-	-		70-130	-		20
Chromium, Total	0.00104	0.2	0.2164	108		-	-		70-130	-		20
Lead, Total	0.00133	0.51	0.5158	101		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.5495	110		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1332	111		-	-		70-130	-		20
Silver, Total	ND	0.05	0.04724	94		-	-		70-130	-		20
Thallium, Total	ND	0.12	0.1147	96		-	-		70-130	-		20
Vanadium, Total	ND	0.5	0.5429	108		-	-		70-130	-		20
Zinc, Total	0.01381	0.5	0.5799	113		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102936-5 QC Sample: L1811085-01 Client ID: MS Sample										
Antimony, Total	ND	0.5	0.6002	120		-	-	70-130	-	20
Arsenic, Total	0.00402	0.12	0.1438	116		-	-	70-130	-	20
Barium, Total	0.1426	2	2.220	104		-	-	70-130	-	20
Beryllium, Total	ND	0.05	0.05082	102		-	-	70-130	-	20
Cadmium, Total	0.00028	0.051	0.05642	110		-	-	70-130	-	20
Chromium, Total	0.00228	0.2	0.2226	110		-	-	70-130	-	20
Lead, Total	0.01257	0.51	0.5660	108		-	-	70-130	-	20
Nickel, Total	0.01230	0.5	0.5589	109		-	-	70-130	-	20
Selenium, Total	0.00699	0.12	0.1428	113		-	-	70-130	-	20
Silver, Total	ND	0.05	0.04574	91		-	-	70-130	-	20
Thallium, Total	ND	0.12	0.1161	97		-	-	70-130	-	20
Vanadium, Total	ND	0.5	0.5631	113		-	-	70-130	-	20
Zinc, Total	0.02685	0.5	0.5788	110		-	-	70-130	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102937-3 QC Sample: L1811085-01 Client ID: MS Sample										
Iron, Total	1.94	1	3.28	**134**	Q	-	-	75-125	-	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102937-3 QC Sample: L1811085-01 Client ID: MS Sample										
Hardness	940	66.2	1070	**196**	Q	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1103158-3 QC Sample: L1811047-03 Client ID: MW-3										
Chromium, Dissolved	ND	0.2	0.2276	114		-	-	70-130	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1103160-3 QC Sample: L1811047-03 Client ID: MW-3									
Iron, Dissolved	ND	1	0.993	99	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1103312-3 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023									
Mercury, Total	ND	0.005	0.00499	100	-	-	70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102936-4 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	ND	ND	mg/l	NC		20
Barium, Total	0.05854	0.05226	mg/l	11		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00104	ND	mg/l	NC		20
Lead, Total	0.00133	0.00122	mg/l	9		20
Nickel, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Thallium, Total	ND	ND	mg/l	NC		20
Vanadium, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.01381	0.01215	mg/l	13		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102936-4 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023						
Beryllium, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102936-6 QC Sample: L1811085-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00402	0.00420	mg/l	4		20
Cadmium, Total	0.00028	0.00030	mg/l	8		20
Chromium, Total	0.00228	0.00252	mg/l	10		20
Lead, Total	0.01257	0.01647	mg/l	**27**	Q	20
Nickel, Total	0.01230	0.01284	mg/l	4		20
Selenium, Total	0.00699	0.00697	mg/l	0		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.02685	0.02772	mg/l	3		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102937-4 QC Sample: L1811085-01 Client ID: DUP Sample						
Iron, Total	1.94	2.05	mg/l	6		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1102937-4 QC Sample: L1811085-01 Client ID: DUP Sample						
Hardness	940	976	mg/l	4		20
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1103158-4 QC Sample: L1811047-03 Client ID: MW-3						
Chromium, Dissolved	ND	ND	mg/l	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1103160-4 QC Sample: L1811047-03 Client ID: MW-3						
Iron, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1103312-4 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023					
Mercury, Total	ND	ND	mg/l	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-01
Client ID: RECEIVING WATERS CSO-023
Sample Location: 50 SYMPHONY ROAD
Sample Depth:
Matrix: Water
Date Collected: 03/30/18 07:20
Date Received: 03/30/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	27.3		mg CaCO3/L	2.00	NA	1	-	04/02/18 09:41	121,2320B	BR
Solids, Total Dissolved	410		mg/l	10	--	1	-	04/03/18 14:05	121,2540C	DW
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/03/18 12:35	121,2540D	JT
Cyanide, Total	ND		mg/l	0.005	--	1	04/01/18 16:00	04/02/18 10:46	121,4500CN-CE	LH
pH (H)	7.2		SU	-	NA	1	-	03/30/18 23:00	121,4500H+-B	CW
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	04/03/18 02:00	04/03/18 19:27	121,4500NH3-BH	ML
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/18 18:00	04/03/18 23:30	74,1664A	MM
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/30/18 21:55	03/30/18 22:12	1,7196A	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	186.		mg/l	12.5	--	25	-	04/04/18 04:51	44,300.0	JT

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-02
Client ID: MW-1
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 09:40
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	04/01/18 16:00	04/02/18 10:48	121,4500CN-CE	LH
Nitrogen, Ammonia	9.74		mg/l	0.075	--	1	04/03/18 02:00	04/03/18 19:28	121,4500NH3-BH	ML
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/18 18:00	04/03/18 23:30	74,1664A	MM
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/30/18 21:55	03/30/18 22:13	1,7196A	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	850.		mg/l	12.5	--	25	-	04/04/18 01:03	44,300.0	JR

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

SAMPLE RESULTS

Lab ID: L1811047-03
Client ID: MW-3
Sample Location: 50 SYMPHONY ROAD

Date Collected: 03/30/18 09:03
Date Received: 03/30/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	04/01/18 16:00	04/02/18 10:49	121,4500CN-CE	LH
Nitrogen, Ammonia	2.21		mg/l	0.075	--	1	04/03/18 02:00	04/03/18 19:28	121,4500NH3-BH	ML
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/18 18:00	04/03/18 23:30	74,1664A	MM
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/30/18 21:55	03/30/18 22:13	1,7196A	CW
Anions by Ion Chromatography - Westborough Lab										
Chloride	398.		mg/l	12.5	--	25	-	04/04/18 01:15	44,300.0	JR

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD
Lab Number: L1811047
Report Date: 04/04/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1102235-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/30/18 21:55	03/30/18 22:12	1,7196A	CW
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1102477-1										
Cyanide, Total	ND		mg/l	0.005	--	1	04/01/18 16:00	04/02/18 10:22	121,4500CN-CE	LH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1102563-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	04/02/18 09:41	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1102827-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	04/03/18 02:00	04/03/18 19:09	121,4500NH3-BH	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1102897-1										
Solids, Total Dissolved	ND		mg/l	10	--	1	-	04/03/18 14:05	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1102916-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/03/18 12:35	121,2540D	JT
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1103169-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/18 18:00	04/03/18 23:30	74,1664A	MM
Anions by Ion Chromatography - Westborough Lab for sample(s): 02-03 Batch: WG1103265-1										
Chloride	ND		mg/l	0.500	--	1	-	04/04/18 02:15	44,300.0	JR
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1103429-1										
Chloride	ND		mg/l	0.500	--	1	-	04/04/18 04:03	44,300.0	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1102235-2								
Chromium, Hexavalent	97		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1102257-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1102477-2								
Cyanide, Total	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1102563-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1102827-2								
Nitrogen, Ammonia	92		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1102897-2								
Solids, Total Dissolved	97		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1103169-2								
TPH	82		-		64-132	-		34

Lab Control Sample Analysis

Batch Quality Control

Project Name: 50 SYMPHONY ROAD

Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047

Report Date: 04/04/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-03 Batch: WG1103265-2					
Chloride	93	-	90-110	-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1103429-2					
Chloride	93	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102235-4 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102477-4 QC Sample: L1811085-02 Client ID: MS Sample												
Cyanide, Total	0.016	0.2	0.201	92		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102563-4 QC Sample: L1810901-02 Client ID: MS Sample												
Alkalinity, Total	94.8	100	195	100		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102827-4 QC Sample: L1810631-01 Client ID: MS Sample												
Nitrogen, Ammonia	ND	4	3.68	92		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1103169-4 QC Sample: L1810865-01 Client ID: MS Sample												
TPH	ND	20	15.4	77		-	-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG1103265-3 QC Sample: L1811047-02 Client ID: MW-1												
Chloride	850	100	954	105		-	-		90-110	-		18
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1103429-3 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023												
Chloride	186	100	257	**71**	Q	-	-		90-110	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102235-3 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102257-2 QC Sample: L1811085-01 Client ID: DUP Sample						
pH	6.8	6.8	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102477-3 QC Sample: L1811085-01 Client ID: DUP Sample						
Cyanide, Total	0.010	0.014	mg/l	**38**	Q	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102563-3 QC Sample: L1810901-01 Client ID: DUP Sample						
Alkalinity, Total	139	140	mg CaCO3/L	1		10
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1102827-3 QC Sample: L1810631-01 Client ID: DUP Sample						
Nitrogen, Ammonia	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102897-3 QC Sample: L1810768-01 Client ID: DUP Sample						
Solids, Total Dissolved	960	980	mg/l	2		10
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1102916-2 QC Sample: L1811041-01 Client ID: DUP Sample						
Solids, Total Suspended	87	90	mg/l	3		29
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1103169-3 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023						
TPH, SGT-HEM	ND	ND	mg/l	NC		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY RO/

Lab Number: L1811047
Report Date: 04/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG1103265-4 QC Sample: L1811047-02 Client ID: MW-1					
Chloride	850	850	mg/l	0	18
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1103429-4 QC Sample: L1811047-01 Client ID: RECEIVING WATERS CSO-023					
Chloride	186	186	mg/l	0	18

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1811047-01A	Vial Na2S2O3 preserved	A	NA		5.0	Y	Absent		624(7)
L1811047-01B	Vial Na2S2O3 preserved	A	NA		5.0	Y	Absent		624(7)
L1811047-01C	Vial Na2S2O3 preserved	A	NA		5.0	Y	Absent		624(7)
L1811047-01D	Plastic 120ml unpreserved	A	7	7	5.0	Y	Absent		CL-300(28),PH-4500(.01)
L1811047-01E	Plastic 250ml unpreserved/No Headspace	A	NA		5.0	Y	Absent		ALK-T-2320(14)
L1811047-01F	Plastic 250ml NaOH preserved	A	>12	>12	5.0	Y	Absent		TCN-4500(14)
L1811047-01G	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		CD-2008T(180),NI-2008T(180),BE-2008T(180),ZN-2008T(180),FE-UI(180),HARDU(180),V-2008T(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),BA-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180),TL-2008T(180)
L1811047-01G1	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		CD-2008T(180),NI-2008T(180),BE-2008T(180),ZN-2008T(180),FE-UI(180),HARDU(180),V-2008T(180),AG-2008T(180),AS-2008T(180),HG-U(28),SE-2008T(180),BA-2008T(180),CR-2008T(180),PB-2008T(180),SB-2008T(180),TL-2008T(180)
L1811047-01H	Plastic 500ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		NH3-4500(28)
L1811047-01I	Plastic 950ml unpreserved	A	7	7	5.0	Y	Absent		TSS-2540(7)
L1811047-01J	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		HEXCR-7196(1)
L1811047-01K	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		TDS-2540(7)
L1811047-01L	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-01M	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-01N	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		PCB-608(7)
L1811047-01O	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		PCB-608(7)
L1811047-01P	Amber 1000ml Na2S2O3	B	7	7	4.6	Y	Absent		PESTICIDE-608(7)

*Values in parentheses indicate holding time in days

Project Name: 50 SYMPHONY ROAD
Project Number: 50 SYMPHONY ROAD

Lab Number: L1811047
Report Date: 04/04/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1811047-01Q	Amber 1000ml Na2S2O3	B	7	7	4.6	Y	Absent		PESTICIDE-608(7)
L1811047-01R	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		8270TCL(7),8270TCL-SIM(7)
L1811047-01S	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		8270TCL(7),8270TCL-SIM(7)
L1811047-02A	Plastic 250ml unpreserved	B	7	7	4.6	Y	Absent		-
L1811047-02D	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		CL-300(28)
L1811047-02F	Plastic 250ml NaOH preserved	B	>12	>12	4.6	Y	Absent		TCN-4500(14)
L1811047-02G	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		FE-UI(180),CR-2008T(180)
L1811047-02H	Plastic 500ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		NH3-4500(28)
L1811047-02J	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		HEXCR-7196(1)
L1811047-02L	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-02M	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-02X	Plastic 120ml HNO3 preserved Filtrates	B	NA		4.6	Y	Absent		CR-2008S(180),FE-RI(180)
L1811047-03A	Plastic 250ml unpreserved	B	7	7	4.6	Y	Absent		-
L1811047-03D	Plastic 60ml unpreserved	B	7	7	4.6	Y	Absent		CL-300(28)
L1811047-03F	Plastic 250ml NaOH preserved	B	>12	>12	4.6	Y	Absent		TCN-4500(14)
L1811047-03G	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		FE-UI(180),CR-2008T(180)
L1811047-03H	Plastic 500ml H2SO4 preserved	B	<2	<2	4.6	Y	Absent		NH3-4500(28)
L1811047-03J	Amber 1000ml unpreserved	B	7	7	4.6	Y	Absent		HEXCR-7196(1)
L1811047-03L	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-03M	Amber 1000ml HCl preserved	B	NA		4.6	Y	Absent		TPH-1664(28)
L1811047-03X	Plastic 120ml HNO3 preserved Filtrates	B	NA		4.6	Y	Absent		CR-2008S(180),FE-RI(180)

*Values in parentheses indicate holding time in days

Project Name:	50 SYMPHONY ROAD	**Lab Number:**	L1811047
Project Number:	50 SYMPHONY ROAD	**Report Date:**	04/04/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report

Project Name:	50 SYMPHONY ROAD	**Lab Number:**	L1811047
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	50 SYMPHONY ROAD	**Lab Number:**	L1811047
Project Number:	50 SYMPHONY ROAD	**Report Date:**	04/04/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/30/18

ALPHA Job #: L1811047

Client Information

Client: FSL Associates, Inc.
Address: 358 Chestnut Hill Ave, 1st Floor
Boston, MA 02135
Phone: (617) 232-0001
Fax: (617) 232-7800
Email: jarod@fslassociates.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: 50 Symphony Road
Project Location: 50 Symphony Road
Project #: 50 Symphony Road
Project Manager: Jarod Cournoyer
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: ASAP Time:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MA MCP and EPA RGP	GW-1; RGP Freshwater

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes	☐ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

*Note: For dissolved Iron and Chromium III, lab to filter and preserve samples before analysis.

* Hexavalent Chromium samples were collected at the times indicated below.

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs (624 and 524.2 for Acetone)	SVOCs (SIM)	Alkalinity	Hardness	pH	Chloride (SM 4110B)	Ammonia (SM 4500B)	TPH (1664A)	Pesticides (608)	Total MCP 14 Metals, Iron, and Cr III (200.8)	Hexavalent Chromium	PCBs (608)	Sample Specific Comments	TOTAL # BOTTLES
11047-01	Receiving Waters CSO-023	03/30/18	7:20	GW	JC	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
02	MW-1	03/30/18	9:40	GW	JC	☐	☐	☐	☐	☐	☒	☒	☒	☐	☐	☒	☐		
03	MW-3	03/30/18	9:03	GW	JC	☐	☐	☐	☐	☐	☒	☒	☒	☐	☐	☒	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						-	-	-	-	-	-	-	-	-	-	-	-		
Preservative						-	-	-	-	-	-	-	-	-	-	-	-		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/30 1:15	[signature]	3/30/18 1315
MCM	3/30/18 1745	Danielle Mertz	3/30/18 17:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/30/18

ALPHA Job #: L1811047

Project Information

Project Name: 50 Symphony Road

Project Location: 50 Symphony Road

Project #: 50 Symphony Road

Project Manager: Jarod Cournoyer

ALPHA Quote #:

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Address: 358 Chestnut Hill Ave, 1st Floor

Boston, MA 02135

Phone: (617) 232-0001

Fax: (617) 232-7800

Email: jarod@fslassociates.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: ASAP Time:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MA MCP and EPA RGP	GW-1; RGP Freshwater

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes	☐ No	Are MCP Analytical Methods Required?
☐ Yes	☒ No	Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

*Note: For dissolved Iron and Chromium III, lab to filter and preserve samples before analysis.

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Iron and Chromium III (200.8)	Dissolved Iron and Chromium III (200.8)	Cyanide (SM 4500-CN)	Total Suspended Solids	Total Dissolved Solids
11047 -01	Receiving Waters CSO-023	03/30/18	7:20	GW	JC	☐	☐	☒	☒	☒
02	MW-1	03/30/18	9:40	GW	JC	☒	☒	☒	☐	☐
03	MW-3	03/30/18	9:03	GW	JC	☒	☒	☒	☐	☐

Container Type	-	-	-	-	-	-	-	-	-	-	-	-	
Preservative	-	-	-	-	-	-	-	-	-	-	-	-	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
	3/30 1:15		3/30/18 1711
	3/30/18 17:45	Samuel Matt	3/30/18 17:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

APPENDIX D – BEST MANAGEMENT PRACTICE PLAN

Best Management Practice Plan (BMPP)

On behalf of 50 Symphony LLC, FSL Associates, Inc. ("FSL") has prepared a Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into the Charles River via the City of Boston storm drainage system. The NOI has been submitted to the United States Environmental Protection Agency (US EPA) and the Boston Water and Sewer Commission (BWSC) for their approval. Temporary construction dewatering discharge is scheduled to occur during the construction of the 5-story residential building with basement. The subject site address is 50 Symphony Road in the Fenway neighborhood of Boston, Massachusetts. This Best Practice Management Plan (BMPP) has been prepared as an appendix to the RGP and shall be posted onsite for the duration of temporary construction dewatering activities.

GROUNDWATER TREATMENT AND DISCHARGE

Dewatering activities are anticipated to be required based upon the maximum depth of excavation (12 feet bgs) and the high groundwater level measured on the subject site during assessment activities (5.2 feet bgs). On-site recharge of groundwater collected during construction activities is anticipated to be unfeasible. Therefore, groundwater will be required to be discharged off-site via the municipal storm drain. Prior to discharge to the storm drain, groundwater must be treated. During construction and excavation activities for the proposed building foundation, dewatering effluent is anticipated to be pumped from a localized sump from within the excavation directly into an Oil Water Separator (OWS) tank. The effluent will flow through the remainder of the treatment system (which contains separate components for bag filters, organoclay media, and liquid-phase activated carbon adsorbers) in order to be discharged to the storm drain via hoses or piping connected into the storm drain.

The primary discharge point for groundwater from this construction dewatering project is the nearest storm drain grate to the northwest of the subject site (located at latitude and longitude coordinates 42.343015 West and 71.088971 West). The BWSC indicates that the storm drainage system that services Symphony Road ultimately discharges via Outfall No. CSO-023 into the Charles River. Groundwater samples from the subject site and also from the Charles River (in the vicinity of Outfall No. CSO-023) have been collected and analyzed prior to EPA's and BWSC's approval of construction dewatering from this construction project. Continuous monitoring of the influent and effluent of the treatment system must be conducted for the duration of temporary dewatering activities in accordance with the schedule described below.

GROUNDWATER DISCHARGE MONITORING REQUIRED BY THE RGP

Sampling and analysis of the groundwater from the construction dewatering project into the treatment system ("influent") and exiting the treatment system ("effluent") is required to be conducted at pre-determined intervals in accordance with the RGP regulations. During the first week of discharge, the operator will sample the untreated effluent and treated effluent two (2) times: one (1) sample of the untreated influent and one (1) sample of the treated effluent will be collected on the first day of discharge, and one (1) sample of untreated influent and one (1) sample of treated effluent must be collected on one additional non-consecutive day within the first week of discharge. Samples will be analyzed in accordance with 40 CFR Part 136 unless otherwise specified by the RGP, with a maximum 5-day turnaround time and results will be reviewed no more than 48 hours from receipt of the results of each sampling event. After the first week, samples will be analyzed with up to a ten (10)-day turnaround time and the results must be reviewed no more than 72 hours from receipt of the results. If the treatment system is operating as designed and achieving the effluent limitations outlined in the RGP, ongoing sampling and analysis shall be conducted weekly for three (3) additional weeks beginning no earlier than 24 hours following initial sampling, and monthly as described below. Any adjustments/reductions in monitoring frequency must be approved by the EPA in writing.

In accordance with Part 4.1 of the RGP, the operator will perform routine monthly monitoring for both influent and effluent beginning no more than 30 days following the sampling requirements for new discharges or discharges that have been interrupted. The routine monthly monitoring is to be conducted through the end of the scheduled discharge. The routine monthly monitoring must continue for five (5) consecutive months prior to submission of any request for modification of monitoring frequency.

The dewatering activity for this project is classified as Category I: Petroleum-Related Site Remediation. Monitoring shall include analysis of influent and effluent for contaminants specified by the EPA.

Additional monitoring shall include inspecting the condition of the treatment system, assessing the need for treatment system adjustments based upon monitoring data, observing and recording the daily flow rates and discharge quantities, and verifying and recording the flow path of the discharged effluent.

Flow shall be maintained below the "proposed maximum effluent flow" and "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed. The total monthly flow shall be monitored by checking and documenting the flow through the flow meter that is to be installed on the system. Monthly monitoring reports shall be compiled and maintained at the site.

TREATMENT SYSTEM MAINTENANCE

The treatment system must be inspected and regular maintenance performed in order to ensure that all components are operating properly. Qualified personnel must perform all operation and maintenance. The operator should be familiar with process piping, electrical controls and components, and filtration components and filtration replacement, and all other components. Regular maintenance will include checking the condition of the treatment system equipment such as the oil water separate tank, bag filters, activated carbon chambers, organoclay chamber, hoses, pumps, and flow meters. Equipment shall be monitored daily for potential issues and unscheduled maintenance requirements. Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

MANAGEMENT OF TREATMENT SYSTEM WASTE

Dewatering effluent will be pumped directly into the treatment system from the excavation using hoses and localized sumps to minimize handling. The Contractor will establish staging areas for equipment or material storage that may be possible sources of pollution away from any dewatering activities, to the extent possible.

Waste materials generated from the dewatering treatment system must be characterized and removed from the site for disposal at an approved licensed receiving facility. Bag filters shall be replaced/disposed of as necessary.