CONTRACT DOCUMENTS

TOWN OF VERNON
Invitation to Bid #2092-06-16-2022

Former Daniel's Mill Building Cleanout
98 East Main Street
Vernon, Connecticut

For Bid
June 2022

95 Glastonbury Boulevard, 3rd Floor
Glastonbury, Connecticut 06033

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INVITATION TO BID
THE TOWN OF VERNON
FORMER DANIEL'S MILL BUILDING CLEANOUT
INVITATION TO BID # 2092-06-16-2022

Sealed Bids for the **FORMER DANIEL'S MILL BUILDING CLEANOUT** will be received by the Town of Vernon at the office of the Town Administrator, Memorial Building, 14 Park Place, 3rd Floor, Vernon, CT 06066 until **10:00 a.m. Eastern Standard Time (EST) on Thursday, June 16, 2022. E-mailed, faxed or late bids will not be accepted. Received bids will be opened publicly in person on Thursday, June 16, 2022 at 11:00 a.m. EST.** Bid results will be posted on both the Town and DAS websites.

A mandatory pre-bid conference will be held at 98 East Main Street, Vernon, Connecticut at 9:00 a.m. EST on Thursday, May 26, 2022. Attendance at the pre-bid conference by a representative of each Bidder is mandatory.

The Work consists of the collection, consolidation, removal, and disposal/recycling of debris and materials from within the interior portions of the Daniel's Mill building located at 98 East Main Street in Vernon, Connecticut. These materials include furniture, mattresses, wood, piping, boxes of various items, appliances, televisions, computer monitors, electronic devices, books, toys, records, tools, clothes, wiring, fixtures, mechanical equipment, tanning booths, and various other materials. The Work also includes consolidation and staging of all aerosol cans and containers, buckets, and drums of oils, antifreeze, paints, chemicals, and coolants within the loading dock area inside the building. The project is located at 98 East Main Street, Vernon, Connecticut and is completely described and depicted in the contract documents. A complete set of the contract documents may be examined at the Town of Vernon, Office of the Town Administrator, 14 Park Place, Vernon, Connecticut 06066. An electronic copy of the contract documents will also be made available for viewing and/or for download on the Town's website at www.vernon-ct.gov/legal-notices and at the Connecticut State Department of Administrative Services (DAS) at https://portal.ct.gov/DAS/CTSource/CTSource by referencing Contract #2092.

Bids must be enclosed in an opaque sealed envelope and plainly marked with the Project Title: **FORMER DANIEL'S MILL BUILDING CLEANOUT, Invitation to Bid #2092**, and shall contain the name and address of the Bidder on the envelope. Each Bid shall include the required information outlined herein and be accompanied by a **Bid Security Deposit in the amount of 5 percent of the Total Bid Price.**

The Bidder, to whom a contract is offered, must furnish to the Town, if that contract has a total cost greater than $25,000.00, a 100 percent Performance and Payment Bond with a surety company acceptable to the Town and in a form acceptable to the Town. An Affirmative Action Plan must be filed with and approved by the CHRO prior to the commencement of the Work. For contracts valued over $50,000, the contractor should be required to make good faith efforts to place a minimum of 25% of the subcontracts awarded by the general contractor with eligible contractors holding current certification from the DAS under the provisions of CGS 4a-60g, as amended. (25% of the work with DAS certified Small and Minority owned business and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) The Project is subject to Prevailing Wage Rates established by the Connecticut Department of Labor.

The selected firm must meet all municipal, state and federal AA and EEO practices and requirements. MBE's, WBE's, SBE's are encouraged to apply. The Town reserves the right to reject any or all proposals in whole or part, to award any one service or group of services or all services, to negotiate with any or all companies submitting proposals, and to enter into an agreement with any company for any services mentioned in this RFP; if it is deemed to be in the best interest of the Town.

Confidentiality - If Respondent believes that any information in its proposal should be treated as confidential that material shall be clearly marked. The Town shall endeavor to protect confidential material from disclosure to non-Town employees to the extent required by State or Federal law. In no event will the Town be responsible for the inadvertent disclosure of your response to this RFP.

SECTION 00 21 13
INSTRUCTIONS TO BIDDERS

FORMER DANIEL'S MILL BUILDING CLEANOUT

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ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in Section 00 70 00 – Standard Conditions and Section 00 73 00 - Supplemental Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. ISSUING OFFICE

1. The office from which the Bidding Documents are to be issued and where the Bidding procedures are to be administered.

2. The Town of Vernon, Office of the Town Administrator is the Issuing Office for the Bidding Documents.

3. The Issuing Office is the Owner responsible for facility administration, regulatory oversight, accounting, purchasing, etc.

B. OWNER

1. The Town of Vernon is referred to as the Owner. On-Site activities are monitored for Owner by the Engineer.

C. ENGINEER

1. GZA GeoEnvironmental, Inc. (GZA) is referred to as Engineer. Engineer reports to Owner and is responsible for the administration of Drawings and Specifications and Contractor communications. Engineer will communicate directly with Contractor to coordinate activities and will receive information directly from Contractor to be conveyed to Owner.

2. Engineer is responsible for observing and documenting activities on the Site and ensuring conformance with the Drawings and Specifications. Engineer will be responsible for reviewing Contractor Submittals. Engineer has prepared the Drawings and Specifications and is responsible for the interpretation of the Drawings and Specifications. Engineer will review proposed alterations or modifications to the work scope as formally requested by the Contractor. Engineer and Owner will decide all questions that arise regarding the interpretation of the Drawings and Specifications.

D. CONTRACTOR

1. Contractor is responsible for implementing and ensuring the completion of the Work and documenting the Work performed in accordance with the Contract Documents. Contractor is responsible for procuring all necessary permits, licenses, and authorizations and completing all notifications unless otherwise specified in the Section 00 73 00 – Supplemental Conditions, procuring the services of subcontractors as necessary to complete the Work as needed, and is responsible for the Work of his subcontractors as he is for his own Work.

Contractor reports to the Owner but shall communicate directly with the Engineer.

2. Contractor is subject to requirements of federal, State, and local agencies for implementation of the Work. Details pertaining to jurisdictional requirements governing the Work that are not specifically mentioned in the Contract Documents shall not relieve the Contractor's obligation to be in compliance with applicable requirements.

ARTICLE 2 – COPIES OF CONTRACT DOCUMENTS

2.01 A Complete set of the Contract Documents may be examined at the Town of Vernon, Office of the Town Administrator, 14 Park Place, Vernon, Connecticut 06066. An electronic copy of the bidding documents will also be made available for viewing and/or for download at Legal Notices, Bids and Contracts - Town of Vernon (vernon-ct.gov), RFP#2092 and at CTsource Bid Board.

2.02 Complete sets of the Contract Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents.

2.03 Owner and Engineer, in making copies of the Contract Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 In evaluating the Bids, the Owner will consider the qualifications of only those Bidders whose Bids, among other factors, are in compliance with the requirements set forth in the Contract Documents.

3.02 Bidders shall complete and submit the Bidder Qualification Form included in Section 00 45 13 with his/her Bid.

3.03 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – EXAMINATION OF CONTRACT DOCUMENTS, OTHER RELATED DATA, AND SITE

4.01 *Subsurface and Physical Conditions*

A. Section 00 73 00 - Supplemental Conditions identify:

1. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. Copies of reports and drawings referenced in Paragraph 4.01.A will be made available on the Town's website at Legal Notices, Bids and Contracts - Town of Vernon (vernon-

ct.gov), RFP #2092. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of Section 00 70 00 - Standard Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.02 *Underground Facilities*

A. Information and data shown or indicated in the Contract Drawings with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.03 *Hazardous Environmental Condition*

A. Section 00 73 00 - Supplemental Conditions identifies any reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.

B. Copies of reports and drawings referenced in Paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of Section 00 70 00 - Standard Conditions has been identified. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Contract Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02, 4.03, and 4.04 of Section 00 70 00 - Standard Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of Section 00 70 00 – Standard Conditions.

4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Contractor Site access deemed necessary for bid submissions shall be solely requested through the Engineer as the Town will not be handling such requests. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

A. Bidders shall coordinate access through Engineer and a minimum of 48-hour notice shall be provided prior to accessing the Site.

B. Site access shall be limited to Monday through Friday between the hours of 7 a.m. to 5 p.m. Eastern Standard Time.

C. Bidders shall be responsible for providing and wearing the minimum personal protective equipment (PPE) including but not limited to steel toed boots, safety glasses, and a hard hat during the Site visit.

D. Bidders shall be responsible for providing lighting during the Site visit.

4.06 It is the responsibility of each Bidder before submitting a Bid to:

A. Examine and carefully study the Contract Documents, and the other related data identified in the Contract Documents.

B. Visit the Site and familiarize himself/herself with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Familiarize himself/herself with all federal, State, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Carefully study all: (1) drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data".

E. Consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Bidder's safety precautions and programs.

F. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Contract Documents.

G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Contract Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder.

I. Determine that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

J. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Contract Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Contract Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 – PRE-BID CONFERENCE

5.01 A mandatory pre-bid conference will be held at **9:00 a.m**. local time on **Thursday, May 26, 2022 at the Site located at 98 East Main Street, Vernon, CT.** Representatives of Owner and Engineer will be present to discuss the Project. Bidders are **required** to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

5.02 Bidders are required to supply and wear steel toed boots, hard hats, and safety glasses during the pre-bid conference. Bidders not wearing these items will not be allowed to participate in the Site walkover.

5.03 Bidders are required to supply and utilize flashlights during the Site walkover.

ARTICLE 6 – SITE AND OTHER AREAS

6.01 The Site is identified in the Contract Documents.

6.02 All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor at no additional cost to the Owner.

6.03 The use of any additional lands shall be approved by the Owner prior to access.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Contract Documents are to be submitted to Engineer in writing electronically via email (david.rusczyk@gza.com). Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda emailed to all parties recorded by Engineer as having attended the mandatory pre-bid conference. Questions received less than five days prior to the date for opening of Bids may not

be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, or change the Contract Documents as deemed advisable by Owner or Engineer.

ARTICLE 8 – BID SECURITY

8.01 In accordance with Connecticut General Statutes (C.G.S.) 49-41, a Bid must be accompanied by a Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price and in the form of a Bid bond (on the form attached, Section 00 43 13 – Bid Security Form) issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of Section 00 70 00 – Standard Conditions.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages are set forth in Section 00 52 00 – Standard Form of Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Contract Documents without consideration of possible substitute or "or-equal" items.

11.02 Whenever it is specified or described in the Contract Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

12.01 If Section 00 73 00 - Supplemental Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, in which case apparent Successful Bidder shall submit an acceptable substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Article 6.06 of Section 00 70 00 – Standard Conditions.

12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included in Section 00 41 00 of the Contract Documents.

13.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each Bid item, alternative, adjustment unit price item, and unit price item listed therein.

13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.

13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.

13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.

13.06 A Bid by an individual shall show the Bidder’s name and official address.

13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.

13.08 All names shall be printed in ink below the signatures**.**

13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID; COMPARISON OF BIDS

14.01 *Lump Sum*

A. Bidders shall submit a Bid on a lump sum basis for each item of Work listed in the Bid Form.

14.02 *Unit Price*

A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.

B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Article 11.03 of Section 07 00 00 – Standard Conditions.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 *Completion Time Comparisons*

A. Bid prices will be compared after adjusting for differences in the time designated by Bidders for Substantial Completion. The adjusting amount will be determined at the rate set forth in the Contract Documents for liquidated damages for failing to achieve Substantial Completion for each day after the desired date appearing in Article 9 above.

ARTICLE 15 – SUBMITTAL OF BID

15.01 The Contract Documents include a Bid Form and a Bid Security Form. Bidders shall submit **two** copies of their bids along with an unbound copy of the Bid Form, the Bid Security Form and the following documents and information:

A. Bid Form (Section 00 41 00)

B. Bid Security Form (Section 00 43 13)

C. Bidder's Qualification Form (Section 00 45 13)

D. Corporate Resolution Form (Section 00 45 42)

E. CHRO Bidder Contract Compliance Monitoring Report (Attachment F of the Project Manual)

F. Name and address of all proposed subcontractors and vendors.

G. Name and address of all proposed disposal and recycling facilities.

H. Name and address of all proposed waste haulers.

I. A preliminary project schedule.

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Section 00 11 16 - Invitation to Bid and shall be enclosed in a plainly marked, sealed package with the Project title, the Invitation to Bid number, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Shaun Gately, Economic Development Director, Town of Vernon, 14 Park Place, Vernon, CT 06066. Emailed, faxed or late bids will not be accepted.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

17.01 Bids which meet the standards as outlined in the previous Articles will be opened at the time and place indicated in the Advertisement or Section 00 11 16 - Invitation to Bid and, read aloud publicly. An abstract of the amounts of the base Bids will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in Section 00 73 00 - Supplemental Conditions.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.

19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

ARTICLE 20 – CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of Section 00 70 00 – Standard Conditions, as may be modified by Section 00 73 00 - Supplemental Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds and Certificates of Insurance with the limits specified in Article 17 of Section 00 73 00 - Supplemental Conditions.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

ARTICLE 22 – SALES AND USE TAXES

22.01 Owner is exempt from Connecticut state sales and use taxes on materials and equipment to be incorporated in the Work. (State ID No. 69-0160138-001 and Federal ID No. 06-6002112). Said taxes shall not be included in the Bid.

ARTICLE 23 – RETAINAGE

23.01 Provisions concerning Contractor's rights to deposit securities in lieu of retainage are set forth in the Agreement.

END OF SECTION

SECTION 00 41 00

BID FORM

ARTICLE 1 - GENERAL

1.01 Bidder accepts all of the terms and conditions of Section 00 21 13 - Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 61 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 2 – BIDDER'S REPRESENTATIONS

2.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Contract Documents, other related data identified in the Contract Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all laws and regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data."

E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Bidder's safety precautions and programs.

F. Based on the information and observations referred to in Paragraph 2.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Contract Documents.

G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 3 – BIDDER'S CERTIFICATION

3.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

C. Bidder has not solicited or induced any individual or entity to refrain from bidding.

D. Bidder is in conformance with all federal, State, and local jurisdictional requirements as outlined in Article 13 of Section 00 73 00 – Supplemental Conditions.

E. Bidder is in compliance with Article 14 of Section 00 73 00 – Supplemental Conditions.

F. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 3.01.F:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 4 – BASIS OF BID

4.01 Bidder will complete the work in accordance with the Contract Documents for the following price(s):

Utilize Attached Bid Form Table at the end of Section 00 41 00 – Bid Form

4.02 Unit Prices have been computed in accordance with Paragraph 11.03.B of Section 00 70 00 – Standard Conditions.

4.03 Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 5 – TIME OF COMPLETION

5.01 Bidder agrees that the Work will be substantially complete within **30** calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of Section 00 70 00 – Standard Conditions and will be completed and ready for final payment in accordance with Paragraph 14.07 of Section 00 70 00 – Standard Conditions within **40** calendar days after the date when the Contract Times commence to run.

5.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 6 – ATTACHMENTS TO THIS BID

6.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security in the form of a Bid bond (Section 00 43 13).

B. Bidder's Qualification Form (Section 00 45 13)

C. Corporate Resolution Form (Section 00 45 42)

D. CHRO Bidder Contract Compliance Monitoring Report (Attachment F)

E. Name and address of all proposed subcontractors and vendors.

F. Name and address of all proposed disposal and recycling facilities.

G. Name and address of all proposed waste haulers.

H. A preliminary project schedule.

ARTICLE 7 – DEFINED TERMS

7.01 The terms used in this Bid with initial capital letters have the meanings stated in Section 00 21 13 - Instructions to Bidders, Section 00 70 00 – Standard Conditions, and Section 00 73 00 - Supplemental Conditions.

ARTICLE 8 – BID SUBMITTAL

8.01 This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability):_____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest _____

Date of Qualification to do business in _*[State where Project is located]*_ is ____/____/____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

_____

Phone No. _____ Fax No. _____

E-mail _____ _____

SUBMITTED on _____, 20____.

State Contractor License No. _____. *[If applicable]*

SECTION 00 41 00
BID FORM
FORMER DANIEL'S MILL BUILDING CLEANOUT
VERNON, CONNECTICUT

Item No.	Estimated Quantity	Unit Bid Prices in Words*	Lump Sum or Unit Price in Figures	Total Price in Figures
1	1 *Lump Sum*	***Performance and Payment Bond***		
		The Lump Sum of:_____ per Lump Sum	per Lump Sum	$
2	1 *Lump Sum*	***Mobilization and Site Preparation***		
		The Lump Sum of:_____ per Lump Sum	per Lump Sum	$
3	1 *Lump Sum*	***Building Cleanout***		
		The Lump Sum of:_____ per Lump Sum	per Lump Sum	$
4	1 *Lump Sum*	***Demobilization***		
		The Lump Sum of:_____ per Lump Sum	per Lump Sum	$
TOTAL BASE BID AMOUNT				$ **TOTAL**

*** Brief Descriptions of Bid Items are provided for bidder convenience only. Refer to Specification Section 01 20 00 for detailed descriptions of each Payment Item.**

PLEASE INDICATE HOW YOU HEARD ABOUT THE INVITATION TO BID:	

ACKNOWLEDGEMENT OF THE RECEIPT OF THE FOLLOWING ADDENDUMS

Addendum No.	Addendum Date	Bidders Initials

Company Name of Bidder
Signature of Bidder
Printed Name of Bidder

SECTION 00 43 13

BID SECURITY FORM

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER *(Name and Address)*:

SURETY *(Name and Address of Principal Place of Business)*:

OWNER *(Name and Address)*:
Town of Vernon
14 Park Place
Vernon, Connecticut 06066

BID
Bid Due Date: **11 a.m. EST., June 16, 2022**
Description *(Project Name and Include Location)*:
Former Daniel's Mill Building Cleanout, 98 East Main Street, Vernon, Connecticut

BOND
Bond Number:
Date *(Not earlier than Bid due date)*:
Penal sum _____ $ _____
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER	**SURETY**
_____ (Seal)	_____ (Seal)
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Contract Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Contract Documents and any performance and payment bonds required by the Contract Documents.

3. This obligation shall be null and void if:

   3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Contract Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Contract Documents and any performance and payment bonds required by the Contract Documents, or

   3.2 All Bids are rejected by Owner, or

   3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Contract Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

END OF SECTION

SECTION 00 45 13

BIDDER'S QUALIFICATIONS

Bidders for the **Former Daniel's Mill Building Cleanout** shall have a minimum of 3 years of successful experience with similar scopes of work.

The undersigned certifies the truth and correctness of statements and all answers to questions made hereinafter.

SUBMITTED TO: **TOWN OF VERNON**

SUBMITTED BY: _____
NAME: _____
BUSINESS NAME: _____
_____
OFFICE ADDRESS: _____
_____
PRINCIPAL OFFICE: _____
BUSINESS TELEPHONE NUMBER: _____
BUSINESS FAX NUMBER: _____
BUSINESS EMAIL ADDRESS: _____

( ) Corporation
( ) Partnership
( ) Individual
( ) Joint Venture
( ) Other_____

(NOTE: Attach separate sheets as required):

1. How many years has your company been in business: _____
2. How many years has your organization been in business under its present name: _____
3. If a Corporation or LLC, answer the following:
   - Date of Incorporation: _____
   - State of Incorporation: _____
   - President/Member: _____
   - Vice Presidents/Members _____
   - _____
   - _____
   - Secretary/Member: _____
   - Treasurer/Member: _____
4. If a Partnership, Individual, Joint Venture or other, answer the following:
   - Date of Incorporation: _____
   - State of Incorporation: _____
   - Officers and Titles _____
   - _____
   - _____
5. Provide the information in the spaces provided for three demolition projects that your company has completed that are most similar in scope to the Former Daniel's Mill

Building Cleanout project.

#1 Project Owner: _____
Address: _____
Project Engineer: _____
Project Contact: _____

#2 Project Owner: _____
Address: _____
Project Engineer: _____
Project Contact: _____

#3 Project Owner: _____
Address: _____
Project Engineer: _____
Project Contact: _____

6. Provide the following Information for each of the past three years (2021, 2020, and 2019):

- NAICS# _____
- Experience Modification Rating _____
- TIR (Total Incident Rate): _____
- DART (Days Away Restricted Time): _____
- No. of Lost or Restricted Time Incident: _____

7. Do you have a designated safety officer/manager? Yes ____ No ____
If yes, full-time or part time: Full-Time ____ Part-time ____

Name: _____ Phone Number: _____

8. Do you have a PPE Policy? (e.g., mandatory hard hats, safety glasses, etc.?) Yes ____ No ____

9. List the licenses, certifications, registrations your company or employees have that may be required during the execution of this project:

TYPE OF LICENSE/ REGISTRATION/CERTIFICATION	ISSUING AGENCY

10. List All subcontractors that may be used to work on this Project:

COMPANY NAME	WORK TO BE PERFORMED	LICENSE / REGISTRATIONS HELD

11. Have you or your company ever failed to complete any work awarded to you, or have you ever defaulted on a contract? Yes ____ No ____

If yes, please explain circumstance(s):

12. Disclose any current (within the last 3 years) business, financial, personal or other types of relationships which may pose a conflict of interest with providing services to the Town.

13. List the information for the Contractor's employees who will be responsible for the Project:

NAME:	PERTINENT TRAINING/CERTIFICATION:
Superintendent:	
Foreman:	
Assistant Foreman:	
Other:	

The undersigned certifies the truth and correctness of statements and all answers to questions made herein.

Dated at _____ this _____ day of _____, 2022.

Name of Contractor: _____

By: _____

_____

(Print and sign name of duly authorized principal)

SECTION 00 45 42

CORPORATE RESOLUTIONS

I, _____ hereby certify that I am the duly elected and acting Secretary of _____ Corporation, a corporation organized and existing under the laws of the State of _____, do hereby certify that the following facts are true and were taken from the records of said corporation.

The following resolution was adopted at a meeting of the corporation duly held on the _____day of_____,_____.

"It is hereby resolved that _____is authorized to make, execute and approve, on behalf of this corporation, any and all contracts or amendments thereof".

And I do further certify that the above resolution has not been in any way altered, amended, repealed and is now in full force and effect.

IN WITNESS WHEREOF, I hereunto set my hand and affix the corporate seal of said _____corporation this _____day of _____ , 2022.

_____

Secretary

END OF SECTION

SECTION 00 51 00 - NOTICE OF AWARD

Date: _____

Project: **Former Daniel's Mill Building Cleanout**	
Owner: **Town of Vernon, Connecticut**	Owner's Contract No.:
Contract:	Engineer's Project No.:
Bidder:	
Bidder's Address: *[send Notice of Award Certified Mail, Return Receipt Requested]*	

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for **Former Daniel's Mill Building Cleanout.**

The Contract Price of your Contract is _____ Dollars ($_____).

_____ copies of the proposed Contract Documents accompany this Notice of Award.

You must comply with the following conditions precedent within [15] days of the date you receive this Notice of Award.

1. Deliver to the Owner two (2) fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Section 00 21 13 - Instructions to Bidders, Section 00 70 00 – Standard Conditions, and Section 00 73 00 - Supplemental Conditions.
3. Other conditions precedent:

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

Town of Vernon, Connecticut
Owner

By:_____
Authorized Signature

_____
Title

END OF SECTION

SECTION 00 52 00

STANDARD FORM OF AGREEMENT

THIS AGREEMENT is by and between **Town of Vernon, Connecticut** ("Owner") and

_____ ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as the collection, removal, and disposal/recycling of debris and materials from within the interior portions of the Daniel's Mill building located at 98 East Main Street in Vernon, Connecticut. These materials include furniture, mattresses, wood, piping, boxes of various items, appliances, televisions, computer monitors, electronic devices, books, toys, records, tools, clothes, wiring, fixtures, mechanical equipment, tanning booths, and various other materials. Work also includes collection and consolidation of any aerosol cans and drums and containers of oils, paints, aerosol cans, chemicals, and cleaners inside the loading dock area located on the west side of the building.

ARTICLE 2 – THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: **Former Daniel's Mill Building Cleanout.**

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by **GZA GeoEnvironmental, Inc.** (Engineer), which is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Days to Achieve Substantial Completion and Final Payment*

A. The Work will be substantially completed within **30** calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of Section 00 70 00 – Standard Conditions and completed and ready for final payment in accordance with Paragraph 14.07 of Section 00 70 00 – Standard Conditions within **40** calendar days after the date when the Contract Times commence to run.

4.03 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of Section 07 00 00 – Standard Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner **$1,200.00** for each day that expires after the time specified in Paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner **$300.00** for each day that expires after the time specified in Paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to the following table:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Performance and Payment Bond	Lump Sum	1	$	$
2	Mobilization and Site Preparation	Lump Sum	1	$	$
3	Building Cleanout	Lump Sum	1	$	$
4	Demobilization	Lump Sum	1	$	$
TOTAL CONTRACT AMOUNT: $					

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in Paragraph 11.03 of Section 00 70 00 – Standard Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of Section 00 70 00 – Standard Conditions.

For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with Article 14 of Section 00 70 00 - Standard Conditions. Applications for Payment will be reviewed and approved by Engineer as provided in Section 00 70 00 - Standard Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the **20th** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below. Applications for payment that are approved by the Owner and Engineer shall be paid in full within **30 calendar days of receipt and verification of accuracy**. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of Section 00 70 00 - Standard Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in Section 00 70 00 - Standard Condition.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of Section 00 70 00 - Standard Conditions.

a. **90%** percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and

b. **90%** percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to **100%** percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of Section 00 70 00 - Standard Conditions and less **200%** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of Section 00 70 00 - Standard Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.

ARTICLE 7 – INTEREST

7.01 All moneys not paid when due as provided in Article 14 of Section 00 70 00 - Standard Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Contract Documents.

B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all federal, State, and local laws and regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities), if any, that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in Section 00 73 00 - Supplemental Conditions as containing reliable "technical data."

E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.

F. Based on the information and observations referred to in Paragraph 8.01.E above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 *Contents*

A. The Contract Documents consist of the following:

1. This Agreement.
2. Performance bond.
3. Payment bond.
4. Release of Waiver of Lien Form.
5. Certificate of Substantial Completion of Work.
6. Certificate of Final Completion of Work.
7. Section 00 70 00 – Standard Conditions.
8. Section 00 73 00 - Supplemental Conditions.
9. Specifications as listed in the table of contents of the Contract Documents.
10. Drawing 1.
11. Tables 1 and 2.
12. Addenda.
13. Exhibits to this Agreement (enumerated as follows):
    a. Contractor's Bid.
    b. Documentation submitted by Contractor prior to Notice of Award.
14. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
    a. Notice to Proceed.
    b. Work Change Directives.
    c. Change Orders.

B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 9.

D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of Section 00 70 00 - Standard Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

A. Terms used in this Agreement will have the meanings stated in Section 00 70 00 - Standard Conditions and Section 00 73 00 - Supplemental Conditions.

10.02 *Assignment of Contract*

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 *Severability*

A. Any provision or part of the Contract Documents held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of

Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

OWNER:	**CONTRACTOR:**
TOWN OF VERNON, CONNECTICUT	
By:	By:
Title:	Title:
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
	License No.:
	(Where applicable)

NOTICE TO PROCEED

Date: _____

Project: **Former Daniel's Mill Building Cleanout**

Owner: **Town of Vernon, Connecticut**	Owner's Contract No.:
Contract:	Engineer's Project No.:

Contractor:

Contractor's Address: [send Certified Mail, Return Receipt Requested]

You are notified that the Contract Times under the above Contract will commence to run on_____. On or before that date, you are to start performing your obligations under the Contract Documents.

In accordance with Article 4 of the Agreement, the date of Substantial Completion is_____, and the date of readiness for final payment is _____ [(or) the number of days to achieve Substantial Completion is__30_____, and the number of days to achieve readiness for final payment is___40____].

Before you may start any Work at the Site, Paragraph 2.01.B of Section 00 70 00 – Standard Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds and loss payees) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must:

_____

Town of Vernon, Connecticut
Owner

Given by:
Authorized Signature

Title

Date

END OF SECTION

PAYMENT BOND

KNOW ALL MEN/WOMEN BY THESE PRESENT THAT:

_____

(Name of Contractor)

_____

(Address of Contractor)

a _____, hereinafter called Principal,
(Corporation, Partnership or Individual)

and _____

(Name of Surety)

_____

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Town of Vernon, Connecticut

(Name of Owner)

14 Park Place, Vernon, Connecticut 06066

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____Dollars,
($ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 20_____, a copy of which is hereto attached and made a part hereof for the construction of:

_____

_____

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK and all insurance premiums on said WORK, and for all labor performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in **seven** (7) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

_____
Principal

_____ By: _____ (s)
(Principal Secretary)

Address: _____

_____

(Seal)

_____
Witness as to Principal

_____
Address

_____

_____
Surety

ATTEST: By: _____
Attorney-in-Fact

_____ Address: _____
Witness as to Surety

_____

_____

_____

_____
Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list as amended and be authorized to transact business in the State where the PROJECT is located.

PERFORMANCE BOND

KNOW ALL MEN/WOMEN BY THESE PRESENTS THAT:

_____

(Name of Contractor)

_____

(Address of Contractor)

a _____ , hereinafter called Principal,
(Corporation, Partnership or Individual)

and _____

(Name of Surety)

_____

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Town of Vernon, Connecticut

(Name of Owner)

14 Park Place, Vernon, Connecticut 06066

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____Dollars, ($_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 20_____, a copy of which is hereto attached and made a part hereof for the construction of:

_____

_____

NOW, THEREFORE, if the principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in seven (7) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

_____
Principal

_____ By: _____ (s)
(Principal Secretary)

Address: _____

(Seal) _____

_____
Witness as to Principal

_____
Address

_____
Surety

ATTEST: By: _____
Attorney-in-Fact

_____ Address: _____
Witness as to Surety

_____

_____

_____
Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list as amended and be authorized to transact business in the State where the PROJECT is located.

AIA® Document G704™ – 2017

Certificate of Substantial Completion

PROJECT: *(name and address)*	**CONTRACT INFORMATION:** Contract For: Date:	**CERTIFICATE INFORMATION:** Certificate Number: Date:
OWNER: *(name and address)*	**ARCHITECT:** *(name and address)*	**CONTRACTOR:** *(name and address)*

The Work identified below has been reviewed and found, to the Architect's best knowledge, information, and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion designated below is the date established by this Certificate.
(Identify the Work, or portion thereof, that is substantially complete.)

ARCHITECT *(Firm Name)*	SIGNATURE	PRINTED NAME AND TITLE	DATE OF SUBSTANTIAL COMPLETION

WARRANTIES
The date of Substantial Completion of the Project or portion designated above is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below:
(Identify warranties that do not commence on the date of Substantial Completion, if any, and indicate their date of commencement.)

WORK TO BE COMPLETED OR CORRECTED
A list of items to be completed or corrected is attached hereto, or transmitted as agreed upon by the parties, and identified as follows:
(Identify the list of Work to be completed or corrected.)

The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Unless otherwise agreed to in writing, the date of commencement of warranties for items on the attached list will be the date of issuance of the final Certificate of Payment or the date of final payment, whichever occurs first. The Contractor will complete or correct the Work on the list of items attached hereto within ( ) days from the above date of Substantial Completion.

Cost estimate of Work to be completed or corrected: $

The responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work, insurance, and other items identified below shall be as follows:
(Note: Owner's and Contractor's legal and insurance counsel should review insurance requirements and coverage.)

The Owner and Contractor hereby accept the responsibilities assigned to them in this Certificate of Substantial Completion:

CONTRACTOR *(Firm Name)*	SIGNATURE	PRINTED NAME AND TITLE	DATE
OWNER *(Firm Name)*	SIGNATURE	PRINTED NAME AND TITLE	DATE

AIA® Document G706™ – 1994

Contractor's Affidavit of Payment of Debts and Claims

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR:

TO OWNER: *(Name and address)*

CONTRACT DATED:

OWNER ☐
ARCHITECT ☐
CONTRACTOR ☐
SURETY ☐
OTHER ☐

STATE OF:

COUNTY OF:

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707™, Consent of Surety to Final Payment, may be used for this purpose.
   Indicate attachment: ☐ Yes ☐ No

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof
3. Contractor's Affidavit of Release of Liens (AIA Document G706A™)

CONTRACTOR: *(Name and address)*

BY:

(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA® Document G706A™ – 1994

Contractor's Affidavit of Release of Liens

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR:

TO OWNER: *(Name and address)*

CONTRACT DATED:

OWNER ☐
ARCHITECT ☐
CONTRACTOR ☐
SURETY ☐
OTHER ☐

STATE OF:

COUNTY OF:

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: *(Name and address)*

BY:

(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA® Document G707™ – 1994

Consent of Surety to Final Payment

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR:

CONTRACT DATED:

OWNER ☐
ARCHITECT ☐
CONTRACTOR ☐
SURETY ☐
OTHER ☐

TO OWNER: *(Name and address)*

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the
(Insert name and address of Surety)

, SURETY,

on bond of
(Insert name and address of Contractor)

, CONTRACTOR,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety of any of its obligations to
(Insert name and address of Owner)

, OWNER,

as set forth in said Surety's bond.

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:
(Insert in writing the month followed by the numeric date and year.)

(Surety)

(Signature of authorized representative)

Attest:
(Seal)

(Printed name and title)

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

CHANGE ORDER # _____

PROJECT TITLE: **Former Daniel's Mill Building Cleanout**

PROJECT NO.: _____ CONTRACT NO. _____ CONTRACT DATE: _____

CONTRACTOR: _____

The following changes are hereby made to the Contract Documents:

1.

_____

Change Order Total:

Justification:

CHANGE TO CONTRACT PRICE:

Original Contract Price: _____

Current Contract Price, as adjusted by previous Change Orders: _____

The Contract Price due to this Change Order will [increase] [decrease] by: _____

The new Contract Price due to this Change Order: _____

CHANGE TO CONTRACT TIME:

The Contract Time will be [increase] [decrease] _____ calendar days.

The date for completion of all work under the contract will be _____

Approvals Required:

To be effective, this order must be approved by the Owner if it changes the scope or objective of the project, or as may otherwise be required under the Supplemental Conditions of the Contract.

Engineer: _____ date _____

Contractor: _____ date _____

Owner: _____ date _____

SECTION 00 70 00

STANDARD CONDITIONS

SECTION 00 70 00
STANDARD CONDITIONS

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form (Section 00 41 00) setting forth the prices for the Work to be performed.

6. *Bidder*—The individual or entity who submits a Bid directly to Owner.

7. *Bidding Requirements*—The Advertisement or Invitation to Bid (Section 00 11 16), Instructions to Bidders (Section 00 21 13), Bid security of acceptable form (Section 00 43 13), if any, and the Bid Form (Section 00 41 00) with any supplements.

8. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

9. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

10. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

11. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

12. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

13. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

14. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.

15. *Cost of the Work*—See Paragraph 11.01 for definition.

16. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

17. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

18. *Engineer*—The individual or entity named as such in the Agreement.

19. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

20. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.

21. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

22. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

23. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

24. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

25. *Notice of Award*—The written notice (Section 00 51 00) by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

26. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

27. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

28. *PCBs*—Polychlorinated biphenyls.

29. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

30. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

31. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

32. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

33. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

34. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.

35. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

36. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

37. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

38. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

39. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

40. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

41. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

43. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.

44. *Supplemental Conditions*—That part of the Contract Documents (Section 00 73 00) which amends or supplements these Standard Conditions.

45. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.

46. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

47. *Unit Price Work*—Work to be paid for on the basis of unit prices.

48. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

49. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 *Terminology*

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives:*

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. *Day:*

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective:*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

    a. does not conform to the Contract Documents; or

    b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

    c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. *Furnish, Install, Perform, Provide:*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in Section 00 73 00 - Supplemental Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor one printed hard copy of the Drawings and Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents; and,

2. a Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference; Designation of Authorized Representatives*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Review of Contract Documents Before Starting Work*: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work*: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order; or,

2. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions; or

2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Unless otherwise stated in Section 00 73 00 - Supplemental Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting

from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* Section 00 73 00 - Supplemental Conditions identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and

2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in Section 00 73 00 - Supplemental Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in Section 00 73 00 - Supplemental Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data;

b. locating all Underground Facilities shown or indicated in the Contract Documents;

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the

extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Not applicable.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Section 00 73 00 - Supplemental Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in Section 00 73 00 - Supplemental Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to

permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, the Engineer, the State of Connecticut, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 *Performance and Payment Bonds*

A. In accordance with Article 15 of Section 00 73 00 – Supplemental Conditions, Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in Section 00 73 00 - Supplemental Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in Section 00 73 00 - Supplemental Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in Section 00 73 00 - Supplemental Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.

E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

   a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

   b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in Section 00 73 00 - Supplemental Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such

additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in Section 00 73 00 - Supplemental Conditions;

3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in Section 00 73 00 - Supplemental Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

4. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

5. include completed operations coverage:

    a. Such insurance shall remain in effect for two years after final payment.

    b. Contractor shall furnish Owner and each other additional insured identified in Section 00 73 00 - Supplemental Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Not Applicable

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in Section 00 73 00 – Supplemental Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such

rights against Subcontractors and Engineer, and all other individuals or entities identified in Section 00 73 00 - Supplemental Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in

accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 *Labor; Working Hours*

A. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and

3) it has a proven record of performance and availability of responsive service.

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. *Substitute Items:*

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,

b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract

with Owner for other work on the Project) to adapt the design to the proposed substitute item, and

c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services; and

4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. *Engineer's Cost Reimbursement*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be

required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If Section 00 73 00 - Supplemental Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with Section 00 73 00 - Supplemental Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor

2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in Section 00 73 00 - Supplemental Conditions to be listed as insureds or loss payees (and the officers, directors,

members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, Engineer, and State of Connecticut, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in Section 00 73 00 - Supplemental Conditions, Contractor shall obtain and pay for all Federal, State, and local permits and licenses necessary to complete the Work. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by

applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

B. Owner is exempt from Connecticut state sales and use taxes on materials and equipment to be incorporated in the Work. (State ID No. 69-0160138-001 and Federal ID No. 06-6002112).

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, Engineer, State of Connecticut, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. Contractor shall comply with the applicable requirements of Owner's safety programs.

D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

1. Not applicable.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, Engineer, State of Connecticut, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner, Engineer, State of Connecticut or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. Owner intends to contract with others for the performance of other work on the Project at the Site.

B. The Owner and/or Engineer will have authority and responsibility for coordination of the activities among the various contractors.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.

C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these Standard Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

8.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

8.12 *Compliance with Safety Program*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of the Work as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, or procedures of construction, or the safety precautions and programs incident

thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. The Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in Article 9 and limitations on the responsibilities thereof will be as provided in Paragraph 9.09.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

B. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required*: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action*: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part;

2. approve the Claim; or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in

Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 *Allowances*

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances:*

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. *Contingency Allowance:*

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect to any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount

equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of

satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or

2. correct such defective Work; or

3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and

4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct, or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. *Applications for Payments:*

1. At least 5 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications:*

1. Engineer will, within 5 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

   a. the Work has progressed to the point indicated;

   b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and

   c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

   a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

   b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

   a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or

d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. *Payment Becomes Due:*

1. After presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor in accordance with the Agreement.

D. *Reduction in Payment:*

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

c. there are other items entitling Owner to a set-off against the amount recommended; or

d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

14.03 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and

guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

   a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;

   b. consent of the surety, if any, to final payment;

   c. a list of all Claims against Owner that Contractor believes are unsettled; and

   d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due:*

1. After the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor in accordance with the Agreement.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or

suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's repeated disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere; and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 – DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration

Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. agrees with the other party to submit the Claim to another dispute resolution process; or

2. gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 – MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the

Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

END OF SECTION

SECTION 00 73 00

SUPPLEMENTAL CONDITIONS

SECTION 00 73 00
SUPPLEMENTAL CONDITIONS
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ARTICLE 1 – SPECIAL NOTE

These Supplemental Conditions amend or supplement Section 00 70 00 - Standard Conditions and other provisions of the Contract Documents and shall be subject to all requirements of the Agreement. The terms used in these Supplemental Conditions which are defined in the Agreement or Section 00 70 00 - Standard Conditions have the meanings assigned to them in said documents. All provisions of Section 00 70 00 - Standard Conditions which are not so amended or supplemented remain in full force and effect.

This section applies equally and specifically to all Contractors and Subcontractors supplying labor and/or equipment and/or materials for this Project, specifications and general provisions of the Agreement including Section 00 70 00 - Standard Conditions, apply to these Supplemental Conditions. Where items of the Contract Documents or Section 00 70 00 - Standard Conditions are repeated, it is intended to call particular attention to or qualify them; it is not intended that any other parts of the Contract Documents or Section 00 70 00 - Standard Conditions shall be assumed to be omitted if not repeated herein.

Unless expressly provided for otherwise, the costs associated with all work under the Supplemental Conditions shall be included in Contractor's Total Bid Price.

ARTICLE 2 – PRELIMINARY MATTERS

A. Contractors are required to comply with all federal, State and local environmental regulations and all other applicable laws, ordinances, regulations, and permits.

B. Noise Control - Contractor is responsible to take preventive measures with the operation of their or Subcontractor's equipment to prevent nuisance noise.

C. Contractor shall be responsible for coordinating and working harmoniously with other contractors working on the Site on behalf of the Owner.

ARTICLE 3 – LAND

A. Contractor shall prevent damage to land resources at the Site.

B. Excavations - Contractors shall inform the Owner and Engineer prior to the excavation of any soil on the Owner's property. Soil excavation includes activities such as boring, trenching, digging, grading or installation of groundwater monitoring well(s).

C. Excavation in Known Contamination - All Contractors who intend to perform soil excavation activities or collect soil or groundwater samples at an Owner facility with known contamination shall comply with all applicable OSHA regulations and provide the following:

1. Contractor must provide Owner with a copy of the written Site-specific work plan for all work being conducted within designated contaminated areas.
2. Contractor must provide Owner with a copy of the written site-specific Health and Safety Plan for their scope of work upon request.

D. Contractors who perform excavation activities on Owner's property not designated as a contaminated area must immediately cease excavation activities and notify the Owner and the Engineer whenever the following occurs:

1. Visual observation or odor of Oil or Hazardous Materials (OHM) in the soil, or analytical test results that indicate the presence of OHM in the soil.
2. Visual Observation of improper solid waste disposal.
3. Visual observation or odor of OHM in the groundwater, or analytical test results that indicate the presence of OHM in the groundwater.

E. Discovery of Historical Artifacts - Contractors who perform excavation activities must immediately cease excavation activities and notify the Owner and the Engineer in the event that potentially significant historical artifacts are uncovered.

F. Excavated Soil Management - All soil must be stored in a secure manner (within a fenced and locked location) to prevent exposure to humans and the environment. No soil may be stored in a manner where sensitive human health receptors, such as public and private water supply wells, or sensitive environmental receptors, such as wetlands, surface water bodies or marine environments, may be impacted.

ARTICLE 4 – WATER/WETLANDS

A. All water/wetland resources shall be protected during the Work.

B. Chemicals, fuels, oils, greases, bituminous materials, solids and concrete shall be stored and handled to prevent leaching or surface run-off into public waters

C. All dewatering operations shall conform to State and local permitting requirements.

D. The Contractor shall comply with all pertinent Permits, Licenses, Certificates, Orders and other regulatory approvals associated with the project. The Engineer or designee will assist the Contractor, as requested, in interpreting the Project's environmental requirements after which it becomes the Contractor's responsibility for full compliance.

ARTICLE 5 – MATERIAL IDENTIFICATION, STORAGE AND MANAGEMENT

A. Prior to mobilization, the Contractor shall provide Safety Data Sheets (SDSs) for each material to be used during the project. All chemicals must be pre-approved for use by the Owner. The Contractor shall also provide the Owner with a list of anticipated waste types and quantities requiring disposal.

B. The Owner reserves the right to deny the use of a chemical if, in the opinion of the Owner, it may pose a threat to the health and safety of the Owner's employees and/or to the environment. If the Owner deems a product unsafe, the Contractor shall remove the product from the work site immediately.

C. Products shall be stored in the original labeled containers at the work site and stored in a manner consistent with label directions and all applicable regulatory requirements to provide protection from accidental releases to the environment, fire or explosion. Use of cargo containers and/or bulk storage trailers must meet the approval of the Engineer. Storage locations may be limited due to site-specific requirements or procedures and as a result, the User, in conjunction with the Engineer shall be consulted prior to locating storage trailers or cargo containers. At a minimum, all storage trailers or cargo containers shall be labeled on all accessible sides with an appropriate NFPA 704M hazard identification diamond, appropriate DOT markings or other hazard communication markings as required, emergency contact phone numbers and an identification number if more than one trailer or cargo container is used.

ARTICLE 6 – TRANSPORTATION OF WASTE

A. Only qualified hazardous waste transporters may transport hazardous waste from the Site. All haulers of hazardous building materials and hazardous waste must have a MCS-90 endorsement. All waste labeling, packaging and transport shall be completed by the Contractor in accordance with all applicable federal, State and local regulations and the Owner's policies as set forth below. All waste labeling, packaging and transport documentation is subject to inspection and review by the Owner or Engineer prior to removal from the work site.

B. Contractor is forbidden to transport or bring any hazardous waste that has been generated, released or encountered at off-site locations to the work site for any reason.

C. The transport of hazardous waste and PCBs may be prohibited on certain roads. It is the Contractor's sole responsibility to identify and prohibit travel of these wastes on said roads. The scope of work may require the development of a site-specific transportation plan due to potential public impacts of local area roadways. If required, a satisfactory plan shall be developed and coordinated with Public & Community Relations Departments.

D. Bidders shall provide a name, address, and contact information for all proposed waste haulers with his/her Bids.

ARTICLE 7 – DISPOSAL

A. Unless otherwise stated, the Contractor will characterize all work-related wastes to ensure proper on-site management and shall arrange for disposal in accordance with federal, State and local regulations. The Owner shall be identified as the generator of the waste, unless the Engineer determines otherwise. The Owner will supply the appropriate permanent or temporary EPA ID Number, address, and telephone number. All hazardous waste manifests shall be reviewed and signed by the Owner or Owner's Agent.

B. There shall be no on-site disposal of wastes unless specified by the Owner elsewhere in the Agreement or in the Contract Documents.

C. All wastes shall be disposed of at an Owner approved waste disposal/recycling facility.

D. Contractor shall provide copies of all hazardous waste manifests, non-hazardous waste manifests, bills of lading, and/or certificates of disposal/recycling, as appropriate to the Owner immediately upon receipt by the Contractor.

E. All unused chemical (non-waste) products originally brought to the property by the Contractor shall remain the responsibility of the Contractor and shall be removed by the Contractor at the conclusion of the Contractor's on-site activities.

F. Bidders shall provide a name, address, and contact information for all proposed disposal and recycling facilities with his/her Bids.

ARTICLE 8 – TRAINING

A. All Contractor employees and subcontractors who handle, transport or in any way manage hazardous wastes, substances, or PCBs or participate in the cleanup of hazardous substance releases are required to be trained in accordance with federal, State and local hazardous waste and OSHA requirements.

B. Contractor shall provide copies of all training certificates for his employees and subcontractors to the Engineer prior to the start of the Work.

ARTICLE 9 – SPILL PREVENTION

A. The Contractor shall conduct all activities in a manner that will prevent a release to the environment. Spill prevention measures, including maintaining spill control materials at the job site, shall be required based on the types, quantities, and locations of material stored. Documented inspections of storage areas by the Contractor may also be required.

ARTICLE 10 – RELEASE RESPONSE AND NOTI ICATION REQUIREMENTS

A. The Contractor shall immediately notify the Owner and Engineer of any release of any quantity of oil or hazardous material.

B. For releases of Contractor material, the Contractor is responsible to make all required notifications to regulatory agencies and to ensure that the release is properly responded to. The Contractor is responsible for hiring subcontractors for the cleanup of releases. The Contractor may request assistance from the Owner in determining whether notifications are required and for guidance in response actions. If the Contractor does not respond appropriately, the Owner reserves the right to assume response actions and recover costs incurred from the Contractor.

C. No response actions other than those necessary to remove personnel from the vicinity of the release and/or stop/minimize the release of the hazardous substance/waste shall be initiated until all necessary safety precautions have been taken, including, but not limited to, securing the work site and donning of personal protective gear. The Contractor shall attempt to contain the spill using absorbent material or other available materials when possible to do so in a safe manner. Measures shall be taken to prevent the material from discharging to soil, drains, or waterways.

D. When a release occurs, the Contractor shall document all release response actions in writing. The Contractor may be requested to submit this information to the Owner within one working day after a release has occurred. However, verbal notification must be given to the Owner and the Engineer immediately after a release has occurred.

E. The Contractor may also be requested to supply the Owner with a copy of all other documentation required by regulatory agencies related to the release, including documentation of soil, water and solid surface clearance samples within five (5) days of receipt by the Contractor.

F. Spill cleanup debris, discarded protective equipment and other waste resulting from a release and cleanup by the Contractor shall be packaged and disposed of in accordance with all Department of Transportation requirements, and all federal, State and local hazardous waste regulations by the Contractor.

ARTICLE 11 – WAGE RATES

A. The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the work herein, contracted to be done shall be at a rate equal to the Prevailing Wage Rates provided by the Connecticut Department of Labor included in Attachment C. The amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund (as defined in Section 31-78 of the Connecticut General Statutes) shall also be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town of Vernon. If the Contractor is not obligated by agreement to make such payment or contribution on behalf of such employees to any such welfare fund, the Contractor shall pay to each employee the amount of payment of contribution for his classification on each payday as part of his wages.

B. The Contractor shall furnish to the Engineer certified copies of payrolls showing the names of its employees working on the Project, the specific days and hours and number of hours that each of them has spent in doing so, and the amount paid to each person for said work. A sample of payroll certification form is provided in Attachment D.

ARTICLE 12 – SCHEDULE AND POSTING OF MINIMUM WAGE RATES

A. Where applicable, the Contractor, and every Subcontractor, shall post a legible copy of the Minimum Wage Rates and Classifications included in the Contract Documents. This posting shall be in a prominent and accessible place at the site of the work. The schedule shall show all determined minimum wage rates for the various classes of laborers and mechanics to be engaged to work on the project. The schedule shall also show all deductions, if any, required by law to be made from wages actually earned by the laborers and mechanics so engaged.

B. The rates established by each schedule are the minimum and all employees shall be paid no less than the established rate for each trade or occupation. In the case of a conflict between schedules in anyone trade or occupation, the higher rate listed shall control and such higher rate shall be considered to be the minimum.

C. Where applicable, the minimum rates of wages and schedule of supplements to be provided for the various trades shall be in accordance with the Prevailing Wage rate Schedule included herein (Attachment C). The rate of wages and schedule of supplements for any trade not appearing or mentioned in this schedule shall be in accordance with the prevailing rates established for that particular trade by the Connecticut Department of Labor. Minimum wages required to be paid shall include supplements for hospital, surgical, medical or other benefits as determined by Sections 31-53 and 32-54 of the General Statutes of the State of Connecticut. The Contractor shall file a Wage Certification Form with the Labor Department of the State of Connecticut prior to beginning work on the site.

D. If for any reason and at any time, the Federal Government, the State of Connecticut, or the Town of Vernon, shall in any way supplement, change or amend the Prevailing Wage Rates Schedule, then the Contractor or subcontractor shall follow such Schedule as supplemented, changed or amended. In no case shall the Contractor or subcontractor be entitled to any additions, compensations or extras because of any supplement, change, amendment or predetermination of the Prevailing Wage Rate Schedule.

ARTICLE 13 – CONFORMANCE WITH FEDERAL, STATE AND OTHER JURISDICTIONAL REQUIREMENTS

A. By executing this Contract, Contractor represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with all applicable statutes, acts, ordinances, guidelines, resolutions, orders, judgments, decrees, injunctions, rules, and regulations of all government authorities applicable to performance by the Contractor of services hereunder, including those having jurisdiction over its registration and licensing to perform services hereunder; including, but not limited to, the following: EQUAL EMPLOYMENT OPPORTUNUTY; COPELAND ANTI-KICKBACK ACT, as supplemented in the Department of Labor Regulations (29 CFR, Part 3) and Section 12-430(7) of the State of Connecticut General Statutes. All applicable sections of the Town Charter and Code of Ordinances are incorporated by reference made a part hereof.

B. **Taxes-Federal, State and Local.** The Town is exempt from Federal Excise and Transportation, State and Local Sales and Use Taxes, including without limitation, taxes that would otherwise be imposed upon the Contractor for transactions required or necessitated hereunder between it and its subcontractors, suppliers, etc. The Contractor remains liable, however, for any applicable tax obligations it incurs. Moreover, the Contractor represents that the bid and pricing contained in this Contract do not include the amount payable for said taxes.

C. **Labor and Wages-Federal and State.** Contractor and its subcontractors shall conform to Federal and State of Connecticut labor laws, and all other laws, ordinances, and legal requirements affecting the work in Connecticut.

1. The Contractor is aware of, and shall comply with, the provisions of Title 31, §53 of the Connecticut General Statutes, latest revision (the "Act"), concerning the payment of minimum wages for work on public facilities. The provisions of the Act are hereby incorporated by reference and made a part of this Contract. The Act provides that the

Connecticut prevailing wage law applies to certain remodeling, refurbishing, alteration, repair and new construction. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statute 31-53(i), shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

D. **Compliance with CONN. GEN. STAT. § 4a-60g, as amended by June 2015 Special Session Public Act 15-5.**

1. Definitions – For purposes of this paragraph:

   i. "Small contractor" means any contractor, subcontractor, manufacturer, Service Company or nonprofit corporation (A) that maintains its principal place of business in the State, (B) that had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year prior to such application, and (C) that is independent. "Small contractor" does not include any person who is affiliated with another person if both persons considered together have a gross revenue exceeding fifteen million dollars.

   ii. "Minority business enterprise" means any small contractor (A) fifty-one per cent or more of the capital stock, if any, or assets of which are owned by a person or persons who (i) exercise operational authority over the daily affairs of the enterprise, (ii) have the power to direct the management and policies and receive the beneficial interest of the enterprise, (iii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, and (iv) are members of a minority, as such term is defined in subsection (a) of section 32-9n, or are individuals with a disability, or (B) which is a nonprofit corporation in which fifty-one per cent or more of the persons who (i) exercise operational authority over the enterprise, (ii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, (iii) have the power to direct the management and policies of the enterprise, and (iv) are members of a minority, as defined in this subsection, or are individuals with a disability.

   iii. "Municipal public works contract" means that portion of an agreement entered into on or after October 1, 2015, between any individual, firm or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project

of an alliance district, as defined in Section 10-262u, as amended by this act, financed by state funding in an amount equal to fifty thousand dollars or less.

2. The Contractor and Subcontractor shall comply with the specific requirements of the State of Connecticut Set Aside Program, Connecticut General Statute § 4a-60g, as amended by June 2015 Special Session Public Act 15-5, if the municipal public works contact awarded to the Contactor is funded in whole or in part by state funds.

3. For contracts valued over $50,000, Contractor should be required to make good faith efforts to place a minimum of 25% of the subcontracts awarded by the general contractor with eligible contractors holding current certification from the DAS under the provisions of CGS 4a-60g, as amended. Twenty five percent (25%) of the work with DAS certified Small and Minority owned business and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.

ARTICLE 14 – DISCRIMINATORY PRACTICES

A. In performing this Contract, the Contractor shall not discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, age, religious creed, disability, national origin or ancestry, marital status, family status, prior psychiatric treatment, health care, military status or source of income or because of a handicap that is unrelated to the employee's or the applicant's ability to perform the duties of a particular job or position. Subcontracts with each Subcontractor shall contain a provision requiring non-discrimination in employment as herein specified. Said provisions with subcontractors shall require conformity and compliance with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements.

B. Discrimination Because of Certain Labor Matters. No person employed on the work covered by this Contract shall be discharged or in any way discriminated against because such person has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or related to the labor standards applicable hereunder to its employer.

C. Equal Opportunity. In its execution of the performance of this Contract, the Contractor shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, national origin or citizenship status, age or handicap. The Contractor agrees to comply with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements, and will require the same of all subcontractors

D. Affirmative Action - Pursuant to Connecticut General Statute §4a-60, as amended by June 2015 Special Session Public Act 15-5, the following are required for every Municipal Public Works Contract:

1. Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract shall contain the following provisions:

    i. Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;

    ii. Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities;

    iii. Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this Article, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

    iv. Contractor agrees to comply with each provision of this Article and Sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to Sections 46a-56, as amended by this act, 46a-68e, 46a-68f and 46a-86; and

    v. Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this Article and Section 46a-56, as amended by this Act.

2. If the contract is a public works contract, municipal public works contract or contract for a quasi-public agency project, Contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works or quasi-public agency project.

ARTICLE 15 – LIENS AND BONDS

A. The Contractor, for itself, its Subcontractors and all other persons performing under the Agreement hereby waives, to the full extent permitted by law, all right to have filed or maintained any mechanics' or other liens or claims for or on account of any Work performed under the Agreement, including any Services, labor, materials or equipment to be furnished thereunder.

B. The Contractor shall: (a) indemnify, release and save harmless the Town and its affiliates and their officers, directors, employees, agents, servants, and assigns from all laborers', materialmen's, and mechanics' liens upon the real property upon which the Project is located arising out of the Services, equipment and materials furnished by the Consultant and its Subcontractors in connection with the Project; and (b) to the full extent permitted by law, keep said property free and clear of all liens, claims, and encumbrances arising from the performance of the Agreement by the Consultant and Subcontractors.

C. Consistent with the provisions of Section 49-41 of the Connecticut General Statutes and the State of Connecticut Department of Economic and Community Development's guidance entitled, "Bidding, Contracting & Construction Guidelines for State Programs" (revision October 2012) (the "DECD Guidance"), Bidders shall provide a Bid Bond with a minimum value of 5% of the bid amount.

D. Contractors retained by the Town, as recommended by the Engineer, shall furnish performance and payment bonds, each in an amount at least equal to the amounts required by Section 49-41 of the Connecticut General Statutes and the DECD Guidance as security for the faithful performance and payment of all of Contractor's obligations under the Agreement and the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified by the Town, whichever is later,

E. Any such bond(s) shall be from a surety and in form and content acceptable to Town. Copies of such bonds shall be furnished to the Town and all Subcontractors of any tier.

ARTICLE 16 – LIABILITY AND INDEMIFICATION

A. To the fullest extent permitted by law, the Contractor shall indemnify, defend, release and hold harmless, the Town, Engineer, the State of Connecticut, and each of their officers, directors, employees, agents, assigns, and servants, from and against any liabilities, fines, payments, penalties, claims, suits, actions, losses, settlement costs, demands, judgment, damages, and costs (including reasonable legal expenses) to the extent caused by any negligent, intentional or reckless act, willful misconduct or omission, on the part of Contractor and to the extent that such underlying action of the Contractor is not reasonable under the customary and generally accepted standards of the industry, its subcontractors, or any person under Contractor's control or supervision, and their officers, directors, employees, agents, servants, or assigns, that causes: (a) any breach or claimed breach of the Agreement and/or the Contract Documents (including breach of any representation or warranty in the Agreement); (b) death or injury to any person, including but not limited to the Town's or the Town's affiliates' employees, Contractor's

employees, any subcontractor or their employees; (c) any damage to, environmental contamination of, or destruction of any real or personal property, including but not limited to property of the Town or the Town's affiliates; (d) any fine, payment, or additional expense imposed upon or incurred by Town or (e) natural resource damages, arising out of or connected with the Contractor's services.

B. In any and all claims against the Town, Engineer, the State of Connecticut or any of its boards, departments, officials, employees, representatives and agents by the Contractor or any employee of the Contractor, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation above, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

C. Without limiting the above, to the fullest extent permitted by law, the Contractor's obligations above shall include, but not be limited to, actions, proceedings, suits, demands, notices, orders, or threats thereof, brought issued, or made by any third party, including, but not limited to, any person, the United States Environmental Protection Agency, any State environmental agency or authority, or any citizens group.

D. Without limiting any other provision of this Article, the Contractor shall reimburse the Town, Engineer, or State of Connecticut for payment of any direct costs, penalties and/or fees pursuant to any order, decree, or other legal instrument or process of any court, agency or other governmental entity but only to the extent such are caused by the Contractor's negligence, recklessness or intentional misconduct or breach of warranty.

E. Notwithstanding any other provision of the Agreement, this Article shall survive the termination or expiration of the Agreement.

F. The Contractor shall be solely responsible for causing the timely repair to and/or replacement of, Town property or item(s) intended to become Town property hereunder, where the need for repair or replacement was caused by the Contractor's negligence, recklessness or intentional misconduct hereunder, by someone under the care and/or control of the Contractor, by any subcontractor of the Contractor, or any contractor being supervised by the Contractor and the Contractor does not exercise reasonable supervision of such contractor. Further, the Contractor shall be solely responsible for securing the Town's written acceptance of all completed repairs and replacements hereunder. The Town hereby retains sole discretion to determine whether a repaid or a replacement is the proper remedy.

ARTICLE 17 – INSURANCE

A. At no additional cost to the Town, the Contractor shall purchase and maintain the insurance coverages set forth below which shall protect the Town from claims which may arise out of or result from the Contractor's obligations under this Agreement, whether such obligations are the Contractor's or subcontractor or person or entity directly or indirectly employed by said Contractor or subcontractor, or by any person or entity for whose acts said Contractor or subcontractor may be liable. Contractor coverage shall be primary and non-contributory. The

policies with stated limits shall be maintained, in full force and effect, at all times during which the work is being performing.

B. The Contractor shall not commence work under this Agreement until all insurance required has been obtained by the Contractor and such insurance has been approved by the Town. Prior to commencing any Work under the Agreement and during the entire term of the Agreement, the Contractor, at its own cost and expense, shall procure and maintain insurance in form and amounts set forth below. Certificates of Insurance shall be issued by an insurance company with a Best's rating of A- or greater and are in A.M. Best financial size category of VII or higher.

C. Prior to commencing the Work, the Contractor shall have its insurer furnish to the Town a Certificate of Insurance evidencing the insurance coverage required by this Article. All such policies shall be written on an occurrence basis. The Contractor must supply replacement/renewal certificates within five days upon renewal the policy(ies). The Contractor shall provide written confirmation that it will not cancel or reduce the coverage afforded under the policies for any reasons unless notice of not less than thirty (30) calendar days has been mailed to the Town Administrator, 14 Park Place, Vernon, CT 06066.

D. Every Certificate of Insurance shall contain the following or equivalent clause: "No reduction, cancellation, or expiration of the policy shall be effective until thirty (30) Days from the date written notice thereof is actually received by the Contractor." Upon receipt of any notice of reduction, cancellation, or expiration, the Contractor shall immediately notify the Town.

E. The “State of Connecticut” and the “Town of Vernon and its affiliates” shall be named as Additional Insureds on the Commercial General Liability, Pollution Legal Liability and Automobile Liability insurance policies. The insurance afforded the additional named insured shall be primary insurance and non-contributory. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this agreement and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 36 months. The Contractor hereby releases and waives all rights of recovery against them for any loss or damage covered by said policies. Evidence of this requirement shall be noted on Certificates of Insurance provided to the Town. This release and waiver shall survive the termination or expiration of the Agreement.

F. In addition to Certificates of Insurance, Contractor shall provide a separate Additional Insured Endorsement with the following wording: "The Town of Vernon is listed as additional insurance as its interests may appear." Contractor shall submit the Additional Insured Endorsement to the Town prior to the start of the Work.

G. The Contractor shall be solely responsible for any and all claims, suits and actions of its employees. The Contractor hereby waives all claims and releases the State of Connecticut and Town and their affiliates from and against such claims, suits, and actions, and without limiting

Article 14, shall hold harmless, and, at the State and/or the Town's option, defend the State of Connecticut and the Town and its affiliates (with counsel acceptable to the Town) from and against such claims. The complete or partial failure of the Contractor's insurance carrier to fully protect and indemnify the State of Connecticut or Town and its affiliates or the inadequacy of the insurance shall not in any way lessen or affect the obligations of the Contractor to the State of Connecticut and Town and their affiliates. Notwithstanding any other provision of the Agreement, this obligation shall survive termination or expiration of the Agreement.

H. Should the Contractor not provide or maintain any of the insurance coverage required herein, the Town shall have the right but not obligation to provide or maintain such coverage at the Contractor's expense, either by direct charge or withholding payment.

I. Failure to Maintain Coverage. In the event the Contractor fails to maintain the minimum required coverage as set forth above, the Town may stop work and, at its option, may take any and all actions available under law to address the issue.

J. THE TOWN SHALL RECEIVE WRITTEN NOTICE OF CANCELLATION FROM THE INSURED AT LEAST 30 CALENDAR DAYS PRIOR TO THE DATE OF ACTUAL CANCELLATION, REGARDLESS OF THE REASON FOR SUCH CANCELLATION.

Coverage Category General	Coverage Category Specific	Limits (Per claim/Per Incident unless otherwise marked)	Notes
General Liability		$1,000,000 Occurrence $2,000,000 General Aggregate	
	Damage to rented premises	$500,000 (each occurrence)	
	Med Ex (Any One person)	$10,000 (any one person)	
	Personal & Advertising Injury	*$1,000,000*	
	Products - Comp/Op Agg	*$2,000,000*	
Umbrella		$5,000,000 Each Occurrence, $5,000,000 General Aggregate	To cover General Liability, Automobile, Worker and Employer Liability
Automobile Liability		$1,000,000 *(combined single limit each accident)*	*All haulers of HBM must have a MCS-90 endorsement*

Coverage Category General	Coverage Category Specific	Limits (Per claim/Per Incident unless otherwise marked)	Notes
Workers Compensation and Employee Liability		Each Accident $1,000,000 Disease/EA Employee $1,000,000, Disease/Policy Limit $1,000,000	
Contractors Pollution		Each Claim $2M /Aggregate $4M	

ARTICLE 18 – WEATHER CONDITIONS

A. In case of temporary suspension of the work, or during inclement weather, or whenever the Owner or Engineer shall direct, the Contractor shall carefully protect his work and materials against damage or injury from the weather. The Contractor shall cause all his Subcontractors to provide the same protection for their portion of the work. If, in the opinion of the Owner or Engineer any work or material was damaged or injured by reason of failure on the part of the Contractor, or any of his Subcontractors, so to protect his work, or otherwise damaged by the negligence of the Contractor or any of his Subcontractors or their agents or servants, or is otherwise defective, such materials shall be removed and replaced at the expense of the Contractor.

B. No "winter shutdown" will be permitted for this Project. No extension of time shall be granted because of seasonal or abnormal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the Contractor, whether occurring within the time originally scheduled for completion or within the period of any extension granted. There shall be no increase in the Contract Sum on account of any additional costs of operations or conditions resulting therefrom.

ARTICLE 19 – PERMITS

A. The Contractor shall keep himself fully informed of all existing and current federal, State or local laws and regulations or ordinances that in any way limit or control the operations or actions of those engaged in the work or affecting the materials supplied to or by them. The Contractor shall at all times observe and comply with all such valid and binding ordinances, laws or regulations. The Contractor shall protect and indemnify the Owner and its representatives against any claims arising from, or based upon, any violation of the same.

B. Unless otherwise specified, Contractor shall obtain all applicable federal, State and local permits, authorizations, and registrations and make all notifications necessary to complete the project at no additional cost to the Owner. The cost of obtaining and maintaining the permits, authorizations, and registrations shall be included in the Contractor's Total Bid Price.

C. Contractor will be responsible for all applicable federal, State, and local permit fees.

ARTICLE 20 – COMMISSION ON HUMAN RIGHTS AND OPPORUNITIES (CHRO)

A. Contractor shall aggressively solicit participation of legitimate minority business enterprises consistent with 4A-60 and 4a-60a of the Connecticut General Statutes and Sections 46a-68j-21 through 43 of the Regulations of the Connecticut State Agencies.

B. **Bidders must complete and sign the CHRO Bidder Contract Compliance Monitoring Report form and include with his/her Bid (Attachment F).** Bids not including CHRO Contract Compliance Monitoring Report form shall be considered incomplete and shall be rejected.

C. **The Contractor awarded the Work must have an Affirmative Action Plan filed with and approved by the Commission on Human Rights and Opportunities within 10 days of Notice of Award and prior to the commencement of the Work.**

D. The Contractor awarded the Work must file a written or electronic nondiscrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav GID=1806.

ARTICLE 21 – TECHNICAL REPORTS AND DATA

A. Engineer has collected and analyzed samples of certain building materials for the presence of Engineer has collected and analyzed samples of certain building materials for the presence of hazardous and asbestos containing materials. Laboratory data reports summarizing the results of this sampling for use by the Contractor are provided within Attachment G.

Electronic copies of these reports are available for viewing and/or for download at Legal Notices, Bids and Contracts - Town of Vernon (vernon-ct.gov), RFP#2092.

B. Information on the presence and layout of subsurface utilities and features depicted on the Drawings are for informational purpose only.

ARTICLE 22 – PROJECT SIGN

A. Not applicable.

END OF SECTION

DIVISION 01
GENERAL REQUIREMENTS

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Site Description

C. Scope of Work

D. Contract Bid Items

E. Contractor's Use of Site

F. Work Sequence

G. Schedule of Work

1.2 RELATED SECTIONS

A. Section 00 70 00 – Standard Conditions

B. Section 00 73 00 – Supplemental Conditions

C. Section 01 11 13 – Work Covered by Contract Documents

D. Section 01 12 19 – Contract Interface

E. Section 01 35 29 – Health, Safety, and Emergency Response Procedures

F. Section 01 35 43 – Environmental Procedures

G. Section 01 35 53 – Security Procedures

H. Section 01 50 00 – Temporary Facilities and Control

I. Section 01 70 00 – Execution and Project Closeout

J. Section 01 74 00 – Final Cleaning

K. Section 01 78 00– Project Record Documents

L. Section 02 81 00 – Waste Management and Disposal

1.3 SITE DESCRIPTION

A. LOCATION OF WORK

1. The Daniel's Mill property is located at 98 East Main Street in an industrial zoned section of Vernon, Connecticut and consists of an approximate 1-acre parcel of land. The Site is abutted by East Main Street to the north, the former Amerbelle Textile Mill to the east, American Mill Pond to the south and west, and by a former industrial facility (Anocoil) to the west. The property is improved with a six-story building (including basement and attic) with a footprint measuring approximately 9,000 square-feet. Areas to the west of the building are predominantly asphalt paved and a narrow-grassed area is located to the east of the building. The Hockanum River runs from east to west through the abutting former Amerbelle Textile Mill property in a stone lined raceway and discharges to the American Mill Pond located adjacent to the south and west of the Site.

2. The Site is owned by the Town of Vernon and is currently vacant. The utilities that formerly serviced the building have been deactivated/disconnected.

3. An elevator extends from the basement to the fourth floor; however, the electrical power to the building and the elevator system is no longer in service.

4. Certain building materials were found to be impacted with polychlorinated biphenyls (PCBs) at concentrations regulated by the State of Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Environmental Protection Agency (EPA). These PCB impacted building materials include painted wood, brick, and plaster surfaces, window glazing, concrete flooring in the basement, and wood flooring. A table summarizing the PCB testing data related to the interior of the building is included in Attachment A.

5. Certain building materials including window and door glazings were also determined to contain asbestos. A table summarizing the asbestos testing data related to the building materials is included in Attachment A.

1.4 SCOPE OF WORK

A. Contractor shall furnish all labor, materials, services, insurance, tools, equipment, temporary facilities, and incidentals to perform Work in accordance with the Contract Documents, including the Drawings and Specifications and applicable Laws, permits, regulations, codes, ordinances, and standards. The Work consists of, but is not limited to the following:

1. Submittal of the names and qualifications of all proposed vendors, subcontractors and suppliers to the Engineer and Owner for review and approval prior to the start of Work.

2. Submittal the names, qualifications, and licenses of all proposed waste haulers, and disposal and recycling facilities to the Engineer and Owner for review and approval prior to the start of Work.

3. Unless otherwise indicated in Section 00 73 00 – Supplemental Conditions, obtain (including paying all fees) and maintain any and all local, State, and federal permits required to perform the Work.

4. Preparation of a Health and Safety (H&S) Plan in accordance with Section 01 35 29 – Health, Safety, and Emergency Response Procedures and other relevant portions of the Contract Documents. Assume full responsibility for health and safety of the Contractor's employees and subcontractor employees while at the Site and for implementation of the Contractor's Health and Safety Plan.

5. Mobilization of all required personnel, equipment, and materials to the Site.

6. Site preparation, including, but not limited to, protection of adjacent structures and other features; protection of existing asphalt and monitoring wells; and utility clearance/protection/guarding (as necessary).

7. Supply, installation, set-up, maintenance, and removal of temporary facilities and controls including temporary electrical power, temporary lighting, signage, temporary sanitary facilities, and temporary fencing in accordance with Section 01 35 53 – Security Procedures and Section 01 50 00 – Temporary Facilities and Controls.

8. Marking, shielding, covering, barricading, and/securing any openings or damaged areas of the building flooring systems to prevent workers from accessing these areas.

9. Maintaining security at all times to prevent unauthorized access to the Site property and the building.

10. Set-up, supply, maintenance, repair, and removal at the completion of the Work a debris chute(s) to transfer the material and debris from the upper floors of the building to containers staged on the ground level.

11. Contractor may elect to utilize mechanized lifts to lower the debris and material from the upper floors of the building to the ground surface. Contractor is responsible for providing workers with the required training/certifications to operate the lifts and providing this documentation to the Engineer and Owner prior to the start of Work. All workers shall wear safety harnesses when riding in the basket of the lifts.

12. Contractor may elect to utilize the existing elevator to remove the debris and material from the upper floors of the building. Contractor is responsible for supplying an electrical power source to the elevator and providing a State of Connecticut licensed electrician to energize the elevator. The building and elevator have been vacant for numerous years and there have not been any inspections performed on the elevator system. Contractor is responsible for performing any inspections of the elevator system to determine the condition and the operability of the system. Contractor will be responsible for any costs associated with energizing, repairing, or maintaining the elevator system in a safe and operable condition. This includes coordinating any necessary third party inspections of the elevator system and obtaining an operating certificate/permit (if necessary) prior to use and paying for any associated fees.

13. Performance of selective demolition to facilitate the performance of the Work. Selective demolition activities will be limited to the removal of doors and/or windows to facilitate removal of the debris and material within the building. Demolition of flooring and interior and exterior walls will not be permitted. Any removed doors or window systems will be left in the building and not disposed off-Site as part of the Work.

14. Supply, maintenance, and covering of containers and roll-offs in accordance with Section 02 81 00 – Waste Management and Disposal.

15. Removal, management, segregation, loading, transportation and off-Site disposal of debris and materials from within the building to a disposal and/or recycling facility pre-approved by the Owner and Engineer in accordance with Section 02 81 00 – Waste Management and Disposal.

16. Management, segregation, and consolidation of aerosol cans and containers, buckets, and drums of oils, paints, lubricants, coolants, chemicals, and chemicals in the loading dock area on the western side of the building. These materials will be disposed off-Site in accordance with all applicable Laws and Regulations by others.

17. Providing traffic control spotters/flagmen to assist trucks entering and leaving the property. Traffic control spotters/flagmen can be an employee of the Contractor provided they wear reflective traffic vests.

18. Sealing, securing, and weather proofing any exterior window or exterior doors removed by the Contractor to facilitate the performance of the Work.

19. Demobilization including, but not limited to removal of all personnel, equipment, and materials from the Site, final cleaning, and project closeout in accordance with Section 01 50 00 – Temporary Facilities and

Controls, Section 01 74 00– Final Cleaning, Section 01 70 00 – Execution and Project Closeout, and Section 01 78 00 – Project Record Documents.

20. Provide any other miscellaneous items or work required to complete the Work in accordance with the Contract Documents.

B. Work shall include replacement, repair, and/or re-installation, as necessary and appropriate, of any items which do not comply with the Contract Drawings and/or Specifications at no additional cost to the Owner.

C. The Work shall be performed under one Contract Document with oversight by the Owner and/or Engineer.

D. If additional data become available during the execution of the Contract, the Owner has the right to reevaluate the requirements of the Contract and modify the work to be performed, as necessary. Payment shall be made as outlined in Section 00 70 00 – Standard Conditions and the Agreement between the Town of Vernon and the Contractor.

E. All material transported off-site for disposal or recycling in connection with the Work shall be shipped to an Owner approved disposal/recycling facility. All Contractor proposed disposal and recycling facilities shall be approved by the Owner prior to transport of the wastes.

1.5 CONTRACT BID ITEMS

A. A listing of proposed recycling/disposal facilities for all waste streams, including the address, contact information, and copies of all applicable permits for the facility, shall be provided with the Bid.

B. A listing of all proposed waste haulers, including the address, contact information, and copies of all applicable licenses for the waste hauler, shall be provided with the Bid.

C. The scope of each Bid Item is described in Section 01 20 00 – Price and Payment Procedures.

D. Contractor shall visit the Site and inspect the nature and condition of the facilities prior to Bid submission. No increase in price or extension of time will be considered for failure to fully understand the conditions of the Site and the structure as outlined in Section 00 70 00 – Standard Conditions.

1.6 CONTRACTOR'S USE OF SITE

A. Limits of Work shall be confined to the smallest reasonable and practicable area to perform the Work in a safe and efficient manner within the Limits of Work shown on the Drawings. Equipment staging and material storage areas and vehicle parking areas shall be within the Contractor's Limit of Work. Access to

and from the Site shall only be by the means designated by the Owner. Under no circumstances shall the Contractor perform any Work or conduct any activities outside of the Contractor's Limit of Work. Any disturbed area(s) not schedule for disturbance or disturbed outside the Limits of Work shall be restored to original conditions by the Contractor at no additional cost to the Owner.

B. Contractor shall:

1. Assume responsibility for Site security within the Limits of Work. Prevent entry by non-project personnel during Work and non-working hours.

2. Confine operations to within Limits of Work shown on the Drawings and shall not encumber adjacent properties.

3. Protect adjacent properties, utilities, and all existing Site features to remain, including but not limited to, buildings, utilities, fencing, monitoring wells, and asphalt and concrete surfaces.

4. Conform to all applicable laws, regulations, codes, ordinances and standards and the Contract Documents.

5. Assume full responsibility for health and safety of the Contractor's employees and subcontractor employees while at the Site and for implementation of the Contractor’s Health and Safety Plan for the Work.

6. Work harmoniously with Site personnel, the Engineer, the Owner and his representatives, Contractors, and all other entities engaged by the Owner necessary to complete the Work.

C. Contractor shall plan and schedule Work activities to be performed Monday through Friday between the hours of 7:00 a.m. and 6:00 p.m. EST unless otherwise requested in advance by the Contractor (minimum two days) and approved in writing by the Owner. No construction equipment shall be permitted to operate prior to 7:00 a.m. or past 6:00 p.m. EST without prior approval by the Owner.

D. The Contractor shall plan and schedule Work activities to be limited to weekdays, unless otherwise requested in advance (minimum two days) and approved in writing by the Owner.

1.7 WORK SEQUENCE

A. Contractor shall submit a Preliminary Project Schedule with their Bid outlining all major Work activities associated with the Contract described in these Specifications and shown on the Drawings. This schedule shall address all major Site activities from the submission of project submittals through demobilization. This Preliminary Project Schedule shall be in the form of a Gantt Chart.

B. In accordance with the Agreement between the Town of Vernon and the Contractor, within 10 days after commencement of the Contract Times, a final version of the Preliminary Project Schedule, designated as the Project Schedule, shall be submitted electronically by Contractor.

C. Contractor shall prepare a Project Schedule based on the Preliminary Project Schedule. This schedule shall identify all task items in sufficient detail to demonstrate how Contractor will execute and sequence the Work. The Project Schedule shall be consistent with the requirements of Section 00 70 00 – Standard Conditions and the milestones, sequencing and completion dates and restrictions described in this Specification.

D. The Project Schedule shall be in the form of a Gantt chart and shall consist of horizontal lines, or bars, plotted along a daily time scale. The schedule shall have a separate line for each section of Work, and shall identify the first work day of each week. It shall show the complete sequence of Work, identifying Work of separate stages and other logically grouped activities, and shall indicate early and late start, early and late finish, float dates, and duration. The time-scale shall indicate all required Milestone and Completion dates as set forth in the Contract Documents. The horizontal bar(s) shall indicate the start and finish dates as well as the total time period of performance for each activity. Contractor shall arrange the chart so as to show the activities which are necessary to fulfill each and every Milestone and Completion date requirement.

E. If Engineer finds that the submitted schedule does not comply with project requirements, corrective revisions will be noted on the submittal copy and returned to Contractor. Contractor shall resubmit revised schedule within five days.

F. The Contractor shall perform all work consistent with the Engineer approved Project Schedule.

G. The Contractor shall perform Work in a manner that will allow the Site and adjacent property owners to maintain normal activities on their properties. Contractor must ensure that neighboring operations or activities are not disturbed, interrupted, or prohibited as a result of Work.

H. Work sequencing shall be conducted in a manner to coordinate staging and loading of materials to be transported and disposed/recycled off the Site.

1.8 SCHEDULE OF WORK

A. All Work must be substantially completed within 30 calendar days of the Notice to Proceed and completed and ready for final payment within 40 calendar days of the Notice to Proceed consistent with the Engineer-approved Project Schedule.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 11 13 - WORK COVERED BY CONTRACT DOCUMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Work Covered by Contract Documents

1.2 RELATED SECTIONS

A. Section 00 70 00 – Standard Conditions

B. Section 00 73 00 – Supplemental Conditions

C. Section 01 11 00 - Summary of Work

D. Section 01 35 29 - Health, Safety, and Emergency Response Procedures

E. Section 01 35 43 - Environmental Procedures

F. Section 01 35 53 - Security Procedures

G. Section 01 50 00 - Temporary Facilities and Controls

H. Section 01 74 23 - Final Cleaning

I. Section 01 78 39 - Project Record Documents

J. Section 02 81 00 - Waste Management and Disposal

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Contractor shall comply with all requirements set forth in the Agreement between the Town of Vernon and the Contractor, Section 00 70 00 – Standard Conditions, Section 00 73 00 – Supplemental Conditions, and the other sections of the Contract Documents.

B. FAMILIARIZATION - Contractor is responsible for becoming familiar with all aspects of the Work and the Site prior to performing the Work in accordance with Section 00 70 00 – Standard Conditions.

C. COOPERATION - Contractor shall cooperate with all other parties engaged in project related activities as well as Owner's employees, representatives, and contractors to the greatest extent possible. Contractor shall confine operations at the Site to within the Limits of Work shown on the Drawings. Disputes or

problems should be submitted in writing by the Contractor to the Owner for resolution.

D. SITE ACCESS – The Limits of Work are shown on the Drawings. The Limits of Work include the locations of staging areas and lay-down areas. Areas of the Site beyond the Limits of Work are not to be accessed or disturbed. Contractor shall conform to Site rules and regulations affecting the Work. Contractor, including all personnel and subcontractors, shall be familiar with security requirements and shall comply with all security requirements.

E. WORK PLATFORMS AND MATERIAL LAYDOWN AREAS - Contractor shall be responsible for constructing and maintaining all work platforms and material lay-down areas that may be required in the execution of the Work. Material lay-down areas and work platforms shall be designed, constructed, maintained, and removed as described in these Specifications by the Contractor. At the completion of the Work, work platforms and material lay-down areas shall be removed in accordance with the Specifications.

F. TEMPORARY ELECTRICAL SERVICE – An active electrical service is not available for use by the Contractor at the Site. Contractor may elect to provide a temporary electrical service for the Work. The Contractor is responsible for coordination of the service drop location with the appropriate utility owner for the conveyance of temporary electrical service to the Work areas including all necessary permits, State of Connecticut licensed electrician services, temporary supports, panel boards, connections for utility wiring, outlets, switched, circuit protection devices, controls, and accessories. In lieu of a temporary electrical service, Contractor may utilize generators for temporary power throughout the Work. All generators shall operate within noise limits set forth in the Specifications. Generators required to operate overnight shall be enclosed or equipped with sufficient noise reduction devices so that the generators are not audible from the Limits of Work.

G. WORK HOURS AND DAYS – On weekdays (Monday through Friday), Work shall only be performed during the hours between 7:00 a.m. to 6:00 p.m. EST. Work shall abide by Town and State regulations for noise. The Contractor may alter work hours for the Work only after receiving written permission from the Owner. After receiving the appropriate approvals, the Engineer must be notified 48 hours before each work day where the Work will be conducted outside the 7:00 a.m. to 6:00 p.m. EST Monday through Friday window. If complaints are received by the Owner regarding noise due to Work activities then no further work shall be performed until noise reduction measures are implemented and approved by the Owner. No Work will be permitted on Saturdays and Sundays unless otherwise approved by the Owner.

H. DELIVERY AND MATERIAL TRANSPORTATION SCHEDULING – Contractor shall coordinate material delivery and off site transportation to prevent disruption of traffic on public roadways. Contractor is responsible for

coordinating all deliveries and off site transportation with subcontractors and vendors.

I. WORK LIMITS – All Work activities shall be confined to the Limits of Work shown on the Drawings unless directed otherwise by the Owner or Engineer. All Work performed beyond designated limits without prior approval shall be corrected or repaired to the Owner's satisfaction, at no additional cost to the Owner.

J. PERMITS - Contractor shall be held responsible for understanding, obtaining, paying all fees, and complying with all permits and notifications required for completion of the Work. The Contractor is responsible for complying with all conditions off all applicable permits throughout the Work.

K. ENVIRONMENTAL PROTECTION – Contractor shall comply with all requirements for protecting the environment, including, but not limited to, controlling erosion, water pollution, spill control, and noise resulting from the Work without exception. Refer to Section 01 35 43 - Environmental Procedures and Section 01 50 00 - Temporary Facilities and Controls.

L. PROTECTION OF STRUCTURES TO REMAIN – Contractor shall exercise care and provide protection to avoid disturbing or damaging the Site building or adjacent structures. Any damage to the existing Site building, adjacent structures or other features not scheduled for removal should be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

M. PROTECTION OF EXISTING SERVICES – Contractor shall exercise care to avoid disturbing or damaging any existing utilities and structures which exist at the Site. Contractor shall be responsible for repairing any utility damaged as a result of the Work. Contractor shall contact CBYD and all other utility companies not contacted by CBYD 72 hours prior to the initiation of excavation activities. Contractor shall also coordinate with the Engineer prior to commencing the Work. If Contractor encounters any unexpected utilities during the course of the Work, Contractor shall inform the Owner and Engineer immediately. The locations of any utilities shown on the Drawings are approximate.

N. PROTECTING EXISTING MONITORING WELLS - Existing groundwater monitoring wells to be protected by the Contractor are shown on the Drawings. Contractor shall protect these wells throughout the Work unless otherwise approved by the Engineer. If the wells are damaged or destroyed by the Contractor, the Contractor will perform any repairs to these wells, including re-installation if necessary, at no additional cost to the Owner. The locations of the monitoring wells shown on the Drawings are approximate and shall be verified in the field by the Contractor prior to initiation of Work.

O. SAFEGUARDS - Contractor shall provide and use all personnel safety equipment, barricades, guardrails, signs, lights, flares, and flagmen/details as required by Occupational Health and Safety Administration, State, or local codes and ordinances. Contractor shall be solely responsible for any fines imposed due to violation of any laws and regulations relating to the safety of the Contractor's personnel. Contractor shall ensure all subcontractors comply with this requirement. See Section 01 35 29 - Health, Safety, and Emergency Response Procedures, for further Health and Safety Plan requirements.

P. HEALTH AND SAFETY TRAINING - Contractor shall prepare a Health and Safety Plan ("HASP") and provide any necessary health and safety training for all of the Contractor's and subcontractor's personnel in accordance with applicable local, State, and federal regulations. Owner shall require evidence of health and safety training prior to the commencement of Work and may request evidence at any time for any of the Contractor's or subcontractor's personnel working on the Site. Training certifications shall be maintained on the Site at all times. See Section 01 35 29 - Health, Safety, and Emergency Response Procedures for further Health and Safety Plan requirements.

Q. SECURITY – Contractor is responsible for security of the Site and the Site building throughout completion of Work activities. The Contractor is responsible for the safety and condition of all of Contractor's tools and equipment. Owner and Owner's agents shall not be responsible for lost or stolen materials or equipment. See Section 01 35 53 - Security Procedures.

R. NUISANCE CONDITIONS - Contractor shall be responsible for controlling noise so as to not create a nuisance condition.

S. HOT WORK – Hot Work will not be permitted.

T. EXPLOSIVES - Use of explosives at the Site are not permitted.

U. BURNING - Burning of any materials at the Site is not permitted.

V. ACCEPTANCE OF WORK - The Contractor shall retain ownership and responsibility for all Work until accepted by the Owner. The Owner will accept ownership of the Work in accordance with Section 00 70 00 – Standard Conditions.

W. CLEAN-UP – Contractor shall be responsible for general housekeeping during the Work in accordance with the Contract Documents. Upon completion of the Work, the Contractor shall remove all of his/her equipment, facilities, construction materials, and trash. All disturbed areas shall be restored, or otherwise put into a condition satisfactory to the Owner. See Section 01 74 23 - Final Cleaning.

X. PERSONNEL RESPONSIBILITIES – Contractor is responsible to inform their employees and employees of subcontractors and distributors that any lewd

actions, verbal and any racial or sexual comments directed toward any individual on the project site is strictly prohibited. Incidents of this type may result in immediate and permanent dismissal of the employee(s) involved. Repeat offenses by a Contractor's employees may lead to the dismissal of the Contractor and/or removal of the Contractor from future bid considerations. **Smoking by Contractor personnel is not allowed in or adjacent to the Site building, around adjacent buildings, or any place where it causes a hazard or inconvenience to non-smokers.**

Y. INCIDENT REPORTING – All incidents involving personnel, equipment, or affecting the environment must be reported to the Engineer as soon as possible and, at a minimum, within 2 hours of the incident. Each of these incidents must be accompanied by a follow-up investigation report in accordance with Section 01 35 29 - Health, Safety, and Emergency Response Procedures.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 12 19 – CONTRACT INTERFACE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Responsibilities of Parties

C. Interpretation of Contract Documents and Specifications

D. Temporary Suspension of the Work

1.2 RELATED SECTIONS

A. Section 00 70 00 – Standard Conditions

B. Section 00 73 00 – Supplemental Conditions

1.3 RESPONSIBILITIES OF PARTIES

A. OWNER

1. The Town of Vernon is the Owner responsible for facility administration, accounting, purchasing, etc. On-Site activities are monitored for the Town of Vernon by the Engineer.

B. ENGINEER

1. GZA GeoEnvironmental, Inc. (GZA) is the Engineer for this project and is responsible for the administration of Contract Documents and Specifications and Contractor communications. The Engineer reports to the Owner. Engineer will communicate directly with the Contractor to coordinate activities and will receive information directly from the Contractor to be conveyed to the Owner.

2. Engineer is responsible for observing and documenting work activities on the Site and ensuring conformance with the Contract Documents and Specifications. The Engineer is responsible for the interpretation of the Contract Drawings and Specifications. The Engineer and Owner will decide all questions that arise regarding the interpretation of the Contract Documents and Specifications.

C. CONTRACTOR

1. The Contractor is responsible for implementing and ensuring the completion of the Work. Contractor is responsible for procuring all required permits, completing any notifications, procuring the services of subcontractors as necessary to complete the Work, and is responsible for the Work of his subcontractors as he is for his own Work. The Contractor reports to the Owner but shall communicate directly with the Engineer.

2. Contractor is subject to requirements of local, State, and federal agencies for implementation of the Work. Details pertaining to jurisdictional requirements governing the Work that are not specifically mentioned in the Contract Documents shall not relieve the Contractor's obligation to be in compliance with applicable requirements.

1.4 INTERPRETATION OF CONTRACT DOCUMENTS AND SPECIFICATIONS

A. Should it appear that the Work to be done or any matters relative thereto are not sufficiently detailed or explained in the Contract Documents and Specifications, upon written request, the Engineer will further explain, clarify, or interpret, as may be necessary. In the event of any questions arising with respect to pay items resulting from the Engineer's interpretation of the Contract Documents and Specifications, the matter shall be referred to the Owner for resolution, whose decision thereon shall be final.

1.5 TEMPORARY SUSPENSION OF THE WORK

A. For Specification of the Owner's Right to Suspend Work refer to Section 00 70 00 – Standard Conditions.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 20 00 – PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Description

B. Scope of Payment

C. Payment for Increased or Decreased Quantities

D. Omitted Items

E. Progress Payments

F. Measurement of Quantities

G. Incidental Work

1.2 DESCRIPTION

A. All payment specifications set forth in the Agreement and Section 00 70 00 – Standard Conditions shall be complied with unless otherwise specified herein.

B. Unless otherwise specified, for lump-sum items, payment will be made as set forth in the Agreement on the basis of actual Work completed and agreed to by the Owner.

C. For certain lump sum payment items, estimated quantities have been provided within and in the attachments to the Specifications. These quantity estimates are provided to the Contractor for reference purposes only. Contractor is responsible for confirming all quantities for these lump sum items. No adjustment to the lump sum payment items will be made on the basis of quantity variation.

D. For unit-price items, payment will be based on the actual amount of Work accepted by the Owner and for the actual quantity of materials and accepted in conformance with the Contract Documents, as shown by final measurement.

E. All units of measurement shall be standard United States convention as applied to the specific items of Work by tradition and as interpreted by the Engineer. Payment units will be as indicated on the Bid Form.

F. Once each month the Contractor shall prepare a "Monthly Progress Summation" form, which shall be signed by both Contractor and Engineer.

G. These "Monthly Progress Summation" forms and material deliver/disposal manifests will provide the basis for the Owner's and/or the Engineer review and verification of monthly applications for payment submitted by Contractor.

1.3 SCOPE OF PAYMENT

A. Payments to Contractor will be made for the actual quantities of the Agreement items performed and accepted by the Owner in accordance with the Contract Documents. Upon completion of the Work, if these actual quantities show either an increase or decrease from the quantities given in the Bid Form, the Contract Unit Prices will still prevail, except as provided hereinafter.

B. Contractor shall accept in compensation, as herein provided, in full payment for furnishing all labor, materials, services, insurance, tools, taxes, equipment, temporary facilities and utilities, and incidentals necessary to complete the Work and for performing all Work contemplated and embraced by the Agreement; also for all loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the Work, except as provided herein, also for all expenses incurred in consequence of the suspension of the Work as herein authorized.

C. The payment of any progress estimate or of any retained percentage except by and under the approved final invoice, in no way shall affect the obligation of the Contractor to repair or renew any defective parts of the Work or to be responsible for all damage due to such defects.

D. Unless otherwise approved by the Owner, payment in excess of any lump sum price items will not be made.

1.4 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

A. Payment for increased or decreased quantities shall be in accordance with Section 00 70 00 – Standard Conditions.

B. Except as otherwise described herein, when alterations in the quantities of Work not requiring supplemental agreements, as herein provided for, are ordered and performed, Contractor shall accept payment in full at the Contract Price for the actual quantities of Work done. No allowance will be made for anticipated profits. Increased or decreased Work involving supplemental agreements will be paid for as stipulated in such agreements.

1.5 OMITTED ITEMS

A. Should any items contained in the Bid Form be found unnecessary for the proper completion of the Work contracted, Owner may eliminate such items from the Agreement, and such action shall in no way invalidate the Agreement, and no allowance will be made for items so eliminated in making final payment to Contractor.

1.6 PROGRESS PAYMENTS

A. Progress payments shall be made monthly as the Work progresses in accordance with the Agreement and Section 00 70 00 – Standard Conditions. All progress invoices and payments shall be subject to correction in the final quantity invoice and payment.

B. No monthly payment shall be required to be made when, in the judgment of Owner and/or the Engineer, the Work is not proceeding in accordance with the provisions of the Contract Documents, or when, in his judgment, the total value of the Work performed since the last payment amounts to less than $1,000.00.

C. A retainage of 10% (ten percent) will be made on all progress payments to secure satisfactory performance of the contractual Work.

1.7 MEASUREMENT OF QUANTITIES

A. Measurement by Weight. The pay quantity shall be computed based on actual weight in the hauling vehicle. For each load and each type of material delivered or removed to/from the Site, the Contractor shall furnish to the Engineer a certified weight ticket from the supply or receiving facility. Certified weight tickets shall clearly and legibly indicate the date, material supplier or facility, project name, bid item number, material description (as defined in these Specifications), and weight of the material delivered. Payment will not be made on items measured by weight for which a certified weight ticket has not been submitted.

B. Measurement by Volume. Measurement shall be based on the in-situ volume and final in-place dimensions as measured by Contractor's survey measurements consistent with the Specifications.

C. Measurement by Area. Measured by square dimensions using mean length and width or radius.

D. Measurement by Linear Measurement. Measured by linear dimension, at the item centerline or mean chord.

1.8 INCIDENTAL WORK

A. Incidental Work items for which separate payment is not measured include, but are not limited to, the following items:

1. All submittals not specifically included in the Contract Payment Items.
2. Cooperation with the Owner, Engineer, other contractors, abutting property owners and others.
3. Obtaining, maintaining, and compliance with all required permits and notifications including any associated fees.

4. Supply and installation of a temporary electrical service including all permit fees to complete the Work if the Contractor elects to install a temporary electrical service.

5. Supply and installation of a generator(s) including all fuel costs to complete the Work.

6. All activities and costs related to the use of the elevator system (as necessary) including all electrical work, inspections, repairs and fees.

7. Materials handling and management.

8. Contractor's health and safety program.

9. Procurement and coordination of subcontractors.

10. All traffic control.

11. Protecting and maintaining all existing utilities and structures as described in the Specifications and as shown on the Drawings.

12. Protecting, as necessary, all equipment and materials from adverse weather affects.

13. Snow plowing.

14. Maintaining the safety of operations at the Site during Work.

15. Compliance with all federal, State, and local regulations and requirements.

16. Site housekeeping/Clean-up.

17. All other Work indicated in these Contract Documents and not specifically listed among the Contract Payment Items described herein.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Contract Pay Items

B. Items and Basis for Measurement and Payment

3.2 CONTRACT PAY ITEMS

A. The purpose of this section is to define the method of measurement and payment for each of the items included on the Bid Form provided in Section 00 41 00 – Bid Form.

B. Contractor shall be carefully acquainted with all work associated with each payment item and shall have no claim for any unfamiliarity with the requirement of various items.

3.3 ITEMS AND BASIS FOR MEASUREMENT AND PAYMENT

The items described below and presented on the Bid Form constitute all items to be specifically paid under this Agreement.

A. GENERAL

Item No. 1 – Performance and Payment Bond

1. Work Included

Furnish performance and payment bonds consistent with Article 5.01 of Section 00 70 00 – Standard Conditions and Article 15 of Section 00 73 00 – Supplemental Conditions.

2. Measurement

The Work required for this item will be measured based on the receipt of the required performance and payment bonds.

3. Payment

Payment for this Lump-Sum item will be made subsequent to receipt of the required performance and payment bonds.

Item No. 2 – Mobilization and Site Preparation

1. Work Included

a. Office-Based Activities – This component of mobilization and site preparation includes, but is not limited to, the following:

1) Insurance.

2) Identification and acquisition of all construction-related permits and notifications that may be necessary for the completion of the project.

3) Procurement and coordination of subcontractors and equipment necessary to perform the Work.

4) Compliance with all federal, State, and local regulations and requirements.

5) All other office and administration services necessary to support the Contractor's activities for the duration of the project.

b. Field-Based Activities – This component of mobilization and site preparation includes several support/operational/maintenance activities required of Contractor during the execution of the Agreement including, but not limited to, the following:

1) Mobilization of all personnel, equipment, and materials to the Site.

2) Construction, maintenance, and subsequent removal of temporary facilities, controls, signage, and utilities in accordance with Section 01 50 00 – Temporary Facilities and Controls.

3) Construction of temporary work platforms as necessary.

4) Installation of a temporary electrical service as necessary.

5) Utility clearance/protection/guarding as necessary.

6) Installation of temporary fencing as shown on the Drawings and in accordance with Section 01 35 53 – Security Procedures.

7) Environmental protection in accordance with Section 01 35 43 – Environmental Procedures.

8) Noise control in accordance with Section 01 50 00 – Temporary Facilities and Controls.

2. Measurement

The Work required for this item will be measured on the basis of satisfactory evidence of mobilization of sufficient labor, equipment, and material to adequately advance the Work.

3. Payment

The Lump-Sum Price for Mobilization and Site Preparation shall be payment for all labor, equipment, material, and other incidentals mobilized to the Site and considered normal for administration of the Work. Fifty (50) percent of the Lump-Sum price for this item will be paid with the first payment request following satisfactory evidence of mobilization and supply and

installation of temporary facilities and utilities. Fifty (50) percent of this Lump Sum payment item will be made incrementally on a monthly basis based on estimated total monthly project duration, consistent with the Engineer- approved Project Schedule.

Item No. 3 – Building Cleanout

Work Included

1. All labor, equipment, and materials associated with the complete removal, management, segregation, loading, transportation, and off-Site disposal/recycling to Owner approved facilities of debris and material within the building in accordance with Section 01 11 00 – Summary of Work and 02 81 00 – Waste Management and Disposal. Work includes, but is not limited to, the following:

    a. Paying for, obtaining, and complying with any and all permits and notifications from the State of Connecticut, federal agencies, and the Town of Vernon.

    b. Protection of abutting properties, structures, active overhead and underground utilities, and public and private ways, including, but not limited to temporary shoring, bracing, scaffolding, debris nets, and/or other devices.

    c. Protection, sealing, barricading, and securing any openings in the building floors and/or any areas of damaged floors in the building.

    d. Site security in accordance with Section 01 32 53 – Security Procedures.

    e. Limited focused demolition of building features to facilitate removal of debris and materials in accordance with Section 01 11 00 – Summary of Work.

    f. Installation of debris chutes to facilitate removal of debris and material in accordance Section 01 11 00 – Summary of Work.

    g. Removal and consolidation of all aerosol cans and containers, buckets, and drums of oils, lubricants, coolants, chemicals, and liquids in the loading area on the west side of the building.

    h. Loading of material and debris into transport containers or vehicles.

    i. Inspection and cleaning of transport vehicles prior to their departure from the Site.

j. Preparation and submittal of a daily summary sheet that indicates the date, load number, truck ID number, time of departure from the Site, gross weight, tare weight, net load weight, and copy of signed bill of lading and/or manifests.

k. Off-Site disposal and/or recycling all debris and materials to an Owner approved receiving facility.

2. Measurement

The Work required for this item will be measured on the basis of satisfactory removal of all debris and material in the building, consolidation of all liquid containerized wastes, sealing of all newly exposed building openings and penetrations, and off Site transportation of all debris to Owner approved disposal/recycling facilities.

3. Payment

Payment for this Lump Sum item will be made on a precent complete basis.

Item No. 4 – Demobilization

1. Work Included

All labor, equipment and materials necessary for demobilization including but not limited to, the following:

a. Removal of all equipment, materials, temporary facilities, temporary fencing, and debris/solid waste in accordance with Section 01 74 00 – Final Cleaning.

b. Sealing and securing any openings in the building's wall including windows and/or doors removed during the Work.

c. Securing the Site building to prevent access by unauthorized personnel.

d. Demobilization of personnel, equipment, and materials from the Site.

e. Contract Closeout in accordance with Section 01 70 00 – Execution and Project Closeout Requirements.

f. Project Final Clean-Up in accordance with Section 01 74 00 – Final Cleaning.

2. Measurement

The Work required for this item will be measured on the basis of satisfactory evidence that Site clean-up and demobilization has been completed, including but not limited to the following:

a. Demobilization of workers, equipment, and materials from the Site.

b. Removal of temporary utilities.

c. Removal of sanitary facilities.

d. Removal of temporary fencing.

e. Provision of Record Drawings and documents.

3. Payment

The Lump-Sum Price for Demobilization shall be full compensation for the removal of all labor, material, equipment and other incidentals required to comply with the Drawings and Specifications.

END OF SECTION

SECTION 01 35 29 – HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Description of Section

C. References and Standards

D. Health and Safety Requirements

E. Health and Safety Plan (HASP) Requirements

F. Responsibilities of the Contractor and Additional Subcontractors

G. Stop Work Authority

H. Employee Training

I. Hazard Communication

J. Site Access and Controls

K. Noise

L. Submittals

1.2 RELATED SECTIONS

A. Section 01 11 00 – Summary of Work

B. Section 01 35 43 - Environmental Procedures

C. Section 01 35 53 - Security Procedures

D. Section 01 50 00 - Temporary Facilities and Controls

E. Section 02 81 00 - Waste Management and Disposal

1.3 DESCRIPTION OF SECTION

A. The Work under the Agreement is to be performed at the former Daniel's Mill property located at 98 East Main Street in an industrial zoned section of Vernon, Connecticut and consists of an approximate 1-acre parcel of land. The Site is

abutted by East Main Street to the north, the former Amerbelle Textile Mill to the east, American Mill Pond to the south and west, and by a former industrial facility (Anocoil) to the west. The property is improved with a six-story building (including basement and attic) with a footprint measuring approximately 9,000 square-feet. Areas to the west of the building are predominantly asphalt paved and a narrow-grassed area is located to the east of the building. An elevator extends from the basement of the building to the fourth floor; however, the utilities including the electrical power to the building are no longer in service.

The Site is owned by The Town of Vernon, Connecticut and is currently vacant. Vehicle access to the Site is provided from East Main Street.

The Work will include, but is not limited to, mobilization; site preparation; site security; noise control; health and safety measures; supply and maintenance of temporary facilities and controls including electrical power, lighting, and debris chutes; barricading and/or covering openings in the floor and damaged areas of the floor; discrete demolition activities associated with doors and windows; removal of debris and material from within the building via a combination of manual methods and/or the use of debris chutes, the existing elevator, or mechanized lifts; consolidation of containers of aerosol cans and various fluids of oils, lubricants, coolants, cleaners, and chemicals in a designated area inside the building; off-site transportation and disposal/recycling of debris and materials; final site cleaning; and demobilization.

B. Certain building materials were found to be impacted with polychlorinated biphenyls (PCBs) at concentrations regulated by the State of Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Environmental Protection Agency (EPA). These PCB impacted building materials include painted wood, brick, and plaster surfaces, window glazing, concrete flooring in the basement, and wood flooring. A table summarizing the PCB testing data related to the interior of the building is included in Attachment A.

C. Certain building materials including window and door glazings were also determined to contain asbestos. A table summarizing the asbestos testing data related to the building materials is included in Attachment A.

D. This Section describes the minimum health and safety requirements and contingency measures required as part of the Work.

1.4 REFERENCES AND STANDARDS

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

B. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) Standards.

1. OSHA 29 CFR 1910: General Industry, specifically sections: 1910.1200 (Hazard Communication), 1910.301 Subpart S (Electrical), 1910.147 (Control of Hazardous Energy (Lockout/Tagout), and 1904 (Recordkeeping and Reporting Occupational Injuries and Illnesses).

2. OSHA 29 CFR 1926 Construction.

1.5 HEALTH AND SAFETY REQUIREMENTS

A. Contractor shall be responsible for monitoring working conditions and determining and providing appropriate health and safety protection for all workers engaged in the Work.

B. Contractor shall be responsible for the development and implementation of a Health and Safety Plan (HASP) specifying the Contractor's policies and procedures to adequately protect Site workers. The HASP shall be written in compliance with applicable sections of OSHA 29 Code of Federal Regulations (CFR) 1910 and 1926. The HASP must establish the protocols necessary for protecting workers, on-Site personnel, and visitors from potential physical hazards encountered during the work.

C. Contractor shall designate one his employees as the Site Safety and Health Officer (SSHO), who shall be responsible in the continuous, day to day, implementation and enforcement of the HASP. The SSHO shall be assigned to the Site on a full-time basis when Work is occurring and shall report to the Engineer in matters pertaining to Site safety and health concerns. The SSHO shall be responsible for preparing and maintaining daily health and safety Site logs and reports. The qualifications of the SSHO shall include:

1. Current certification in first aid and CPR by a recognized approved organization such as the American Red Cross.

1.6 HEALTH AND SAFETY PLAN (HASP) REQUIREMENTS

A. Contractor’s HASP shall address all relevant general construction hazards.

B. Contractor shall be responsible for all notifications to utility companies or other parties regarding any intrusive Site work in compliance with OSHA 29 CFR 1926.650-652 and all applicable local and State requirements.

C. At a minimum the HASP shall include:

1. Site Description and Hazard Evaluation for each element of the Work.

2. Names of key Contractor and subcontractor personnel and alternate responsible for Site safety and health (responsibilities and chain of command).

3. Safety and health hazard assessment and risk analysis for each Work task and operation, including physical hazards.

4. Identification of the SSHO.

5. Training in accordance with applicable federal, State, and local regulations.

6. Personal Protective Equipment (PPE) in accordance with applicable federal, state, and local regulations.

7. Site Control Measures (Communications and Security) including a map indicating route to hospital for emergency medical care.

8. Logs, Reports and Recordkeeping.

9. Emergency Response Plan.

10. Emergency procedures for occurrences such as personal injury, fire, and exposure to toxic substances.

11. Emergency contact information for Contractor, subcontractors, fire, police, ambulance, and utility providers.

12. Contingency Measures.

13. Task-specific Job Safety Analysis (JSA) for each component of Work.

14. In the event a change in work scope occurs, that in the opinion of Engineer or Owner, requires a new JSA be prepared, such Work shall not be performed until Contractor submits the JSA for review and comment by Engineer.

1.7 RESPONSIBILITIES OF THE CONTRACTOR AND ADDITIONAL SUB-CONTRACTORS

A. Minimum precautions noted in this Section shall in no way relieve individual employers from their responsibility to implement stricter health and safety precautions as warranted by the Work.

B. The SSHO shall maintain a continuous health and safety monitoring program throughout the performance of the Work. It shall be the SSHO's responsibility to notify the Contractor and the Engineer of any deviations from the health and safety monitoring program.

C. It shall be the Contractor's responsibility to notify the Engineer and Owner verbally and in writing as quickly as possible should any unforeseen safety hazard or condition become evident during the performance of the Work. In the interim, the

Contractor shall take prudent action to establish and maintain safe working conditions and to safeguard workers, on-Site personnel, trespassers, and the environment in accordance with the established emergency response procedures detailed in the Contractor's HASP.

1.8 STOP WORK AUTHORITY

A. Should any unforeseen safety-related factor, hazard, or condition which poses a potential threat of physical injury or harm to Site personnel or the environment become evident during the performance of the Work, all Site personnel shall have authority as granted by OSHA regulations to issue a Stop Work directive. In addition, Engineer and Owner shall also have authority to issue a Stop Work directive upon observation of a safety-related factor, hazard, or condition of potential injury or harm to the environment.

B. If a Stop Work directive is issued, Contractor must immediately take prudent corrective action to secure the Work and provide safe conditions for Site personnel and the environment. This corrective action shall be followed by an immediate written incident report to Engineer and Owner. The incident report shall be provided as soon as possible but, at a minimum, within 24 hours of the incident. Contractor shall conduct an investigation and provide a written report incorporating results of the investigation if directed to do so by Engineer or Owner.

C. Contractor shall not charge standby time during Stop Work directives initiated by Owner or Engineer, in response to Contractor’s near miss, unsafe action or reportable safety incident.

D. Should Contractor refuse to obey a Stop Work directive, Contractor shall immediately be excused from the Site.

1.9 EMPLOYEE TRAINING

A. It will be the Contractor’s responsibility to ensure its employees and that the Contractor’s subcontractors have the appropriate training to complete the Work.

B. Contractor and any Subcontractors shall comply with the following additional requirements; Hazard Communication, Site orientation, daily toolbox meetings, weekly safety meeting, and all other training as required by other applicable regulations within 29 CFR 1926 and 1910.

1.10 HAZARD COMMUNICATION

A. Contractor and each subcontractor must have a written Hazard Communication Program. This Program must be available on the Site at all times for review by the Owner or the Engineer.

B. Contractor shall ensure that Safety Data Sheets for chemicals brought onto the Site by the Contractor and subcontractors shall be maintained within a current and comprehensive Chemical Inventory located at the Site and must be made available to the Owner or the Engineer upon request.

1.11 SITE ACCESS AND CONTROLS

A. Contractor's HASP shall include Site access provisions which effectively limit access to active Work areas to only those persons in full compliance with the Project requirements.

B. No eating or smoking will be allowed within the Site building.

C. Contractor shall be required to make provisions for pedestrian and other Site worker traffic control as necessary.

D. Contractor shall maintain the perimeter Site fencing during the performance of the Work to limit unauthorized access to the Site.

E. Contractor is responsible for securing the Site and the building at the end of each shift and ensuring that all Work areas are fenced, barricaded, or secured in such a way so as to prevent unauthorized or accidental access to Work areas or tampering with equipment or materials that may result in bodily injury or a release of hazardous materials consistent with the requirements of Section 01 35 53 - Security Procedures.

1.12 NOISE

A. Contractor shall conduct all operations so as to minimize noise consistent with OSHA 29CFR 1910.95 and Town of Vernon noise ordinances.

B. In the event the OSHA limit of 85 dBA is exceeded for eight (8) hours per day or a peak level of 140 dBA is exceeded as determined by the Engineer, a hearing protection program shall be implemented by the Contractor at no additional cost to the Owner.

C. Owner and Engineer reserve the right to suspend Work at any time, if necessary, due to noise generation causing a safety hazard.

1.13 SUBMITTALS

A. Within 10 days of Notice to Proceed but no less than 14 days prior to commencement of field activities, Contractor shall submit the following to the Engineer:

1. Written HASP containing all applicable requirements under Section 1.6 above. The plan shall be written to avoid misinterpretation, ambiguity, and mistakes that verbal orders cause.

2. HASP approvals by appropriate and qualified Contractor personnel for review and approval by Owner and Engineer.

3. The HASP must be maintained on the Site at all times by the Contractor.

PART 2 PRODUCTS

2.1 MATERIALS

A. Contractor and all Subcontractors shall provide on-Site personnel, when required by the Contractor's HASP, with the appropriate PPE and shall ensure that all PPE is kept clean and well maintained.

B. Minimum PPE to be worn on the Site includes hard hats, steel toed work boots, safety glasses, and standard work clothes.

C. Contractor shall supply eyewash stations, first aid supplies and fire extinguishers for the period of the Work.

D. Contractor shall supply any additional PPE or safety equipment for the period of construction as required by the Contractor's HASP or OSHA.

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Implementation and General Requirements

B. Emergency/Contingency Planning

C. Logs, Reports, and Record Keeping

D. Incident Reporting Procedures

3.2 IMPLEMENTATION AND GENERAL REQUIREMENTS

A. The HASP shall be implemented by the Contractor and the subcontractors. It is the Contractor's responsibility to ensure compliance with the HASP by all on-Site personnel. Modifications to the Contractor's HASP (if necessary) shall be made after consultation with the Engineer.

B. The Engineer may conduct quality assurance inspections and will have access to all of Contractor's project-specific health and safety records.

3.3 EMERGENCY/CONTINGENCY PLANNING

A. At a minimum, Contractor's HASP shall include emergency procedures for occurrences such as personal injury, fire, and exposure to toxic substances. The

SSHO shall instruct all personnel, including Subcontractor personnel, on the Site during the daily safety briefings concerning these safety procedures.

B. Emergency response procedures shall include employee training, alarm systems, escape routes and procedures, critical operations or equipment, rescue and medical duty assignments, designation of responsible parties, emergency reporting procedures and methods to account for all employees after evacuation.

C. Emergency contact information shall be included in the Contractor's HASP and shall be posted by the Contractor in accessible areas near the Work.

D. In the event that on-Site Work results in the accidental spill or release of oil or hazardous materials, containment to the extent possible by on-Site personnel (in proper PPE as designated by the SSHO) shall be required of the Contractor. Containment shall include the use of absorbent pads or materials, soil dikes, covering and/or diverting spills from sewers, drains, surface water bodies, etc. For any spill that cannot be controlled by on-Site personnel or are above the applicable reportable quantities, the SSHO or designee shall secure the area and notify the necessary personnel, including, but not limited to the Owner and Engineer**,** state environmental personnel, the Connecticut Department of Energy and Environmental Protection (CTDEEP) and a designated hazardous materials cleanup sub-contractor trained in compliance with the emergency response training requirements of 1926.65 and 1910.120.

E. Should any unforeseen hazardous condition that may affect the completion of this Work become evident, it shall be the SSHO's responsibility to bring such to the attention of the Contractor, Owner and the Engineer immediately both verbally and in writing. Resolution of the matter shall come through the Owner. In the interim, the SSHO shall take prudent action to establish and maintain safe working conditions and to safeguard all Site personnel, the public, and the environment.

3.4 LOGS, REPORTS AND RECORD KEEPING

A. The SSHO shall maintain daily logs and reports covering the implementation of the HASP including the daily safety meetings. The format shall be developed by the SSHO to include daily logs and weekly reports. The SSHO shall provide the Contractor and the Engineer with copies of all logs and reports as requested.

B. The SSHO shall provide the Contractor and Engineer with minutes of safety meetings including topics discussed and attendance sheets.

3.5 INCIDENT REPORTING PROCEDURES

A. Incident Response Steps. In the event of a safety incident, including injuries and "near-misses", the SSHO shall provide details of the incident to the Contractor, Engineer and the Owner as soon as possible and, at a minimum, within 2 hours of the incident. The report shall provide details regarding the following:

1. What happened?

2. Who and how many people were injured?

3. What treatment was administered?

4. What was the nature and seriousness of the injury?

5. Where did the incident occur?

6. When did the incident occur (date, time of day)?

7. Were there any witnesses?

The SSHO shall conduct an investigation and at a minimum, provide a written report to the Owner within 24 hours of the incident. The investigation shall include identification of contributing factors relating to and the root cause of the incident and the corrective actions that will be taken to prevent reoccurrence. Contractor vehicle accidents occurring during the performance of work shall also be investigated and reported to the Owner and the Engineer.

B. All injuries, accidents and illnesses occurring as a result of or during on-Site work must be recorded on the Contractor's or affected Subcontractor's OSHA 200 and 101 or equivalent forms. These forms shall be forwarded to the Owner and the Engineer. Contractor shall report all injuries to the appropriate authorities, including OSHA if necessary, and the Owner and the Engineer immediately.

C. Contractor shall make arrangements with an ambulance service, medical professionals, and hospitals for the emergency treatment of its employees prior to commencing work on the Site. The Owner and the Engineer will not furnish any emergency medical treatment.

END OF SECTION

SECTION 01 35 43 - ENVIRONMENTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. References

C. Environmental Requirements

D. Protection Outside Work Limits

E. Protection of Water Resources

F. Spillages

G. Debris Disposal

H. Noise Control

1.2 RELATED SECTIONS:

A. Section 01 11 00 – Summary of Work

B. Section 01 35 29 - Health, Safety, and Emergency Response Procedures

C. Section 01 50 00 - Temporary Facilities and Controls

D. Section 02 81 00 – Waste Management and Disposal

1.3 REFERENCES

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

1.4 ENVIRONMENTAL REQUIREMENTS

A. All environmental pollution shall be prevented, abated, and controlled; environmental degradation arising from the Work shall be minimized by complying with all permit/license conditions and requirements; applicable federal, State, and local laws; and regulations concerning environmental pollution control and abatement, as well as the specific requirements contained within these Specifications and Section 00 73 00 – Supplemental Conditions.

1.5 PROTECTION OUTSIDE WORK LIMITS

A. Areas outside the Limits of Work of this Agreement shall not be disturbed. Confine work activities to areas defined by the Drawings. Disruption of areas beyond that specifically called for in the Contract Documents will not be permitted without the prior approval of Owner. Contractor shall not perform any unauthorized disruption of soil and/or sediment and shall be responsible for restoring such disruptions, including handling of any wastes generated there from at no additional cost to the Owner.

1.6 PROTECTION OF WATER RESOURCES

A. Waste materials shall not be discharged to surface or groundwater. The Contractor shall comply with all applicable federal, State, and local laws concerning pollution of surface and ground waters.

B. Protect water resources consistent with Section 00 73 00 – Supplemental Conditions.

1.7 SPILLAGES

A. Take all necessary measures to ensure that no contamination of the soil, sediments, groundwater, surface waters, or other uncontaminated areas will occur from any of the activities required to perform the Work or from equipment or materials used to perform the Work. Report all spills to the Engineer and Owner immediately. Take corrective action immediately, using approved emergency response and spill containment techniques in accordance with Section 01 35 29 - Health, Safety, and Emergency Response Procedures.

B. These corrective actions shall be performed by the Contractor at no additional cost to the Owner.

1.8 DEBRIS DISPOSAL

A. Contractor is responsible for debris disposal and/or recycling including proper, containerization, staging, preparation of waste material for disposal and recycling, loading, transportation, and disposal of waste material. All debris shall be disposed or recycled at facilities pre-approved by the Owner.

1.9 NOISE CONTROL

A. Implement noise control measures as necessary to adequately protect the public and employees of Contractor, subcontractor, Owner, and Engineer.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Notification of Noncompliance

B. Protection of Resources

3.2 NOTIFICATION OF NONCOMPLIANCE

A. Contractor will be notified by the Owner or Engineer of noncompliance with the provisions of this Section and Section 00 73 00 – Supplemental Conditions. Immediate corrective action shall be taken to be in compliance with this Section and related Sections. The Owner may issue an order stopping all or part of the Work for failure to comply until corrective action has been taken. No time lost due to such stop orders shall be the subject of a claim for extension of time or for costs or damages from the Owner.

3.3 PROTECTION OF RESOURCES

A. Compliance with State water quality standards and conditions of any permits and clearances obtained for the work is the Contractor's responsibility.

B. Except as provided in the Contract, disposal of any wastes, effluents, trash, grease, chemicals, or other contaminants in waterways or to soils shall not be allowed. If any waste material is dumped in unauthorized areas, the material shall be removed and the area restored to a condition approximating the adjacent undisturbed area. Contaminated soil shall be excavated, disposed of, and the area restored to its pre-disturbed condition at no additional cost to the Owner.

END OF SECTION

SECTION 01 35 53 – SECURITY PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Summary

1.2 RELATED SECTIONS

A. Section 01 11 00 – Summary of Work

B. Section 01 35 29 - Health, Safety, and Emergency Response Procedures

1.3 SUMMARY

A. Contractor shall furnish, install, and maintain temporary perimeter fencing as specified on the Drawings.

B. Contractor shall equip all existing and new gates with locks for his/her use throughout the Work. Gates shall be locked at all times or manned by Contractor personnel.

C. Gates to access the Site and Limits of Work shall be maintained as shown on the Drawings. All gates shall be equipped with locks, be keyed alike, and keys shall be provided to the Engineer and Owner.

D. Access to the inside of the building by unauthorized personnel shall be prevented at all times.

E. Contractor shall be responsible for the removal of all temporary fencing at the completion of the project and for securing any openings in the exterior walls of the building created by the Contractor.

PART 2 PRODUCTS

2.1 SECTION INCLUDES

A. Temporary Fencing

2.2 TEMPORARY FENCING

A. Temporary Fencing shall be minimum 8-feet-high, No. 9 gauge, galvanized chain link fence with 2-inch diamond mesh lattice and vertical and horizontal bracing.

B. Temporary fence panels shall be installed with either:

1. Detachable concrete bases sized to have a minimum weight of 100 pounds; or,
2. Fabricated galvanized pipe frame with a minimum width of 36-inches and ballasted with two 50-pound (minimum) sand bags.

C. Additional weight may be required depending on wind loads and Site conditions. Contractor shall be responsible for assessing and supplying sufficient weight so that fencing is secure at all times.

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Installation of Temporary Fencing

B. Maintaining Security During Site Access/Use

3.2 INSTALLATION OF TEMPORARY FENCING

A. Temporary Fencing shall be installed at the locations shown on the Drawings.

B. Temporary Fencing shall be relocated or additional Temporary Fencing installed as needed to secure the Limits of Work.

C. Contractor shall set fence panels in ballasted stands or detachable concrete bases which shall be oriented perpendicular to the fence line. Fence panels shall be attached to each other using a minimum of two galvanized saddle clips.

D. The ends of Temporary Fencing shall be rigidly affixed to the building or other Site features to mitigate potential unauthorized entry to the Work areas.

3.3 MAINTAINING SECURITY DURING SITE ACCESS/USE

A. Contractor shall access the Site utilizing the existing gate identified on the Drawings and a new gate installed within the temporary fencing supplied by the Contractor. Gates shall remain locked or manned by Contractor personnel at all times.

B. Work area gates must remain closed and locked during all non-working hours and when not is use during working hours.

1. Restrict entrance of persons and vehicles into Work areas.
2. Allow entrance only to authorized persons.
3. Protect Work areas from theft, vandalism, and unauthorized entry including locking and/or securing entryways into all buildings.

C. Access to the interior of the building by unauthorized personnel and the public shall be restricted at all times. Access shall be restricted through the use of

plywood secured to the doorframe with screws or other fasteners or other Engineer approved method.

D. Maintain security program throughout the Work

E. Contractor is responsible for all costs associated with providing the access restriction features, maintaining all features during the Work and removal of the temporary features at the conclusion of the Work.

F. Protect all stored and containerized waste materials from vandalism and unauthorized access.

G. Should any unforeseen, potentially Site security condition become evident during the performance of the Work, it shall be the Contractor's responsibility to bring such to the attention of the Engineer for resolution both verbally within 1 hour and in writing within 48 hours. In the interim, the Contractor shall implement all necessary prudent action to establish and maintain safe working conditions and to safeguard employees, the public, and the environment.

END OF SECTION

SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Description

C. Requirements of Regulatory Agencies and Utilities

D. Work Lighting and Power

E. Water Supply

F. Temporary Sanitary Facilities

G. Signage

1.2 RELATED SECTIONS

A. Section 01 11 00 – Summary of Work

B. Section 01 35 43 - Environmental Procedures

C. Section 01 35 53 - Security Procedures

D. Section 01 74 23 - Final Cleaning

E. Section 02 81 00 – Waste Management and Disposal

1.3 DESCRIPTION

A. Contractor shall furnish, install, and maintain all temporary facilities and utilities required for the Work and remove all temporary facilities and utilities upon completion of Work as described herein. Temporary facilities and utilities include, but are not limited to, a source of electrical power, Work lighting, water supply, sanitary facilities, and signage.

1.4 REQUIREMENTS OF REGULATORY AGENCIES AND UTILITIES

A. Contractor shall comply with all federal, State, and local electric codes.

B. Contractor shall comply with federal, State, and local codes and regulations and with utility company requirements.

C. Contractor shall be responsible for notifying affected utility companies before starting Work and obtaining and paying all fees and arranging all necessary inspections associated with required permits and approvals related to the Work.

1.5 WORK LIGHTING AND POWER

A. Contractor shall provide lighting to sufficiently illuminate work areas as required by 29 CFR 1926.56.

B. Contractor shall provide and maintain a temporary electric service for lighting or operate the existing elevator (if the Contractor elects to utilize the elevator). All costs associated with the temporary electrical service will be paid for by the Contractor.

C. All required electrical work shall be performed by a licensed State of Connecticut electrician engaged by the Contractor.

D. Contractor may utilize generators for temporary power for lighting throughout the Work. All generators shall operate within noise limits set forth in the Specifications. Generators required to operate overnight shall be enclosed or equipped with sufficient noise reduction devises so that the generators are not audible from the Limits of Work.

E. Power for temporary electrical service is available from the primary electrical service lines located outside the Limits of Work. Contractor is responsible for coordination of service drop locations with the Owner and utility.

F. Any electrical service provided by the Contractor shall be of sufficient capacity and characteristic to supply the proper current for the various types of tools, lights, and other required Work. All necessary permits, temporary supports, connections for utility wiring, panelboards, outlets, switches, lamps, lamp holders, circuit protection devices, controls, and accessories shall be provided by Contractor.

G. All wiring materials, devices, etc., installed as part of the construction light and power Work, shall be completely removed by Contractor as Work is completed and the temporary services are no longer required.

1.6 WATER SUPPLY

A. Contractor shall provide his own potable water in sufficient quantity and of sufficient quality for all potable needs of the Contractor during the Work.

1.7 TEMPORARY SANITARY FACILITIES

A. Contractor shall provide sanitary facilities for use by Contractor’s employees and subcontractors in compliance with laws and regulations at the Site.

B. Contractor shall service, clean, and maintain such facilities and enclosures, at a minimum, on a weekly basis.

C. Separate facilities for men and women shall be provided.

D. Location of temporary sanitary facilities shall be within the Limits of Work.

1.8 SIGNAGE

A. Individual advertising signs will not be permitted.

B. Contractor shall furnish, erect, and maintain approved “Keep Out,” “Construction Site, Authorized Personnel Only”, and “Hard Hats Required” signs at the gates at the Limits of Work as shown on the Drawings.

PART 2 PRODUCTS

2.1 SECTION INCLUDES

A. Materials, General

2.2 MATERIALS, GENERAL

A. Materials must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of all applicable codes and standards including requirements of the Drawings and specifications.

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Removal

3.2 REMOVAL

A. Contractor shall remove temporary facilities completely and dispose of materials upon completion of the Work or as directed by Owner.

END OF SECTION

SECTION 01 70 00 – EXECUTION AND PROJECT CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. References

B. Substantial Completion

C. Final Inspection

D. Re-Inspection Fees

E. Contractor's Closeout Submittals to Owner

F. Final Adjustments of Accounts

G. Final Application for Payment

1.2 REFERENCES

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

1.3 SUBSTANTIAL COMPLETION

A. When Contractor considers the Work is substantially complete, Contractor shall submit to Owner, in writing:

1. A notice that the Work is substantially complete.

2. A list of items to be completed or corrected.

3. A request that Owner issue a certificate of Substantial Completion.

B. Within 5 days after receipt of such notice, Owner and Engineer will review the Work to determine the status of completion.

C. Should Owner determine that the Work is not substantially complete:

1. Owner will notify Contractor promptly in writing, giving the reasons, therefore.

2. Contractor shall remedy the deficiencies in the Work and send a second written notice of Substantial Completion to Owner and Engineer.

3. Owner and Engineer will review the Work to determine status of completion.

D. When Owner concurs that the Work is substantially complete, Owner will:

1. Prepare and deliver to Contractor a Certificate of Substantial Completion, accompanied by list of items to be completed or corrected by Contractor as a precedent to final payment.

1.4 FINAL INSPECTION

A. When Contractor considers the Work is complete, Contractor shall submit written certification to the Owner that:

1. Contract Documents have been reviewed.

2. Work has been inspected for compliance with the Contract Documents.

3. Work has been completed in accordance with Contract Documents.

4. Work is completed and ready for final inspection by Owner and Engineer.

B. Owner and Engineer will review the Work to verify the status of completion with reasonable promptness after receipt of such certification.

C. Should Owner consider that the Work is incomplete or defective:

1. Owner will notify Contractor promptly in writing, listing the incomplete or defective Work.

2. Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification to Owner and Engineer that the Work is complete.

3. Owner and Engineer will review the Work.

D. When Owner finds that the Work is acceptable under the Contract Documents, he shall request Contractor to make closeout submittals.

1.5 RE-INSPECTION FEES

A. Should Owner or Engineer have to view the Work more than once after Contractor notifies Owner that the Work is substantially complete or complete due to failure of the Work to comply with the claims of status of completion made by Contractor, Owner reserves the right to deduct re-inspection fees from the final payment to Contractor.

1.6 CONTRACTOR'S CLOSEOUT SUBMITTALS TO OWNER

A. Contractor shall provide closeout submittals to Owner within 10 days of receiving the request from Engineer to make closeout submittals unless otherwise agreed to by Owner.

B. The following documentation shall be provided in the Closeout submittals to Owner:

1. Evidence of compliance with requirements of governing authorities.

2. Project Record Documents as specified in Section 01 78 00 – Project Record Documents.

3. Evidence of Payment and Release of Liens in connection with the requirements of the General and Supplemental Conditions.

1.7 FINAL ADJUSTMENTS OF ACCOUNTS

A. Contractor shall submit a final statement of accounting to Engineer.

B. Such final statement shall reflect all adjustments to the Contract Sum:

1. The original Contract Sum

2. Additions and deductions resulting from:

a. Previous change orders

b. Unit prices

c. Deductions for incorrect Work

d. Deductions for re-inspection payments

e. Other adjustments

3. Total Contract Sum, as adjusted.

4. Previous payments

5. Sum remaining due

C. Engineer will prepare a final Change Order, reflecting approved adjustments to the Contract Sum, which were not previously made by Change Orders.

1.8 FINAL APPLICATION FOR PAYMENT

A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in Section 00 70 00 – Standard Conditions.

B. A Certificate of Final Completion of Work will be issued by Owner to Contractor at the completion of project after receipt of all required bonds, insurance certificates, and Release of Liens. The date of said certificates shall be the beginning date of all guarantees.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 74 00 - FINAL CLEANING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. References

C. Description

D. Disposal Requirements

1.2 RELATED SECTIONS

A. Section 01 11 00 – Summary of Work

B. Section 01 50 00 - Temporary Facilities and Control

C. Section 01 78 00 - Project Record Documents

D. Section 02 81 00 – Waste Management and Disposal

1.3 REFERENCES

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

1.4 DESCRIPTION

A. The Contractor shall remove all debris and perform all cleaning required as a result of the performance of the Work. Cleaning work shall be performed throughout the duration of the project so as to result in a neat, safe and organized manner. Final clean-up shall be performed by the Contractor to the satisfaction of the Engineer at the completion of the Work.

1.5 DISPOSAL REQUIREMENTS

A. Contractor shall conduct cleaning and disposal operations to comply with all State, federal and local codes, ordinances, regulations, anti-pollution laws and these Specifications.

PART 2 PRODUCTS

2.1 SECTION INCLUDES

A. Materials

2.2 MATERIALS

A. Contractor shall use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

B. Contractor shall use only those cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned.

PART 3 EXECUTION

3.1 SECTION INCLUDES

A. Site Restoration

B. Final Cleaning

3.2 SITE RESTORATION

A. Contractor shall remove all material, excess equipment and other debris remaining on the Site as a result of his/her operations and shall restore the Site of the work to a neat and orderly condition.

3.3 FINAL CLEANING

A. At completion, Contractor shall clean all Work areas related to the Agreement, and remove from the Site all debris and waste material in compliance with these Specifications. Contractor shall then perform a general and final cleanup of the Site.

1. Remove debris and packing material associated with the Work from the project area; and

2. Prior to final completion, Engineer shall view all Work areas, to verify that the entire Limit of Work is clean. Contractor shall perform additional clean-up as necessary to satisfy the Engineer at no additional cost to the Owner.

END OF SECTION

SECTION 01 78 00- PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. References

B. Submittals

C. Maintenance of Documents

D. Recording

1.2 REFERENCES

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

1.3 SUBMITTALS

A. Work includes keeping accurate record documents for the Work and all additions, substitutions of material, variations in Work and any other additions or revisions to the Agreement in accordance with Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions.

1. All record documents required for the Work as described herein.

1.4 MAINTENANCE OF DOCUMENTS

A. Maintain at Site, one copy of:

1. Contract Drawings
2. Specifications
3. Addenda
4. Permits
5. Health and Safety Plan
6. Change Orders
7. Any other modifications to the Contract
8. Engineer’s field orders or written instructions

9. Disposal Manifests, Weight Slips, and Bills of Lading

10. Recycling Weight Slips and Bills of Lading

B. Maintain all documents in clean, dry, legible condition.

C. Do not use record documents for construction purposes.

D. Make all documents available at all times for inspection by Engineer.

1.5 RECORDING

A. Label each document "PROJECT RECORD" in large printed letters.

B. Keep record documents current and do not permanently conceal or cover any installed project components until required information has been recorded.

C. Specifications and Addenda; legibly mark up each Section to record:

1. Changes made by Change Order or Field Order.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

DIVISION 02
EXISTING CONDITIONS

SECTION 02 81 00 - WASTE MANAGEMENT AND DISPOSAL

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Related Sections

B. Description of Work

C. References

D. Submittals

E. Waste Categories

1.2 RELATED SECTIONS

A. Section 00 70 00 – Standard Conditions

B. Section 00 73 00 – Supplemental Conditions

C. Section 01 11 00 – Summary of Work

D. Section 01 35 29 – Health, Safety, and Emergency Response Procedures

E. Section 01 35 43 – Environmental Procedures

F. Section 01 35 53 – Security Procedures

G. Section 01 50 00 – Temporary Facilities and Controls

1.3 DESCRIPTION OF WORK

A. Contractor shall furnish all labor, materials, tools, equipment, and supervision for containerization, management, transportation, and incidentals necessary to transport and dispose/recycle all debris and materials within the building to a facility permitted to accept the waste and pre-approved by the Owner. Waste includes, but is not limited to, furniture, mattresses, wood, piping, boxes of various items, appliances, televisions, computer monitors, electronic devices, books, toys, records, tools, clothes, wiring, fixtures, mechanical equipment, tanning booths, and various other materials.

B. At a minimum, Contractor shall segregate the debris and material within the building into the categories outlined herein. Additional categories may be necessary depending on the requirements of the proposed receiving facility(ies).

C. It is the intent of the Work to recycle the debris and material generated during the Work to the maximum extent practicable.

D. Containers, drums, pails, and/or buckets of liquids, oil, chemicals, lubricants, paints, and/or cleaners; cans/containers of aerosols; and batteries will be consolidated by the Contractor in the loading dock area located on the first floor of the building for subsequent off-Site disposal by others.

E. Work does not include the disposal or recycling of liquid wastes.

F. Contractor will be responsible for preparation of any Bills of Lading (BOLs), manifests, and other shipping documents as necessary to dispose/recycle of the debris and material at a pre-approved off-Site facility. Engineer will assist the Contractor as necessary in preparation of any required BOLs, manifests, and other shipping documents as required per the Owner-approved facilities. Contractor shall allow a minimum of 5-days for review, and two days for review of all revisions to initial submittals. Contractor shall allow for a minimum of two days for approval and signature of all finalized disposal documentation requiring Owner signature.

G. Contractor shall arrange for off-Site transportation of all debris and materials to the Owner-approved facilities and pay all necessary taxes, surcharges, transportation and tipping fees.

H. Owner or Owner's designee will sign all necessary shipping documents as the Generator.

1.4 REFERENCES

A. Section 00 70 00 – Standard Conditions and Section 00 73 00 – Supplemental Conditions of the Agreement between the Town of Vernon and the Contractor.

B. Connecticut General Statues 22a-207 through 256 - Solid Waste Management.

1.5 SUBMITTALS

A. Prepare and submit to Engineer within 10 days of Notice to Proceed, the following:

1. List of proposed disposal and recycling facilities for each anticipated waste stream. Contractor shall identify facilities that are permitted to accept these waste streams with their bids. All material shall be disposed of or recycled at a facility permitted to accept these waste streams.

2. Name, title, and telephone number of contact person for each recycling/disposal facility to be used.

3. Lists matching each facility with the materials it will accept for this project, and specifying whether the facility is a recycling or disposal facility.

4. Confirmation from the facility(ies) that they are permitted to and will accept the type and quantities of materials. Provide copies of all applicable permits.

5. Description of Contractor's procedures to manage and track materials and example of Contractor's material tracking log.

6. Estimated volumes of waste expected to be generated.

7. Hauling company(s) name(s) and address(es).

8. Name, title, and telephone number of contact person for each hauling company to be used.

9. Provide copy of MCS-90 endorsement for haulers of hazardous waste (if necessary).

B. If the Engineer finds that the submitted waste management and disposal/recycling information does not comply with specified requirements, a list of corrective revisions will be returned to the Contractor.

C. Revisions to the waste management and disposal/recycling information may be made only with the written approval of the Engineer. A change affecting the contract value of any activity including the contract time may be made only in accordance with applicable provisions of the Contract Documents.

D. Contractor shall submit daily disposal truck logs to the Engineer. Log shall include date, waste stream, transporter, disposal/recycling facility identification and location, bill of lading or manifest number, vehicle number, driver, and approximate volume and/or weight of waste.

E. Contractor shall submit certificate of recycle for materials transported for recycle to the Engineer. Certificate shall include date, recycle facility, identification and location, approximate volume and/or weight of material, and description of recycled methods.

F. Submit the following upon completion of activities.

1. Recorded actual quantities of materials removed on a volume and/or mass basis and provide copies of shipping papers and weight receipts.

1.6 WASTE CATEGORIES

A. The following is a listing of the waste categories anticipated for the Work. At a minimum, Contractor shall segregate and dispose/recycle all materials based on these categories.

1. **Municipal Solid or Construction Waste** which includes but is not limited to non-contaminated waste materials, including but not limited to, interior furnishings, trash, waste packaging materials, carpeting, rugs, pallets, scrap metal, and other non-contaminated solid wastes generated during the Work.
2. **Electronics or E Waste** which includes but is not limited to computers, televisions, VCRs, radios, and cell phones.
3. **Appliances** which includes refrigerators, air conditioners, and dehumidifiers.
4. **Tires**

B. Additional Waste Categories may be necessary depending on the debris and material encountered during the Work.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.1 SECTION INCLUDES

A. Coordination

B. Materials Handling and Off-Site Transportation

C. General Waste Handling and Disposal Procedures

D. Labeling of Waste Containers

3.2 COORDINATION

A. Contractor shall coordinate the removal, processing (if applicable), and off site transportation of all materials and debris with the Engineer, the transporter, and the approved receiving facility.

3.3 MATERIALS HANDLING AND OFF-SITE TRANSPORTATION

A. Contractor shall perform the following tasks for the proper handling of materials that will be transported to the identified Owner-approved off site disposal/recycling facilities:

1. Pack and label materials for transportation following all USEPA, CTDEEP and U.S. and CTDOT regulations.
2. Pending the approval of the Engineer, Contractor may transport the material from the Site to the approved recycling/disposal facility in appropriate containers or trucks.

3. Coordinate and manage the custody of BOLs, manifests, and labels, as required by all applicable Laws and Regulations and by the receiving facility. Prepare shipping documents for review by the Engineer and Owner, and signature by the Owner as the Generator as necessary. Contractor shall allow a minimum of 5-days for review, and two days for review of all revisions to initial submittals. Contractor shall allow for a minimum of two days for approval and signature of all finalized disposal documentation requiring Owner signature.
4. Engage a licensed transporter.

3.4 GENERAL WASTE HANDLING AND DISPOSAL PROCEDURES

A. Waste shall be transported in DOT-approved containers or roll-offs to be provided by waste transporter(s) or drums to be provided by Contractor. Containers shall meet all U.S. DOT shipping requirements. Shipping containers shall be filled to within legal weight and height limits for shipping. Waste shall be contained to comply with all approved disposal facility requirements.

B. Contractor shall be responsible for temporarily staging waste in an area designated in the Owner approved on-Site area.

C. Care should be taken not to overload waste containers. Debris shall be sized, as necessary, and placed in transport containers to achieve appropriate minimum densities.

D. Contractor shall coordinate, manage, and pay for (as a part of the bid price) all waste handling activities including transportation costs /fees to the approved receiving facilities.

E. Contractor shall schedule all waste shipments, in coordination with the Engineer, and with the Owner identified as Generator.

F. Any demurrage costs and taxes associated with transportation shall be borne by Contractor at no additional cost to Owner.

G. Contractor shall be responsible for transportation of all waste to Owner -approved disposal/recycling facilities unless otherwise noted in these Specifications.

H. Contractor shall provide weight tickets for all waste disposal using commercially available scales with current calibration records. Portable scales will not be permitted for determination of pay quantities. Failure to properly weigh and record wastes transported for disposal will result in non-payment by the Owner.

I. Contractor shall maintain a daily log of each truck’s weight and all waste shipped off the Site.

J. All solid waste material shall be placed directly in appropriate waste receptacles immediately upon removal. Suitable waste receptacles may consist of enclosed

roll-off containers or DOT-approved 55-gallon drums, and shall be supplied by the Contractor.

K. Roll-off containers shall be equipped with secured cover.

1. The cover shall remain securely in place at all times when material is not being actively placed in the vessels. Contractor shall be responsible for ensuring that the cover remains securely intact until the container is removed from the Site.

L. If 55-gallon drums are to be utilized, the drums shall consist of suitable DOT-approved 55-gallon drums that are watertight and free of corrosion, perforations, punctures, or other damage. All drums shall be securely covered and sealed at the conclusion of each work day. All drums shall be labeled in accordance with the requirements of this Section and meet the following specifications.

1. Waste disposal drums: Provide DOT 17-H Open – Top Drums (55 gallon) in accordance with DOT regulation title 49 CFR Parts 173, 178, and 179.

3.5 LABELING OF WASTE CONTAINERS

A. All waste containers must be labeled with the name of the waste contained.

END OF SECTION

ATTACHMENT A
TABLES

TABLE 1
PCB SAMPLING SUMMARY
Former Daniel's Mill
98 East Main Street
Vernon, Connecticut

SAMPLE NUMBER	DATE SAMPLED	MATERIAL DESCRIPTION	MATERIAL LOCATION	CONCENTRATION (PPM) - TYPE PCB				
				Aroclor 1242	Aroclor 1254	Aroclor 1260	Aroclor 1268	Total PCBs
1ST FLOOR								
PCB-2-1-19	8/7/2017	Wood floor	Building 2, first floor, western hallway, northern end of hallway, floor beneath carpet	ND<9.8	**93.2**	ND<9.8	ND<9.8	**93.2**
PCB-1-1-20	8/7/2017	Wood floor	Building 1, first floor, hallway, southern side, northeast of elevator, floor	ND<5.0	**26.9**	ND<5.0	ND<5.0	**26.9**
PCB-1-1-21	8/7/2017	Wood floor	Building 1, first floor, hallway, southwest corner, floor	ND<5.0	**58.6**	ND<5.0	ND<5.0	**58.6**
PCB-1-1-22	8/7/2017	Wood floor	Building 1, first floor, electrical equipment storage room (northwest corner of building), north side, floor	ND<9.8	**67.6**	ND<9.8	ND<9.8	**67.6**
PCB-1-1-23	8/7/2017	Concrete Floor	Building 1, first floor, southern loading dock, north overhead door, floor	ND<0.2	**18.6**	ND<0.2	ND<0.2	**18.6**
PCB-2-1-24	11/2/2017	Wood floor	Building 2, first floor, western hallway, northern end of hallway, floor, under wood floor first layer (PCB-2-1-19)	ND<5.4	**48.1**	ND<5.4	ND<5.4	**48.1**
PCB-2-1-25	11/2/2017	Wood beam	Building 2, first floor, west wall, four windows south of Building 1 entrance, under black and white paint	ND<0.1	**1.4**	ND<0.1	ND<0.1	**1.4**
PCB-2-1-26	11/2/2017	Wood ceiling	Building 2, first floor, west wall, ceiling, four windows south of Building 1 entrance, under white paint	ND<53.8	**254**	ND<53.8	ND<53.8	**254**
PCB-2-1-27	11/2/2017	Brick	Building 2, first floor, west wall, ceiling, four windows south of Building 1 entrance, under black paint	ND<0.1	0.2	ND<0.1	ND<0.1	0.2
PCB-1-1-28	11/2/2017	Wood floor, 3/4-inch thick	Building 1, first floor, electrical equipment storage room (northwest corner of building), north side, floor, under wood floor first layer (PCB-1-1-22)	ND<0.1	**8.6**	ND<0.1	ND<0.1	**8.6**
PCB-1-1-28B	11/2/2017	Wood floor, 3-inch thick	Building 1, first floor, electrical equipment storage room (northwest corner of building), north side, floor, under wood PCB-1-1-28	ND<0.1	0.6	ND<0.1	ND<0.1	0.6
PCB-1-1-29	11/2/2017	Wood beam	Building 1 ,first floor, south side, ceiling, three windows west of elevator, under white paint	ND<0.1	**3**	ND<0.1	ND<0.1	**3**
PCB-1-1-30	11/2/2017	Wood ceiling	Building 1 ,first floor, south side, ceiling, three windows west of elevator, under white paint	ND<0.1	0.8	0.1	ND<0.1	0.9
PCB-1-1-31	11/2/2017	Wood column	Building 1, first floor, electrical equipment storage room, second post from door, under pink, green, and black paint	ND<0.1	**4.6**	ND<0.1	ND<0.1	**4.6**
PCB-1-1-32	11/3/2017	Plaster	Building 1, first floor, south wall, hallway, three windows west of elevator	ND<0.1	0.5	ND<0.1	ND<0.1	0.5
PCB-1-1-33	11/3/2017	Masonry wall	Building 1, first floor, south wall, hallway, three windows west of elevator, under PCB-1-1-32	ND<0.1	0.1	ND<0.1	ND<0.1	0.1
2ND FLOOR								
PCB-2-2-14	8/7/2017	Concrete Floor	Building 2, second floor, eastern hallway, northern end, middle of hallway, floor under mastic	ND<0.2	**5.1**	ND<0.2	ND<0.2	**5.1**
PCB-2-2-15	8/7/2017	Wood floor	Building 2, second floor, western hallway, middle of hallway, middle of floor, floor	ND<5.0	**26.9**	ND<5.0	ND<5.0	**26.9**
PCB-1-2-16	8/7/2017	Concrete Floor	Building 1, second floor, eastern room (machine shop), middle wall, northern end, by lathe, floor	ND<10.2	**133**	ND<10.2	ND<10.2	**133**
PCB-1-2-17	8/7/2017	Wood floor	Building 1, second floor, southern wall, by entrance to Building 2, north of stairs, floor	ND<4.9	**23.4**	ND<4.9	ND<4.9	**23.4**
PCB-2-2-MASTIC	8/7/2017	Mastic	Building 2, second floor, eastern hallway, northern end, middle of hallway, floor	ND<5.0	**46.2**	ND<5.0	ND<5.0	**46.2**
PCB-1-2-18	8/7/2017	Concrete Floor	Building 1, second floor, elevator threshold, floor	ND<0.2	**19.4**	ND<0.2	ND<0.2	**19.4**
PCB-2-2-19	11/2/2017	Brick	Building 2, second floor, south end, under white paint	ND<0.1	0.3	ND<0.1	ND<0.1	0.3
PCB-2-2-20	11/2/2017	Plaster	Building 2, second floor, south end, under white paint	ND<0.1	0.7	ND<0.1	ND<0.1	0.7
PCB-2-2-21	11/2/2017	Wood beam	Building 2, second floor, middle isle, ceiling, under white paint	ND<0.1	**1.6**	ND<0.1	ND<0.1	**1.6**
PCB-2-2-22	11/2/2017	Wood ceiling	Building 2, second floor, middle isle, ceiling, under white paint	ND<0.1	**2.2**	ND<0.1	ND<0.1	**2.2**
PCB-2-2-23	11/2/2017	Wood floor, 3-inch thick	Building 2, second floor, western hallway, middle of hallway, middle of floor, floor, under wood floor first layer (PCB-2-2-15)	ND<0.1	0.5	ND<0.1	ND<0.1	0.5
PCB-1-2-24	11/2/2017	Wood beam	Building 1, second floor, off elevator, under white paint	ND<0.1	**4.7**	**1.5**	ND<0.1	**6.2**
PCB-1-2-25	11/2/2017	Wood ceiling	Building 1, second floor, off elevator, ceiling, under white paint	ND<0.1	**8.1**	**3.6**	ND<0.1	**11.7**
PCB-1-2-26	11/2/2017	Waxy paint layer	Building 1, second floor, stairs to first floor, south wall, under brown paint	ND<2	**13.8**	**3.2**	ND<2	**17**
PCB-1-2-27	11/2/2017	Plaster	Building 1, second floor, stairs to first floor, south wall, under PCB1-2-26	ND<0.1	**4.4**	ND<0.1	ND<0.1	**4.4**
PCB-1-2-28	11/2/2017	Brick	Building 1, second floor, brick by elevator door	ND<0.1	**2.6**	**1.5**	ND<0.1	**4.1**
PCB-1-2-29	11/2/2017	Wood floor	Building 1, second floor, southern wall, by entrance to Building 2, north of stairs, floor, under wood floor first layer (PCB-1-2-17)	ND<0.1	0.7	ND<0.1	ND<0.1	0.7

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				Aroclor 1242	Aroclor 1254	Aroclor 1260	Aroclor 1268	Total PCBs
3RD FLOOR								
PCB-2-3-09	8/7/2017	Wood floor	Building 2, third floor, eastern hallway, middle of hallway, middle of floor, floor	ND<5.0	**88.5**	ND<5.0	ND<5.0	**88.5**
PCB-2-3-10	8/7/2017	Wood floor	Building 2, third floor, western hallway, middle of hallway, middle of floor, floor	ND<0.1	**8.5**	ND<0.1	ND<0.1	**8.5**
PCB-1-3-11	8/7/2017	Wood floor	Building 1, third floor, eastern hallway, middle of hallway, middle of floor, floor	ND<1.9	**21.4**	ND<1.9	ND<1.9	**21.4**
PCB-1-3-12	8/7/2017	Wood floor	Building 1, third floor, northwestern hallway, middle of hallway, floor	ND<9.9	**74.9**	ND<9.9	ND<9.9	**74.9**
PCB-1-3-13	8/7/2017	Concrete Floor	Building 1, third floor, elevator threshold, floor	ND<10.1	**79.3**	ND<10.1	ND<10.1	**79.3**
PCB-1-3-14	11/2/2017	Wood floor, 1-inch thick	Building 1, third floor, northwestern hallway, middle of hallway, floor, under wood floor first layer (PCB-1-3-12)	**1**	**2.8**	ND<0.1	ND<0.1	**3.8**
PCB-1-3-14B	11/2/2017	Wood floor, 2-inch thick	Building 1, third floor, northwestern hallway, middle of hallway, floor, under wood floor PCB-1-3-14	0.6	**1.4**	ND<0.1	ND<0.1	**2**
PCB-1-3-15	11/2/2017	Plaster	Building 1, third floor, north wall, by PCB-1-3-14	ND<0.1	0.6	ND<0.1	ND<0.1	0.6
PCB-1-3-16	11/2/2017	Masonry wall	Building 1, third floor, north wall, under PCB-1-3-15	ND<0.1	0.2	ND<0.1	ND<0.1	0.2
PCB-1-3-17	11/2/2017	Wood column	Building 1, third floor, off elevator	ND<2.2	**18.4**	ND<2.2	ND<2.2	**18.4**
PCB-1-3-18	11/2/2017	Wood beam	Building 1, third floor, off elevator, under grey and white paint	ND<0.1	0.6	ND<0.1	ND<0.1	0.6
PCB-1-3-19	11/2/2017	Wood ceiling	Building 1, third floor, off elevator, ceiling, under grey and white paint	ND<0.1	0.5	ND<0.1	ND<0.1	0.5
PCB-2-3-20	11/2/2017	Plaster	Building 2, third floor, west wall by entrance to Building 1	ND<0.1	0.1	ND<0.1	ND<0.1	0.1
PCB-2-3-21	11/2/2017	Brick	Building 2, third floor, west wall by entrance to Building 1, under PCB-2-3-21	ND<0.1	0.3	0.2	ND<0.1	0.5
PCB-2-3-22	11/2/2017	Wood floor, 1-inch thick	Building 2, third floor, eastern hallway, middle of hallway, middle of floor, floor, under wood floor first layer (PCB-2-3-09)	ND<0.1	**7.2**	ND<0.1	ND<0.1	**7.2**
PCB-2-3-22B	11/2/2017	Wood floor, 3-inch thick	Building 2, third floor, eastern hallway, middle of hallway, middle of floor, floor, under wood floor PCB-2-3-22	ND<0.1	**2.8**	ND<0.1	ND<0.1	**2.8**
PCB-2-3-23	11/2/2017	Wood beam	Building 2, third floor, central hallway by entrance to Building 1	ND<0.1	0.3	ND<0.1	ND<0.1	0.3
PCB-2-3-24	11/2/2017	Wood ceiling	Building 2, third floor, ceiling, central hallway by entrance to Building 1	ND<0.1	**3.7**	ND<0.1	ND<0.1	**3.7**
4TH FLOOR								
PCB-2-4-04	8/7/2017	Wood floor	Building 2, fourth floor, eastern hallway, southern end, middle of floor, floor	ND<0.1	**6.4**	ND<0.1	ND<0.1	**6.4**
PCB-2-4-05	8/7/2017	Wood floor	Building 2, fourth floor, western hallway, southern end, middle of floor, floor	ND<2.0	**19.7**	ND<2.0	ND<2.0	**19.7**
PCB-1-4-06	8/7/2017	Wood floor	Building 1, fourth floor, east of elevator, floor	ND<9.8	**56.3**	ND<9.8	ND<9.8	**56.3**
PCB-1-4-07	8/7/2017	Wood floor	Building 1, fourth floor, west of elevator, middle of floor, floor	ND<20	**147**	ND<20	ND<20	**147**
PCB-1-4-08	8/7/2017	Wood floor	Building 1, fourth floor, eastern room, northwest corner, floor	ND<2.0	**13.9**	ND<2.0	ND<2.0	**13.9**
PCB-1-4-09	11/1/2017	Wood floor, 1-inch thick	Building 1, fourth floor, east of elevator, floor, under wood floor first layer (PCB-1-4-06)	0.9	**1.5**	ND<0.1	ND<0.1	**2.4**
PCB-1-4-09B	11/1/2017	Wood floor, 2-inch thick	Building 1, fourth floor, east of elevator, floor, under wood floor PCB-1-4-09	0.6	**2.6**	ND<0.1	ND<0.1	**3.2**
PCB-1-4-10	11/1/2017	Wood floor, 1-inch thick	Building 1, fourth floor, west of elevator, middle of floor, under wood floor first layer (PCB-1-4-07)	0.9	**5.4**	ND<0.1	ND<0.1	**6.3**
PCB-1-4-10B	11/1/2017	Wood floor, 2-inch thick	Building 1, fourth floor, west of elevator, middle of floor, under wood floorPCB-1-4-10	0.3	0.5	ND<0.1	ND<0.1	0.8
PCB-1-4-11	11/1/2017	Plaster	Building 1, fourth floor, north wall, three windows east of northwest corner	ND<0.1	0.9	ND<0.1	ND<0.1	0.9
PCB-1-4-12	11/1/2017	Brick	Building 1, fourth floor, north wall, three windows east of northwest corner, under PCB-1-4-11	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND
PCB-1-4-13	11/1/2017	Wood beam	Building 1, fourth floor, north room, middle of room	ND<0.1	**1.3**	0.3	ND<0.1	**1.6**
PCB-1-4-14	11/1/2017	Wood ceiling	Building 1, fourth floor, north room, middle of room, ceiling	ND<0.1	**1.5**	**1.1**	ND<0.1	**2.6**
PCB-1-4-15	11/1/2017	Wood column	Building 1, fourth floor, northeast room, column	ND<0.1	**2.6**	ND<0.1	ND<0.1	**2.6**
PCB-2-4-16	11/1/2017	Plaster	Building 2, fourth floor, northeast wall	ND<0.1	0.6	ND<0.1	ND<0.1	0.6
PCB-2-4-17	11/1/2017	Brick	Building 2, fourth floor, northeast wall, under PCB-2-4-16	ND<0.1	0.2	ND<0.1	ND<0.1	0.2
PCB-2-4-18	11/1/2017	Wood ceiling	Building 2, fourth floor, east room, center of ceiling	ND<0.1	0.7	ND<0.1	ND<0.1	0.7
PCB-2-4-19	11/1/2017	Wood beam	Building 2, fourth floor east room, center	ND<0.1	0.4	ND<0.1	ND<0.1	0.4

TABLE 1
PCB SAMPLING SUMMARY
Former Daniel's Mill
98 East Main Street
Vernon, Connecticut

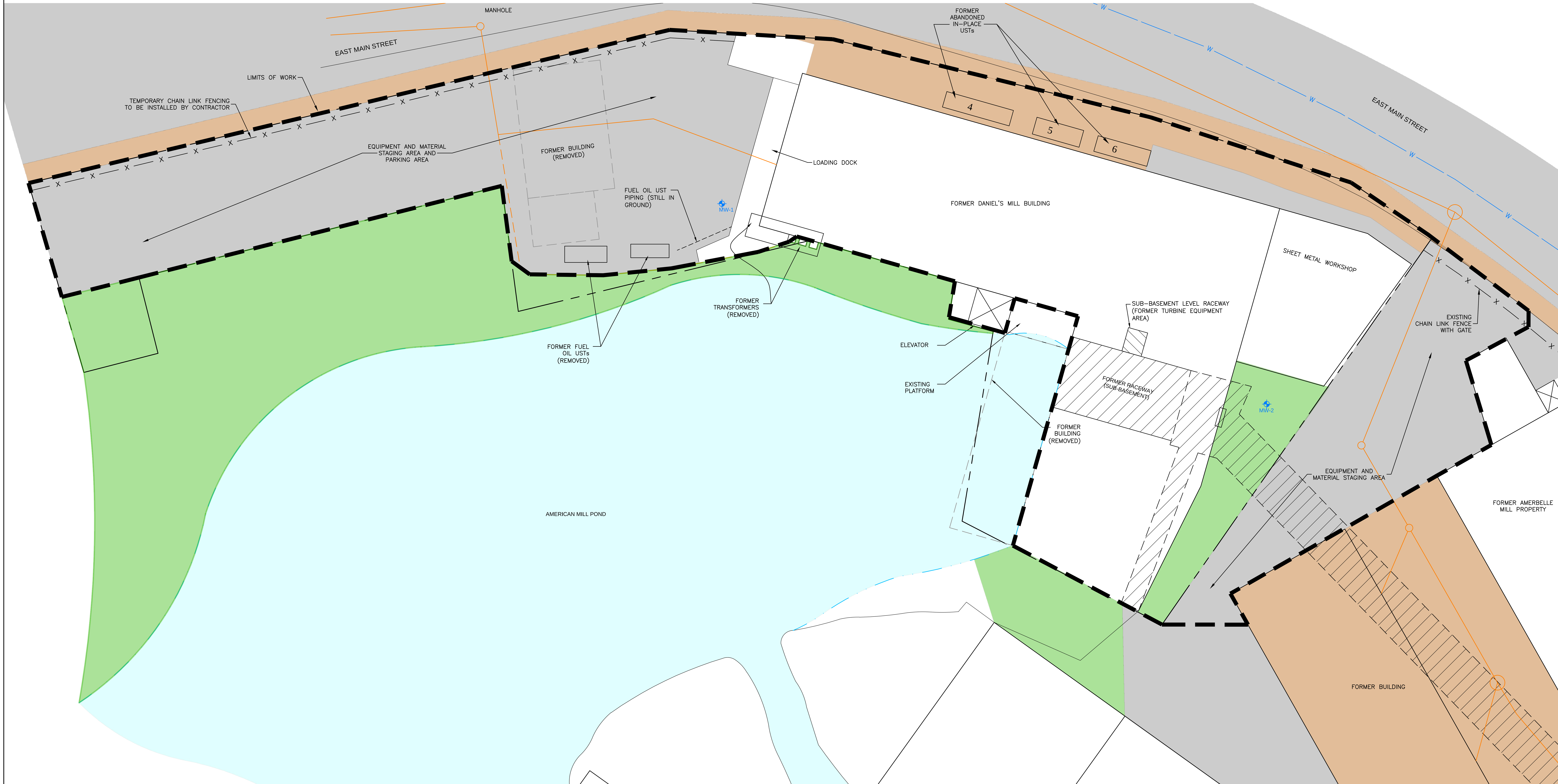
SAMPLE NUMBER	DATE SAMPLED	MATERIAL DESCRIPTION	MATERIAL LOCATION	CONCENTRATION (PPM) - TYPE PCB				
				Aroclor 1242	Aroclor 1254	Aroclor 1260	Aroclor 1268	Total PCBs
5TH FLOOR (ATTIC)								
PCB-2-5-01	8/7/2017	Wood floor	Building 2, fifth floor, north wall, in front of tunnel, floor	ND<0.1	**1.9**	1	ND<0.1	**2.9**
PCB-1-5-02	8/7/2017	Wood floor	Building 1, fifth floor, east wall, middle of floor, floor	ND<0.1	**2.8**	ND<0.1	ND<0.1	**2.8**
PCB-1-5-03	8/7/2017	Wood floor	Building 1, fifth floor, west of elevator, middle of floor, floor	ND<2.0	**29.1**	ND<2.0	ND<2.0	**29.1**
PCB-1-5-04	11/1/2017	Wood floor, 1.25-inch thick	Building 1, fifth floor, west of elevator, middle of floor, under wood floor first layer (PCB-1-5-03)	ND<0.2	**2.3**	ND<0.2	ND<0.2	**2.3**
PCB-1-5-04A	11/1/2017	Wood floor, 1-inch thick	Building 1, fifth floor, west of elevator, middle of floor, under wood floor PCB-1-5-04	ND<0.2	**1.4**	ND<0.2	ND<0.2	**1.4**
PCB-1-5-04B	11/1/2017	Wood floor, 1.25-inch thick	Building 1, fifth floor, west of elevator, middle of floor, under wood floor PCB-1-5-04A	**0.5**	**1.8**	0.6	ND<0.1	**2.9**
PCB-1-5-05	11/1/2017	Wood truss	Building 1, fifth floor, west truss north of elevator, under green, gray, and white paint	ND<0.1	0.5	ND<0.1	ND<0.1	0.5
PCB-1-5-06	11/1/2017	Wood ceiling	Building 1, fifth floor, east of elevator, ceiling, under rolled asphalt roofing	ND<0.1	0.3	ND<0.1	ND<0.1	0.3
PCB-2-5-08	11/1/2017	Wood ceiling	Building 2, fifth floor, at entrance to Building 2	ND<0.1	0.3	ND<0.1	ND<0.1	0.3
PCB-2-5-07	11/1/2017	Wood truss	Building 2, fifth floor, at entrance to Building 1	ND<0.1	0.4	ND<0.1	ND<0.1	0.4
PCB-1-5-09	11/1/2017	Plaster	Building 1, fifth floor, west wall, under white paint	ND<0.1	0.6	0.2	ND<0.1	0.8
PCB-1-5-10	11/1/2017	Brick	Building 1, fifth floor, west wall, under PCB-1-5-09	ND<0.1	0.4	0.1	ND<0.1	0.5
BASEMENT								
PCB-1-B-24	8/7/2017	Concrete Floor	Building 1, basement, at boring B-31, floor	ND<4.3	**39.3**	ND<4.3	ND<4.3	**39.3**
PCB-1-B-25	8/7/2017	Concrete Floor	Building 1, basement, at boring B-30, floor	ND<0.2	**5.9**	**1.8**	ND<0.2	**7.7**
PCB-1-B-26	8/7/2017	Concrete Floor	Building 1, basement, at boring B-32, floor	ND<0.2	**9.4**	**3.1**	ND<0.2	**12.5**
PCB-1-B-27	8/7/2017	Concrete Floor	Building 1, basement, between boring B-31 and B-32, floor	ND<0.2	0.8	ND<0.2	ND<0.2	0.8
PCB-1-B-28	8/7/2017	Concrete Floor	Building 1, basement, at boring B-33, floor	ND<0.2	**9.2**	ND<0.2	ND<0.2	**9.2**
PCB-1-B-29	8/7/2017	Concrete Floor	Building 1, basement, at boring B-29, floor	ND<0.2	**1.9**	ND<0.2	ND<0.2	**1.9**
PCB-1-B-30	8/7/2017	Concrete Floor	Building 1, basement, at boring B-28, floor	ND<0.2	**7.8**	**3.3**	ND<0.2	**11.1**
PCB-1-B-31	8/7/2017	Concrete Floor	Building 1, basement, at boring B-34, floor	ND<0.2	0.8	ND<0.2	ND<0.2	0.8
PCB-1-B11-32	8/7/2017	Concrete Floor	Building 1, basement, at boring B-11A, floor	ND<4.1	**50.9**	ND<4.1	ND<4.1	**50.9**
PCB-1-B15-33	8/7/2017	Concrete Floor	Building 1, basement, at boring B-32A, floor	ND<4.2	**38.3**	ND<4.2	ND<4.2	**38.3**
PCB-1-B-34	11/3/2017	Masonry foundation	Building 1, basement, north wall, across from elevator	ND<0.1	0.1	ND<0.1	ND<0.1	0.1
PCB-1-B-35	11/3/2017	Plaster	Building 1, basement, south wall, west of elevator	ND<0.1	**9.3**	**3.3**	ND<0.1	**12.6**
PCB-1-B-36	11/3/2017	Wood column	Building 1, basement, first wood column north of elevator, under white black paint	ND<5.1	**66.2**	**25.1**	**5.1**	**96.4**
PCB-1-B-37	11/3/2017	Wood beam	Building 1, basement, above first wood column north of elevator, under white black paint	ND<2.2	**12.7**	**2.2**	**2.2**	**17.1**
PCB-1-B-38	11/3/2017	Wood ceiling	Building 1, basement, ceiling, above first wood column north of elevator, under white black paint	ND<5.5	**24.4**	**5.5**	**5.5**	**35.4**
PCB-2-B-39	11/3/2017	Brick	Building 2, basement, west wall be exit to exterior deck	ND<0.1	**8.8**	0.1	0.1	**9**
PCB-2-B-40	11/3/2017	Masonry foundation	Building 2, basement, east wall by southeast corner	ND<0.1	0.1	0.1	0.1	0.3
PCB-2-B-41	11/3/2017	Plaster	Building 2, basement, east wall by southeast corner, on masonry foundation	ND<0.1	**5.7**	0.7	0.1	**6.5**
PCB-2-B-42	11/3/2017	Wood column	Building 2, basement, middle, under white paint	**2.3**	**21.8**	**2.3**	**2.3**	**28.7**
PCB-2-B-43	11/3/2017	Wood ceiling	Building 2, basement, south end, ceiling, under grey and white paint	ND<0.1	**3.2**	0.7	ND<0.1	**3.9**
PCB-2-B-44	11/3/2017	Wood beam	Building 2, basement, south end, under grey and white paint	ND<0.1	**5.4**	0.7	ND<0.1	**6.1**

ND = Not detected at a concentration above the laboratory's reporting limit.

Table 2
Asbestos Containing Materials Inventory
Former Daniel's Mill
98 East Main Street
Vernon, Connecticut

Material	Quantity	Hazard	Location	Asbestos Status
8-foot by 3-foot window glazing	32 windows	Asbestos	Exterior-South Side	Assumed Positive
3-foot by 3-foot window glazing	4 windows	Asbestos	Exterior-South Side	Assumed Positive
Double door with glazing	2 double doors	Asbestos	Exterior	Assumed Positive
8-foot by 3-foot window glazing	48 windows	Asbestos	Exterior-East Side	2% chrysotile - Positive
8-foot by 3-foot window glazing	16	Asbestos	Exterior-West Side	Assumed Positive
6-foot by 8-foot door glazing	5	Asbestos	Exterior-West Side	Assumed Positive
2-foot round window glazing	2	Asbestos	Exterior-West Side	Assumed Positive

ATTACHMENT B
CONTRACT DRAWINGS

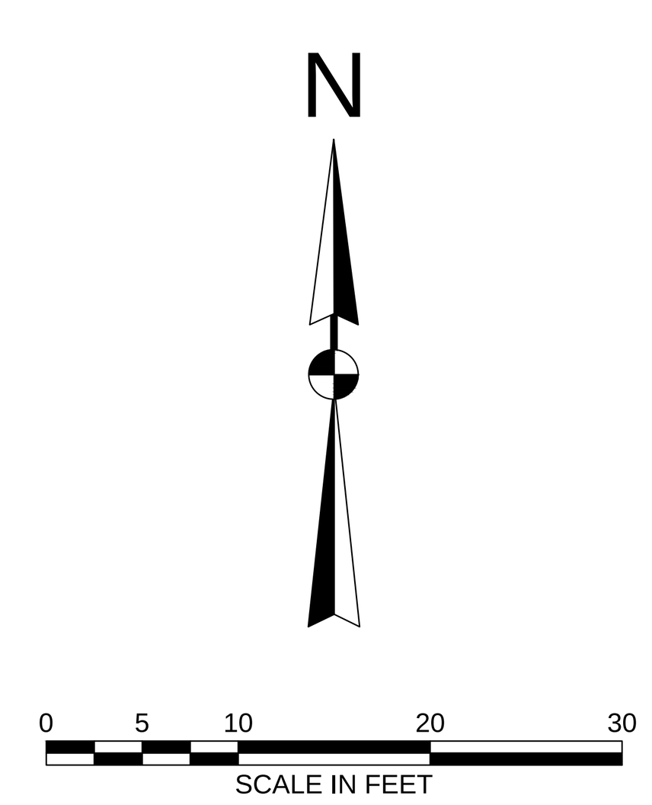


LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- LIMIT OF WORK
- SANITARY SEWER LINE
- FORMER SANITARY SEWER LINE
- WATER LINE
- GROUNDWATER MONITORING WELL
- LANDSCAPED/GRASS AREA
- ASPHALT AREA
- CONCRETE AREA

NOTES:

1. PROPERTY LINES ARE APPROXIMATE AND BASED ON THE TOWN OF VERNON PARCEL MAP FROM THEIR GIS WEBSITE.



NO.	ISSUE/DESCRIPTION	BY	DATE

FORMER DANIEL'S MILL
98 EAST MAIN STREET
VERNON-ROCKVILLE, CONNECTICUT

LIMITS OF WORK AND LOGISTICS PLAN

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:

PROJ MGR: BDR	REVIEWED BY: DR	CHECKED BY: DR	FIGURE 1
DESIGNED BY: BDR	DRAWN BY: MJT	SCALE: AS SHOWN	
DATE: 5-4-2022	PROJECT NO. 05.0045441.03	REVISION NO.	SHEET NO. 1 OF 1

ATTACHMENT C
PREVAILING STATE WAGE RATES

Building Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Tolland	Union	15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	$40.08	41.26
Tolland	Union	16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	$45.83	33.50
Tolland	Union	------TRUCK DRIVERS------		
Tolland	Union	17a) 2 Axle	$30.16	27.16 + a
Tolland	Union	17b) 3 Axle, 2 Axle Ready Mix	$30.27	27.16 + a
Tolland	Union	17c) 3 Axle Ready Mix	$30.33	27.16 + a
Tolland	Union	17d) 4 Axle, Heavy Duty Trailer up to 40 tons	$30.39	27.16 + a
Tolland	Union	17e) 4 Axle Ready Mix	$30.44	27.16 + a
Tolland	Union	17f) Heavy Duty Trailer (40 Tons and Over)	$30.66	27.16 + a
Tolland	Union	17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	$30.44	27.16 + a
Tolland	Union	18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	$47.55	26.60 + a
Tolland	Union	19) Theatrical Stage Journeyman	$25.76	7.34
Tolland	Vernon	1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
Tolland	Vernon	1c) Asbestos Worker/Heat and Frost Insulator	$43.72	30.99
Tolland	Vernon	2) Boilermaker	$38.34	26.01
Tolland	Vernon	3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	$36.18	34.59 + a
Tolland	Vernon	3b) Tile Setter	$34.90	25.87
Tolland	Vernon	3c) Terrazzo Mechanics and Marble Setters	$31.69	22.35

As of: July 1, 2021

Building Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Tolland	Vernon	3d) Tile, Marble & Terrazzo Finishers	$26.70	21.75
Tolland	Vernon	3e) Plasterer	$33.48	32.06
Tolland	Vernon	------LABORERS------		
Tolland	Vernon	4) Group 1: Laborers (common or general), acetylene burners, concrete specialists, wrecking laborers, fire watchers.	$31.50	23.25
Tolland	Vernon	4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofer/mixer/nozzleman (Person running mixer and spraying fireproof only).	$31.75	23.25
Tolland	Vernon	4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	$32.00	23.25
Tolland	Vernon	4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections) P6 and P7 rate is $26.80.	$32.50	23.25
Tolland	Vernon	4d) Group 5: Air track operator, sand blaster and hydraulic drills.	$32.25	23.25
Tolland	Vernon	4e) Group 6: Blasters, nuclear and toxic waste removal.	$34.50	23.25
Tolland	Vernon	4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	$32.50	23.25
Tolland	Vernon	4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	$29.78	23.25
Tolland	Vernon	4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	$29.24	23.25
Tolland	Vernon	4i) Group 10: Traffic Control Signalman	$18.00	23.25
Tolland	Vernon	5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	$35.57	25.65
Tolland	Vernon	5a) Millwrights	$35.64	26.49
Tolland	Vernon	6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	$40.75	30.47+3% of gross wage
Tolland	Vernon	7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	$56.96	35.825+a+b

As of: July 1, 2021

Building Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Tolland	Vernon	-----LINE CONSTRUCTION----		
Tolland	Vernon	Groundman	$26.50	6.5% + 9.00
Tolland	Vernon	Linemen/Cable Splicer	$48.19	6.5% + 22.00
Tolland	Vernon	8) Glazier (Trade License required: FG-1,2)	$39.98	22.90 + a
Tolland	Vernon	9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	$38.17	38.02 + a
Tolland	Vernon	----OPERATORS----		
Tolland	Vernon	Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over), work boat 26 ft. and over and Tunnel Boring Machines. (Trade License Required)	$43.88	25.80 + a
Tolland	Vernon	Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver ($3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	$43.53	25.80 + a
Tolland	Vernon	Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar);Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.). (Trade License Required)	$42.72	25.80 + a
Tolland	Vernon	Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	$42.30	25.80 + a
Tolland	Vernon	Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24	$41.65	25.80 + a
Tolland	Vernon	Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	$41.65	25.80 + a
Tolland	Vernon	Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	$41.31	25.80 + a
Tolland	Vernon	Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24	$40.94	25.80 + a
Tolland	Vernon	Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.;	$40.51	25.80 + a

As of: July 1, 2021

Building Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
		transfer machine.		
Tolland	Vernon	Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	$40.04	25.80 + a
Tolland	Vernon	Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	$37.81	25.80 + a
Tolland	Vernon	Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	$37.81	25.80 + a
Tolland	Vernon	Group 12: Wellpoint operator.	$37.74	25.80 + a
Tolland	Vernon	Group 13: Compressor battery operator.	$37.11	25.80 + a
Tolland	Vernon	Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	$35.87	25.80 + a
Tolland	Vernon	Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	$35.43	25.80 + a
Tolland	Vernon	Group 16: Maintenance Engineer/Oiler.	$34.72	25.80 + a
Tolland	Vernon	Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	$39.42	25.80 + a
Tolland	Vernon	Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	$36.77	25.80 + a
Tolland	Vernon	------PAINTERS (Including Drywall Finishing)------		
Tolland	Vernon	10a) Brush and Roller	$36.42	22.90
Tolland	Vernon	10b) Taping Only/Drywall Finishing	$37.17	22.90
Tolland	Vernon	10c) Paperhanger and Red Label	$36.92	22.90
Tolland	Vernon	10e) Blast and Spray	$39.42	22.90
Tolland	Vernon	11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	$45.83	33.50
Tolland	Vernon	12) Well Digger, Pile Testing Machine	$37.26	24.05 + a
Tolland	Vernon	13) Roofer (composition)	$38.50	21.50
Tolland	Vernon	14) Roofer (slate & tile)	$39.00	21.50

As of: July 1, 2021

Building Rates

County	Town	Classification	Hourly Rate	Hourly Benefit
Tolland	Vernon	15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	$40.08	41.26
Tolland	Vernon	16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	$45.83	33.50
Tolland	Vernon	------TRUCK DRIVERS------		
Tolland	Vernon	17a) 2 Axle	$30.16	27.16 + a
Tolland	Vernon	17b) 3 Axle, 2 Axle Ready Mix	$30.27	27.16 + a
Tolland	Vernon	17c) 3 Axle Ready Mix	$30.33	27.16 + a
Tolland	Vernon	17d) 4 Axle, Heavy Duty Trailer up to 40 tons	$30.39	27.16 + a
Tolland	Vernon	17e) 4 Axle Ready Mix	$30.44	27.16 + a
Tolland	Vernon	17f) Heavy Duty Trailer (40 Tons and Over)	$30.66	27.16 + a
Tolland	Vernon	17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	$30.44	27.16 + a
Tolland	Vernon	18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	$47.55	26.60 + a
Tolland	Vernon	19) Theatrical Stage Journeyman	$25.76	7.34
Tolland	Willington	1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
Tolland	Willington	1c) Asbestos Worker/Heat and Frost Insulator	$43.72	30.99
Tolland	Willington	2) Boilermaker	$38.34	26.01
Tolland	Willington	3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	$36.18	34.59 + a
Tolland	Willington	3b) Tile Setter	$34.90	25.87
Tolland	Willington	3c) Terrazzo Mechanics and Marble Setters	$31.69	22.35

As of: July 1, 2021

ATTACHMENT D

CONTRACTOR'S WAGE CERTIFICATION FORM

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Connecticut General Statutes, 31-53
Certified Payrolls with a statement of compliance
shall be submitted monthly to the contracting agency.

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

WEEKLY PAYROLL

Connecticut Department of Labor
Wage and Workplace Standards Division
200 Folly Brook Blvd.
Wethersfield, CT 06109

CONTRACTOR NAME AND ADDRESS:

SUBCONTRACTOR NAME & ADDRESS

WORKER'S COMPENSATION INSURANCE CARRIER

POLICY #

EFFECTIVE DATE:
EXPIRATION DATE:

PAYROLL NUMBER | Week-Ending Date | PROJECT NAME & ADDRESS

PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/ FEMALE AND RACE*	WORK CLASSIFICATION Trade License Type & Number - OSHA 10 Certification Number	DAY AND DATE S	M	T	W	TH	F	S	Total ST Hours Total O/T Hours	BASE HOURLY RATE TOTAL FRINGE BENEFIT PLAN CASH	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	TOTAL DEDUCTIONS FICA	FEDERAL WITH-HOLDING	STATE WITH-HOLDING	LIST OTHER	GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY
				HOURS WORKED EACH DAY								$ Base Rate $ Cash Fringe	1. $ 2. $ 3. $ 4. $ 5. $ 6. $							
												$ Base Rate $ Cash Fringe	1. $ 2. $ 3. $ 4. $ 5. $ 6. $							
												$ Base Rate $ Cash Fringe	1. $ 2. $ 3. $ 4. $ 5. $ 6. $							
												$ Base Rate $ Cash Fringe	1. $ 2. $ 3. $ 4. $ 5. $ 6. $							

12/9/2013
WWS-CP1

*IF REQUIRED

*SEE REVERSE SIDE

PAGE NUMBER _____OF

OSHA 10 ~ATTACH CARD TO 1ST CERTIFIED PAYROLL

***FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:

1) Medical or hospital care _____ 4) Disability_____

2) Pension or retirement _____ 5) Vacation, holiday_____

3) Life Insurance _____ 6) Other (please specify) _____

CERTIFIED STATEMENT OF COMPLIANCE

For the week ending date of _____,

I, _____of _____, (hereafter known as

Employer) in my capacity as _____ (title) do hereby certify and state:

Section A:

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

a) The records submitted are true and accurate;

b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;

c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);

d) Each such person is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;

e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and

f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

_____ _____ _____

(Signature) (Title) Submitted on (Date)

*****THIS IS A PUBLIC DOCUMENT*****
*****DO NOT INCLUDE SOCIAL SECURITY NUMBERS*****

Weekly Payroll Certification For Public Works Projects (Continued)

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:

Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/ FEMALE AND RACE*	WORK CLASSIFICATION Trade License Type & Number - OSHA 10 Certification Number	DAY AND DATE S	M	T	W	TH	F	S HOURS WORKED EACH DAY	Total ST Hours Total O/T Hours	BASE HOURLY RATE TOTAL FRINGE BENEFIT PLAN CASH	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	TOTAL DEDUCTIONS FICA	FEDERAL WITH-HOLDING	STATE WITH-HOLDING	LIST OTHER	GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY
												$ Base Rate	1. $ 2. $ 3. $							
												$ Cash Fringe	4. $ 5. $ 6. $							
												$ Base Rate	1. $ 2. $ 3. $							
												$ Cash Fringe	4. $ 5. $ 6. $							
												$ Base Rate	1. $ 2. $ 3. $							
												$ Cash Fringe	4. $ 5. $ 6. $							
												$ Base Rate	1. $ 2. $ 3. $							
												$ Cash Fringe	4. $ 5. $ 6. $							
												$ Base Rate	1. $ 2. $ 3. $							
												$ Cash Fringe	4. $ 5. $ 6. $							

*IF REQUIRED

ATTACHMENT E

SAMPLE PAYMENT APPLICATION FORMS

AIA® Document G702®GMP – 2021

Application and Certificate for Payment for Cost of the Work Projects with a Guaranteed Maximum Price

TO OWNER:

PROJECT:

APPLICATION NO:

PERIOD TO:

CONTRACT FOR:

CONTRACT DATE:

PROJECT NOS: / /

Distribution to:

OWNER ☐

ARCHITECT ☐

CONTRACTOR ☐

FIELD ☐

☐

FROM CONTRACTOR:

VIA ARCHITECT:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
AIA Document G703®CW, Continuation Sheet for Cost of the Work Projects, is attached.

1. **ORIGINAL GUARANTEED MAXIMUM PRICE** ..... $ _____
2. **NET CHANGE BY CHANGE ORDERS** ..... $ _____
3. **GUARANTEED MAXIMUM PRICE TO DATE** *(Line 1 ± 2)* ..... $ _____
4. **TOTAL COMPLETED & STORED TO DATE** *(Column G on G703CW)* $ _____
5. **RETAINAGE:**
   a. _____% of Completed Work
   (Columns D + E on G703CW) $ _____
   b. _____% of Stored Material
   (Column F on G703CW) $ _____

   Total Retainage *(Lines 5a + 5b, or Total in Column I of G703CW)*.. $ _____
6. **TOTAL EARNED LESS RETAINAGE** ..... $ _____
   (Line 4 minus Line 5 Total)
7. **LESS PREVIOUS CERTIFICATES FOR PAYMENT** ..... $ _____
   (Line 6 from prior Certificate)
8. **CURRENT PAYMENT DUE** ..... $
9. **GUARANTEED MAXIMUM PRICE BALANCE, INCLUDING RETAINAGE**
   (Line 3 minus Line 6) $ _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	$	$
Total approved this month	$	$
TOTAL	$	$
NET CHANGES by Change Order	$	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information, and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of:

County of:

Subscribed and sworn to before me this day of

Notary Public:

My commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information, and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED ..... $ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

AIA® Document G703® – 1992

Continuation Sheet

AIA Document G702®, Application and Certificate for Payment, or G732™, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:
APPLICATION DATE:
PERIOD TO:
ARCHITECT'S PROJECT NO:

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED *(Not in D or E)*	TOTAL COMPLETED AND STORED TO DATE *(D+E+F)*	% *(G ÷ C)*	BALANCE TO FINISH *(C – G)*	RETAINAGE *(If variable rate)*
			FROM PREVIOUS APPLICATION *(D + E)*	THIS PERIOD					
	GRAND TOTAL								

ATTACHMENT F
CHRO BIDDER CONTRACT COMPLIANCE MONITORING REPORT

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES
CONTRACT COMPLIANCE REGULATIONS
NOTIFICATION TO BIDDERS
(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to "aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials." "Minority business enterprise" is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: "(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n." "Minority" groups are defined in Section 32-9n of the Connecticut General Statutes as "(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4)Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . ." An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder's qualifications under the contract compliance requirements:

(a) the bidder's success in implementing an affirmative action plan;
(b) the bidder's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
(c) the bidder's promise to develop and implement a successful affirmative action plan;
(d) the bidder's submission of employment statistics contained in the "Employment Information Form", indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
(e) the bidder's promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

INSTRUCTIONS AND OTHER INFORMATION

The following BIDDER CONTRACT COMPLIANCE MONITORING REPORT must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder's good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) Definition of Small Contractor

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving o f written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

White (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East. Black (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa. Hispanic- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.	Asian or Pacific Islander- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa. American Indian or Alaskan Native- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART 1 – Bidder Information

Company Name: Street Address: City & State: Chief Executive:	Bidder Federal Employer Identification Number: Or Social Security Number:
Major Business Activity: (brief description)	Bidder Identification (response optional/definitions on page 1) -Bidder is a small contractor? Yes ☐ No ☐ -Bidder is a minority business enterprise? Yes ☐ No ☐ (If yes, check ownership category) Black ☐ Hispanic ☐ Asian American ☐ American Indian/Alaskan Native ☐ Iberian Peninsula ☐ Individual(s) with a Physical Disability ☐ Female ☐ -Bidder is certified as above by State of CT? Yes ☐ No ☐
Bidder Parent Company: (If any)	
Other Locations in CT: (If any)	

PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes ☐ No ☐	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes ☐ No ☐
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes ☐ No ☐	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes ☐ No ☐
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes ☐ No ☐	9. Does your company have a mandatory retirement age for all employees? Yes ☐ No ☐
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes ☐ No ☐	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes ☐ No ☐ N/A ☐
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes ☐ No ☐	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes ☐ No ☐ N/A ☐
6. Does your company have a collective bargaining agreement with workers? Yes ☐ No ☐ 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes ☐ No ☐ 6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes ☐ No ☐	12. Does your company have a written affirmative action Plan? Yes ☐ No ☐ If no, please explain. 13. Is there a person in your company who is responsible for equal employment opportunity? Yes ☐ No ☐ If yes, give name and phone number:

1. Will the work of this contract include subcontractors or suppliers? Yes ☐ No ☐

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes ☐ No ☐

PART IV - Bidder Employment Information Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service	☐	☐			Work Experience	
Private Employment Agencies	☐	☐			Ability to Speak or Write English	
Schools and Colleges	☐	☐			Written Tests	
Newspaper Advertisement	☐	☐			High School Diploma	
Walk Ins	☐	☐			College Degree	
Present Employees	☐	☐			Union Membership	
Labor Organizations	☐	☐			Personal Recommendation	
Minority/Community Organizations	☐	☐			Height or Weight	
Others (please identify)	☐	☐			Car Ownership	
	☐	☐			Arrest Record	
	☐	☐			Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)

ATTACHMENT G
TECHNICAL DATA

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: AEC Laboratories (4406)
Address: 814 Broad Street
Weymouth, MA 02189

Order #: 135992

Attn:

Project: Daniels Mill 05.0045441.00
Location: 98 East Main Street
Number: 13923

Received 07/17/15
Analyzed 07/17/15
Reported 07/17/15

PO Number:

Method: EPA 600/R-93/116 & 600/M4-82-020

PLM Analysis

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
135992-001	07/10/15	001A	Courtyard		
Layer 1: Glazing Gray, Granular				2% CHRYSOTILE	98% NON FIBROUS MATERIAL
135992-002	07/10/15	001B	Courtyard		
Layer 1: Glazing					
Not analyzed due to positive stop instructions.					
135992-003	07/10/15	002A	Building Facing East		
Layer 1: Glazing Beige, Brittle				None Detected	100% NON FIBROUS MATERIAL
135992-004	07/10/15	002B	Building Facing East		
Layer 1: Glazing Beige, Brittle				None Detected	100% NON FIBROUS MATERIAL
135992-005	07/10/15	003A	Building Facing East		
Layer 1: Caulking Red/Gray, Rubbery				None Detected	100% NON FIBROUS MATERIAL
135992-006	07/10/15	003B	Building Facing East		
Layer 1: Caulking Red/Gray, Rubbery				None Detected	100% NON FIBROUS MATERIAL
135992-007	07/10/15	004A	1st Floor Interior		
Layer 1: Sheetrock White, Powdery				None Detected	15% CELLULOSE FIBER 85% NON FIBROUS MATERIAL
135992-008	07/10/15	004B	1st Floor Interior		
Layer 1: Sheetrock White, Powdery				None Detected	15% CELLULOSE FIBER 85% NON FIBROUS MATERIAL

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory. The test results reported relate only to the samples submitted.

Method: EPA 600/R-93/116 & 600/M4-82-020 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
135992-009	07/10/15	005A	1st Floor Stairwell		
Layer 1: Plaster Gray, Hard				None Detected	100% NON FIBROUS MATERIAL
135992-010	07/10/15	005B	1st Floor Stairwell		
Layer 1: Plaster Gray, Hard				None Detected	100% NON FIBROUS MATERIAL
135992-011	07/10/15	005C	1st Floor Stairwell		
Layer 1: Plaster Gray, Hard				None Detected	100% NON FIBROUS MATERIAL
135992-012	07/10/15	006A	Hardwood Floor 1st Floor		
Layer 1: Floor Leveler Gray, Granular				None Detected	2% CELLULOSE FIBER 98% NON FIBROUS MATERIAL
135992-013	07/10/15	006B	Hardwood Floor 1st Floor		
Layer 1: Floor Leveler Gray, Granular				None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
135992-014	07/10/15	007A	2nd Floor Bath		
Layer 1: Tile Tan, Organically Bound				None Detected	100% NON FIBROUS MATERIAL
135992-015	07/10/15	007B	2nd Floor Bath		
Layer 1: Tile Tan, Organically Bound				None Detected	100% NON FIBROUS MATERIAL
135992-016	07/10/15	008A	2nd Floor Bath		
Layer 1: Mastic Tan, Soft				None Detected	4% CELLULOSE FIBER 96% NON FIBROUS MATERIAL
135992-017	07/10/15	008B	2nd Floor Bath		
Layer 1: Mastic Tan, Soft				None Detected	3% CELLULOSE FIBER 97% NON FIBROUS MATERIAL
135992-018	07/10/15	009A	2nd Floor		
Layer 1: Window Glaze Gray, Granular				None Detected	2% CELLULOSE FIBER 95% NON FIBROUS MATERIAL 3% WOLLASTONITE
135992-019	07/10/15	009B	2nd Floor		
Layer 1: Window Glaze Gray, Granular				None Detected	2% CELLULOSE FIBER 95% NON FIBROUS MATERIAL 3% WOLLASTONITE

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory. The test results reported relate only to the samples submitted.

Method: EPA 600/R-93/116 & 600/M4-82-020 **PLM Analysis**

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials

Analyst: Wilson, John

135992-07/17/15 11:17 AM

ali Eltom

Reviewed By: **Ali Eltom**
Analyst

Method reporting limit is 1%. PLM analysis is based on Visual Estimation and NESHAP recommends that any asbestos content less than 10 percent be verified by PLM Point Count or TEM Analysis. This report must not be reproduced except in full with the approval of the laboratory. The test results reported relate only to the samples submitted.

Relinquished by: [signature] Date/Time: 7/16/15
Received by: [signature] Date/Time: 7/16/15 12:25 pm
Relinquished by: [signature] Date/Time: 7/16/15 12:25 pm
Received by: _____ Date/Time: _____

AEC Laboratories, LLC
814 Broad Street
Weymouth, MA 02189
Phone: 781-337-0567
Fax: 781-337-0986
labreports@americanenviron.com

Client Name: GZA GeoEnvironmental, Inc. Phone: 781-278-3700
Client Address: 249 Vanderbilt ave., Norwood, MA 02062
Project: Daniels Mill 05.0045441.00
Proj. Address: 98 East Main Street, Vernon, CT State (Required): CT

Page 1 of 1

BULK SAMPLE CHAIN OF CUSTODY

Analysis: ☒ PLM ☒ Positive Stop ☐ Qualitative ☐ Point Count ☐ NOB Prep ☐ TEM Chat ☐ Lead ☐ PCB

Turnaround Time: ☒ RUSH ☒ 24 Hour ☐ 48 Hour ☐ 3 Day ☐ 5 Day

Sampled By: John Pilling
Date: 7-10-15
Results to (PM): John Pilling

Verbal Results: Y (N)
Cell #: 617-594-5618
Name: John Pilling

AEC Laboratories ID: 13923

Special Instructions:
john.pilling@gza.com

LAB ID	FIELD ID	LOCATION	SAMPLE DESCRIPTION	Homogeneous Area	Material Type
	001 A, B	Courtyard	Exterior Glazing		
	002 A, B	Building Facing East Main Street	↓		
	003 A, B	↓	Door Caulking		
	004 A, B	1st Floor Interior	Sheetrock		
	005 A, B, C	↓ stairwell	Plaster wall		
	006 A, B	Hardwood Floor - 1st Floor	Floor Leveler under Hardwood		
	007 A, B	2nd Floor Bath	12" Tan Floor Tile		
	008 A, B	↓	Tan Mastic		
	009 A, B	2nd Floor	Interior Window Glaze		

135992
V:\135\135992

7-17-15

G 1770 x

PHOENIX
Environmental Laboratories, Inc.

Wednesday, July 29, 2015

Attn: Mr James Hutton
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive
Suite 402
Glastonbury, CT 06033

Project ID: DANIELLES MILL
Sample ID#s: BJ62646 - BJ62648

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 29, 2015

FOR: Attn: Mr James Hutton
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive
Suite 402
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	AT	07/23/15	11:32
Location Code:	GZACTENG	Received by:	LK	07/23/15	15:55
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	45441.03				

Laboratory Data

SDG ID: GBJ62646
Phoenix ID: BJ62646

Project ID: DANIELLES MILL
Client ID: CAULK 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	100	1	%		07/23/15		SW846-%Solid
Caulk Extraction for PCB	Completed				07/24/15	QQ/Z	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1221	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1232	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1242	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1248	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1254	1700	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1260	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1262	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1268	ND	530	ug/Kg	5	07/27/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	111		%	5	07/27/15	AW	30 - 150 %
% TCMX	98		%	5	07/27/15	AW	30 - 150 %

Project ID: DANIELLES MILL
Client ID: CAULK 1

Phoenix I.D.: BJ62646

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
July 29, 2015
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 29, 2015

FOR: Attn: Mr James Hutton
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive
Suite 402
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	AT	07/23/15	11:28
Location Code:	GZACTENG	Received by:	LK	07/23/15	15:55
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	45441.03				

Laboratory Data

SDG ID: GBJ62646
Phoenix ID: BJ62647

Project ID: DANIELLES MILL
Client ID: CAULK 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	100	1	%		07/23/15		SW846-%Solid
Caulk Extraction for PCB	Completed				07/24/15	QQ/Z	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1221	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1232	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1242	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1248	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1254	*	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1260	*	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1262	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
PCB-1268	ND	440	ug/Kg	2	07/27/15	AW	SW8082A
Total PCBs	3100	440	ug/Kg	2	07/27/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	95		%	2	07/27/15	AW	30 - 150 %
% TCMX	80		%	2	07/27/15	AW	30 - 150 %

Project ID: DANIELLES MILL
Client ID: CAULK 2

Phoenix I.D.: BJ62647

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1254 and 1260.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
July 29, 2015
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 29, 2015

FOR: Attn: Mr James Hutton
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive
Suite 402
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	AT	07/23/15	11:22
Location Code:	GZACTENG	Received by:	LK	07/23/15	15:55
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	45441.03				

Laboratory Data

SDG ID: GBJ62646
Phoenix ID: BJ62648

Project ID: DANIELLES MILL
Client ID: CAULK 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	100	1	%		07/23/15		SW846-%Solid
Caulk Extraction for PCB	Completed				07/24/15	NQ/Z	SW3540C
PCB (Soxhlet SW3540C)							
PCB-1016	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1221	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1232	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1242	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1248	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1254	*	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1260	*	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1262	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
PCB-1268	ND	810	ug/Kg	5	07/27/15	AW	SW8082A
Total PCBs	4300	810	ug/Kg	5	07/27/15	AW	SW8082A
QA/QC Surrogates							
% DCBP	102		%	5	07/27/15	AW	30 - 150 %
% TCMX	91		%	5	07/27/15	AW	30 - 150 %

Project ID: DANIELLES MILL
Client ID: CAULK 3

Phoenix I.D.: BJ62648

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1254 and 1260.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
July 29, 2015
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

July 29, 2015

QA/QC Data

SDG I.D.: GBJ62646

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 314933 (ug/Kg), QC Sample No: BJ62998 10X (BJ62646, BJ62647)										
Polychlorinated Biphenyls - Solid										
PCB-1016	ND	170	82	77	6.3	104	106	1.9	40 - 140	30
PCB-1221	ND	170							40 - 140	30
PCB-1232	ND	170							40 - 140	30
PCB-1242	ND	170							40 - 140	30
PCB-1248	ND	170							40 - 140	30
PCB-1254	ND	170							40 - 140	30
PCB-1260	ND	170	89	85	4.6	92	93	1.1	40 - 140	30
PCB-1262	ND	170							40 - 140	30
PCB-1268	ND	170							40 - 140	30
% DCBP (Surrogate Rec)	102	%	98	100	2.0	97	101	4.0	30 - 150	30
% TCMX (Surrogate Rec)	80	%	74	72	2.7	78	83	6.2	30 - 150	30
QA/QC Batch 314954 (ug/Kg), QC Sample No: BJ63143 10X (BJ62648)										
Polychlorinated Biphenyls - Solid										
PCB-1016	ND	170	97	93	4.2	94	97	3.1	40 - 140	30
PCB-1221	ND	170							40 - 140	30
PCB-1232	ND	170							40 - 140	30
PCB-1242	ND	170							40 - 140	30
PCB-1248	ND	170							40 - 140	30
PCB-1254	ND	170							40 - 140	30
PCB-1260	ND	170	103	100	3.0	116	121	4.2	40 - 140	30
PCB-1262	ND	170							40 - 140	30
PCB-1268	ND	170							40 - 140	30
% DCBP (Surrogate Rec)	101	%	105	103	1.9	96	97	1.0	30 - 150	30
% TCMX (Surrogate Rec)	93	%	93	89	4.4	90	93	3.3	30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
July 29, 2015

Criteria: None

State: CT

Sample Criteria Exceedences Report

GBJ62646 - GZACTENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** GZA GeoEnvironmental, Inc.

Project Location: DANIELLES MILL **Project Number:**

Laboratory Sample ID(s): BJ62646, BJ62647, BJ62648

Sampling Date(s): 7/23/2015

RCP Methods Used:

☐ 1311/1312	☐ 6010	☐ 7000	☐ 7196	☐ 7470/7471	☐ 8081	☐ EPH	☐ TO15
☑ 8082	☐ 8151	☐ 8260	☐ 8270	☐ ETPH	☐ 9010/9012	☐ VPH	

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☐ Yes ☑ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	☑ Yes ☐ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☐ Yes ☑ No
5b.	Were these reporting limits met?	☐ Yes ☐ No ☑ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☑ Yes ☐ No ☐ NA
7.	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☐ Yes ☑ No ☐ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

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.

Authorized Signature: Ethan Lee

Date: Wednesday, July 29, 2015

Printed Name: Ethan Lee

Position: Project Manager

Nov 2007

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

July 29, 2015

SDG I.D.: GBJ62646

Temperature above 6C:
The samples were received in a cooler with ice packs. The samples were delivered to the Laboratory within a short period of time after sample collection. Therefore no bias is suspected.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd1 07/27/15-1 (BJ62647, BJ62648)

The initial calibration (PC713AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC702BI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC713BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds: None.

Printed Name Adam Werner
Position: Chemist
Date: 7/27/2015

Instrument: Au-ecd48 07/27/15-1 (BJ62646)

The initial calibration (PC622AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC622BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds: None.

Printed Name Adam Werner
Position: Chemist
Date: 7/27/2015

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

July 29, 2015

SDG I.D.: GBJ62646

QC (Batch Specific)

---------- Sample No: BJ62998, QA/QC Batch: 314933 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

---------- Sample No: BJ63143, QA/QC Batch: 314954 ----------

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Temperature Narration

The samples were received at 11C with cooling initiated.
(Note acceptance criteria is above freezing up to 6°C)

Coolant: IPK [ ] ICE [X] No [ ]
Temp 1 °C Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
- [ ] Fax:
- [X] Phone: 860-858-3135
- [X] Email: james.hutton@gza.com

Customer: GZA
Address: 655 WINDING BROOK DR., SUITE 402
GLASTONBURY, CT

Project: DANIELLES MILL ~~[illegible]~~
Report to: JAMES HUTTON
Invoice to: ↓

Project P.O: 45441.03

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Anthony Tirri Date: 7/23/15

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCBs	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (4) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
62646	CAULK-1	SD	7/23/15	1132	X		1								
62647	CAULK-2	↓	↓	1128	X		1								
62648	CAULK-3	↓	↓	1122	X		1								

Relinquished by:	Accepted by:	Date:	Time:
Anthony Tirri	[signature]	7/23/15	15:55

Comments, Special Requirements or Regulations:

Turnaround:
- [ ] 1 Day*
- [ ] 2 Days*
- [ ] 3 Days*
- [X] Standard
- [ ] Other

* SURCHARGE APPLIES

RI
- [ ] Direct Exposure (Residential)
- [ ] GW
- [ ] Other

CT
- [X] RCP Cert
- [ ] GW Protection
- [ ] SW Protection
- [ ] GA Mobility
- [ ] GB Mobility
- [ ] Residential DEC
- [ ] I/C DEC
- [X] Other

MA
- [ ] MCP Certification
- [ ] GW-1
- [ ] GW-2
- [ ] GW-3
- [ ] S-1
- [ ] S-2
- [ ] S-3
- [ ] MWRA eSMART
- [ ] Other

Data Format
- [X] Excel
- [X] PDF
- [ ] GIS/Key
- [ ] EQuIS
- [ ] Other

Data Package
- [ ] Tier II Checklist
- [ ] Full Data Package*
- [X] Phoenix Std Report
- [ ] Other

State where samples were collected: CT

* SURCHARGE APPLIES

CERTIFICATE OF ANALYSIS

Benjamin Rach
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1708210

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:47 pm, Aug 17, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

SAMPLE RECEIPT

The following samples were received on August 09, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Lab Number	Sample Name	Matrix	Analysis
1708210-01	PCB-2-5-01	Solid	8082A
1708210-02	PCB-1-5-02	Solid	8082A
1708210-03	PCB-1-5-03	Solid	8082A
1708210-04	PCB-2-4-04	Solid	8082A
1708210-05	PCB-2-4-05	Solid	8082A
1708210-06	PCB-1-4-06	Solid	8082A
1708210-07	PCB-1-4-07	Solid	8082A
1708210-08	PCB-1-4-08	Solid	8082A
1708210-09	PCB-2-3-09	Solid	8082A
1708210-10	PCB-2-3-10	Solid	8082A
1708210-11	PCB-1-3-11	Solid	8082A
1708210-12	PCB-1-3-12	Solid	8082A
1708210-13	PCB-1-3-13	Solid	8082A
1708210-14	PCB-2-2-Mastic	Solid	8082A
1708210-15	PCB-2-2-14	Solid	8082A
1708210-16	PCB-2-2-15	Solid	8082A
1708210-17	PCB-1-2-16	Solid	8082A
1708210-18	PCB-1-2-17	Solid	8082A
1708210-19	PCB-1-2-18	Solid	8082A
1708210-20	PCB-2-1-19	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1708210-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-04 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl [2C] (22% @ 30-150%)

1708210-05 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-06 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-07 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-09 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-11 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-12 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-13 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-14 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-16 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-17 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708210-18 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1708210

1708210-20	**Surrogate recovery(ies) diluted below the MRL (SD).**
	Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)
CH71014-BSD1	**Relative percent difference for duplicate is outside of criteria (D+).**
	Aroclor 1016 (70% @ 30%), Aroclor 1016 [2C] (73% @ 30%)
CH71014-BSD1	**Surrogate recovery(ies) below lower control limit (S-).**
	Tetrachloro-m-xylene (22% @ 30-150%), Tetrachloro-m-xylene [2C] (26% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **8/7/2017**
Laboratory Sample ID(s): **1708210-01 through 1708210-20**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes ( ) No (X)
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: August 17, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-5-01
Date Sampled: 08/07/17 09:20
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1221	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1232	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1242	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1248	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1254	**1.9** (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1260 [2C]	**1.0** (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1262	ND (0.1)		8082A		1	08/11/17 22:59		CH71014
Aroclor 1268	ND (0.1)		8082A		1	08/11/17 22:59		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-02
Date Sampled: 08/07/17 09:25
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1221	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1232	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1242	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1248	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1254	**2.8** (0.5)		8082A		5	08/14/17 16:53		CH71014
Aroclor 1260	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1262	ND (0.1)		8082A		1	08/11/17 23:19		CH71014
Aroclor 1268	ND (0.1)		8082A		1	08/11/17 23:19		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*40 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-03
Date Sampled: 08/07/17 09:30
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1221	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1232	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1242	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1248	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1254	**29.1** (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1260	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1262	ND (2.0)		8082A		20	08/14/17 13:25		CH71014
Aroclor 1268	ND (2.0)		8082A		20	08/14/17 13:25		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-04
Date Sampled: 08/07/17 10:04
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1221	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1232	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1242	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1248	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1254	**6.4** (1.0)		8082A		10	08/14/17 17:10		CH71014
Aroclor 1260	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1262	ND (0.1)		8082A		1	08/11/17 23:57		CH71014
Aroclor 1268	ND (0.1)		8082A		1	08/11/17 23:57		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*35 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*22 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-05
Date Sampled: 08/07/17 10:15
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1221	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1232	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1242	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1248	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1254	**19.7** (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1260	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1262	ND (2.0)		8082A		20	08/14/17 17:29		CH71014
Aroclor 1268	ND (2.0)		8082A		20	08/14/17 17:29		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-06
Date Sampled: 08/07/17 10:20
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1221	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1232	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1242	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1248	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1254	**56.3** (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1260	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1262	ND (9.8)		8082A		100	08/14/17 17:48		CH71014
Aroclor 1268	ND (9.8)		8082A		100	08/14/17 17:48		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-07
Date Sampled: 08/07/17 10:25
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1221	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1232	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1242	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1248	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1254	**147** (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1260	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1262	ND (20.0)		8082A		200	08/14/17 18:07		CH71014
Aroclor 1268	ND (20.0)		8082A		200	08/14/17 18:07		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-08
Date Sampled: 08/07/17 10:35
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-08
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1221	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1232	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1242	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1248	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1254	**13.9** (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1260	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1262	ND (2.0)		8082A		20	08/14/17 18:25		CH71014
Aroclor 1268	ND (2.0)		8082A		20	08/14/17 18:25		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-09
Date Sampled: 08/07/17 11:15
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-09
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1221	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1232	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1242	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1248	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1254	**88.5** (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1260	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1262	ND (5.0)		8082A		50	08/14/17 18:44		CH71014
Aroclor 1268	ND (5.0)		8082A		50	08/14/17 18:44		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-10
Date Sampled: 08/07/17 11:20
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-10
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1221	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1232	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1242	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1248	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1254	**8.5** (1.0)		8082A		10	08/14/17 19:03		CH71014
Aroclor 1260	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1262	ND (0.1)		8082A		1	08/12/17 1:52		CH71014
Aroclor 1268	ND (0.1)		8082A		1	08/12/17 1:52		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-11
Date Sampled: 08/07/17 11:25
Percent Solids: N/A
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-11
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1221	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1232	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1242	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1248	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1254	**21.4** (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1260	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1262	ND (1.9)		8082A		20	08/14/17 19:22		CH71014
Aroclor 1268	ND (1.9)		8082A		20	08/14/17 19:22		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-12
Date Sampled: 08/07/17 11:30
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-12
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1221	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1232	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1242	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1248	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1254	**74.9** (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1260	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1262	ND (9.9)		8082A		100	08/14/17 19:41		CH71014
Aroclor 1268	ND (9.9)		8082A		100	08/14/17 19:41		CH71014

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-13
Date Sampled: 08/07/17 11:35
Percent Solids: 98
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1221	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1232	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1242	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1248	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1254	**79.3** (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1260	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1262	ND (10.1)		8082A		50	08/14/17 21:54		CH71015
Aroclor 1268	ND (10.1)		8082A		50	08/14/17 21:54		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-Mastic
Date Sampled: 08/07/17 11:55
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-14
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1221	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1232	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1242	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1248	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1254	**46.2** (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1260	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1262	ND (5.0)		8082A		50	08/14/17 22:13		CH71015
Aroclor 1268	ND (5.0)		8082A		50	08/14/17 22:13		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-14
Date Sampled: 08/07/17 12:00
Percent Solids: 99
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1254	**5.1** (1.0)		8082A		5	08/14/17 22:31		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 15:34		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 15:34		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-15
Date Sampled: 08/07/17 12:05
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-16
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1221	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1232	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1242	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1248	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1254	**26.9** (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1260	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1262	ND (5.0)		8082A		50	08/14/17 22:50		CH71015
Aroclor 1268	ND (5.0)		8082A		50	08/14/17 22:50		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-16
Date Sampled: 08/07/17 12:30
Percent Solids: 98
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1221	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1232	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1242	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1248	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1254	**133** (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1260	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1262	ND (10.2)		8082A		50	08/14/17 23:10		CH71015
Aroclor 1268	ND (10.2)		8082A		50	08/14/17 23:10		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-17
Date Sampled: 08/07/17 12:45
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-18
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1221	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1232	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1242	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1248	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1254	**23.4** (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1260	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1262	ND (4.9)		8082A		50	08/14/17 23:29		CH71015
Aroclor 1268	ND (4.9)		8082A		50	08/14/17 23:29		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-18
Date Sampled: 08/07/17 12:55
Percent Solids: 99
Initial Volume: 5.02
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1254	**19.4** (2.0)		8082A		10	08/14/17 23:48		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 16:50		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 16:50		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*62 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-19
Date Sampled: 08/07/17 13:35
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708210
ESS Laboratory Sample ID: 1708210-20
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1221	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1232	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1242	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1248	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1254	**93.2** (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1260	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1262	ND (9.8)		8082A		100	08/15/17 0:07		CH71015
Aroclor 1268	ND (9.8)		8082A		100	08/15/17 0:07		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH71014 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		107	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		80	40-140			
Surrogate: Decachlorobiphenyl	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0204*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0240*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS Dup										
Aroclor 1016	0.3	0.05	mg/kg wet	0.5000		51	40-140	70	30	D+
Aroclor 1016 [2C]	0.2	0.05	mg/kg wet	0.5000		45	40-140	73	30	D+
Aroclor 1260	0.3	0.05	mg/kg wet	0.5000		69	40-140	29	30	
Aroclor 1260 [2C]	0.3	0.05	mg/kg wet	0.5000		63	40-140	25	30	
Surrogate: Decachlorobiphenyl	*0.0159*		mg/kg wet	*0.02500*		*64*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0162*		mg/kg wet	*0.02500*		*65*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.00556*		mg/kg wet	*0.02500*		*22*	*30-150*			*S-*
Surrogate: Tetrachloro-m-xylene [2C]	*0.00652*		mg/kg wet	*0.02500*		*26*	*30-150*			*S-*
Batch CH71015 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH71015 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0183*		mg/kg wet	*0.02500*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140	3	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140	3	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		96	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1708210

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S-	Surrogate recovery(ies) below lower control limit (S-).
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708210

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1708210
Date Received: 8/9/2017
Project Due Date: 8/17/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	153334	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	153333	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	153332	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	153331	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	153330	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	153329	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	153328	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	153327	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	153326	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	153325	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	153324	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	153323	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	153322	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
14	153321	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
15	153320	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
16	153319	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	153318	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	153317	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	153316	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	153315	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

ESS Project ID: 1708210
Date Received: 8/9/2017

Completed By: [signature]
Date & Time: 8/9/17 1630

Reviewed By:
Date & Time: 8/9/17 1725

Delivered By:
8/9/17 1725

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1708210

Turn Time 5 Standard Rush _____ Approved By: _____

Reporting Limits - 0.09 mg/kg

State where samples were collected: **MA RI CT NH NJ NY ME** Other _____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other _____

Electonic Deliverable Yes X No ____
Format: Excel X Access ___ PDF X Other ____

GZA Project Manager: BEN RACH

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # ~~DANIELS MILL~~ 45441.06

Project Name: DANIELS MILL

Contract Pricing _____

Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (Solid) (8082)										Comment #
1	8/7/2017	0920	G	wood floor	PCB-2-5-01	1											
2		0925			PCB-1-5-02												
3		0930			PCB-1-5-03												
4		1004			PCB-2-4-04												
5		1015			PCB-2-4-05												
6		1020			PCB-1-4-06												
7		1025			PCB-1-4-07												
8		1035			PCB-1-4-08												
9		1115			PCB-2-3-09												
10		1120			PCB-2-3-10												

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ~~Yes~~ ____ No

Seals Intact ____ Yes ____ No NA: ~~____~~

Cooler Temperature: 3.7-4.4 ICE ea

Sampled by : Anthony Trani ; Sean Conolly

Comments: Building materials

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/7/17 1600	GZA FEDEX	[signature]	8/9/17	[signature]
[signature]	8/9/17 1547	[signature] 8/9/17 1547			

Please E-mail all changes to Chain of Custody in writing.

Page 1 of ~~2~~ 2 (8/9/17)

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1708210

Turn Time 5 Standard Rush _____ Approved By: _____

Reporting Limits - 0.09 mg/kg

State where samples were collected: MA RI (CT) NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
MA-MCP (CT-RCP) RGP Other _____

Electonic Deliverable Yes X No ____
Format: Excel X Access ___ PDF X Other ____

GZA Project Manager: BEN RACH

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 45441.06
Project Name: DANIELS MILL
Contract Pricing _____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (SOXLET) mg/kg											Comment #
11	8/7/17	1125	G	WOOD FLOOR	PCB-1-3-11	1	X											
12		1130		WOOD FLOOR	PCB-1-3-12													
13		1135		CONCRETE FLOOR	PCB-1-3-13													
14		1155		mastic	PCB-2-[illegible]-MASTIC													
15		1200		concrete floor	PCB-2-2-14													
16		1205		wood floor	PCB-2-2-15													
17		1230		concrete floor	PCB-1-2-16													
18		1245		wood floor	PCB-1-2-17													
19		1255		concrete floor	PCB-1-2-18													
20		1335		wood floor	PCB-2-1-19													

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ____Yes ____No

Seals Intact ____Yes ____No NA: ____

Cooler Temperature: 3.7-4.2 [illegible]

Sampled by : Anthony Trani, Sean Connolly

Comments: Building material

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/7/17 1600	GZA FRIDGE	[signature]	8/9/17 1342	[signature]
[signature]	8/9/17 [illegible]	[signature] 8/9/17 1547			

Please E-mail all changes to Chain of Custody in writing.

Page 2 of 2
EL 8/9/17

CERTIFICATE OF ANALYSIS

Benjamin Rach
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1708211

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:52 pm, Aug 17, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

SAMPLE RECEIPT

The following samples were received on August 09, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1708211-01	PCB-1-1-20	Solid	8082A
1708211-02	PCB-1-1-21	Solid	8082A
1708211-03	PCB-1-1-22	Solid	8082A
1708211-04	PCB-1-1-23	Solid	8082A
1708211-05	PCB-1-B-24	Solid	8082A
1708211-06	PCB-1-B-25	Solid	8082A
1708211-07	PCB-1-B-26	Solid	8082A
1708211-08	PCB-1-B-27	Solid	8082A
1708211-09	PCB-1-B-28	Solid	8082A
1708211-10	PCB-1-B-29	Solid	8082A
1708211-11	PCB-1-B-30	Solid	8082A
1708211-12	PCB-1-B-31	Solid	8082A
1708211-13	PCB-1-B11-32	Solid	8082A
1708211-14	PCB-1-B15-33	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1708211-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708211-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708211-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708211-05 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708211-13 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708211-14 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

CH71016-BSD1 **Relative percent difference for duplicate is outside of criteria (D+).**
Aroclor 1016 (44% @ 30%), Aroclor 1016 [2C] (44% @ 30%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **8/7/2017**
Laboratory Sample ID(s): **1708211-01 through 1708211-14**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes ( ) No (X)
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: August 17, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-20
Date Sampled: 08/07/17 13:40
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1221	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1232	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1242	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1248	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1254	**26.9** (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1260	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1262	ND (5.0)		8082A		50	08/15/17 0:26		CH71015
Aroclor 1268	ND (5.0)		8082A		50	08/15/17 0:26		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-21
Date Sampled: 08/07/17 14:00
Percent Solids: N/A
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1221	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1232	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1242	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1248	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1254	**58.6** (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1260	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1262	ND (5.0)		8082A		50	08/15/17 0:45		CH71015
Aroclor 1268	ND (5.0)		8082A		50	08/15/17 0:45		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-22
Date Sampled: 08/07/17 14:05
Percent Solids: N/A
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1221	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1232	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1242	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1248	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1254	**67.6** (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1260	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1262	ND (9.8)		8082A		100	08/15/17 1:04		CH71015
Aroclor 1268	ND (9.8)		8082A		100	08/15/17 1:04		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-23
Date Sampled: 08/07/17 14:10
Percent Solids: 99
Initial Volume: 5.13
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1254	**18.6** (2.0)		8082A		10	08/15/17 1:23		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 20:20		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 20:20		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*109 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-24
Date Sampled: 08/07/17 14:23
Percent Solids: 92
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1221	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1232	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1242	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1248	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1254	**39.3** (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1260	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1262	ND (4.3)		8082A		20	08/15/17 1:42		CH71015
Aroclor 1268	ND (4.3)		8082A		20	08/15/17 1:42		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-25
Date Sampled: 08/07/17 14:26
Percent Solids: 97
Initial Volume: 5.01
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1254 [2C]	**5.9** (1.0)		8082A		5	08/17/17 9:48		CH71015
Aroclor 1260	**1.8** (1.0)		8082A		5	08/17/17 9:48		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/16/17 20:59		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/16/17 20:59		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*65 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*48 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-26
Date Sampled: 08/07/17 14:30
Percent Solids: 96
Initial Volume: 5.08
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1254 [2C]	**9.4** (1.0)		8082A		5	08/17/17 10:06		CH71015
Aroclor 1260	**3.1** (1.0)		8082A		5	08/17/17 10:05		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/16/17 21:18		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/16/17 21:18		CH71015

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*124 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-27
Date Sampled: 08/07/17 14:32
Percent Solids: 97
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1254	**0.8** (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 21:36		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 21:36		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-28
Date Sampled: 08/07/17 14:35
Percent Solids: 95
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1254	**9.2** (1.0)		8082A		5	08/15/17 2:01		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 21:55		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 21:55		CH71015

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*75 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-29
Date Sampled: 08/07/17 14:37
Percent Solids: 96
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1254	**1.9** (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 22:14		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 22:14		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*32 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*35 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-30
Date Sampled: 08/07/17 14:39
Percent Solids: 95
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1254	**7.8** (1.0)		8082A		5	08/15/17 2:20		CH71015
Aroclor 1260 [2C]	**3.3** (1.0)		8082A		5	08/15/17 2:20		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/11/17 22:33		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/11/17 22:33		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-31
Date Sampled: 08/07/17 14:41
Percent Solids: 98
Initial Volume: 5.04
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1221	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1232	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1242	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1248	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1254	**0.8** (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1260	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1262	ND (0.2)		8082A		1	08/15/17 2:39		CH71015
Aroclor 1268	ND (0.2)		8082A		1	08/15/17 2:39		CH71015

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*53 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B11-32
Date Sampled: 08/07/17 14:45
Percent Solids: 95
Initial Volume: 5.11
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1221	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1232	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1242	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1248	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1254	**50.9** (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1260	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1262	ND (4.1)		8082A		20	08/15/17 2:58		CH71016
Aroclor 1268	ND (4.1)		8082A		20	08/15/17 2:58		CH71016

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B15-33
Date Sampled: 08/07/17 14:48
Percent Solids: 94
Initial Volume: 5.05
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708211
ESS Laboratory Sample ID: 1708211-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 8/10/17 16:45

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1221	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1232	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1242	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1248	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1254	**38.3** (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1260	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1262	ND (4.2)		8082A		20	08/15/17 3:17		CH71016
Aroclor 1268	ND (4.2)		8082A		20	08/15/17 3:17		CH71016

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH71015 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0196*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0194*		mg/kg wet	*0.02500*		*78*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0183*		mg/kg wet	*0.02500*		*73*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		95	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		93	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140	3	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140	3	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		96	40-140	3	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0224*		mg/kg wet	*0.02500*		*90*	*30-150*			
Batch CH71016 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH71016 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0117*		mg/kg wet	*0.02500*		*47*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0128*		mg/kg wet	*0.02500*		*51*	*30-150*			
LCS										
Aroclor 1016	0.3	0.05	mg/kg wet	0.5000		60	40-140			
Aroclor 1016 [2C]	0.3	0.05	mg/kg wet	0.5000		60	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		83	40-140			
Surrogate: Decachlorobiphenyl	*0.0224*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.00961*		mg/kg wet	*0.02500*		*38*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.00979*		mg/kg wet	*0.02500*		*39*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		93	40-140	44	30	D+
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140	44	30	D+
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		87	40-140	4	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		81	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708211

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1708211
Date Received: 8/9/2017
Project Due Date: 8/17/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	153348	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	153347	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	153346	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	153345	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	153542	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
06	153541	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
07	153540	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
08	153539	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
09	153538	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
10	153537	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
11	153536	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
12	153535	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
13	153534	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
14	153533	Yes	NA	Yes	2 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

Completed By: Date & Time: 8/9/17 1619
Reviewed By: Date & Time: 8/9/17 1718

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

ESS Project ID: 1708211

Date Received: 8/9/2017

Delivered By: RLA 8/9/17 1718

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 170821

Turn Time 5 Standard Rush _____ Approved By: _____

Reporting Limits - 0.09 mg/kg

State where samples were collected: **MA RI CT NH NJ NY ME** Other _____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other _____

Electonic Deliverable Yes X No ____
Format: Excel X Access ____ PDF X Other ____

GZA Project Manager: BEN RACH

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 45441.06

Project Name: DANIELS MILL

Contract Pricing _____

Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCBs (Matrix: Soil)										Comment #
1	8/7/17	1340	G	wood floor	PCB-1-1-20	1	X										
2		1400		wood floor	PCB-1-1-21												
3		1405		wood floor	PCB-1-1-22												
4		1410		concrete floor	PCB-1-1-23												
5		1423			PCB-1-B-24												
6		1426			PCB-1-B-25												
7		1430			PCB-1-B-26												
8		1432			PCB-1-B-27												
9		1435			PCB-1-B-28												
10		1437			PCB-1-B-29												
							–										
							G										

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present X Yes ____ No

Seals Intact ____ Yes ____ No NA: X

Cooler Temperature: 3.7-4.4 ice

Sampled by : ANTHONY TRANI, SEAN CONNOLLY

Comments:
BLDG. MATERIALS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/7/17 1600	GZA FRIDGE	[signature]	8/9/17 1342	[signature]
[signature]	8/7/17 [illegible]	[signature] 8/9/17 1547			

Please E-mail all changes to Chain of Custody in writing.

Page 3/1 of 4/2 RCP 8/9/17

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1708211

Turn Time 5 Standard Rush _____ Approved By: _____

Reporting Limits - 0.09 mg/kg

State where samples were collected: **MA RI CT NH NJ NY ME** Other _____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other _____

Electonic Deliverable Yes X No ____
Format: Excel X Access ___ PDF X Other ____

GZA Project Manager: Ben Rach
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 45441.06
Project Name: DANIELS MILL
Contract Pricing ____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (Solid) (Env.)											Comment #
11	8/7/17	1439	G	Composite Floor	PCB-1-B-30	1	X											
12		1441			PCB-1-B-31													
13		1445			PCB-1-B11-32													
14		~~1448~~			PCB-1-B15-33													
							1											
							G											

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge ~~WW-Wastewater~~ GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ___Yes ____No
Seals Intact ____ Yes ____No NA: N
Cooler Temperature: 3.7-4.4 [illegible]

Sampled by : Anthony Trani ; Sean Connolly
Comments: Bldg. Materials

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Anthony Trani	8/7/17 1600	GZA FEDEX		8/8/17 PR	
	8/8/17 1547				

Please E-mail all changes to Chain of Custody in writing.

Page 4/2 of 4/2 8/8/17

CERTIFICATE OF ANALYSIS

Benjamin Rach
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1708212

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:54 pm, Aug 17, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

SAMPLE RECEIPT

The following samples were received on August 09, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1708212-01	PCB-1-5-Paint-1	Solid	8082A
1708212-02	PCB-1-5-Paint-2	Solid	8082A
1708212-03	PCB-2-4-Glaze-1	Solid	8082A
1708212-04	PCB-2-4-Paint-3	Solid	8082A
1708212-05	PCB-1-4-Paint-4	Solid	8082A
1708212-06	PCB-1-3-Glaze-2	Solid	8082A
1708212-07	PCB-2-2-Paint-5	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1708212-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708212-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708212-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708212-05 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1708212-07 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **8/7/2017**
Laboratory Sample ID(s): **1708212-01 through 1708212-07**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes ( ) No (X)
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: August 17, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-Paint-1
Date Sampled: 08/07/17 09:35
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-01
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1221	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1232	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1242	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1248	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1254	**61.5** (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1260	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1262	ND (5.0)		8082A		50	08/17/17 2:57		CH71103
Aroclor 1268	ND (5.0)		8082A		50	08/17/17 2:57		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-Paint-2
Date Sampled: 08/07/17 09:40
Percent Solids: N/A
Initial Volume: 9.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-02
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1221	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1232	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1242	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1248	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1254	**163** (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1260	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1262	ND (10.2)		8082A		100	08/17/17 5:09		CH71103
Aroclor 1268	ND (10.2)		8082A		100	08/17/17 5:09		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-Glaze-1
Date Sampled: 08/07/17 10:40
Percent Solids: N/A
Initial Volume: 2.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-03
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1221	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1232	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1242	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1248	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1254	**17.1** (2.3)		8082A		5	08/16/17 17:30		CH71103
Aroclor 1260	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1262	ND (0.5)		8082A		1	08/17/17 5:28		CH71103
Aroclor 1268	ND (0.5)		8082A		1	08/17/17 5:28		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-Paint-3
Date Sampled: 08/07/17 10:45
Percent Solids: N/A
Initial Volume: 9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-04
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1221	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1232	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1242	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1248	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1254	**61.4** (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1260	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1262	ND (5.6)		8082A		50	08/17/17 5:47		CH71103
Aroclor 1268	ND (5.6)		8082A		50	08/17/17 5:47		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-Paint-4
Date Sampled: 08/07/17 10:50
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-05
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1221	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1232	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1242	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1248	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1254	**69.3** (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1260	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1262	ND (5.0)		8082A		50	08/17/17 6:06		CH71103
Aroclor 1268	ND (5.0)		8082A		50	08/17/17 6:06		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-Glaze-2
Date Sampled: 08/07/17 11:40
Percent Solids: N/A
Initial Volume: 2.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-06
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1221	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1232	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1242	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1248	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1254 [2C]	**5.5** (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1260	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1262	ND (0.5)		8082A		1	08/17/17 6:25		CH71103
Aroclor 1268	ND (0.5)		8082A		1	08/17/17 6:25		CH71103

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*87 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*89 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-Paint-5
Date Sampled: 08/07/17 12:10
Percent Solids: N/A
Initial Volume: 9.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1708212
ESS Laboratory Sample ID: 1708212-07
Sample Matrix: Solid
Units: mg/kg wet
Analyst: CAD
Prepared: 8/11/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1221	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1232	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1242	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1248	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1254	**37.4** (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1260	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1262	ND (5.1)		8082A		50	08/17/17 10:25		CH71103
Aroclor 1268	ND (5.1)		8082A		50	08/17/17 10:25		CH71103

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CH71103 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0263*		mg/kg wet	*0.02500*		*105*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0300*		mg/kg wet	*0.02500*		*120*	*30-150*			
LCS										
Aroclor 1016	0.6	0.05	mg/kg wet	0.5000		119	40-140			
Aroclor 1016 [2C]	0.6	0.05	mg/kg wet	0.5000		117	40-140			
Aroclor 1260	0.6	0.05	mg/kg wet	0.5000		116	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		108	40-140			
Surrogate: Decachlorobiphenyl	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0276*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0303*		mg/kg wet	*0.02500*		*121*	*30-150*			
LCS Dup										
Aroclor 1016	0.6	0.05	mg/kg wet	0.5000		124	40-140	4	30	
Aroclor 1016 [2C]	0.6	0.05	mg/kg wet	0.5000		117	40-140	0.02	30	
Aroclor 1260	0.6	0.05	mg/kg wet	0.5000		118	40-140	2	30	
Aroclor 1260 [2C]	0.6	0.05	mg/kg wet	0.5000		111	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0257*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0249*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0275*		mg/kg wet	*0.02500*		*110*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0299*		mg/kg wet	*0.02500*		*120*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1708212

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1708212

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1708212
Date Received: 8/9/2017
Project Due Date: 8/17/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 4.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? No
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of holo time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:
Did not receive Sample PCB-2-3-Caulk 8/9/17

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted: Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	153573	Yes	NA	Yes	Plastic Baggie	NP	
02	153572	Yes	NA	Yes	Plastic Baggie	NP	
03	153571	Yes	NA	Yes	Plastic Baggie	NP	
04	153570	Yes	NA	Yes	Plastic Baggie	NP	
05	153569	Yes	NA	Yes	Plastic Baggie	NP	
06	153568	Yes	NA	Yes	Plastic Baggie	NP	
07	153567	Yes	NA	Yes	Plastic Baggie	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

Completed By: Date & Time: 8/9/17 1643
Reviewed By: Date & Time: 8/9/17 1714
Delivered By: 8/9/17 1714

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1708212

Turn Time 5 Standard Rush ____ Approved By: ____

Reporting Limits - 0.09 mg/kg

State where samples were collected: **MA RI CT NH NJ NY ME** Other____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other____ (CT-RCP circled)

Electonic Deliverable Yes X No____
Format: Excel X Access___ PDF X Other____

GZA Project Manager: BEN RACH
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 45441.06
Project Name: DANIELS MILL
Contract Pricing ____
Special Pricing: ____

Analysis: PCB (Soxlet) (mo-vc)

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	PCB (Soxlet)										Comment #
1	8/7/2017	0935	G	SD	PCB-1-5-PAINT-1	1	X										
2	↓	0940	↓	↓	PCB-1-5-PAINT-2	1	↓										
3	↓	1040	↓	↓	PCB-2-4-GLAZE-1	1	↓										
4	↓	1045	↓	↓	PCB-2-4-PAINT-3	1	↓										
5	↓	1050	↓	↓	PCB-1-4-PAINT-4	1	↓										
6	↓	1140	↓	↓	PCB-1-3-GLAZE-2	1	↓										
7	↓	1210	↓	↓	PCB-2-2-PAINT-5	1	↓										
~~8~~ RE 8/9/17	↓	1440	↓	↓	PCB-2-3-CAULK	1	↓										

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-____ — (PCB column: –)

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA — (PCB column: BAE)

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ✓ Yes ____ No
Seals Intact ____ Yes ____ No NA: ____
Cooler Temperature: 7.4-4.4 [illegible]

Sampled by : AJT, SCC

Comments: BLDG. MATERIALS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/7/17 1600	GZA FRIDGE	[signature]	8/9/17 1202	[signature]
[signature]	8/9/17 [illegible]	[signature] 8/9/17 1547			

Please E-mail all changes to Chain of Custody in writing.

Page 1 of 1

CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1711115

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:44 pm, Nov 10, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

SAMPLE RECEIPT

The following samples were received on November 03, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1711115-01	PCB-1-4-PAINT-5	Solid	8082A
1711115-02	PCB-1-4-PAINT-6	Solid	8082A
1711115-03	PCB-1-3-PAINT-1	Solid	8082A
1711115-04	PCB-1-3-PAINT-2	Solid	8082A
1711115-05	PCB-1-3-PAINT-3	Solid	8082A
1711115-06	PCB-2-1-PAINT-1	Solid	8082A
1711115-07	PCB-1-B-PAINT-1	Solid	8082A
1711115-08	PCB-1-B-PAINT-2	Solid	8082A
1711115-09	PCB-2-B-PAINT-3	Solid	8082A
1711115-10	PCB-1-4-PAINT-7	Solid	8082A
1711115-11	PCB-1-5-04	Solid	8082A
1711115-12	PCB-1-5-04A	Solid	8082A
1711115-13	PCB-1-5-04B	Solid	8082A
1711115-14	PCB-1-5-05	Solid	8082A
1711115-15	PCB-1-5-06	Solid	8082A
1711115-16	PCB-2-5-07	Solid	8082A
1711115-17	PCB-2-5-08	Solid	8082A
1711115-18	PCB-1-5-09	Solid	8082A
1711115-19	PCB-1-5-10	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1711115-01 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260 [2C]

1711115-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-02 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-03 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260 [2C]

1711115-03 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-05 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-06 **Lower value is used due to matrix interferences (LC).**
Aroclor 1260

1711115-06 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260

1711115-06 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-09 **Lower value is used due to matrix interferences (LC).**
Aroclor 1260

1711115-09 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260

1711115-09 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-10 **Lower value is used due to matrix interferences (LC).**
Aroclor 1260

1711115-10 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260

1711115-10 **Surrogate recovery(ies) diluted below the MRL (SD).**

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1711115

Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711115-13 **Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).**
Decachlorobiphenyl (10% @ 30-150%), Decachlorobiphenyl [2C] (12% @ 30-150%)

1711115-19 **Lower value is used due to matrix interferences (LC).**
Aroclor 1260

1711115-19 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **11/1/2017 through 11/3/2017**
Laboratory Sample ID(s): **1711115-01 through 1711115-19**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes (X) No ( )
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: November 10, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-PAINT-5
Date Sampled: 11/01/17 10:10
Percent Solids: 98
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1221	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1232	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1242	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1248	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1254	**33.2** (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1260 [2C]	**P 19.1** (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1262	ND (5.1)		8082A		50	11/08/17 19:14		CK70610
Aroclor 1268	ND (5.1)		8082A		50	11/08/17 19:14		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-PAINT-6
Date Sampled: 11/01/17 10:20
Percent Solids: 96
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1221	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1232	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1242	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1248	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1254	**68.1** (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1260	**66.5** (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1262	ND (10.4)		8082A		100	11/08/17 19:33		CK70610
Aroclor 1268	ND (10.4)		8082A		100	11/08/17 19:33		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-PAINT-1
Date Sampled: 11/02/17 11:00
Percent Solids: 95
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1221	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1232	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1242	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1248	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1254 [2C]	**66.5** (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1260 [2C]	**P 13.4** (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1262	ND (5.2)		8082A		50	11/08/17 19:52		CK70610
Aroclor 1268	ND (5.2)		8082A		50	11/08/17 19:52		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-PAINT-2
Date Sampled: 11/02/17 11:10
Percent Solids: 90
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1221	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1232	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1242	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1248	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1254	**102** (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1260	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1262	ND (11.1)		8082A		100	11/08/17 20:11		CK70610
Aroclor 1268	ND (11.1)		8082A		100	11/08/17 20:11		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-PAINT-3
Date Sampled: 11/02/17 11:20
Percent Solids: 97
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1221	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1232	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1242	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1248	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1254 [2C]	**32.1** (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1260	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1262	ND (5.2)		8082A		50	11/08/17 20:31		CK70610
Aroclor 1268	ND (5.2)		8082A		50	11/08/17 20:31		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-PAINT-1
Date Sampled: 11/02/17 11:30
Percent Solids: 94
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1221	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1232	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1242	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1248	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1254 [2C]	**50.6** (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1260	**LC, P 13.2** (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1262	ND (5.3)		8082A		50	11/08/17 20:50		CK70610
Aroclor 1268	ND (5.3)		8082A		50	11/08/17 20:50		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-PAINT-1
Date Sampled: 11/03/17 11:50
Percent Solids: 89
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1254 [2C]	**11.8** (1.1)		8082A		10	11/08/17 21:09		CK70610
Aroclor 1260	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/07/17 21:22		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/07/17 21:22		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*115 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*116 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-PAINT-2
Date Sampled: 11/03/17 11:40
Percent Solids: 96
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1221	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1232	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1242	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1248	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1254 [2C]	**58.5** (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1260	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1262	ND (5.1)		8082A		50	11/08/17 21:28		CK70610
Aroclor 1268	ND (5.1)		8082A		50	11/08/17 21:28		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-B-PAINT-3
Date Sampled: 11/03/17 11:30
Percent Solids: 96
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1221	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1232	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1242	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1248	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1254 [2C]	**50.9** (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1260	**LC, P 16.5** (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1262	ND (5.1)		8082A		50	11/08/17 21:47		CK70610
Aroclor 1268	ND (5.1)		8082A		50	11/08/17 21:47		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-PAINT-7
Date Sampled: 11/03/17 11:20
Percent Solids: 95
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1221	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1232	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1242	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1248	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1254 [2C]	**112** (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1260	**LC, P 28.3** (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1262	ND (10.6)		8082A		100	11/08/17 22:06		CK70610
Aroclor 1268	ND (10.6)		8082A		100	11/08/17 22:06		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-04
Date Sampled: 11/01/17 09:59
Percent Solids: 92
Initial Volume: 6.59
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/9/17 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1221	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1232	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1242	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1248	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1254	**2.3** (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1260	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1262	ND (0.2)		8082A		1	11/10/17 9:40		CK70821
Aroclor 1268	ND (0.2)		8082A		1	11/10/17 9:40		CK70821

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*37 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*36 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*73 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-04A
Date Sampled: 11/01/17 10:10
Percent Solids: 93
Initial Volume: 5.66
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/9/17 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1221	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1232	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1242	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1248	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1254	**1.4** (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1260	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1262	ND (0.2)		8082A		1	11/10/17 10:04		CK70821
Aroclor 1268	ND (0.2)		8082A		1	11/10/17 10:04		CK70821

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-04B
Date Sampled: 11/01/17 10:20
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1242	**0.5** (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1254	**1.8** (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1260 [2C]	**0.6** (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/07/17 23:16		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/07/17 23:16		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*10 %*	*SC*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*12 %*	*SC*	*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-05
Date Sampled: 11/01/17 10:50
Percent Solids: 92
Initial Volume: 7.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/8/17 16:25

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1254 [2C]	**0.5** (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 13:06		CK70821
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 13:06		CK70821

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*63 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-06
Date Sampled: 11/01/17 11:00
Percent Solids: 92
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1254	**0.3** (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1260	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/07/17 23:54		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/07/17 23:54		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*45 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*51 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*53 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-5-07
Date Sampled: 11/01/17 11:10
Percent Solids: 92
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 0:13		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 0:13		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*47 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*59 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-5-08
Date Sampled: 11/01/17 11:20
Percent Solids: 93
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 0:32		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 0:32		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*53 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-09
Date Sampled: 11/01/17 11:40
Percent Solids: 100
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 0:51		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 0:51		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*85 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-5-10
Date Sampled: 11/01/17 12:00
Percent Solids: 100
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711115
ESS Laboratory Sample ID: 1711115-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:00

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1260	**LC, P 0.1** (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 1:10		CK70610
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 1:10		CK70610

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*73 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*81 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70610 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0159*		mg/kg wet	*0.02500*		*64*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0204*		mg/kg wet	*0.02500*		*82*	*30-150*			
LCS										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		89	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		70	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		75	40-140			
Surrogate: Decachlorobiphenyl	*0.0176*		mg/kg wet	*0.02500*		*71*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0211*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0229*		mg/kg wet	*0.02500*		*92*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		90	40-140	0.2	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		90	40-140	1	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		74	40-140	5	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		78	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0180*		mg/kg wet	*0.02500*		*72*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0206*		mg/kg wet	*0.02500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Batch CK70821 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70821 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0266*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		87	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140	0.2	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140	0.7	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		86	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1711115

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
SC	Surrogate recovery(ies) outside of criteria. Reextraction/Reanalysis confirms results (SC).
P	Percent difference between primary and confirmation results exceeds 40% (P).
LC	Lower value is used due to matrix interferences (LC).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711115

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1711115
Date Received: 11/3/2017
Project Due Date: 11/10/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	178972	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	178971	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	178970	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	178969	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	178968	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	178967	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	178966	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	178965	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	178964	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	178963	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	178962	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	178961	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	178960	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	178959	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	178958	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	178957	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	178956	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	178955	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	178954	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client:	GZA - Glastonbury CT - GZA/MM	ESS Project ID:	1711115
		Date Received:	11/3/2017
Completed By:		Date & Time:	11/3/17 2140
Reviewed By:		Date & Time:	11/3/17 2233
Delivered By:			11/3/17 2233

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1711115

Reporting Limits -

Turn Time 5 day Standard Rush ____ Approved By: ____

State where samples were collected: MA RI (CT) NH NJ NY ME Other ____

Is this project for any of the following: (please circle) MA-MCP (CT-RCP) RGP Other ____

Electonic Deliverable Yes ____ No ____
Format: Excel X Access ____ PDF X Other ____

GZA Project Manager: DAVID RUSCZYK

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900

REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 05.0045441.06

Project Name: DANIELS MILL

Contract Pricing ____
Special Pricing: ____

Analysis: PCB (Neutral Soxhlet) 8082

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	PCB (Neutral Soxhlet) 8082										Comment #
1	11/1/2017	1010	G	PAINT	PCB-1-4-PAINT-5	1	X										
2	↓	1020			PCB-1-4-PAINT-6												
3	11/2/2017	1100			PCB-1-3-PAINT-1												
4		1110			PCB-1-3-PAINT-2												
5		1120			PCB-1-3-PAINT-3												
6	↓	1130			PCB-2-1-PAINT-1												
7	11/3/2017	1150			PCB-1-8-PAINT-1												
8		1140			PCB-1-8-PAINT-2												
9		1130			PCB-2-8-PAINT-3												
10	↓	1120	↓	↓	PCB-1-4-PAINT-7	↓	↓										

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-____ —
Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA AG
Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter SD

Cooler Present ✓ Yes ____ No
Seals Intact ____ Yes ____ No NA: ____
Cooler Temperature: 0.9 + 1.3 Ice

Sampled by: AJT

Comments: 0.1 ppm detection limit

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	11/3/17	[signature] 11/3/17 1334	[signature] 11/3/17 1756		[signature] 11/3/17 2100
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Please E-mail all changes to Chain of Custody in writing.

Page 1 of 2

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 17115

Turn Time: 5 day Standard Rush _____ Approved By: _____

Reporting Limits -

State where samples were collected: MA RI (CT) NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
MA-MCP (CT-RCP) RGP Other _____

Electonic Deliverable Yes ____ No ____
Format: Excel X Access ___ PDF X Other ____

GZA Project Manager: DAVID RUSCZYK
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 05.0045441.06
Project Name: DANIELS MILL
Contract Pricing ____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCBs (wipes soxhlet)	Comment #
11	11/1/2017	0959	G	wood floor	PCB-1-5-04	1	X	
12		1010			PCB-1-5-04A			
13		1020			PCB-1-5-04B			
~~14~~		~~1040~~			~~PCB-1-5-04C~~			
14/5		1050		WOOD TRUSS	PCB-1-5-05			
15/6	11/2/17	1100		ROOF BOARD	PCB-1-5-06			
16/7		1110		WOOD TRUSS	PCB-2-5-07			
17/8		1120		ROOF BOARD	PCB-2-5-08			
18/9		1140		Plaster	PCB-1-5-09			
19/20		1200		Brick	PCB-1-5-10			

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present Yes ____ No

Seals Intact ____ Yes ____ No NA

Cooler Temperature: 0.9 to 3.1°C

Sampled by: Anthony Trani; Joseph Kief

Comments: 0.1 ppm reporting limit

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Anthony Trani	11/3/17	11/3/17 1330	11/3/17 17:56		11/3/17 2100

Please E-mail all changes to Chain of Custody in writing.

Page 1 of 1

CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1711116

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:45 pm, Nov 10, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

SAMPLE RECEIPT

The following samples were received on November 03, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1711116-01	PCB-1-4-09	Solid	8082A
1711116-02	PCB-1-4-09B	Solid	8082A
1711116-03	PCB-1-4-10	Solid	8082A
1711116-04	PCB-1-4-10B	Solid	8082A
1711116-05	PCB-1-4-11	Solid	8082A
1711116-06	PCB-1-4-12	Solid	8082A
1711116-07	PCB-1-4-13	Solid	8082A
1711116-08	PCB-1-4-14	Solid	8082A
1711116-09	PCB-1-4-15	Solid	8082A
1711116-10	PCB-2-4-16	Solid	8082A
1711116-11	PCB-2-4-17	Solid	8082A
1711116-12	PCB-2-4-18	Solid	8082A
1711116-13	PCB-2-4-19	Solid	8082A
1711116-14	PCB-1-3-14	Solid	8082A
1711116-15	PCB-1-3-14B	Solid	8082A
1711116-16	PCB-1-3-15	Solid	8082A
1711116-17	PCB-1-3-16	Solid	8082A
1711116-18	PCB-1-3-17	Solid	8082A
1711116-19	PCB-1-3-18	Solid	8082A
1711116-20	PCB-1-3-19	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1711116-07 **Percent difference between primary and confirmation results exceeds 40% (P).**
Aroclor 1260 [2C]

1711116-18 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **11/1/2017 through 11/2/2017**
Laboratory Sample ID(s): **1711116-01 through 1711116-20**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes (X) No ( )
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: November 10, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-09
Date Sampled: 11/01/17 12:14
Percent Solids: 86
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1242	**0.9** (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1254	**1.5** (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 2:41		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 2:41		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*74 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*70 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-09B
Date Sampled: 11/01/17 12:30
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1242	**0.6** (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1254	**2.6** (0.5)		8082A		5	11/08/17 23:03		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 2:59		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 2:59		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*62 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-10
Date Sampled: 11/01/17 12:45
Percent Solids: 94
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1242	**0.9** (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1254 [2C]	**5.4** (1.1)		8082A		10	11/08/17 23:22		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 3:18		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 3:18		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-10B
Date Sampled: 11/01/17 13:00
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1242	**0.3** (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1254	**0.5** (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 3:36		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 3:36		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*52 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*46 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-11
Date Sampled: 11/01/17 13:15
Percent Solids: 100
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1254	**0.9** (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 3:55		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 3:55		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*80 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*87 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-12
Date Sampled: 11/01/17 13:30
Percent Solids: 100
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1254	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 4:14		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 4:14		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-13
Date Sampled: 11/01/17 13:45
Percent Solids: 95
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1254	**1.3** (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1260	**0.3** (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 4:32		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 4:32		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*61 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*54 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-14
Date Sampled: 11/01/17 14:00
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1254 [2C]	**1.5** (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1260 [2C]	**1.1** (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 4:51		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 4:51		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*77 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-4-15
Date Sampled: 11/01/17 14:15
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1254	**2.6** (0.5)		8082A		5	11/08/17 23:41		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 5:10		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 5:10		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*63 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-16
Date Sampled: 11/01/17 14:30
Percent Solids: 100
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1254	**0.6** (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 5:28		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 5:28		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*81 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*71 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*76 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-17
Date Sampled: 11/01/17 14:45
Percent Solids: 87
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1254	**0.2** (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 5:47		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 5:47		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-18
Date Sampled: 11/01/17 14:59
Percent Solids: 91
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1254	**0.7** (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 6:05		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 6:05		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*50 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*52 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-4-19
Date Sampled: 11/01/17 15:30
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1254 [2C]	**0.4** (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 6:24		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 6:24		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*37 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*39 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*36 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-14
Date Sampled: 11/02/17 09:00
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1242	**1.0** (0.1)		8082A		1	11/09/17 0:00		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1254	**2.8** (0.5)		8082A		5	11/09/17 0:00		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 6:43		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 6:43		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*63 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*72 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-14B
Date Sampled: 11/02/17 09:15
Percent Solids: 94
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1242	**0.6** (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1254	**1.4** (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 7:01		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 7:01		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*61 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*64 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-15
Date Sampled: 11/02/17 09:30
Percent Solids: 100
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 7:20		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 7:20		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*58 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*57 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-16
Date Sampled: 11/02/17 09:40
Percent Solids: 98
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1254	**0.2** (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 7:39		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 7:39		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*85 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-17
Date Sampled: 11/02/17 09:50
Percent Solids: 93
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1221	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1232	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1242	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1248	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1254 [2C]	**18.4** (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1260	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1262	ND (2.2)		8082A		20	11/09/17 0:19		CK70611
Aroclor 1268	ND (2.2)		8082A		20	11/09/17 0:19		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-18
Date Sampled: 11/02/17 10:00
Percent Solids: 95
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1254 [2C]	**0.6** (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 0:38		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 0:38		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*34 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*41 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*34 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*37 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-3-19
Date Sampled: 11/02/17 10:10
Percent Solids: 93
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711116
ESS Laboratory Sample ID: 1711116-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/6/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1254	**0.5** (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 8:35		CK70611
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 8:35		CK70611

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*82 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*67 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70611 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0217*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0226*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0193*		mg/kg wet	*0.02500*		*77*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0201*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		82	40-140			
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		82	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		78	40-140			
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		77	40-140			
Surrogate: Decachlorobiphenyl	*0.0225*		mg/kg wet	*0.02500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0230*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
LCS Dup										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		87	40-140	6	30	
Aroclor 1016 [2C]	0.4	0.05	mg/kg wet	0.5000		84	40-140	2	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		86	40-140	10	30	
Aroclor 1260 [2C]	0.4	0.05	mg/kg wet	0.5000		82	40-140	7	30	
Surrogate: Decachlorobiphenyl	*0.0231*		mg/kg wet	*0.02500*		*92*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0206*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1711116

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
P	Percent difference between primary and confirmation results exceeds 40% (P).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711116

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1711116
Date Received: 11/3/2017
Project Due Date: 11/10/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	178991	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	178990	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	178989	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	178988	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	178987	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	178986	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	178985	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	178984	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	178983	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	178982	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	178981	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	178980	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	178979	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	178978	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	178977	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	178976	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	178975	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	178974	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	178973	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	178992	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA Glastonbury CT - GZA/MM

ESS Project ID: 1711116

Date Received: 11/3/2017

Completed By: [signature]

Date & Time: 11/3/17 2153

Reviewed By: [signature]

Date & Time: 11/3/17 2227

Delivered By: [signature]

11/3/17 2227

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1711116

Reporting Limits -

Turn Time: 5 day Standard ___ Rush ___ Approved By: ___

State where samples were collected: MA RI (CT) NH NJ NY ME Other ___

Is this project for any of the following: (please circle) MA-MCP (CT-RCP) RGP Other ___

Electonic Deliverable Yes ___ No ___
Format: Excel X Access ___ PDF X Other ___

GZA Project Manager: DAVID RUSCZYK
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project #: 05.0045441.06
Project Name: DANIELS MILL
Contract Pricing ___
Special Pricing: ___

Analysis: PCBs (merged solids) 8082

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	PCBs (merged solids) 8082										Comment #
1	11/1/2017	1214	G	Wood Floor	PCB-1-4-09	1	X										
2	↓	1230	↓	↓	PCB-1-4-09B	↓	↓										
3	↓	1245	↓	↓	PCB-1-4-10	↓	↓										
4	↓	1300	↓	↓	PCB-1-4-10B	↓	↓										
5	↓	1315	↓	Plaster	PCB-1-4-11	↓	↓										
6	↓	1330	↓	Brick	PCB-1-4-12	↓	↓										
7	↓	1345	↓	Wood beam	PCB-1-4-13	↓	↓										
8	↓	1400	↓	Wood ceiling	PCB-1-4-14	↓	↓										
9	↓	1415	↓	Wood post	PCB-1-4-15	↓	↓										
10	↓	1430	↓	Plaster	PCB-2-4-16	↓	↓										

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-___ —
Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA — AG
Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter — SD

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA
Cooler Temperature: 0.1+1.3 Ice

Sampled by: Anthony Tran, Joseph Kiff

Comments: 0.1 ppm Reporting limit

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Anthony Tran	11/3/17	[signature] 11/3/17 13:34	[signature] 11/3/17 17:56		[signature] 11/3/17 2058
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Please E-mail all changes to Chain of Custody in writing.

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 17111116

Turn Time 5 day Standard Rush _____ Approved By: _____

Reporting Limits -

State where samples were collected: MA RI (CT) NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
MA-MCP (CT-RCP) RGP Other _____

Electonic Deliverable Yes ____ No ____
Format: Excel X Access ____ PDF X Other ____

GZA Project Manager: DAVID RUSZYK
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 05.0045441.06
Project Name: DANIELS MILL
Contract Pricing ____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (wipe & solid)											Comment #
11	11/1/2017	1445	G	Brick	PCB-2-4-17	1	X											
12		1459		ceiling wood	PCB-2-4-18													
13		1530		wood beam	PCB-2-4-19													
14	11/2/17	0900		wood floor	PCB-1-3-14													
15		0915			PCB-1-3-14B													
16		0930		plaster	PCB-1-3-15													
17		0940		masonry wall	PCB-1-3-16													
18		0950		wood post	PCB-1-3-17													
19		1000		wood beam	PCB-1-3-18													
20		1010		wood ceiling	PCB-1-3-19													

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA — — AG

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter SD

Cooler Present ✓ Yes ____ No

Seals Intact ____ Yes ____ No NA:

Cooler Temperature: 0.9+1.3 ice

Sampled by : Anthony Trani, Joseph Kiff

Comments: all PCB Reporting Limits

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	11/3/17	[signature] 11/3/17 15:34	[signature] 11/3/17 17:50		[signature] 11/3/17 2055

Please E-mail all changes to Chain of Custody in writing.

Page 3 of 7

2 of 2 11/3/17

CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1711117

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:52 pm, Nov 10, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711117

SAMPLE RECEIPT

The following samples were received on November 03, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1711117-01	PCB-2-2-23	Solid	8082A
1711117-02	PCB-1-2-24	Solid	8082A
1711117-03	PCB-1-2-25	Solid	8082A
1711117-04	PCB-1-2-26	Solid	8082A
1711117-05	PCB-1-2-27	Solid	8082A
1711117-06	PCB-1-2-28	Solid	8082A
1711117-07	PCB-1-2-29	Solid	8082A
1711117-08	PCB-2-1-24	Solid	8082A
1711117-09	PCB-2-1-25	Solid	8082A
1711117-10	PCB-2-1-26	Solid	8082A
1711117-11	PCB-2-1-27	Solid	8082A
1711117-12	PCB-1-1-28	Solid	8082A
1711117-13	PCB-1-1-28B	Solid	8082A
1711117-14	PCB-1-1-29	Solid	8082A
1711117-15	PCB-1-1-30	Solid	8082A
1711117-16	PCB-1-1-31	Solid	8082A
1711117-17	PCB-1-1-32	Solid	8082A
1711117-18	PCB-1-1-33	Solid	8082A
1711117-19	PCB-1-B-34	Solid	8082A
1711117-20	PCB-1-B-35	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1711117

PROJECT NARRATIVE

8082A Polychlorinated Biphenyls (PCB)

1711117-04 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711117-06 **Surrogate recovery(ies) above upper control limit (S+).**
Decachlorobiphenyl (152% @ 30-150%)

1711117-07 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl [2C] (26% @ 30-150%)

1711117-08 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711117-10 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

1711117-13 **Surrogate recovery(ies) below lower control limit (S-).**
Decachlorobiphenyl [2C] (24% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711117

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711117

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **11/2/2017 through 11/3/2017**
Laboratory Sample ID(s): **1711117-01 through 1711117-20**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ( ) No (X)
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes (X) No ( )
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: November 10, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-23
Date Sampled: 11/02/17 12:00
Percent Solids: 91
Initial Volume: 10.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1254	**0.5** (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 16:13		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 16:13		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*38 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*52 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-24
Date Sampled: 11/02/17 12:30
Percent Solids: 90
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1254 [2C]	**4.7** (0.6)		8082A		5	11/09/17 18:08		CK70708
Aroclor 1260 [2C]	**1.5** (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 16:32		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 16:32		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*111 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*33 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*39 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-25
Date Sampled: 11/02/17 12:45
Percent Solids: 93
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1254 [2C]	**8.1** (1.1)		8082A		10	11/10/17 9:22		CK70708
Aroclor 1260 [2C]	**3.6** (1.1)		8082A		10	11/10/17 9:22		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/10/17 11:09		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/10/17 11:09		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*291 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*190 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-26
Date Sampled: 11/02/17 13:00
Percent Solids: 93
Initial Volume: 10.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1221	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1232	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1242	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1248	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1254	**13.8** (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1260	**3.2** (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1262	ND (2.0)		8082A		20	11/10/17 10:05		CK70708
Aroclor 1268	ND (2.0)		8082A		20	11/10/17 10:05		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-27
Date Sampled: 11/02/17 13:15
Percent Solids: 92
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1254	**4.4** (0.5)		8082A		5	11/09/17 19:25		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 19:42		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 19:42		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*56 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-28
Date Sampled: 11/02/17 13:25
Percent Solids: 99
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1254 [2C]	**2.6** (0.5)		8082A		5	11/09/17 21:38		CK70708
Aroclor 1260 [2C]	**1.5** (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 20:01		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 20:01		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*152 %*	*S+*	*30-150*
Surrogate: Decachlorobiphenyl [2C]	*115 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-2-29
Date Sampled: 11/02/17 13:35
Percent Solids: 93
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1254	**0.7** (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/10/17 10:45		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/10/17 10:45		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*39 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*26 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene	*88 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*60 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-24
Date Sampled: 11/02/17 13:45
Percent Solids: 90
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1221	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1232	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1242	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1248	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1254 [2C]	**48.1** (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1260	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1262	ND (5.4)		8082A		50	11/09/17 22:16		CK70708
Aroclor 1268	ND (5.4)		8082A		50	11/09/17 22:16		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-25
Date Sampled: 11/02/17 13:55
Percent Solids: 91
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1254 [2C]	**1.4** (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 20:57		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 20:57		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*55 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*47 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*58 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-26
Date Sampled: 11/02/17 14:05
Percent Solids: 92
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1221	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1232	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1242	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1248	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1254 [2C]	**254** (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1260	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1262	ND (53.8)		8082A		500	11/09/17 22:36		CK70708
Aroclor 1268	ND (53.8)		8082A		500	11/09/17 22:36		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	%	SD	30-150
Surrogate: Decachlorobiphenyl [2C]	%	SD	30-150
Surrogate: Tetrachloro-m-xylene	%	SD	30-150
Surrogate: Tetrachloro-m-xylene [2C]	%	SD	30-150

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-1-27
Date Sampled: 11/02/17 14:15
Percent Solids: 100
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-11
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1254	**0.2** (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 22:55		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 22:55		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*88 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*100 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*94 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-28
Date Sampled: 11/02/17 14:30
Percent Solids: 91
Initial Volume: 10.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-12
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1254 [2C]	**8.6** (1.0)		8082A		10	11/09/17 23:14		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 21:54		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 21:54		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*48 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*35 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*62 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*44 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-28B
Date Sampled: 11/02/17 14:45
Percent Solids: 92
Initial Volume: 10.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-13
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1242 [2C]	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1254	**0.6** (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 22:13		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 22:13		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*36 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*24 %*	*S-*	*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*51 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-29
Date Sampled: 11/02/17 15:00
Percent Solids: 94
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-14
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1254 [2C]	**3.0** (0.5)		8082A		5	11/09/17 23:33		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 22:31		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 22:31		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-30
Date Sampled: 11/02/17 15:15
Percent Solids: 94
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-15
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1254 [2C]	**0.8** (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1260	**0.1** (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 22:50		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 22:50		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*65 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*55 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*68 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*68 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-31
Date Sampled: 11/02/17 15:30
Percent Solids: 92
Initial Volume: 10.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-16
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1254 [2C]	**4.6** (0.5)		8082A		5	11/09/17 23:52		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 23:09		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 23:09		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*65 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-32
Date Sampled: 11/03/17 08:00
Percent Solids: 99
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-17
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1254	**0.5** (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 23:28		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 23:28		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*81 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*84 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*92 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-1-33
Date Sampled: 11/03/17 08:20
Percent Solids: 100
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-18
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 23:47		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 23:47		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*93 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*98 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-34
Date Sampled: 11/03/17 09:00
Percent Solids: 99
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-19
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 0:06		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 0:06		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*86 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-1-B-35
Date Sampled: 11/03/17 09:20
Percent Solids: 98
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711117
ESS Laboratory Sample ID: 1711117-20
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 16:30

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1254 [2C]	**9.3** (1.0)		8082A		10	11/10/17 0:11		CK70708
Aroclor 1260 [2C]	**3.3** (1.0)		8082A		10	11/10/17 0:11		CK70708
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 0:25		CK70708
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 0:25		CK70708

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*119 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*95 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*55 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711117

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70708 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0253*		mg/kg wet	*0.02500*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		97	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		96	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		100	40-140			
Surrogate: Decachlorobiphenyl	*0.0260*		mg/kg wet	*0.02500*		*104*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0258*		mg/kg wet	*0.02500*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0239*		mg/kg wet	*0.02500*		*96*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0238*		mg/kg wet	*0.02500*		*95*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		98	40-140	1	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		101	40-140	3	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		99	40-140	3	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		101	40-140	0.4	30	
Surrogate: Decachlorobiphenyl	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0272*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0236*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill ESS Laboratory Work Order: 1711117

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
S+	Surrogate recovery(ies) above upper control limit (S+).
S-	Surrogate recovery(ies) below lower control limit (S-).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711117

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1711117
Date Received: 11/3/2017
Project Due Date: 11/10/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	179011	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	179010	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	179009	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	179008	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	179007	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	179006	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	179005	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	179004	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	179003	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	179002	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
11	179001	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
12	179000	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
13	178999	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
14	178998	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
15	178997	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
16	178996	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
17	178995	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
18	178994	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
19	178993	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
20	179012	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

ESS Project ID: 1711117
Date Received: 11/3/2017

Completed By: [signature]
Date & Time: 11/3/17 2000 11/3/17 2203

Reviewed By: [signature]
Date & Time: 11/3/17 2230

Delivered By: [signature]
11/3/17 2230

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 1711117

Turn Time: 5 day Standard Rush ____ Approved By: ____

Reporting Limits -

State where samples were collected: MA RI (CT) NH NJ NY ME Other ____

Is this project for any of the following: (please circle) MA-MCP (CT-RCP) RGP Other ____

Electonic Deliverable Yes ___ No ___
Format: Excel X Access ___ PDF ✓ Other ___

GZA Project Manager: DAVID RUSCZYK
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project #: 05.0045441.06
Project Name: DANIELS MILL
Contract Pricing ____
Special Pricing: ____

Analysis: PCB (manual soxhlet) 8082

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	PCB (manual soxhlet) 8082	Comment #
1	11/2/2017	1200	G	wood floor	PCB-2-2-23	1	X	
2	↓	1230	↓	wood beam	PCB-1-2-24	↓	↓	
3	↓	1245	↓	wood ceiling	PCB-1-2-25	↓	↓	
4	↓	1300	↓	waxy paint layer	PCB-1-2-26	↓	↓	
5	↓	1315	↓	Plaster	PCB-1-2-27	↓	↓	
6	↓	1325	↓	Brick	PCB-1-2-28	↓	↓	
7	↓	1335	↓	wood floor	PCB-1-2-29	↓	↓	
8	↓	1345	↓	↓	PCB-2-1-24	↓	↓	
9	↓	1355	↓	wood beam	PCB-2-1-25	↓	↓	
10	↓	1405	↓	wood ceiling	PCB-2-1-26	↓	↓	

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-____ — —
Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA — AG
Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter — SD

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temperature: 0.1+1.3 Ice

Sampled by: Anthony Trani ; Joseph Kief

Comments: 0.1 PPM Reporting limit

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	11/3/17	[signature] 11/3/17 13:34	[signature] 11/3/17 17:56		[signature] 11/3/17 2015
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Please E-mail all changes to Chain of Custody in writing.

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ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-
2211 Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS LAB PROJECT ID: 0117

Turn Time 5 dy Standard Rush _____ Approved By: _____

Reporting Limits -

State where samples were collected: MA RI CT NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other _____

Electonic Deliverable Yes ____ No ____
Format: Excel X Access ____ PDF X Other ____

GZA Project Manager: DAVID RUSZYK

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 05.0045441.06

Project Name: DANIELS MILL

Contract Pricing _____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (wipes SOLID SOIL)											Comment #
11	11/2/2017	1415	G	Brick	PCB-2-1-27	1	X											
12		1430		wood floor	PCB-1-1-28													
13		1445		↓	PCB-1-1-28B													
14		1500		wood beam	PCB-1-1-29													
15		1515		wood ceiling	PCB-1-1-30													
16	↓	1530		wood column	PCB-1-1-31													
17	11/3/2017	0800		plaster	PCB-1-1-32													
18		0820		masonry wall	PCB-1-1-33													
19		0900		masonry foundation	PCB-1-B-34													
20	↓	0920	↓	plaster	PCB-1-B-35	↓	↓											

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____ — 1

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA — AG

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter — SD

Cooler Present ____Yes ____No

Seals Intact ____ Yes ____ No NA: ____

Cooler Temperature: 0.9+1.3 Ice

Sampled by : Anthony Trani, Joseph Icif

Comments: 0.1 ppm reporting limit

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Anth	11/3/17	11/3/17 1354	11/3/17 17:56		11/3/17 20:15

Please E-mail all changes to Chain of Custody in writing.

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CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive Suite 402
Glastonbury, CT 06033

RE: Daniels Mill (05.0045441.06)
ESS Laboratory Work Order Number: 1711141

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:51 pm, Nov 10, 2017

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

SAMPLE RECEIPT

The following samples were received on November 03, 2017 for the analyses specified on the enclosed Chain of Custody Record.

To achieve Reasonable Confidence Protocols (RCP) compliance for Connecticut data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All RCP requirements have been performed and achieved unless noted in the project narrative.

Question 5: **Each method has been set-up in the laboratory to reach required RCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes (ie for GWPC samples, 1,2-Dibromoethane regulatory levels will not be met by VOA 8260. If this is a contaminant of concern Method 8011 will need to be used.). The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.**

Lab Number	Sample Name	Matrix	Analysis
1711141-01	PCB-2-3-20	Solid	8082A
1711141-02	PCB-2-3-21	Solid	8082A
1711141-03	PCB-2-3-22	Solid	8082A
1711141-04	PCB-2-3-22B	Solid	8082A
1711141-05	PCB-2-3-23	Solid	8082A
1711141-06	PCB-2-3-24	Solid	8082A
1711141-07	PCB-2-2-19	Solid	8082A
1711141-08	PCB-2-2-20	Solid	8082A
1711141-09	PCB-2-2-21	Solid	8082A
1711141-10	PCB-2-2-22	Solid	8082A

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

Laboratory Analysis
QA/QC Certification Form

Project Number: **05.0045441.06**
Sampling Date(s): **11/2/2017**
Laboratory Sample ID(s): **1711141-01 through 1711141-10**

List RCP Methods Used	( ) 8260B	( ) 8151A	( ) ETPH	( ) 6010B	( ) 7470A/1A
Other: _____	( ) 8270C	( ) 8081A	( ) VPH	( ) 6020	( ) 9014M
_____	(X) 8082	( ) 8021B	( ) EPH	( ) 7000 S	( ) 7196A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria failing outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	Yes (X) No ( )
1A	Were the method specified preservation and holding time requirements met?	Yes (X) No ( )
1B	***VPH and EPH Methods only:*** Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes ( ) No ( ) N/A (X)
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes (X) No ( )
3	Were samples received at an appropriate temperature (<6º Cº)?	Yes (X) No ( ) N/A ( )
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes (X) No ( )
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes (X) No ( ) Yes (X) No ( )
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes (X) No ( )
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ( ) No (X)

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

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.

Authorized Signature: Laurel Stoddard Position: Laboratory Director

Printed Name: Laurel Stoddard Date: November 10, 2017

Name of Laboratory: ESS Laboratory

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-20
Date Sampled: 11/02/17 10:15
Percent Solids: 96
Initial Volume: 10.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 17:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1254 [2C]	**0.1** (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 15:59		CK70709
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 15:59		CK70709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*102 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*112 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*95 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-21
Date Sampled: 11/02/17 10:20
Percent Solids: 99
Initial Volume: 10.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 17:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1260 [2C]	**0.2** (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 16:18		CK70709
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 16:18		CK70709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*97 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*102 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-22
Date Sampled: 11/02/17 10:25
Percent Solids: 83
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 17:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1254 [2C]	**7.2** (1.2)		8082A		10	11/10/17 3:03		CK70709
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 16:36		CK70709
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 16:36		CK70709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*54 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*49 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*78 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-22B
Date Sampled: 11/02/17 10:30
Percent Solids: 88
Initial Volume: 10.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 17:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1254 [2C]	**2.8** (0.5)		8082A		5	11/10/17 3:22		CK70709
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 16:55		CK70709
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 16:55		CK70709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*68 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*69 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-23
Date Sampled: 11/02/17 10:40
Percent Solids: 93
Initial Volume: 8.86
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-05
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/9/17 15:35

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1221	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1232	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1242	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1248	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1254 [2C]	**0.3** (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1260	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1262	ND (0.1)		8082A		1	11/10/17 12:00		CK70821
Aroclor 1268	ND (0.1)		8082A		1	11/10/17 12:00		CK70821

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*40 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*44 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*43 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*50 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-3-24
Date Sampled: 11/02/17 10:50
Percent Solids: 91
Initial Volume: 10.6
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-06
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/7/17 17:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1221	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1232	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1242	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1248	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1254 [2C]	**3.7** (0.5)		8082A		5	11/10/17 3:41		CK70709
Aroclor 1260	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1262	ND (0.1)		8082A		1	11/08/17 19:24		CK70709
Aroclor 1268	ND (0.1)		8082A		1	11/08/17 19:24		CK70709

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*75 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*74 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-19
Date Sampled: 11/02/17 11:00
Percent Solids: 99
Initial Volume: 10.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-07
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/8/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1254	**0.3** (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 19:29		CK70820
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 19:29		CK70820

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*86 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*96 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-20
Date Sampled: 11/02/17 11:10
Percent Solids: 99
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-08
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/8/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1254 [2C]	**0.7** (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 19:48		CK70820
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 19:48		CK70820

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*100 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*99 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*96 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*101 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-21
Date Sampled: 11/02/17 11:25
Percent Solids: 92
Initial Volume: 10.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-09
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/8/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1254 [2C]	**1.6** (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 20:07		CK70820
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 20:07		CK70820

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*57 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*58 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*59 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*46 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill
Client Sample ID: PCB-2-2-22
Date Sampled: 11/02/17 11:40
Percent Solids: 75
Initial Volume: 10
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1711141
ESS Laboratory Sample ID: 1711141-10
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 11/8/17 16:15

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1221	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1232	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1242	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1248	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1254 [2C]	**2.2** (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1260	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1262	ND (0.1)		8082A		1	11/09/17 20:26		CK70820
Aroclor 1268	ND (0.1)		8082A		1	11/09/17 20:26		CK70820

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*92 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*89 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*90 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*93 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70709 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0266*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0276*		mg/kg wet	*0.02500*		*111*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0218*		mg/kg wet	*0.02500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0249*		mg/kg wet	*0.02500*		*99*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		100	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		101	40-140			
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		103	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0265*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0281*		mg/kg wet	*0.02500*		*112*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0244*		mg/kg wet	*0.02500*		*97*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		105	40-140	4	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		104	40-140	3	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		108	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		103	40-140	4	30	
Surrogate: Decachlorobiphenyl	*0.0273*		mg/kg wet	*0.02500*		*109*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0286*		mg/kg wet	*0.02500*		*115*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0251*		mg/kg wet	*0.02500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Batch CK70820 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70820 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0213*		mg/kg wet	*0.02500*		*85*	*30-150*			
LCS										
Aroclor 1016	0.4	0.05	mg/kg wet	0.5000		86	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		88	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		99	40-140			
Surrogate: Decachlorobiphenyl	*0.0235*		mg/kg wet	*0.02500*		*94*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0256*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0210*		mg/kg wet	*0.02500*		*84*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0223*		mg/kg wet	*0.02500*		*89*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140	5	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		91	40-140	4	30	
Aroclor 1260	0.5	0.05	mg/kg wet	0.5000		92	40-140	4	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		97	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0232*		mg/kg wet	*0.02500*		*93*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0244*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0221*		mg/kg wet	*0.02500*		*88*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Batch CK70821 - 3540C										

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK70821 - 3540C										
Blank										
Aroclor 1016	ND	0.05	mg/kg wet							
Aroclor 1016 [2C]	ND	0.05	mg/kg wet							
Aroclor 1221	ND	0.05	mg/kg wet							
Aroclor 1221 [2C]	ND	0.05	mg/kg wet							
Aroclor 1232	ND	0.05	mg/kg wet							
Aroclor 1232 [2C]	ND	0.05	mg/kg wet							
Aroclor 1242	ND	0.05	mg/kg wet							
Aroclor 1242 [2C]	ND	0.05	mg/kg wet							
Aroclor 1248	ND	0.05	mg/kg wet							
Aroclor 1248 [2C]	ND	0.05	mg/kg wet							
Aroclor 1254	ND	0.05	mg/kg wet							
Aroclor 1254 [2C]	ND	0.05	mg/kg wet							
Aroclor 1260	ND	0.05	mg/kg wet							
Aroclor 1260 [2C]	ND	0.05	mg/kg wet							
Aroclor 1262	ND	0.05	mg/kg wet							
Aroclor 1262 [2C]	ND	0.05	mg/kg wet							
Aroclor 1268	ND	0.05	mg/kg wet							
Aroclor 1268 [2C]	ND	0.05	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0266*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0191*		mg/kg wet	*0.02500*		*76*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0209*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140			
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140			
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		87	40-140			
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		98	40-140			
Surrogate: Decachlorobiphenyl	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0255*		mg/kg wet	*0.02500*		*102*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0207*		mg/kg wet	*0.02500*		*83*	*30-150*			
LCS Dup										
Aroclor 1016	0.5	0.05	mg/kg wet	0.5000		90	40-140	0.2	30	
Aroclor 1016 [2C]	0.5	0.05	mg/kg wet	0.5000		92	40-140	0.7	30	
Aroclor 1260	0.4	0.05	mg/kg wet	0.5000		86	40-140	2	30	
Aroclor 1260 [2C]	0.5	0.05	mg/kg wet	0.5000		96	40-140	2	30	
Surrogate: Decachlorobiphenyl	*0.0216*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0214*		mg/kg wet	*0.02500*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0205*		mg/kg wet	*0.02500*		*82*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

Notes and Definitions

U	Analyte included in the analysis, but not detected
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Daniels Mill

ESS Laboratory Work Order: 1711141

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1711141
Date Received: 11/3/2017
Project Due Date: 11/10/2017
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	179340	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
02	179339	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
03	179338	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
04	179337	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
05	179336	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
06	179335	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
07	179334	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
08	179333	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
09	179332	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
10	179331	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? Yes / No

Completed By: Date & Time: 11/3/17 2209
Reviewed By: Date & Time: 11/3/17 2239
Delivered By: 11/3/17 2239

ESS Laboratory
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CHAIN OF CUSTODY

ESS LAB PROJECT ID: D11141

Turn Time 5 dsy Standard Rush _____ Approved By: _____

Reporting Limits -

State where samples were collected: MA RI CT NH NJ NY ME Other _____

Is this project for any of the following: (please circle)
MA-MCP CT-RCP RGP Other _____

Electonic Deliverable Yes ____ No ____
Format: Excel X Access ___ PDF X Other ____

GZA Project Manager: DAVID RUSCZYK
GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033
(860) 286-8900
REASONABLE CONFIDENCE PROTOCOLS REQUIRED

Project # 05.0045441.06
Project Name: DANIELS MILL
Contract Pricing _____
Special Pricing: _____

ESS Lab Sample ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample Identification	# of Containers	Analysis: PCB (modified SW846 8082)	Comment #
1	11/2/2017	1015	G	Plaster	PCB-2-3-20	1	X	
2		1020		Brick	PCB-2-3-21			
3		1025		Wood floor	PCB-2-3-22			
4		1030		↓	PCB-2-3-22B			
5		1040		Wood beam	PCB-2-3-23			
6		1050		wood ceiling	PCB-2-3-24			
7		1100		Brick	PCB-2-2-19			
8		1110		Plaster	PCB-2-2-20			
9		1125		Wood beam	PCB-2-2-21			
10	↓	1140	↓	wood ceiling	PCB-2-2-22	↓	↓	

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Ascorbic Acid, 8-ZnAce 9-_____ —
Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA AG
Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter SD

Cooler Present ✓ Yes ____ No
Seals Intact ____ Yes ____ No NA: ____
Cooler Temperature: 0.0 + 1.3

Sampled by : Anthony Trani & Joseph Kief

Comments:
0.1 PPM Reporting limits

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Anthony Trani	11/3/17	11/3/17 13:39	11/3/17 17:56		11/3/17 2304

Please E-mail all changes to Chain of Custody in writing.

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