

October 10, 2022

Mr. Eugene H. Watts  
Senior Buyer  
Purchasing Department  
Greenwich Public Schools  
290 Greenwich Avenue  
Greenwich, CT 06830

**Reference: Preliminary Geotechnical Investigation for Central Middle School –  
Greenwich Public Schools, Connecticut**

**Object: Transmission of the Preliminary Geotechnical Investigation Report**

Dear Mr. Watts:

Atane Engineers, P.C. is pleased to submit the report of finding, analysis, and recommendations related to the preliminary geotechnical investigation for the referenced project site. Our work was initiated and conducted in accordance with Contract Supplement 7061-3 CS Soil (22404) dated June 8<sup>th</sup>, 2022, and Contract Supplement 7201-01 CS CMS (22404) dated August 24<sup>th</sup>, 2022.

Should you have any questions or need any additional information, I can be reached at 617-655-4758, or [psousa@ataneconsulting.com](mailto:psousa@ataneconsulting.com). We thank you for the opportunity to assist you on this project and look forward to continuing our successful working relationship with Greenwich Public Schools on future projects.

Sincerely,

*Paul Sousa*  
10-10-22

**Paul G. Sousa, Jr.**  
**Assistant Vice President**  
**Director of Materials – New England Region**  
**ATANE Engineers, Architects and Land Surveyors, P.C.**

OCTOBER 10, 2022

# CENTRAL MIDDLE SCHOOL

## PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT

Prepared for:

**Greenwich Public Schools**  
290 Greenwich Avenue  
Greenwich, CT 06830

Prepared by:



**PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT**  
**Greenwich Public Schools – Central Middle School**  
*9 Indian Rock Lane, Greenwich, CT 06830*

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## **1. INTRODUCTION**

ATANE Engineers, P.C., was retained by the client to perform a preliminary geotechnical investigation to gather initial geotechnical data regarding the possible location for the construction of a new building to locate the Central Middle School of Greenwich Public Schools.

Currently, no specific building layout or location was provided from the client for the construction of the proposed building. The preliminary geotechnical investigation was conducted at the site identified by KGD, the Master Plan Architect, as a possible location to construct the proposed middle school building. Also, it is important to note that the architectural and structural drawings are not yet finalized and are not considered for this preliminary geotechnical investigation.

The main goal of this preliminary geotechnical investigation is to inform the design team and client of the basic geotechnical properties and parameters of the areas under consideration for the construction of the proposed building and to determine whether a specific location warrants the completion of all investigations required to be in accordance with Sections 1803.3 through 1803.5 of the International Building Code (IBC).

## **2. SITE LOCATION**

The location under consideration for the construction of the proposed school building consists of the areas within the property lines that surround the existing Central Middle School building located at 9 Indian Rock Lane, Greenwich, CT 06830 (see Site Location Map in Appendix 1). The buildings main access is located on Indian Rock Lane. However, pedestrians can access the athletic field from the North using Orchard Street. The site is situated in the Residential Zone R-12 as per the “*Town of Greenwich, Connecticut, Building Zone Regulations Map, Rev. January 31, 2022*”.

## **3. SCOPE OF SERVICES**

This report presents the findings regarding the preliminary geotechnical investigation performed as required and in accordance with our scope of work, which consists of the following:

- a) Geotechnical surface reconnaissance:
  - Identification of the type of soil
  - The strength and density of the soil
  - Identification of any organic material or contamination present
  - Recording of any shallow groundwater or perched water table encountered
- b) Limited subsurface exploration using soil borings and test pits,
- c) Representative soil samples collection,
- d) Laboratory testing including chemical testing,
- e) Analysis of the field and laboratory data, and
- f) A review of available geologic literature.

Limited soil borings and test pits were to be performed at specific locations to evaluate the geotechnical conditions beneath the proposed site for implantation of eventual shallow foundations.



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Currently, a deep pile foundation system is not under consideration for support of the proposed structures.

### **3.1. Exclusions**

The executed scope of work and the associated cost do not include services not specifically listed in the Contract including the following:

- a) Preparation of drawings or specifications,
- b) Design services,
- c) Any additional borings or permeability tests, if and as warranted or required,
- d) Any pavement cores, temporary or permanent wells, additional test pits, if and as warranted or required,
- e) Site specific seismic evaluation,
- f) Review of shop drawings or Request for Information (RFIs), and
- g) Construction oversight or inspection services.

## **4. GEOTECHNICAL INVESTIGATION**

As part of this preliminary geotechnical investigation, twelve (12) Test Pits were excavated to a maximum depth of twelve (12) feet below ground surface (BGS) and fifteen (15) Boreholes were drilled to a maximum depth of sixteen (16) BGS were performed in the Athletic Field on the North side of the existing school building, and five (5) more Boreholes were completed in the South and Southwest sides of the existing school building.

All borings were drilled using a 4-1/4 inch hollow stem auger to advance and maintain the hole. Soil samples were collected using a 1-3/8 inch split-barrel sampler (SS) driven by a 140 pound hammer falling 30 inch for each hammer blow. The number of blows for each 6-inch increment was recorded, in accordance with procedures outlined in ASTM D1586, Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils. An experienced geologist from SOILTESTING, INC. performed the classification of the soil samples. Most borings were sampled continuously from a depth of four (4) feet BGS to the depth of completion of the boring, except where large boulders or bedrock were encountered. The groundwater level BGS was recorded when encountered in each exploration.

Also, samples were collected at twelve (12) different locations for chemical testing (see Boring, Test Pit, and Sampling Location Plan in Appendix 2). Five of these twelve samples collected from Test Pit Locations were marked TP-SL-01 through TP-SL-05 and the remaining seven samples collected from Boreholes locations were marked B-SL-01 through B-SL-07. Additionally, other soil samples were collected for each type of soil encountered at potential shallow foundation depths (4 to 6 feet BGS) to identify geotechnical properties. The samples for identification of geotechnical properties were collected at the locations indicated below.

- a. For moisture content, grain size analyses and specific gravity testing; samples were collected from the following locations: TP-1, TP-2, TP-3, TP-4, TP-5, TP-9, TP-12 and from B-17, B-18 and B-19 for a composite sample.

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- b. For Atterberg limits (plasticity indices) related to the clay materials encountered, samples were selected from the following locations: TP-8 and TP-9

Furthermore, all possible efforts were made to gather available pertinent data susceptible to help develop a broad understanding of the prevalent surface and subsurface materials in the vicinity of the existing school building. Among others, the following documents were reviewed:

- **Bedrock Geological Map of Connecticut** (1:125,000 scale), published in 1985 on behalf of the Connecticut Geological and Natural History Survey of the Connecticut Department of Environmental Protection, in Cooperation with the U.S. Geological Survey.
- **Generalized Bedrock Geologic Map of Connecticut**, published in 1990, reprinted 1996, revised 2013, Connecticut Geological Survey, Department of Energy and Environmental Protection.
- **Connecticut Quaternary Geology Long Island Sound End Moraine Deposits**, published in 2005, by Janet Radway Stone, John P. Schafer, Elizabeth Haley London, Mary L. DiGiacomo-Cohen, Ralph S. Lewis, and Woodrow B. Thompson on behalf of U.S. Geological Survey, State of Connecticut, Department of Environmental Protection, Geological and Natural History Survey
- **Superficial Materials Map of Connecticut**, published in 1992, by Janet Radway Stone, John P. Schafer, Elizabeth Haley London, and Woodrow B. Thompson, prepared in cooperation with the State of Connecticut, Department of Environmental Protection, Geological and Natural History Survey.
- **The Geology of Greenwich, Connecticut** (Reed A. Schwimmer), published in 1987 by The Greenwich Conservation Commission, Greenwich, Connecticut.
- **Building Zone Regulations Map** (1:2,000 scale), zoning district boundaries in the Town of Greenwich Building Zone Regulations as of December 31, 2002, revised January 31, 2022, Town of Greenwich, Connecticut
- **Connecticut's 2010 Natural Hazard Mitigation Plan Update**, published in December 2010, Prepared by the Department of Environmental Protection, Inland Water Resources Division, Bureau of Water Protection and Land Reuse, with Assistance from The Connecticut Department of Emergency Management and Homeland Security.
- **Natural Hazard Mitigation Plan, 2016-2021 Update for the South Western Region**, published in February 2016, prepared by the Western Connecticut Council of Governments (WCCOG).
- **Water-Resources Investigations Report 03-4300**, published in 2004, by John R. Mullaney, in cooperation with the town of Greenwich, Connecticut, U.S. Department of the Interior, U.S. Geological Survey.
- **Historical aerials from Connecticut Environmental Conditions Online (CT ECO)** covering the years: 1934, 1990, 1996, 2004, 2005, 2006, 2008, 2012, 2010, 2014, 2016, 2017, 2018, and 2019
- **Preliminary Environmental Investigation at Central Middle School, Greenwich, Connecticut**, MMI #5062-10-02, prepare in July 2019 by Milone & Macbroom, Inc.

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## **5. GEOTECHNICAL CONDITIONS**

### **5.1. Geology**

As identified in the Bedrock Geologic Map of Connecticut (1985) by John Rodgers, the Central Middle School site is situated in the Iapetos (Oceanic) Terrane – Connecticut Valley Synclinorium. The Harrison Gneiss (interlayered dark-and light-gray, medium grain, foliated gneiss) is the dominant rock in the areas surrounding the existing building. As per the Bedrock Geologic Map of Connecticut (1985), foliation of bedrock typically strikes N-NE and dips west at 34 to 82 degrees. Apart from the Cameron's fault line on the Northeast of Greenwich, a High-Angle Fault (mostly Jurassic) is located in the vicinity of the site on the West side.

Based on their geographic coordinates and available geologic information collected, the superficial soil in areas surrounding the Central Middle School building can be assessed as glacial ice-laid deposits (tills) which consist of non-sorted, generally non-stratified mixtures of grain-sizes ranging from clay to large boulders. The matrix is composed dominantly of sand and silt.

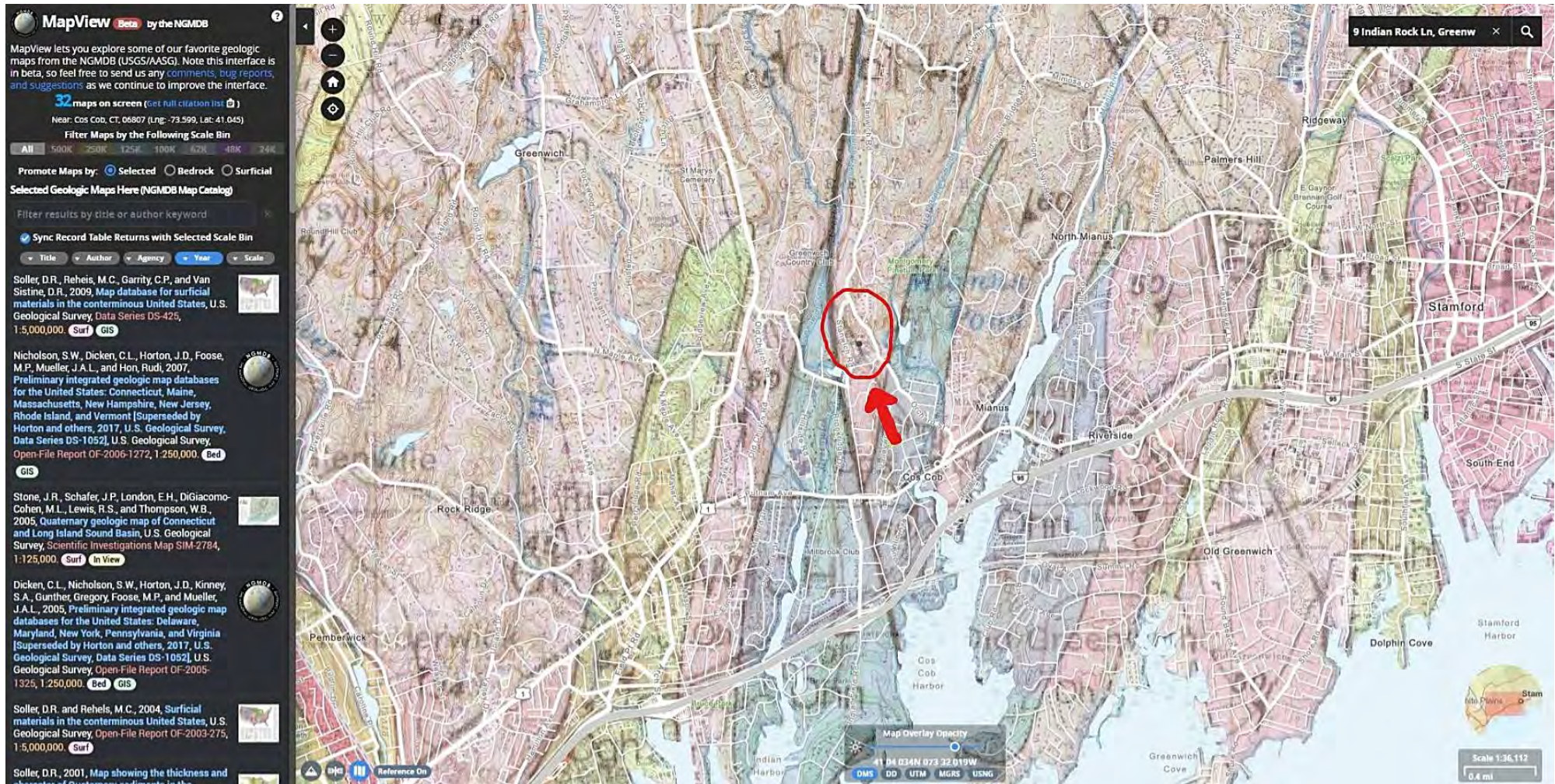
As described in the “*Superficial Materials Map of Connecticut (1992)*” by Janet Radway Stone, John P. Schafer, Elizabeth Haley London, and Woodrow B. Thompson, the thickness of superficial materials in Connecticut varies considerably because of such factors as the high relief of the bedrock surface, changing conditions of deposition during deglaciation, and various effects of postglacial erosion and removal of glacial sediments. Glacial ice-laid deposits (tills) in Connecticut are grouped into upper till and lower till. The matrix of most tills is composed dominantly of sand and silt. The most extensive till is commonly observed in surface exposures. It is described as thin till in areas where till is generally less than 10 to 15 feet thick and including areas of bedrock outcrop where till is absent. It consists predominantly of upper till which is loose to moderate compact, generally sandy, commonly stony. The lower till (thick till) is generally overlain by upper till. Lower till does constitute the bulk of material in the areas where till thickness is greater than 15 feet. It has a patchier distribution and is principally a subsurface deposit. Lower till is moderately to very compact and is commonly finer-grained and less stony than upper till.

The Water-Resources Investigations Report 03-4300 By John R. Mullaney records that two types of aquifers are present in the Greenwich area: (1) aquifers in surficial deposits; and (2) aquifers in the fractured crystalline bedrock. Report 03-4300 furthermore points out that “*The stream-drainage network apparently is strongly controlled by the underlying rock structure, and many streams are parallel to the strike of the foliation*”.

No landslide, rockfall or debris flow were identified at the site during the preliminary investigation.



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Central Middle School at 9 Indian Rock Ln, Greenwich, CT  
Near: Cos Cob, CT, 06807 (Lng: -73.599, Lat: 41.045)  
Extract from: MapView Beta by the NGMDB

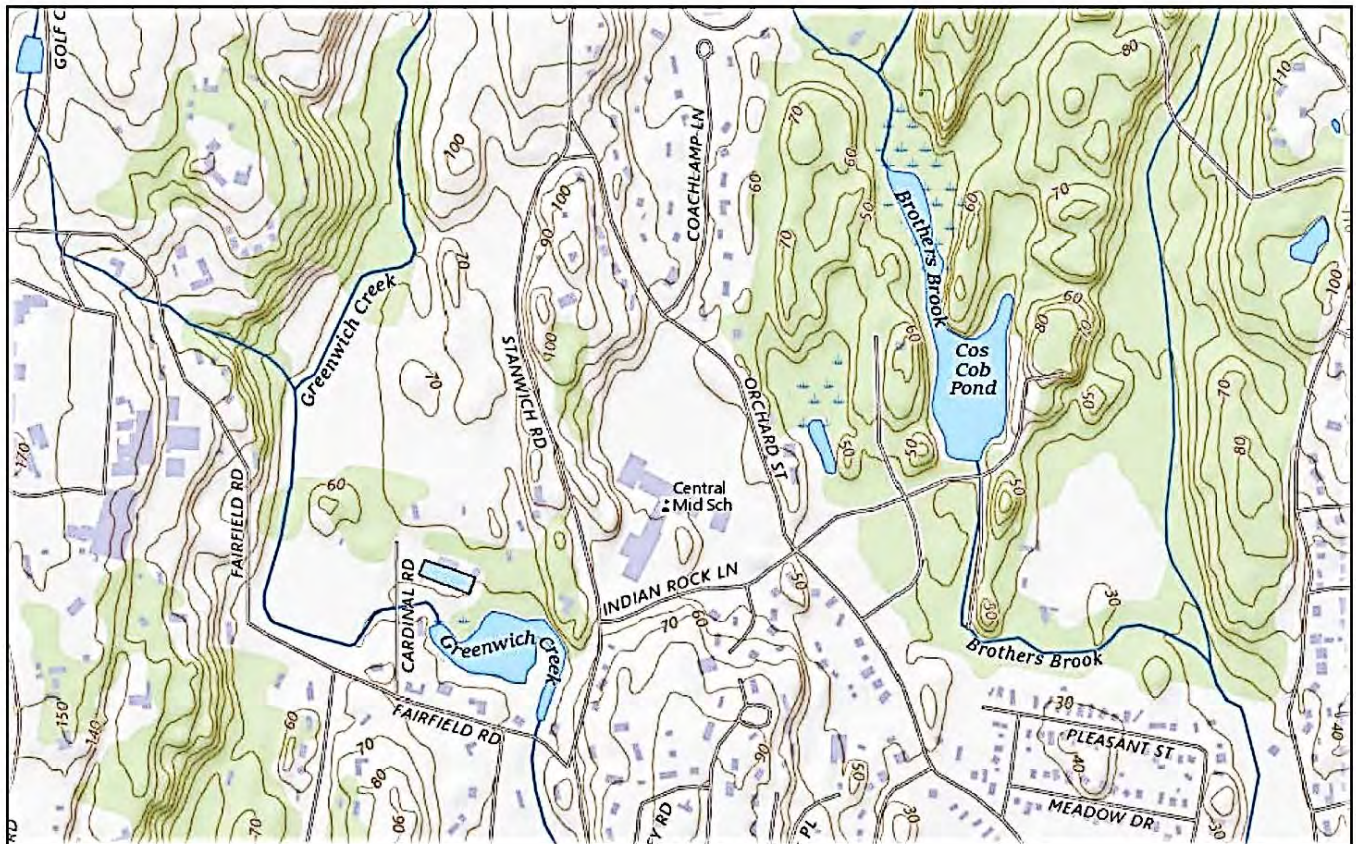


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## **5.2. Surface Conditions**

The areas surrounding the existing Central Middle School Building can be sorted in four main subareas consisting of: (1) the flat Athletic field, North of the existing Building; (2) the parking areas in the Southwest and the Southeast including an outcrop next to the building on the Southeast; (3) a hillock on the West side with some outcrops in the periphery of the property; and (4) a hillock located East including the existing tennis court and some outcrops in the periphery of the property as well. The subareas 3 and 4 are relatively wooded.

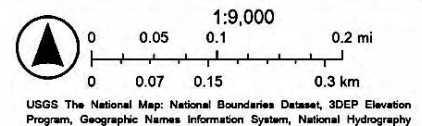


8/31/2022

### **Central Middle School**

9, Indian Rock Lane, Greenwich, CT 06830

Map Source: USGS The National Map



Based on data from “USGS The National Map”, the athletic field on the North side of the existing school building has an average elevation of about 50 feet. The parking locations on the South of the building have an average elevation of about 60 feet with an outcrop on the Southeast of the existing school building. In general, the ground surface elevation increases when moving away from the existing building on the East and West sides of the property. Outcrops were noted as well on the East and West sides of the property.



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**Outcrop on the  
Southeast of the  
existing school  
building**



**Outcrop on the West  
side of the existing  
school building**



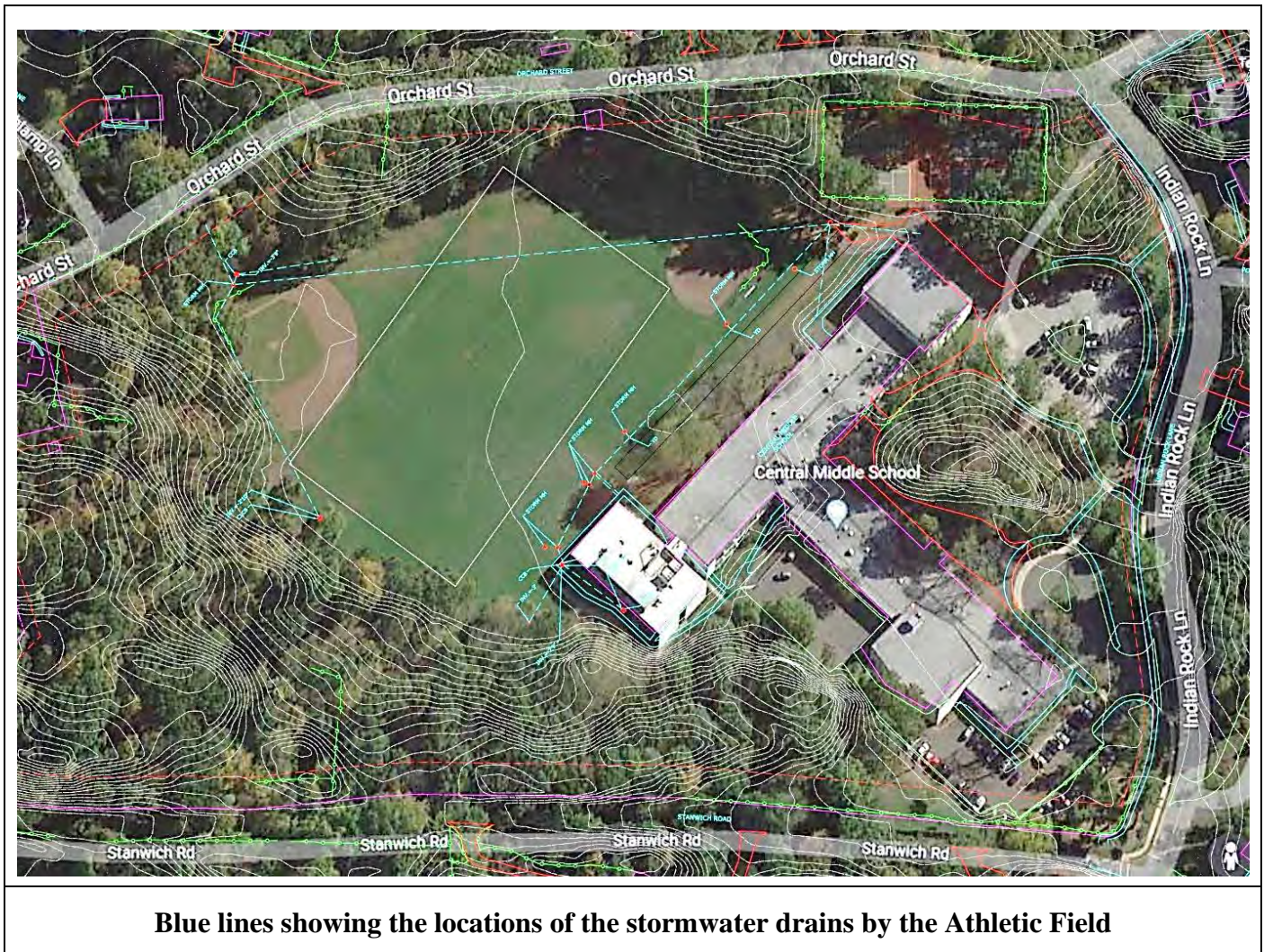
**Outcrop on the East  
side of the existing  
school building**



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Some stormwater drains were identified in the Athletic Field as shown in the drawing provided by the client. These stormwater drains are shown in the figure below using a Google Map background.



The Athletic Field is relatively depressed below the surrounding areas which makes it prone to flooding in the event of heavy and prolonged storms. The area is of minimal flood hazard as per the FEMA National Flood Hazard Layer FIRMette (see Appendix 3).

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### **5.3. Subsurface Conditions**

The soils encountered beneath this site are largely consistent with the published geologic descriptions of thin till generally less than 10 to 15 feet thick and including areas of bedrock outcrop where till is absent. It consists predominantly of moderate compact mixture of gray and brown sand, silt, and gravel with inclusion of cobbles and boulders. Trace of organic matter and trace of clay were encountered as well.

**In subarea (1)** around the middle of the flat Athletic field on the North side of the existing school building, mostly dense dry and dense wet granular soils were encountered in boreholes B-02, B-03, B-04, B-05, B-06, and B-08 below the topsoil layer of the athletic field. Trace of cobbles and trace boulders were noted. These boreholes generally ended at 14 feet to 16 feet BGS. Ground water table was measured at 9 feet BGS in B-02, 10 feet BGS in B-03, 7 feet BGS in B-04, 8 feet BGS in B-05 & B-06, 10 feet BGS in B-08. The soils above a depth of 4 feet to 6 feet could be described as possible fill. The information collected using Test Pits performed in the athletic field is consistent with these findings (see APPENDIX 4: Test Pit Logs and APPENDIX 5: Boring Logs). Standard penetration test N-values were typically around 30 blows per foot (bpf) on average. N-Values greater than 50 blows per foot generally indicated the presence of cobbles and boulders. However, Boreholes B-04 and B-08 in the middle of the athletic field exhibited some layers with N-Values between 6 and 15 blows per foot at depth greater than 9 feet BGS. This can be correlated with the presence clay of low to medium plasticity, debris, and organics identified in the Test Pits TP-05, TP-08, and TP-09 located in the vicinity of Boreholes B-04 and B-08.

**In subarea (2)** by the parking areas in the Southwest and the Southeast of the existing school building, mostly brown and gray mixtures of sand, silt, and gravel were encountered in boreholes B-15, B-16, B-17, and B-18. No Test Pits was performed in this subarea with auger refusal in large boulders of bedrock. Trace of asphalt was noted in the top layers. The boreholes in subarea (2) generally ended at 8 feet to 14 feet BGS. Auger refusal was noted at 9 feet BGS in B-15 with no ground water observation. Partly weathered bedrock was noted at 12 feet BGS for B-16 with no ground water observation. Auger refusal was noted at 8 feet BGS for B-17 with no ground water observation. However, B-18 ended at nearly 14 feet BGS with ground water table observed at 9 feet BGS. Trace of organics along with cobbles (possible fill materials) were noted in B-18. Standard penetration test N-values were typically above 30 blows per foot on average for B-15 and B-16. On the Southeast side, N-values were typically about 7 blows per foot for B-15 upper soil layers, and between 12 and 27 blows per foot for B-16 upper soil layers.

**In subarea (3)** by the hillock on the West side with some outcrops in the periphery of the property, mostly brown mixtures of sand, silt, and gravel were encountered with trace of cobbles and boulders in boreholes B-09, B-10, B-11, B-12, B-13, and B-14. No ground water was observed in these boreholes. The boreholes in subarea (3) generally ended with auger refusal at 7 feet to 12 feet BGS in large boulders of bedrock. Standard penetration test N-values



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were typically around 50 blows per foot on average at 8 feet or more BGS. N-Values recorded for the upper soil layers were between 20 to 30 blows per foot.

**In subarea (4)** by the hillock on the East side and some outcrops in the periphery of the property, mostly brown mixtures of sand, silt, and gravel were encountered with trace of cobbles and boulders in boreholes B-01, B-07, B-19, and B-20. Ground water table was observed at 7 feet BGS in B-01 and at 8 feet BGS in B-07. No ground water table was observed in B-19 and B-20. Bedrock refusal was noted at about 10.5 feet BGS in B-01. Refusal was noted at about 11.5 feet in B-07. Spoon refusal was noted at about 7.5 feet BGS in B-19. Auger refusal in bedrock was noted at 3 feet BGS in B-20. Standard penetration test N-values were typically above 30 blows per foot on average for the upper soil layers.

The individual boring logs containing specific information at each boring location are included in APPENDIX 5: Boring Logs.

#### **5.4. Groundwater**

The following table summarize the observed groundwater conditions from information collected during the explorations of the boreholes and test pits. The depth below ground surface provided represents the value measured when the anticipated water table was first encountered. Given the distribution of the different sizes of individual particles within the in-situ soils, and considering the relative consistency in readings, we expect these ground water table surface readings to properly represent stable groundwater conditions, and not perched conditions.

The approximative ground surface elevation is based on the “USGS The National Map”. If more accurate elevation data are needed, the service of a third-party surveyor should be engaged by the owner. Ground water monitoring wells and soil permeability evaluation are not included in the scope of this preliminary geotechnical investigation.

Table 1 – Measured Groundwater Table

Location: Borehole or Test Pit No.	Approximate Ground Surface Elevation (feet)	Groundwater Table Depth BGS (feet)	Date Measured	Notes
B-01	±50	7	08/23/2022	
B-02	±50	9	08/23/2022	
B-03	±50	10	08/23/2022	
B-04	±50	7	08/23/2022	
B-05	±50	8	08/23/2022	
B-06	±50	8	08/23/2022	
B-07	±50	8	08/24/2022	

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Location: Borehole or Test Pit No.	Approximate Ground Surface Elevation (feet)	Groundwater Table Depth BGS (feet)	Date Measured	Notes
B-08	±50	10	08/24/2022	
B-09	±50	-	08/24/2022	No ground water observation
B-10	±50	-	08/24/2022	No ground water observation
B-11	±60	-	08/24/2022	No ground water observation
B-12	±50	-	08/24/2022	No ground water observation
B-13	±50	-	09/03/2022	No ground water observation
B-14	±60	-	08/25/2022	No ground water observation
B-15	±60	-	08/25/2022	No ground water observation
B-16	±60	-	08/25/2022	No ground water observation
B-17	±60	-	09/03/2022	No ground water observation
B-18	±60	9	09/03/2022	
B-19	±50	-	09/03/2022	No ground water observation
B-20	±50	-	09/03/2022	No ground water observation
TP-01	±50	6.5	08/12/2022	
TP-02	±50	6.5	08/12/2022	
TP-03	±50	7	08/12/2022	
TP-04	±50	8	08/12/2022	
TP-05	±50	6.2	08/12/2022	
TP-06	±50	7.5	08/12/2022	
TP-07	±50	9.5	08/12/2022	
TP-08	±50	9	08/12/2022	
TP-09	±50	8.5	08/12/2022	
TP-10	±50	-	08/12/2022	No ground water observation
TP-11	±50	9	08/12/2022	
TP-12	±50	-	08/12/2022	No ground water observation

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Preliminary interpreted groundwater table elevations for design would require additional investigation not part of this preliminary investigation to identify the following information:

- Direction and gradient of groundwater, artesian conditions, and confined aquifers
- Eventual perched water tables
- Potentially significant seasonal variations
- Observed influences on the groundwater table
- Other features related to groundwater, streams, springs, seeps.

### **5.5. Seismic Hazards**

The determination of the Seismic Design Category (SDC) involves the following three parameters: geographic location, underlying soils, and building use or occupancy category. Seismic hazard assessment is not included in the contract scope for this preliminary geotechnical investigation.

### **5.6. Site Seismic Parameters**

The evaluation of the following site seismic parameters may be needed in relation with the SDC.

- Geospatial information (latitude/longitude in decimal degrees) of representative location(s) where VS30 values are evaluated.
- The time-averaged shear-wave velocity (VS30) for the top 30 m of the earth materials, and how it was determined (e.g., CPT or SPT correlations, Seismic CPT, and geophysical methods).

However, evaluation of site seismic parameters is not included in the contract scope for this preliminary geotechnical investigation.

### **5.7. Ground Motion Parameters**

The evaluation of the following ground motion parameters may be needed in relation with the SDC.

- Design Horizontal Peak Ground Acceleration (HPGA),
- Mean earthquake moment magnitude (M), and
- Mean site to fault source distance (R) based on procedures described in Design Acceleration Response Spectrum

However, evaluation of ground motion parameters is not included in the contract scope for this preliminary geotechnical investigation.

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**5.8. Identification of contamination present**

The chemical testing data are summarized in the following table. See APPENDIX 6 for Laboratory Test Results – Chemical Test Results

Table 2 – Chemical testing data summary

Parameter	Comments
Dibromotoluene-FID for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Potential high bias
CT RCP Volatile Organics for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not detected (ND) at the reporting limit (RL) for the sample
CT RCP PAHs for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not detected (ND) at the reporting limit (RL) for the sample
CT RCP Semivolatile Organics for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Within the percentage recovery limits
Gasoline Range Organics for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not detected (ND) at the reporting limit (RL) for the sample
Diesel Range Organics for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not detected (ND) at the reporting limit (RL) for the sample
Volatile Petroleum Hydrocarbons for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not detected (ND) at the reporting limit (RL) for the sample
Extractable Petroleum Hydrocarbons for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05 except for samples B-SL-04, B-SL-06, TP-SL-03	Not detected (ND) at the reporting limit (RL) for the sample
CT RCP Total Metals - Associated samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Within the percentage recovery limits
Ignitability of Solids for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Not ignitable (NI)
<i>pH</i> for samples B-SL-01 through B-SL -06 and samples TP-SL-01 through TP-SL-05	Between 5.9 and 8.4

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**5.9. Strength and density of the soil**

Initial value of the compressive strength of the cohesive soil and modulus of elasticity of granular soil ( $E_s$ ) can be approximated based on the Standard Penetration Test N-Values data collected during Boreholes explorations. However, a given soil does not have a unique bearing capacity; the bearing capacity is a function of the footing shape, depth, and width as well as load eccentricity.

As described in Table 4-1 of the Manual on Subsurface Investigations (Publication No. FHWA NHI-01-031, July 2001), for the coarse-grained soils with a standard penetration test N-values around 30 blows per foot, the coarse-grain soils can be described as firm to dense with a relative density of about 70%. Based on the boring logs, this is representative of most of the soil layers located at 6 to 7 feet BGS, with exception in boreholes B-14 and B-18. Using the Peck, Hanson, and Thornburn (1974) correlation, the average pick friction angle,  $\phi'$ (deg), can be approximated to roughly 36 degrees. Based on a first order estimation given by Kulhawy and Mayne (1990), the modulus of elasticity of the granular soils ( $E_s$ ) is found to be approximately between 10,000 and 18,000 kPa for depth around 6 feet BGS. Also, based on the 2021 IBC Table 1806.2, the presumptive load-bearing values can be approximated between 95 and 140 kPa.

Similarly, as described in Table 4-2 of the Manual on Subsurface Investigations (Publication No. FHWA NHI-01-031, July 2001), for the fine-grained soils with a standard penetration test N-values around 6 and 10 blows per foot, the fine-grained soils can be described as firm to stiff with an unconfined compressive strength between 50 and 125 kPa. Based on the boring logs, this is representative of soil layers located at 10 to 12 feet BGS in borehole B-04 and at 9 to 11 feet BGS in borehole B-08.

Coarse-grained soils have high permeability which typically leads to immediate settlements. However, long term settlements can occur due to submergence, change in water level, blasting, machine vibration or earthquake loading. For the samples collected at depth ranging from 4 feet to 6 feet BGS, the average specific gravity was 2.674 and the natural moisture content was found to be between 4% and 6%. Since the sieve analysis revealed that more than 10 percent of the soil particles pass a No.200 sieve (75  $\mu$ m) for samples collected in boreholes B-17, B-18 and B-19 and in Test Pits TP-01, TP-08, TP-09 and TP-12, it is likely to have expansive soil on the North and East side portions of the athletic field in subarea (1) and on the Southeast side of the existing school building in subarea (2). However, the values of 2.8 and 3.4 obtained for the plasticity index (PI) of the soil samples tested for TP-08 and TP-09 are indicative of low expansion potential. Hence, additional geotechnical investigations will be required in accordance with the 2021 IBC Section 1803.5.3 in case portion of the footprint of the proposed new building would have to be situated in said areas.

Also, fine-grained soils have very low permeability. The underlying silty clay soils layers in the vicinity of boreholes B-04 and B-08 on the North and East side portions of the athletic field in subarea (1) will require additional investigations to determine the magnitude and duration of settlement to be expected in said area.

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As the range of applied loads for consolidation testing should cover the smallest and largest effective stresses anticipated in the field and will depend on depth, foundation loads, and excavations, additional investigations based on design information are needed to perform consolidation testing. Indeed, performance of consolidation tests can provide additional data that will be needed by the design engineer to estimate the magnitude and rate of both differential and total settlement if the decision was to be made to locate portion of the footprint of the proposed new school building structure or earthfill by the location of Test Pits TP-05, TP-08, and TP-09 and Boreholes B-04 and B-08 in the North and East side portions of the athletic field in subarea (1).

## **6. RECOMMENDATIONS**

All soils and foundation work shall comply with the Chapter 18 of the 2022 Connecticut State Building Code and of the 2021 International Building Code (IBC). Additional studies shall be made as recommended to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness in accordance with the requirements of the 2021 IBC.

### **6.1. Recommendations for frost protection**

As per the 2022 Connecticut State Building Code Section (Amd) 1809.5, except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1) Extending a minimum of 42 inches (1067 mm) below finished grade;
- 2) Constructing in accordance with ASCE 32; or
- 3) Erecting on solid rock.

Shallow foundations shall not bear or be installed on frozen soil.

### **6.2. Recommendations for excavation and controlled fill**

The depth and slope of excavation and ground water conditions control the overall stability of open excavations. One of the main concerns would be the fluctuation of the ground water level, specifically ground water lowering. It is not yet known how the ground water table will fluctuate over time. Dewatering may be required during excavations if portions of the existing athletic field will be included in the footprint of the proposed new building. Additional investigation including permeability testing and ground water monitoring wells would be warranted.

In general, we recommend installing drainage to keep the depth of the water table  $d_w > D$  (depth of footing). Shoring should be provided for excavation depth of 5 feet or greater unless the excavation is made entirely in stable rock.

The effects of excavation on adjacent structures should be evaluated by the design engineer to determine whether existing buildings in the vicinity are protected.



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**6.2.1. Excavation Difficulties**

Cobbles and boulders encountered in subarea (1) – the flat Athletic field on the North side of the existing Building – will likely present excavation difficulties. Excavation difficulties will be particularly affected by the anticipated excavation size and depth. The speed and ease of excavation will depend on the type of equipment used and the skill of the operator.

The same level of difficulties is to be expected for the upper layers of soil in the remaining subareas (2), (3), and (4). In addition, the presence of the bedrock at shallow depth (3 to 7 feet BGS) may require additional heavier equipment.

**6.2.2. Excavation near foundations**

In accordance with 2021 IBC Section 1803.5.7, where excavations will reduce support from any foundation, a registered design professional shall prepare an assessment of the structure and shall determine the requirements for support and protection of any existing foundation and prepare site-specific plans, details and sequence of work for submission. Such support shall be provided by underpinning, bracing, excavation retention systems, or by other means acceptable to the local building official.

**6.2.3. Surface Preparation/Proofrolling**

In general, large size particles interfere with compaction of the finer soil fraction. It is recommended that the maximum cobble size should not exceed 3 inches or 50 percent of the compacted layer thickness.

All organics and any other deleterious material should be stripped and removed from the surface. All subsurface structures or debris which will interfere with the compaction of the area to be prepared should be removed. The soil should be scarified as needed and brought to optimum moisture content. Before performing fill placement, the newly exposed soil surface should be compacted to a firm and unyielding surface with several passes in two perpendicular directions. Additional investigations based on design information is needed to determine the minimum vibratory compactor needed to meet the requirements of the specifications.

**6.2.4. Compacted fill material**

As per 2021 IBC Section 1803.5.8, where shallow foundations will bear on compacted fill material more than 12 inches (305 mm) in depth, a geotechnical investigation shall be conducted and shall include Specifications for the preparation of the site prior to placement of compacted fill material, specifications for said fill material, the various test methods to be used and their frequency, maximum allowable thickness of each lift of compacted fill material, and the minimum acceptable in-place dry density. Additional investigations based on design information is needed regarding the proposed new building (such as loads, type and shape of proposed foundation system, etc.) to meet the requirements of the specifications.

**PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT**  
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**6.3. Recommendations for further investigations to be performed**

As per 2021 IBC Section 1803.6, where geotechnical investigations are required, a written report of the investigations shall be submitted to the building official by the permit applicant at the time of permit application. Among other requirements, the geotechnical report shall include bearing capacity of natural or compacted soil, expected total and differential settlement, effects of any adjacent loads, provisions to mitigate the effects of expansive soils, mitigation of the effects of liquefaction, differential settlement, and varying soil strength.

**6.3.1. Ground-water table**

According to 2021 IBC Section 1803.5.4 Ground-water table, “A subsurface soil investigation shall be performed to determine whether the existing ground-water table is above or within 5 feet (1524 mm) below the elevation of the lowest floor level where such floor is located below the finished ground level adjacent to the foundation.” However, such subsurface soil investigation shall not be required where waterproofing is provided in accordance with Section 1805. Hence, unless the decision is made to provide waterproofing, ground water monitoring wells are recommended for estimation of the degree of fluctuation of the groundwater table elevations for design that would require the identification of the following information:

- Direction and gradient of groundwater, artesian conditions, and confined aquifers
- Eventual perched water tables
- Potentially significant seasonal variations
- Observed influences on the groundwater table
- Other features related to groundwater such as streams, springs, seeps.

**6.3.2. Seismic hazard assessment and design wind speed**

Preliminary seismic hazard assessment is not included in the contract scope for this preliminary geotechnical investigation. The evaluation of the site seismic parameters and the evaluation of the ground motion parameters would require additional geotechnical investigation.

Determination of wind characteristics is not part of this preliminary geotechnical investigation. However, it is worth noting that some basic design wind speed, V, for use in the design of Risk Category III buildings and structures can be obtained from Figures 1609.3(2), 1609.3(7) and 1609.3(8) of the 2021 International Building Code. (Ref.: 2021 International Building Code®)

**6.3.3. Allowable bearing pressures**

Allowable bearing pressures for shallow foundations are limited by two considerations. The safety factor against ultimate shear failure must be adequate, and settlements under allowable bearing pressure should not exceed tolerable values. In most cases, settlement governs the foundation pressures. (Ref.: pp151, *Naval Facilities Engineering Command, Foundations & Earth Structures, Design Manual 7.02, September 1986*)



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In dense coarse-grained soils failure typically occurs along a well-defined failure surface. In loose coarse-grained soils, volumetric compression dominates and punching failures are common. Increased depth of overburden can change a dense sand to behave more like loose sand. In (homogeneous) fine-grained cohesive soils, failure occurs along an approximately circular surface.

However, as previously stated, a given soil does not have a unique bearing capacity; the bearing capacity is a function of the footing shape, depth, and width as well as load eccentricity. Since the bearing capacity is based on effective stress analysis, fluctuation of the groundwater table is expected to affect the value of the soil unit weight. Hence, additional design information regarding the proposed new building (such as loads, type and shape of proposed foundation system, etc.) will be needed to determine the expected settlement and the bearing capacity of the proposed footprint of the eventual new school building.

## **7. CONCLUSION**

A preliminary geotechnical investigation was performed to inform the design process by identifying some basic geotechnical properties of the areas under consideration for the construction of the proposed building to allow the design engineer to determine whether a specific location warrants the completion of all investigations required in accordance with Sections 1803.3 through 1803.5 of the IBC.

The data collected suggests that the North and East side portions of the athletic field in subarea (1) and Southeast of the existing school building in subarea (2) may contain layers of expansive soil. Additional geotechnical investigations will be required in accordance with the 2021 IBC Section 1803.5.3 if the proposed new building would be located in said portions of the athletic field or by the Southeast of the existing school building.

The boreholes performed in subareas (2), (3), and (4) generally terminated with auger refusal at 7 to 12 feet BGS in large boulders of weathered bedrock. However, it is worth noting that in subarea (2), standard penetration test N-values were typically above 30 blows per foot on average for B-15 and B-16. On the Southeast side, N-values were typically about 7 blows per foot for B-15 upper soil layers, and between 12 and 27 blows per foot for B-16 upper soil layers. In subareas (3) and (4), N-Values recorded for the upper soil layers were between 20 to 30 blows per foot. Additional information regarding the proposed new building (such as loads, type and shape of proposed foundation system, etc.) will be needed to assess the allowable bearing capacity.

Also, it was determined that additional geotechnical investigation may be required to assess the seasonal degree of fluctuation of the underground water table level. Furthermore, additional investigation may be needed to assess seismic hazard and design wind speed along with specific recommendations for compacted fill and excavations. In addition, more investigations will be necessary to finalize specific recommendations to meet all requirements stipulated in the 2021 IBC Section 1803.6.

**PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT**  
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**8. PERMITS**

Any permit application shall be the responsibility of the owner. However, ATANE may provide some assistance regarding permit application, if warranted.

**PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT**  
**Greenwich Public Schools – Central Middle School**  
*9 Indian Rock Lane, Greenwich, CT 06830*

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**9. APPENDICES**

**APPENDIX 1: Site Location Map**

**APPENDIX 2: Boring and Test Pit Location Plan**

**APPENDIX 3: FEMA National Flood Hazard Layer FIRMette**

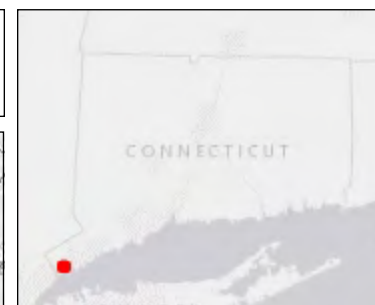
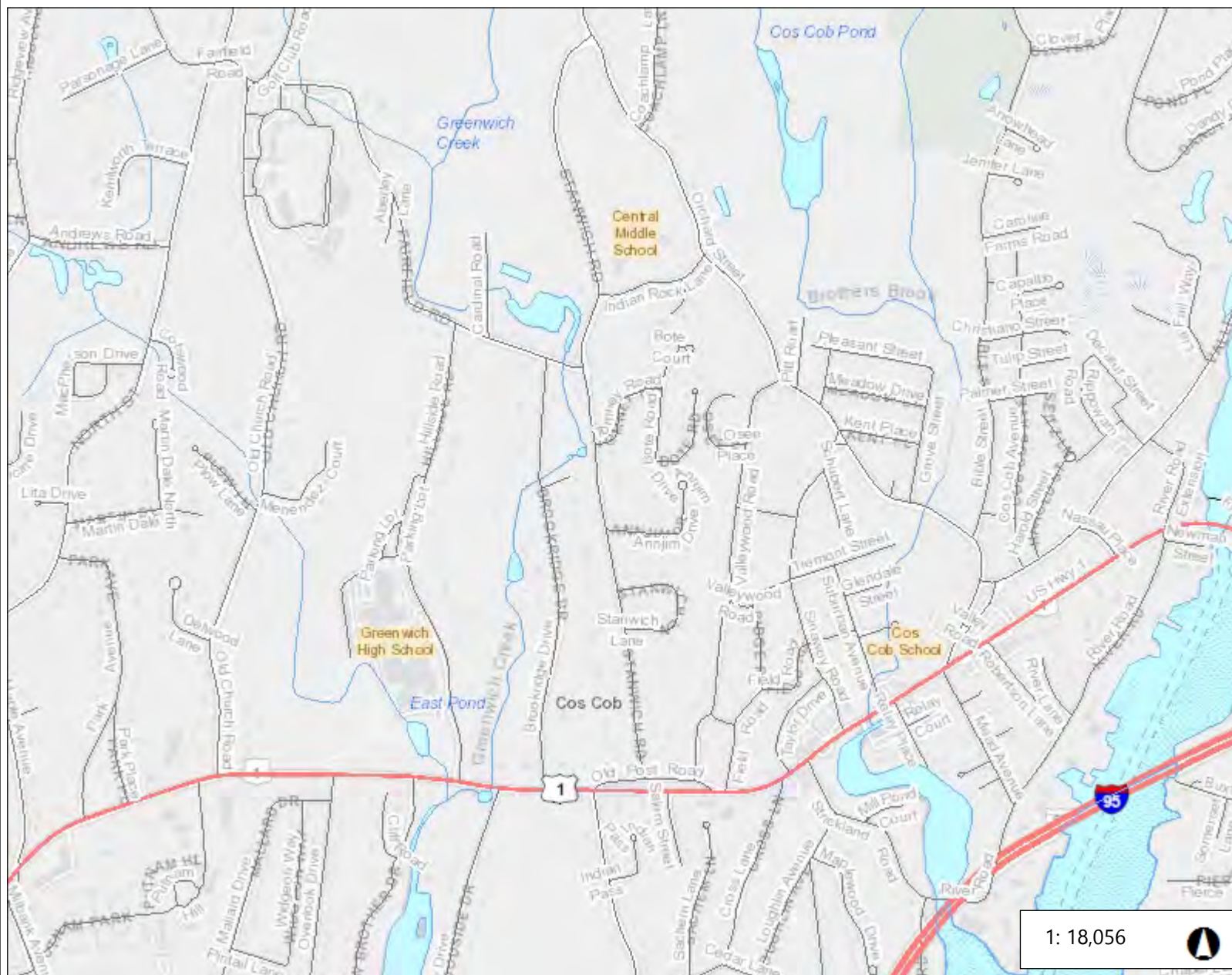
**APPENDIX 4: Test Pit Logs**

**APPENDIX 5: Boring Logs**

**APPENDIX 6: Laboratory Test Results**

- **Geotechnical Test Results**
- **Chemical Test Results**

**APPENDIX 1:**  
**Site Location Map**



## Legend

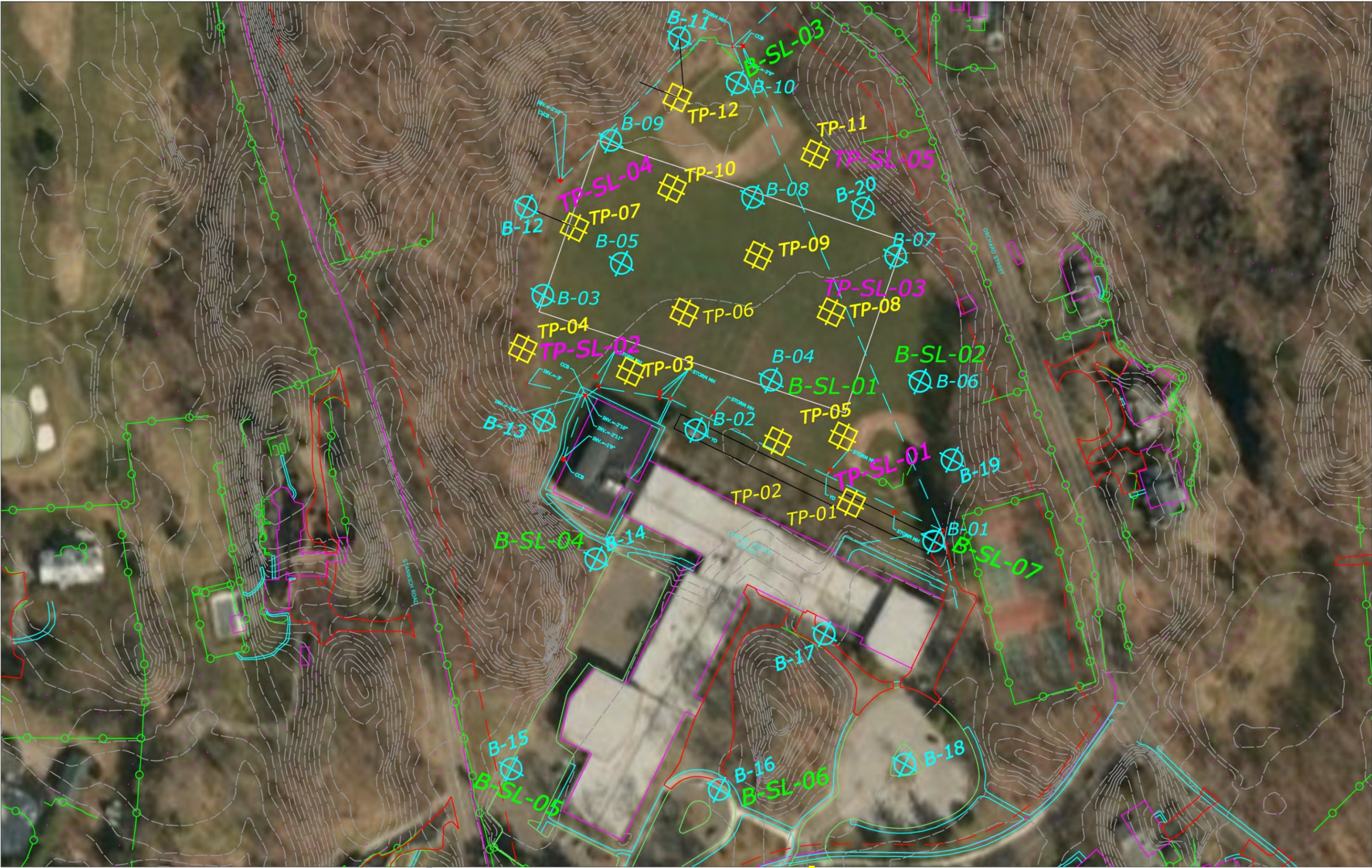
- Town Line**
  - State Boundary
  - Town Boundary
  - Coastline
- Geographic Names7**
- Geographic Place 3**
- Airport**
  - Airport
  - Heliport
- + Railroad**
- Streets**
  - Interstate Highway
  - US Highway
  - State Highway
  - Primary limited-access
  - Ramp
  - Street
  - Ferry crossing
- County Line**
  - State Boundary
  - County Boundary
  - Coastline
- County Name**
- Town Line**
  - State Boundary
  - Town Boundary

## Notes

0.6 0 0.28 0.6 Miles

**APPENDIX 2:**  
**Boring and Test Pit Location Plan**





BORING AND TEST PIT LOCATION PLAN



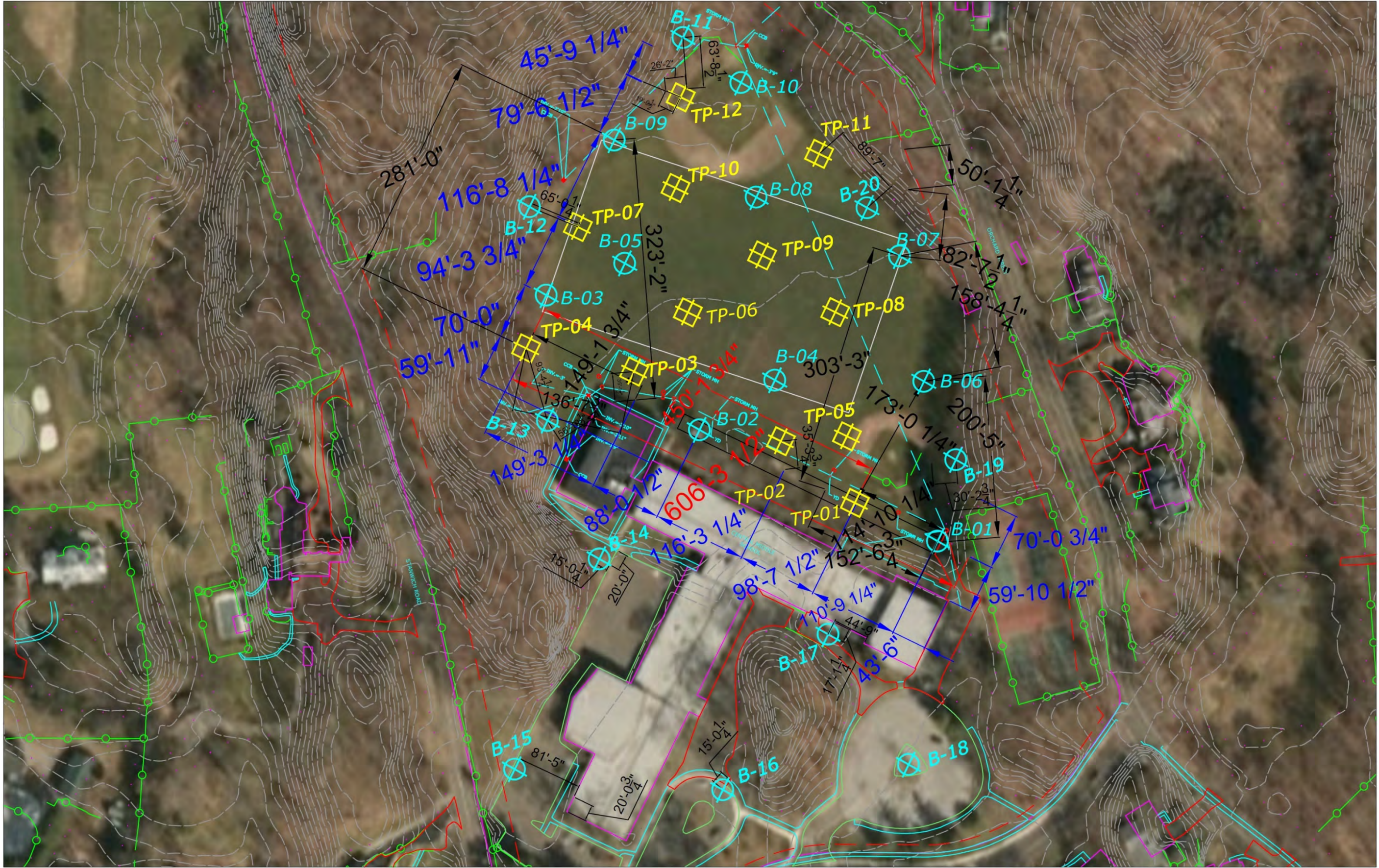
BORING (20 LOCATIONS)



TEST PIT (12 LOCATIONS)







BORING AND TEST PIT LOCATION PLAN



BORING (20 LOCATIONS)



TEST PIT (12 LOCATIONS)

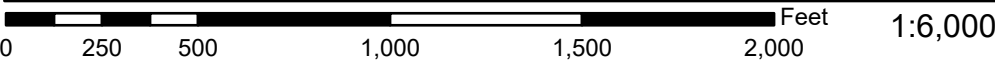
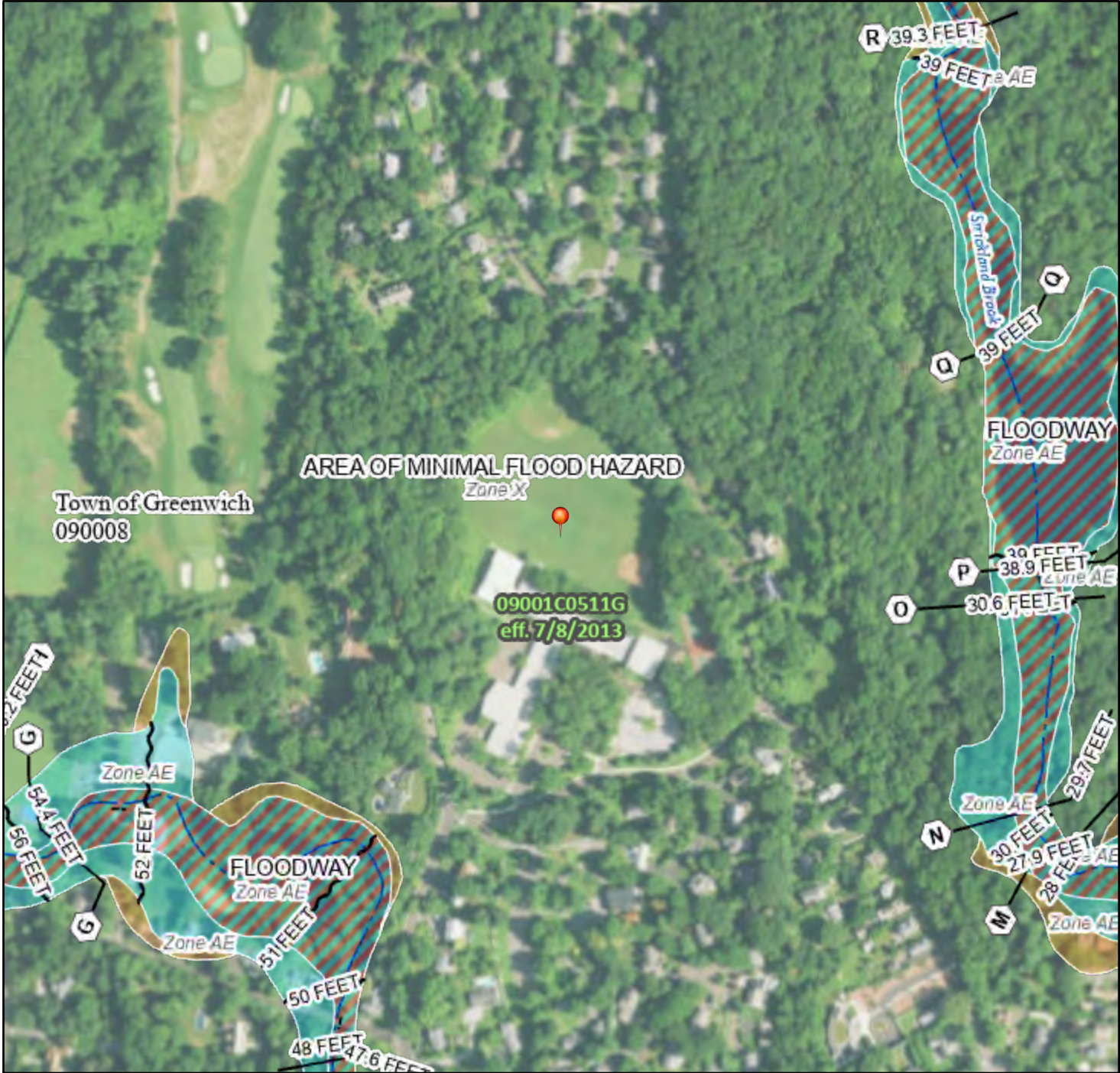




**APPENDIX 3:**  
**FEMA National Flood Hazard Layer FIRMette**

# National Flood Hazard Layer FIRMMette

73°36'39"W 41°3'10"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/22/2022 at 3:50 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**APPENDIX 4:**  
**Test Pit Logs**

# LOG OF TEST PIT – TP-01

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-01

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 8:00 a.m.

Time Test Pit Ended: 8:35 a.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Black; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	FILL	Brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.	E	None	
3	Silty SAND	Black; fine to coarse SAND; dry; loose to medium dense; with some silt, with some organic material.	E	None	
4	Silty SAND	Gray; fine to coarse SAND; dry; loose to medium dense; with some silt; with some gravel.	E	None	
5	Silty SAND	Gray; fine to coarse SAND; moist to saturated; loose to medium dense; with some silt; with some gravel.			Grab Sample collected at ±6 feet BGS
6	▼				
7					
8					
9					
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 6.5 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

**Note 3:** Some cave-in was noticed in the sand at about 7 feet below ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	<u>BOULDER COUNT</u>		<u>PROPORTIONS USED</u>		<u>EXCAVATION EFFORT</u>
	<u>Boulder</u>	<u>Class</u>	< 10%	Trace	E = Easy
	12"-24"	A	10-20%	Little	M = Moderate
	24"-36"	B	20-35%	Some	D = Difficult
	>36"	C	35-50%	And	



# LOG OF TEST PIT – TP-01

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-01

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 8:00 a.m.

**Time Test Pit Ended:** 8:35 a.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-01



Mixture of fine to coarse Sand, some Silt, and some Gravel



Short-term equilibrium groundwater level  
measured at approximately 6.5 feet below ground surfaces

# LOG OF TEST PIT – TP-02

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-02

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 8:40 a.m.

Time Test Pit Ended: 9:27 a.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	FILL	Light brown and gray; fine to medium SAND; dry; loose to medium dense; with some silt; with some gravel.	E	None	
3			E	None	
4	Gravelly SAND	Dark yellowish brown; mixture of SAND and GRAVEL; dry; loose to medium dense; trace of silt; trace of cobbles.	E	None	
5	Gravelly SAND	Dark yellowish brown; mixture of SAND and GRAVEL; moist to saturated; loose to medium dense; trace of silt; trace of cobbles.	E	None	Grab Sample collected at ±6 feet BGS
6	▼				
7					
8					
9					
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 6.5 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	<u>BOULDER COUNT</u>		<u>PROPORTIONS USED</u>		<u>EXCAVATION EFFORT</u>
	<u>Boulder</u>	<u>Class</u>			
	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
	>36"	C	20-35%	Some	D = Difficult
			35-50%	And	



# LOG OF TEST PIT – TP-02

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-02

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 8:40 a.m.

**Time Test Pit Ended:** 9:27 a.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-02. – Short-term equilibrium groundwater level measured at approximately 6.5 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some Gravel, and trace of cobbles



Trace of cobbles in mixture of sand and gravel

# LOG OF TEST PIT – TP-03

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-03

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 9:30 a.m.

Time Test Pit Ended: 10:14 a.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SAND, GRAVEL, and SILT; dry; medium dense; with little Organics.	E	None	
2	Silty GRAVEL	Light brown; Mixture of GRAVEL, SAND, and SILT; dry; medium dense; with little cobbles.	E	None	
3	Silty GRAVEL	Light brown; Mixture of GRAVEL, SAND, and SILT; dry; medium dense; with little cobbles; with some boulders	M	2/C	
4	Silty GRAVEL	Light brown; Mixture of GRAVEL, SAND, and SILT; dry; medium dense; with little cobbles; with some boulders; trace of debris	M	2/C	
5	SILTS & CLAYS ▼	Gray; CLAYS of low to medium plasticity; little gravelly clays; little sandy clays; little silty clays; trace of cobbles.	E	None	Grab Sample collected at ±6 feet BGS
6					
7					
8	Gravelly SAND	Gray; gravel-SAND-silt mixtures; moist to saturated; medium dense; trace of cobbles.			
9					
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 7.0 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
<div> <div>6.0'</div> <div>2.5'</div> <div></div> <div>E</div> <div>↑</div> </div>	Boulder	Class	< 10%	Trace	E = Easy M = Moderate D = Difficult
	12"-24"	A	10-20%	Little	
	24"-36"	B	20-35%	Some	
	>36"	C	35-50%	And	



# LOG OF TEST PIT – TP-03

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-03

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 9:30 a.m.

**Time Test Pit Ended:** 10:14 a.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-03. – Short-term equilibrium groundwater level measured at approximately 7 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some clay, some Gravel, little cobbles, little boulders



Boulder ±4.0 feet long



Gravel-sand-silt mixtures; little cobbles

# LOG OF TEST PIT – TP-04

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-04

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 10:15 a.m.

Time Test Pit Ended: 11:10 a.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with some Organics; trace of gravel.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; medium dense; with some gravel; with some cobbles; trace of boulders.	M	1/B	
3			M	1/B	
4			M	1/B	
5			M	None	Grab Sample collected at ±6 feet BGS
6					
7					
8 – 8.5	Clayey SAND ▼	Gray; sand-clay mixtures; moist; loose to medium dense; with some silt; with some gravel.			
8.5 – 9	Silty SAND	Dark yellowish brown; fine to coarse SAND; moist to saturated; loose to medium dense; with some silt; with some gravel; trace of cobbles.			
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 8.0 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	<u>BOULDER COUNT</u>		<u>PROPORTIONS USED</u>		<u>EXCAVATION EFFORT</u>
<div> <div>6.0'</div> <div>2.5'</div> <div> <div></div> <div>E</div> <div>↑</div> </div> </div>	Boulder	Class	< 10%	Trace	E = Easy M = Moderate D = Difficult
	12"-24"	A	10-20%	Little	
	24"-36"	B	20-35%	Some	
	>36"	C	35-50%	And	



# LOG OF TEST PIT – TP-04

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-04

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 10:15 a.m.

**Time Test Pit Ended:** 11:10 a.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-04. – Short-term equilibrium groundwater level measured at approximately 8 feet below ground surfaces



Mixture of fine to coarse sand, some silt, and some gravel, trace of clay, some cobbles, trace of boulders



Mixture of sand and gravel, trace of silt, some cobbles, trace of boulders

# LOG OF TEST PIT – TP-05

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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-05

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 11:25 a.m.

Time Test Pit Ended: 11:50 a.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
1 – 2.5	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.	E	None	
2.5 – 3	Silty SAND ▼	Gray; fine to coarse SAND; dry to moist; loose to medium dense; with some silt; trace of debris and organics; slightly odorous; trace of gravel; trace of cobbles.	E	None	
4			E	None	
5			E	None	Grab Sample collected at ±6 feet BGS
6			E	None	
7	Silty SAND	Gray; fine to coarse SAND; saturated; loose to medium dense; with some silt; trace of clay; trace of gravel.	E	None	
8	Silty SAND	Gray; fine to coarse SAND; saturated; loose; with some silt; trace of gravel.	E	None	
9					
10					
11		Bottom of Exploration ±10.0'			
12					

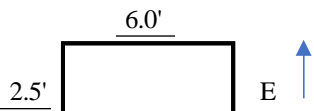
**Note 1:** Short-term equilibrium groundwater level measured at approximately 6.2 feet below ground surface. Water flows from Northwest to Southeast before short-term equilibrium.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

**Note 3:** Some cave-in was noticed in the sand at about 7 feet below ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
	<u>Boulder</u>	<u>Class</u>	< 10%	Trace	E = Easy
	12"-24"	A	10-20%	Little	M = Moderate
	24"-36"	B	20-35%	Some	D = Difficult
	>36"	C	35-50%	And	





# LOG OF TEST PIT – TP-05

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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-05

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 11:25 a.m.

**Time Test Pit Ended:** 11:50 a.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-05. – Short-term equilibrium groundwater level measured at approximately 6.2 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some Gravel, some cobbles



Mixture of sand and gravel, trace of silt, trace of cobbles, trace of clay

# LOG OF TEST PIT – TP-06

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-06

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 11:50 a.m.

Time Test Pit Ended: 12:10 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel; trace of cobbles.	E	None	
3			E	None	
4	Silty SAND	Black and gray; SAND and silt mixture; dry; loose to medium dense; with some organics; trace of gravel.	E	None	
5					
6	Silty SAND ▼	Gray; fine to coarse SAND; moist to saturated; loose to medium dense; with some silt; with some gravel; trace of cobbles.	E	None	Grab Sample collected at ±6 feet BGS
7					
8					
9	Silty SAND	Gray; fine to coarse SAND; saturated; loose to medium dense; with some silt; with some gravel; trace of cobbles.			
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 7.5 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

**Note 3:** Some cave-in was noticed in the sand at about 6 feet below ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
	<u>Boulder</u>	<u>Class</u>			
<div> <div>6.0'</div> <div>2.5'</div> <div></div> <div>E</div> <div></div> </div>	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
	>36"	C	20-35%	Some	D = Difficult
			35-50%	And	



# LOG OF TEST PIT – TP-06

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-06

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 11:50 a.m.

**Time Test Pit Ended:** 12:10 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-06. – Short-term equilibrium groundwater level measured at approximately 7.5 feet below ground surfaces



Mixture of fine to coarse sand, some silt, some gravel; some cobbles



Mixture of sand, silt, gravel, cobbles, trace of organics



Mixture of sand, silt, gravel, and cobbles



# LOG OF TEST PIT – TP-07

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-07

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 12:20 p.m.

Time Test Pit Ended: 01:15 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel, trace of cobbles, trace of boulders.	M	4/A	Grab Sample collected at ±6 feet BGS
3					
4					
5					
6					
7					
8					
9	SILT & CLAY ▼	Gray; sandy and silty CLAY; low to medium plasticity;	E	None	
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 9.5 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
<div> <div>6.0'</div> <div>2.5'</div> <div>E</div> <div>↑</div> </div>	Boulder	Class	< 10%	Trace	E = Easy M = Moderate D = Difficult
	12"-24"	A	10-20%	Little	
	24"-36"	B	20-35%	Some	
	>36"	C	35-50%	And	

# LOG OF TEST PIT – TP-07

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-07

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 12:20 p.m.

**Time Test Pit Ended:** 1:15 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-07. – Short-term equilibrium groundwater level measured at approximately 9.5 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some Gravel,  
Trace of cobbles, trace of boulders



Trace of cobbles and boulders



# LOG OF TEST PIT – TP-08

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-08

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 3:35 p.m.

Time Test Pit Ended: 4:03 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.	E	None	
2.5	Silty SAND	Black and gray; Mixture of SAND and Silt; dry; loose to medium dense; with some organic materials.	E	None	
3	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.			
4			E	None	
5					Grab Sample collected at ±6 feet BGS
6					
6.5					
7	Silty SAND	Black and Gray; fine to coarse SAND; dry; loose to medium dense; with some silt; with trace of organics.			
8	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.			
9	SILT & CLAY ▼	Gray; CLAYS of low to medium plasticity; moist to saturated; little sandy clays; little silty clays;			
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 9.0 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
<div> <div>6.0'</div> <div>2.5'</div> <div>E</div> <div>↑</div> </div>	Boulder	Class			
	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
	>36"	C	20-35%	Some	D = Difficult
			35-50%	And	



# LOG OF TEST PIT – TP-08

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-08

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 3:35 p.m.

**Time Test Pit Ended:** 4:03 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-08. – Short-term equilibrium groundwater level measured at approximately 9.0 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, and some Gravel, some clay



Mixture of Clay, silt, sand, trace of organics



Mixture of Sand, some Silt, some Gravel, some clay



# LOG OF TEST PIT – TP-09

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-09

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 4:04 p.m.

Time Test Pit Ended: 4:20 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel.	E	None	
2.5	Silty SAND	Dak brown; Mixture of SAND and Silt; dry; loose to medium dense; with roots and some organic materials.			
3	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel; trace of cobbles.	E	None	
4			E	None	
5					
6					Grab Sample collected at ±6 feet BGS
7	SILT & CLAY	Gray; SILTS and CLAYS; dry to moist; low to medium plasticity; little sandy clays; little silty clays; trace of cobbles.	E	None	
8					
9	▼	Gray; CLAYS of low to medium plasticity; moist to saturated; little sandy clays; little silty clays;	E	None	
10	SILT & CLAY				
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 8.5 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
<div> <div>6.0'</div> <div>2.5'</div> <div></div> <div>E</div> <div>↑</div> </div>	Boulder	Class			
	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
	>36"	C	20-35%	Some	D = Difficult
			35-50%	And	

# LOG OF TEST PIT – TP-09

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-09

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 4:04 p.m.

**Time Test Pit Ended:** 4:20 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-09. – Short-term equilibrium groundwater level measured at approximately 8.5 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some Gravel; some Cobbles, trace of Clay.



Mixture of Sand, Silt, Gravel, and Cobbles



Mixture of Sand, Silt, Gravel, Cobbles, and trace of Clay



# LOG OF TEST PIT – TP-10

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-10

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 1:35 p.m.

Time Test Pit Ended: 2:39 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel, with some cobbles, with some boulders.	M	>4/C	
3					
4					
5.5					
6.5	Silty SAND	Dark gray and black; fine to coarse SAND; dry; loose to medium dense; with some silt, with some organic material.	E	None	
7					
8	SILT & CLAY	Gray; CLAYS of low to medium plasticity; dry to slightly moist; little sandy clays; little silty clays.	E	None	
9					
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** No groundwater encountered.

Water Symbols ▼ = Groundwater

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
	<u>Boulder</u>	<u>Class</u>			
<div> <div>6.0'</div> <div>2.5'</div> <div></div> <div>E</div> <div></div> </div>	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
			20-35%	Some	D = Difficult
	>36"	C	35-50%	And	

# LOG OF TEST PIT – TP-10

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-10

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 1:35 p.m.

**Time Test Pit Ended:** 2:39 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-10



Mixture of fine to coarse Sand, some Silt, some Gravel,  
some Cobbles, some Boulders, little Clay, trace of Organics.



Class C Boulders



Mixture of Clay, Silt, Sand, and Gravel.



# LOG OF TEST PIT – TP-11

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-11

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 4:22 p.m.

Time Test Pit Ended: 4:50 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	E	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel; with some cobbles; some boulders.	E	None	
3			E	>2/A	
4	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel; with some cobbles; with some roots.	E	None	
5			M	None	
6	Silty SAND	Light brown; fine to medium SAND and SILT; dry; loose to medium dense; with some gravel; with some cobbles;	M	None	Grab Sample collected at ±6 feet BGS
7	Silty SAND	Gray; fine to coarse SAND; dry; loose to medium dense; with some silt; with some gravel.	E	None	
8					
9	▼ SILT & CLAY	Gray; CLAYS of low to medium plasticity; moist to saturated; little sandy clays; little silty clays.			
10					
11		Bottom of Exploration ±10.0'			
12					

**Note 1:** Short-term equilibrium groundwater level measured at approximately 9.0 feet below ground surface.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
	<u>Boulder</u>	<u>Class</u>			
<div> <div>6.0'</div> <div>2.5'</div> <div></div> <div>E</div> <div>↑</div> </div>	12"-24"	A	< 10%	Trace	E = Easy
	24"-36"	B	10-20%	Little	M = Moderate
			20-35%	Some	D = Difficult
	>36"	C	35-50%	And	



# LOG OF TEST PIT – TP-11

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

**Test Pit No:** TP-01

**Surface Elevation:** ~ 50 Feet

**Drilling Method:** Trench Excavation

**Sampling Method:** Grab

**Completion depth:** 10.0 Feet BGS

**Test Pit Subcontractor:** J.J.K. Electric

**Compact Excavators:** Bobcat E35

**Excavator Dig Depth in feet:** 10'3"

**Weather:** Sunny, 84 F

**Time Test Pit Started:** 4:22 p.m.

**Time Test Pit Ended:** 4:50 p.m.

**Date Test Pit Started:** 08/12/2022

**Date Test Pit Completed:** 08/12/2022



In progress TP-11. – Short-term equilibrium groundwater level measured at approximately 9.0 feet below ground surfaces



Mixture of fine to coarse Sand, some Silt, some Gravel, some Cobbles; some Boulders



Mixture of Clay, Silt, Sand, Gravel



# LOG OF TEST PIT – TP-12

Sheet 1 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-12

Surface Elevation: ~ 50 Feet

Drilling Method: Trench Excavation

Sampling Method: Grab

Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric

Compact Excavators: Bobcat E35

Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F

Time Test Pit Started: 1:20 p.m.

Time Test Pit Ended: 1:35 p.m.

Date Test Pit Started: 08/12/2022

Date Test Pit Completed: 08/12/2022

Depth Below Ground Surface (BGS) in feet	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Comments
1	TOPSOIL	Light brown; SILT; dry; loose to medium dense; with some fine Sand, with little Organics.	M	None	
2	Silty SAND	Light brown; fine to medium SAND and SILT; dry; medium dense; with some gravel; with some cobbles; with some boulders.	M	None	
3			D	>3/C	Grab Sample collected at ±3 feet BGS
4		Bottom of Exploration ±3.0'			
5					
6					
7					
8					
9					
10					
11					
12					

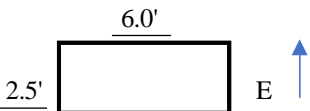
**Note 1:** No groundwater encountered.

**Note 2:** Test pit backfilled with excavated soils and compacted with excavator bucket at ground surface.

**Note 3:** Excavation stopped at about 3 feet below ground surface. Excavator could not remove the boulders.

Water Symbols ▼ = Groundwater

Test Pit Dimensions & Orientation	BOULDER COUNT		PROPORTIONS USED		EXCAVATION EFFORT
	<u>Boulder</u>	<u>Class</u>	< 10%	Trace	E = Easy
	12"-24"	A	10-20%	Little	M = Moderate
	24"-36"	B	20-35%	Some	D = Difficult
	>36"	C	35-50%	And	





# LOG OF TEST PIT – TP-12

Sheet 2 of 2



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## PROJECT

PRELIMINARY GEOTECHNICAL INVESTIGATION  
Greenwich Public Schools – Central Middle School  
9, Indian Rock Lane, Greenwich, CT 06830

Test Pit No: TP-12

Surface Elevation: ~ 50 Feet  
Drilling Method: Trench Excavation  
Sampling Method: Grab  
Completion depth: 10.0 Feet BGS

Test Pit Subcontractor: J.J.K. Electric  
Compact Excavators: Bobcat E35  
Excavator Dig Depth in feet: 10'3"

Weather: Sunny, 84 F  
Time Test Pit Started: 1:20 p.m.  
Time Test Pit Ended: 1:35 p.m.

Date Test Pit Started: 08/12/2022  
Date Test Pit Completed: 08/12/2022



In progress TP-12. – Class C Boulders



Mixture of fine to coarse Sand, some Silt, some Gravel; some Cobbles



Class C Boulders



Mixture of Sand, some Silt, some Gravel; some Cobbles



**APPENDIX 5:**  
**Boring Logs**

Phone  
(203) 262-9328

Telefax  
(203) 264-3414

WHITE PLAINS, N.Y.  
(914) 946-4850



# SOILTESTING, INC.

90 DONOVAN ROAD - OXFORD, CONN. 06478-1028

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**GEOTECHNICAL / ENVIRONMENTAL SUBSURFACE INVESTIGATIONS - Test Borings - Core Drilling**  
**Monitoring Wells - Recovery Wells - Direct Push/Probe Sampling**  
**UNDERPINNING - HELICAL PILES - SOIL NAILS**



September 19, 2022

ATANE Engineers  
40 Wall St., 11<sup>th</sup> FL  
New York NY 10005  
Attn.: Paul Sousa

G189-2236-22

Re: 9 Indian Rock Ln.  
Greenwich CT

Dear Mr. Sousa,

Attached please find the Test Boring Logs, and location plan for work in Greenwich CT.

If you have any questions, please do not hesitate to contact us.

Very truly yours,



James A. DeAngelis

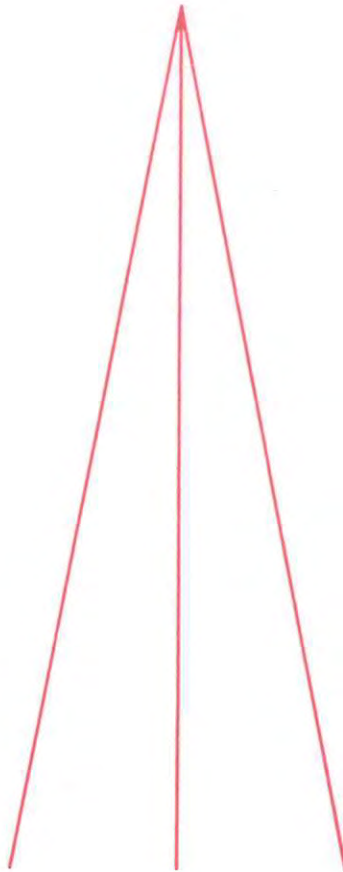
President

JAD:mv



# SOILTESTING, INC.

TO .....	ATANE Engineers	DATE .....	19-Sep-22
ADDRESS .....	40 Wall St., New York NY 10005		
SITE LOCATION .....	9 Indian Roack Ln., Greenwich CT		
REPORT SENT TO .....	Paul Sousa		
SAMPLES SENT TO .....	Storage (Max 60 days)		



90 Donovan Road  
Oxford, Connecticut 06478-1028  
203-262-9328

Branch Office:  
White Plains, New York 10607  
914-946-4850

**JOB NO.**  
G189-2236-22

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-1</u>
	PROJECT NAME <u>Central Middle School</u>		
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>		BORING LOCATIONS Per Plan
INSPECTOR	TYPE	CASING <u>HSA</u> SAMPLER <u>SS</u> CORE BAR	OFFSET
GROUND WATER OBSERVATIONS AT <u>7</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	SIZE I.D.	<u>4 1/4"</u> <u>1 3/8"</u>	DATE START <u>8/23/22</u>
	HAMMER WT.	<u>140#</u> BIT	DATE FINISH <u>8/23/22</u>
	HAMMER FALL	<u>30"</u>	SURFACE ELEV.
			GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6   6 - 12   12- 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT				MOIST	ELEV	
5										dense dry v dense moist/wet dense wet v dense/wet	9'6"	Blk F sand, F-C gravel  Brn F sand & silt, F-C gravel, trace cobbles
	1	ss	24"	4"	6'0"	17	29					
						20	20					
	2	ss	24"	14"	8'0"	40	41					
10												Poss partly weathered Bedrock or Boulder Partly weathered Bedrock EOB 10'4"
						49	27					
	3	ss	23"	14"	9'11"	14	25					
						22	100/5"					
		4	ss	4"	4"	10'4"	100/4"				10'4"	
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.	<b>HOLE NO. B-1</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE	







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		PROJECT NO. <b>G189-2236-22</b>				BORING LOCATIONS Per Plan				
		PROJECT NAME <b>Central Middle School</b>								
FOREMAN - DRILLER <b>AO/aa</b>		LOCATION <b>9 Indian Rock Lane Greenwich CT</b>				OFFSET DATE START <span style="float:right">8/23/22</span> DATE FINISH <span style="float:right">8/23/22</span> SURFACE ELEV. GROUND WATER ELEV.				
INSPECTOR		TYPE SIZE I.D. HAMMER WT. HAMMER FALL								
GROUND WATER OBSERVATIONS AT <u>10</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS		CASING HSA SAMPLER SS CORE BAR 140# BIT 30"								
DEPTH	CASING BLOWS PER FOOT	SAMPLE				BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12- 18	CORE TIME PER FT (MIN)	DENSITY OR CONSIST  MOIST	STRATA CHANGE DEPTH  ELEV	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.					
5		1	ss	24"	14"	6'0"	12 32			Gry/brn F sand & silt, F-C gravel  Brn F-M sand, F-C gravel, some silt  Same & cobbles, boulders  Brn F sand & silt, F-C gravel  Same  EOB 14'
		2	ss	24"	18"	8'0"	12 6			
							14 17			
10		3	ss	24"	14"	10'0"	13 88			
							30 32			
		4	ss	24"	14"	12'0"	14 14			
							27 19			
		5	ss	24"	8"	14'0"	18 17			
							20 23			
15										
20										
25										
30										
35										
40										
<b>NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.</b>										
GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT. <span style="float:right">HOLE NO. <b>B-3</b></span> A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE										



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	PROJECT NO. <u>G189-2236-22</u>			HOLE NO. <u>B-4</u>	
	PROJECT NAME <u>Central Middle School</u>			BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>				
INSPECTOR	TYPE	CASING	SAMPLER	CORE BAR	OFFSET
		HSA	SS		
GROUND WATER OBSERVATIONS AT <u>7</u> * FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	SIZE I.D.	<u>4 1/4"</u>	<u>1 3/8"</u>		DATE START <u>8/23/22</u>
	HAMMER WT.		<u>140#</u>	BIT	DATE FINISH <u>8/23/22</u>
	HAMMER FALL		<u>30"</u>		SURFACE ELEV.
					GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT						
5											8"	Topsoil
		1	ss	24"	22"	6'0"	13	11		compact		
							17	19		moist		
		2	ss	24"	20"	8'0"	42	53		v dense		Brn F sand & silt, F-C gravel
							40	34		wet		
		3	ss	24"	16"	10'0"	12	14		dense		Brn F-C sand, F-C gravel, some silt
10							24	2		wet		Brn F-C sand, F-C gravel, trace cobbles, trace silt
		4	ss	24"	10"	12'0"	5	5		compact		
							7	5		wet		Same
		5	ss	24"	22"	14'0"	10	7		compact		
							7	8		wet		Gry F-C sand, F-C gravel
		6	ss	24"	24"	16'0"	15	10		compact		
15							10	30		wet	16'	Same, gry silt, trace clay
												EOB 16'
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT.	USED _____	CASING _____	THEN _____	CASING TO _____ FT.	HOLE NO. <u>B-4</u>
A = AUGER    UP = UNDISTURBED PISTON    T = THINWALL    V = VANE TEST					
WOR = WEIGHT OF RODS    WOH = WEIGHT OF HAMMER & RODS    C = COARSE					
SS = SPLIT TUBE SAMPLER    H.S.A. = HOLLOW STEM AUGER    M = MEDIUM					
PROPORTIONS USED: TRACE = 0 - 10%    LITTLE = 10 - 20%    SOME = 20 - 35%    AND = 35 - 50%    F = FINE					

<b>SOILTESTING, INC.</b> <b>90 DONOVAN RD.</b> <b>OXFORD, CT 06478</b> <b>CT (203) 262-9328</b> <b>NY (914) 946-4850</b>	CLIENT: <u>ATANE Engineers</u>			SHEET <u>1</u> OF <u>1</u> HOLE NO. <span style="float: right;">B-5</span>	
	PROJECT NO. <b>G189-2236-22</b>				
	PROJECT NAME <b>Central Middle School</b>			BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <b>AO/aa</b>	LOCATION <b>9 Indian Rock Lane Greenwich CT</b>				
INSPECTOR		CASING	SAMPLER	CORE BAR	OFFSET
	TYPE	HSA	SS		DATE START <span style="float: right;">8/23/22</span>
	SIZE I.D.	4 1/4"	1 3/8"		DATE FINISH <span style="float: right;">8/23/22</span>
	HAMMER WT.		140#	BIT	SURFACE ELEV.
	HAMMER FALL		30"		GROUND WATER ELEV.
GROUND WATER OBSERVATIONS AT <u>8</u> _FT AFTER <u>0</u> _HOURS AT <u>  </u> _FT AFTER <u>  </u> _HOURS					

**NOTE:** Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.



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	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-6</u>	
	PROJECT NAME <u>Central Middle School</u>		BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>			
INSPECTOR	TYPE	CASING <u>HSA</u>	SAMPLER <u>SS</u>	CORE BAR <u>BIT</u>
GROUND WATER OBSERVATIONS AT <u>8</u> FT AFTER <u>0</u> HOURS	SIZE I.D.	<u>4 1/4"</u>	<u>1 3/8"</u>	
AT <u>  </u> FT AFTER <u>  </u> HOURS	HAMMER WT.	<u>140#</u>		
	HAMMER FALL	<u>30"</u>		
			OFFSET	
			DATE START	<u>8/23/22</u>
			DATE FINISH	<u>8/23/22</u>
			SURFACE ELEV.	
			GROUND WATER ELEV.	

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT						
											8"	Topsoil
5		1	ss	24"	14"	6'0"	4	6		compact dry		Brn F sand, F-C gravel
		2	ss	24"	16"	8'0"	8	9		compact dry		Gry F sand & silt
10		3	ss	24"	10"	10'0"	10	15		dense wet		Brn F sand & silt, F-C gravel
		4	ss	24"	24"	12'0"	19	25		v dense wet		Same
		5	ss	24"	24"	14'0"	10	19		dense wet		Same
15							31	31			14'	EOB 14'
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO <u>  </u> FT. USED <u>  </u> CASING THEN <u>  </u> CASING TO <u>  </u> FT.	HOLE NO. <u>B-6</u>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE	



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>ATANE Engineers</b>		SHEET <u>1</u> OF <u>1</u>			
	PROJECT NO. <b>G189-2236-22</b>		HOLE NO. <b>B-7</b>			
	PROJECT NAME <b>Central Middle School</b>		BORING LOCATIONS Per Plan			
	LOCATION <b>9 Indian Rock Lane Greenwich CT</b>					
FOREMAN - DRILLER <b>AO/aa</b>	TYPE		CASING	SAMPLER	CORE BAR	OFFSET
INSPECTOR	SIZE I.D.		<b>HSA</b>	<b>SS</b>		DATE START <b>8/24/22</b>
GROUND WATER OBSERVATIONS AT <u>8</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	HAMMER WT.		<b>4 1/4"</b>	<b>1 3/8"</b>		DATE FINISH <b>8/24/22</b>
	HAMMER FALL		<b>140#</b>	<b>BIT</b>		SURFACE ELEV.
			<b>30"</b>			GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT				MOIST	ELEV	
5		1	ss	24"	16"	6'0"	12	11		compact		Brn/lr brn F sand, F-C gravel, some silt
							16	31		dry		
		2	ss	24"	16"	8'0"	95	44		v dense		Brn F-C sand, F-C gravel, trace cobbles
							40	39		moist		
		3	ss	24"	18"	10'0"	35	57		v dense		Brn F sand & silt, F-C gravel, trace cobbles
10							42	38		wet		
		4	ss	15"	10"	11'3"	135	133		v dense		
							100/3"			wet	11'3"	Same
												EOB 11'3"
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT.	USED _____	CASING THEN _____	CASING TO _____ FT.	HOLE NO. <b>B-7</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE				



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <u>G189-2236-22</u>		BORING LOCATIONS Per Plan
	PROJECT NAME <u>Central Middle School</u>		
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>		
INSPECTOR	CASING TYPE	SAMPLER HSA SS	OFFSET
GROUND WATER OBSERVATIONS AT <u>10</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	SIZE I.D.	1 3/8"	DATE START <u>8/24/22</u>
	HAMMER WT.	140#	DATE FINISH <u>8/24/22</u>
	HAMMER FALL	30"	SURFACE ELEV.
			GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6   6 - 12   12- 18				CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT						MOIST	ELEV	
5											compact moist v dense dry loose moist compact wet	11'6"	Gry F sand & silt, F-C gravel  Same, cobbles  Gry silt, trace F gravel, trace clay Gry F-C sand, some silt Gry silt, trace clay	
	1	ss	24"	14"	6'0"	15	9							
						8	15							
10		2	ss	24"	14"	8'0"	105	64			compact wet  compact wet v dense wet	16'	Gry F-C sand & silt, F-C gravel, trace clay  Gry F sand & silt, trace cobbles	
						65	17							
		3	ss	24"	12"	10'0"	16	5						
15							3	3						
		4	ss	24"	10"	12'0"	4	9						
						9	10							
20							10	8						
		5	ss	24"	20"	14'0"	7	6						
						11	65							
25		6	ss	24"	24"	16'0"	19	45						
30														
35														
40														

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT.	USED _____	CASING THEN _____	CASING TO _____ FT.	<b>HOLE NO. B-8</b>
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A = AUGER    UP = UNDISTURBED PISTON    T = THINWALL    V = VANE TEST  
 WOR = WEIGHT OF RODS    WOH = WEIGHT OF HAMMER & RODS    C = COARSE  
 SS = SPLIT TUBE SAMPLER    H.S.A. = HOLLOW STEM AUGER    M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10%    LITTLE = 10 - 20%    SOME = 20 - 35%    AND = 35 - 50%    F = FINE



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>			SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <u>G189-2236-22</u>			HOLE NO. <u>B-9</u>	
	PROJECT NAME <u>Central Middle School</u>			BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>				
INSPECTOR		CASING	SAMPLER	CORE BAR	OFFSET
	TYPE	HSA	SS		DATE START <u>8/24/22</u>
	SIZE I.D.	4 1/4"	1 3/8"		DATE FINISH <u>8/24/22</u>
	HAMMER WT.		140#	BIT	SURFACE ELEV.
	HAMMER FALL		30"		GROUND WATER ELEV.
GROUND WATER OBSERVATIONS					
AT <u>none</u> FT AFTER <u>0</u> HOURS					
AT <u>  </u> FT AFTER <u>  </u> HOURS					

[illegible]

**NOTE:** Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

GROUND SURFACE TO _____ FT.		USED _____ CASING	THEN _____ CASING TO _____ FT.	<b>HOLE NO.</b>	<b>B-9</b>
A = AUGER		UP = UNDISTURBED PISTON	T = THINWALL	V = VANE TEST	
WOR = WEIGHT OF RODS		WOH = WEIGHT OF HAMMER & RODS		C = COARSE	
SS = SPLIT TUBE SAMPLER		H.S.A. = HOLLOW STEM AUGER		M = MEDIUM	
PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50%				F = FINE	



SOILTESTING, INC. 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850							CLIENT: <u>ATANE Engineers</u>							SHEET <u>1</u> OF <u>1</u> HOLE NO. _____ B-10						
							PROJECT NO. <u>G189-2236-22</u>													
							PROJECT NAME <u>Central Middle School</u>							BORING LOCATIONS <u>Per Plan</u>						
FOREMAN - DRILLER <u>AO/aa</u>							LOCATION <u>9 Indian Rock Lane Greenwich CT</u>													
INSPECTOR _____							TYPE _____ CASING HSA SAMPLER SS CORE BAR _____							OFFSET _____						
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS							SIZE I.D. <u>4 1/4"</u> <u>1 3/8"</u>							DATE START <u>8/24/22</u>						
AT <u>  </u> FT AFTER <u>  </u> HOURS							HAMMER WT. <u>140#</u> BIT _____							DATE FINISH <u>8/24/22</u>						
							HAMMER FALL <u>30"</u>							SURFACE ELEV. _____						
														GROUND WATER ELEV. _____						
SAMPLE							BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18							FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.						
DEPTH	CASING BLOWS PER FOOT	NO	Type	PEN	REC.	DEPTH @ BOT	CORE TIME PER FT (MIN)		DENSITY OR CONSIST	STRATA CHANGE DEPTH										
							MOIST	ELEV												
5									v dense dry		Brn F-M sand, F-C gravel, some silt, trace cobbles									
	1	ss	24"	12"	7'0"	25	34													
									v dense dry		Same Auger Refusal									
	2	ss	24"	14"	9'0"	35	64													
10										10'	EOB 10'									
15																				
20																				
25																				
30																				
35																				
40																				

NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT.      HOLE NO.      B-10

A = AUGER   UP = UNDISTURBED PISTON      T = THINWALL      V = VANE TEST

WOR = WEIGHT OF RODS      WOH = WEIGHT OF HAMMER & RODS      C = COARSE

SS = SPLIT TUBE SAMPLER      H.S.A. = HOLLOW STEM AUGER      M = MEDIUM

PROPORTIONS USED: TRACE = 0 - 10%   LITTLE = 10 - 20%   SOME = 20 - 35%   AND = 35 - 50%      F = FINE



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-11</u>	
	PROJECT NAME <u>Central Middle School</u>		BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>			
INSPECTOR	TYPE	CASING <u>HSA</u>	SAMPLER <u>SS</u>	OFFSET
GROUND WATER OBSERVATIONS	SIZE I.D.	<u>4 1/4"</u>	<u>1 3/8"</u>	DATE START <u>8/24/22</u>
AT <u>none</u> FT AFTER <u>0</u> HOURS	HAMMER WT.	<u>140#</u>	BIT	DATE FINISH <u>8/24/22</u>
AT <u>  </u> FT AFTER <u>  </u> HOURS	HAMMER FALL	<u>30"</u>		SURFACE ELEV.
				GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT						
										MOIST	ELEV	
5												
		1	ss	22"	22"	6'8"	18	19		v dense		
							52	150/4"		dry	7'	Brn/lt brn F sand, F-C gravel, trace cobbles Auger Refusal
												EOB 7'
10												
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT.	USED _____	CASING THEN _____	CASING TO _____ FT.	<b>HOLE NO. B-11</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE				



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-12</u>	
	PROJECT NAME <u>Central Middle School</u>		BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane Greenwich CT</u>			
INSPECTOR		CASING <u>HSA</u>	SAMPLER <u>SS</u>	CORE BAR <u>          </u>
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	TYPE			OFFSET
	SIZE I.D.	<u>4 1/4"</u>	<u>1 3/8"</u>	DATE START <u>8/24/22</u>
	HAMMER WT.	<u>140#</u>	BIT	DATE FINISH <u>8/24/22</u>
	HAMMER FALL	<u>30"</u>		SURFACE ELEV. <u>          </u>
				GROUND WATER ELEV. <u>          </u>

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6   6 - 12   12- 18				CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT								
5														
10														
15														
20														
25														
30														
35														
40														

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO <u>          </u> FT. USED <u>          </u> CASING THEN <u>          </u> CASING TO <u>          </u> FT.	<b>HOLE NO. B-12</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE	



SOILTESTING, INC. 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850						CLIENT: ATANE Engineers						SHEET 1 OF 1 HOLE NO. B-13					
						PROJECT NO. G189-2236-22											
						PROJECT NAME Central Middle School						BORING LOCATIONS Per Plan					
FOREMAN - DRILLER SD/cp						LOCATION 9 Indian Rock Lane Greenwich CT											
INSPECTOR						TYPE		CASING HSA	SAMPLER SS	CORE BAR	OFFSET						
						SIZE I.D.		4 1/4"	1 3/8"		DATE START 9/3/22						
						HAMMER WT.			140#	BIT	DATE FINISH 9/3/22						
						HAMMER FALL			30"		SURFACE ELEV.						
											GROUND WATER ELEV.						
GROUND WATER OBSERVATIONS																	
AT none FT AFTER 0 HOURS																	
AT _ FT AFTER _ HOURS																	
SAMPLE																	
DEPTH	CASING BLOWS PER FOOT	NO	Type	PEN	REC.	DEPTH @ BOT	BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)				CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.			
							0	6	6	12		12	18		MOIST	ELEV	
5		1	ss	24"	18"	6'0"	9	13			dense dry	5'	Brn F-M sand & F gravel, lit silt				
							33	45				7'	Bedrock or Boulder Fragments Cobbles and/or fractured Bedrock 5-7' EOB 7'				
10																	
15																	
20																	
25																	
30																	
35																	
40																	

NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT.      HOLE NO. B-13

A = AUGER    UP = UNDISTURBED PISTON                  T = THINWALL                  V = VANE TEST

WOR = WEIGHT OF RODS                  WOH = WEIGHT OF HAMMER & RODS                  C = COARSE

SS = SPLIT TUBE SAMPLER                  H.S.A. = HOLLOW STEM AUGER                  M = MEDIUM

PROPORTIONS USED: TRACE = 0 - 10%    LITTLE = 10 - 20%    SOME = 20 - 35%    AND = 35 - 50%                  F = FINE



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-14</u>	
	PROJECT NAME <u>Central Middle School</u>		BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>			
INSPECTOR	TYPE	CASING	SAMPLER	CORE BAR
		HSA	SS	
GROUND WATER OBSERVATIONS	SIZE I.D.	4 1/4"		1 3/8"
AT <u>none</u> FT AFTER <u>0</u> HOURS	HAMMER WT.	140#		BIT
AT <u>  </u> FT AFTER <u>  </u> HOURS	HAMMER FALL	30"		
				OFFSET
				DATE START <u>8/25/22</u>
				DATE FINISH <u>8/25/22</u>
				SURFACE ELEV.
				GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6   6 - 12   12- 18			CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT					MOIST	ELEV	
5										compact dry dense dry v dense dry	10'	Brn F sand, F-C gravel, trace silt, trace asphalt (fill)  Brn F sand, F-C gravel, trace silt, trace cobbles  Brn F sand, F-C gravel, some silt, some weathered Bedrock frag Partly weathered Bedrock or Boulders Auger Refusal	
	1	ss	24"	4"	6'0"	15	6						
						7	12						
	2	ss	24"	16"	8'0"	12	12						
						17	32						
10		3	ss	24"	18"	10'0"	28	25					
						30	39						
	4	ss	4"	4"	10'4"	100/4"			v dense/dry	12'			
												EOB 12'	
15													
20													
25													
30													
35													
40													

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT.	USED _____ CASING	THEN _____ CASING TO _____ FT.	<b>HOLE NO. B-14</b>
A = AUGER    UP = UNDISTURBED PISTON    T = THINWALL    V = VANE TEST WOR = WEIGHT OF RODS    WOH = WEIGHT OF HAMMER & RODS    C = COARSE SS = SPLIT TUBE SAMPLER    H.S.A. = HOLLOW STEM AUGER    M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10%    LITTLE = 10 - 20%    SOME = 20 - 35%    AND = 35 - 50%    F = FINE			



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <u>ATANE Engineers</u>		SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <u>G189-2236-22</u>		HOLE NO. <u>B-15</u>	
	PROJECT NAME <u>Central Middle School</u>		BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <u>AO/aa</u>	LOCATION <u>9 Indian Rock Lane</u> <u>Greenwich CT</u>			
INSPECTOR	TYPE	CASING <u>HSA</u>	SAMPLER <u>SS</u>	CORE BAR <u>BIT</u>
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS	SIZE I.D.	<u>4 1/4"</u>	<u>1 3/8"</u>	
AT <u>  </u> FT AFTER <u>  </u> HOURS	HAMMER WT.	<u>140#</u>		
	HAMMER FALL	<u>30"</u>		
			OFFSET	
			DATE START	<u>8/25/22</u>
			DATE FINISH	<u>8/25/22</u>
			SURFACE ELEV.	
			GROUND WATER ELEV.	

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12- 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST  MOIST	STRATA CHANGE DEPTH  ELEV	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT						
5		1	ss	24"	14"	6'0"	18	85		v dense dry		Weathered Bedrock fragments No recovery
		2	ss	3"	0"	6'3"	100/3"			v dense/dry		
10											9'	Auger Refusal
15												EOB 9'
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.	<b>HOLE NO. B-15</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST	
WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS	C = COARSE
SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER	M = MEDIUM
PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50%	F = FINE



<b>SOILTESTING, INC.</b> <b>90 DONOVAN RD.</b> <b>OXFORD, CT 06478</b> <b>CT (203) 262-9328</b> <b>NY (914) 946-4850</b>	CLIENT: <u>ATANE Engineers</u>			SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <b>G189-2236-22</b>			HOLE NO. <b>B-16</b>	
	PROJECT NAME <b>Central Middle School</b>			BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <b>AO/aa</b>	LOCATION <b>9 Indian Rock Lane Greenwich CT</b>				
INSPECTOR		CASING	SAMPLER	CORE BAR	OFFSET
	TYPE	HSA	SS		DATE START <b>8/25/22</b>
	SIZE I.D.	4 1/4"	1 3/8"		DATE FINISH <b>8/25/22</b>
	HAMMER WT.		140#	BIT	SURFACE ELEV.
	HAMMER FALL		30"		GROUND WATER ELEV.
GROUND WATER OBSERVATIONS					
AT <u>none</u> FT AFTER <u>0</u> HOURS					
AT <u>  </u> FT AFTER <u>  </u> HOURS					

[illegible]

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. **HOLE NO. B-16**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST

WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE

SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM

PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE



<b>SOILTESTING, INC.</b> <b>90 DONOVAN RD.</b> <b>OXFORD, CT 06478</b> <b>CT (203) 262-9328</b> <b>NY (914) 946-4850</b>	CLIENT: <u>ATANE Engineers</u>			SHEET <u>1</u> OF <u>1</u>	
	PROJECT NO. <b>G189-2236-22</b>			HOLE NO. <b>B-17</b>	
	PROJECT NAME <b>Central Middle School</b>			BORING LOCATIONS Per Plan	
FOREMAN - DRILLER <b>SD</b>	LOCATION <b>9 Indian Rock Lane Greenwich CT</b>				
INSPECTOR		CASING	SAMPLER	CORE BAR	OFFSET
	TYPE	HSA	SS		DATE START <b>9/3/22</b>
	SIZE I.D.	4 1/4"	1 3/8"		DATE FINISH <b>9/3/22</b>
	HAMMER WT.		140#	BIT	SURFACE ELEV.
	HAMMER FALL		30"		GROUND WATER ELEV.
GROUND WATER OBSERVATIONS					
AT <u>none</u> FT AFTER <u>0</u> HOURS					
AT <u>  </u> FT AFTER <u>  </u> HOURS					

[illegible]

**NOTE:** Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.		<b>HOLE NO.</b>	<b>B-17</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST			
WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS		C = COARSE	
SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER		M = MEDIUM	
PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50%		F = FINE	



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850		CLIENT: <b>ATANE Engineers</b>				SHEET <u>1</u> OF <u>1</u>						
		PROJECT NO. <b>G189-2236-22</b>				HOLE NO. <b>B-18</b>						
		PROJECT NAME <b>Central Middle School</b>				BORING LOCATIONS Per Plan						
FOREMAN - DRILLER <b>SD/cp</b>		LOCATION <b>9 Indian Rock Lane Greenwich CT</b>										
INSPECTOR		TYPE <b>HSA</b> CASING <b>HSA</b> SAMPLER <b>SS</b> CORE BAR SIZE I.D. <b>4 1/4"</b> <b>1 3/8"</b> HAMMER WT. <b>140#</b> BIT HAMMER FALL <b>30"</b>				OFFSET DATE START <b>9/3/22</b> DATE FINISH <b>9/3/22</b> SURFACE ELEV. GROUND WATER ELEV.						
GROUND WATER OBSERVATIONS AT <u>9</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS												
DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST  MOIST	STRATA CHANGE DEPTH  ELEV	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC.	DEPTH @ BOT						
5		1	ss	24"	24"	6'0"	14	13		compact dry compact dry	7'6"	Gry F-M sand & F gravel, lit silt
		2	ss	21"	12"	8'0"	11	14				Same
10							7	5			10'	Gry/blk F sand & silt (gry/blk) trace organics, F gravel- Cobbles 9'-10' (poss fill)
		3	ss	24"	16"	12'0"	9	11		compact wet dense wet		
15		4	ss	22"	20"	13'10"	7	13			13'10"	Same
						20	50/4"			EOB 13'10"		
20												
25												
30												
35												
40												
<b>NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.</b>												
GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.												HOLE NO. <b>B-18</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE												



<b>SOILTESTING, INC.</b> <b>90 DONOVAN RD.</b> <b>OXFORD, CT 06478</b> <b>CT (203) 262-9328</b> <b>NY (914) 946-4850</b>	CLIENT: <b>ATANE Engineers</b>			SHEET <u>1</u> OF <u>1</u> HOLE NO. <span style="float: right;">B-19</span>		
	PROJECT NO. <b>G189-2236-22</b>					
	PROJECT NAME <b>Central Middle School</b>			BORING LOCATIONS Per Plan		
FOREMAN - DRILLER <b>SD</b>	LOCATION <b>9 Indian Rock Lane Greenwich CT</b>					
INSPECTOR				OFFSET		
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	TYPE	CASING	SAMPLER	CORE BAR	DATE START	9/3/22
	SIZE I.D.	HSA	SS		DATE FINISH	9/3/22
	HAMMER WT.	4 1/4"	1 3/8"		SURFACE ELEV.	
	HAMMER FALL		140#	BIT	GROUND WATER ELEV.	
			30"			

[illegible]

**NOTE:** Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

CONDITIONS AT OTHER LOCATIONS OR TIMES. GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.										<b>HOLE NO.</b>		<b>B-19</b>	
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE													





**APPENDIX 6:**  
**Laboratory Test Results – Geotechnical Test Results**





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## SIEVE ANALYSIS ASTM DESIGNATION C136

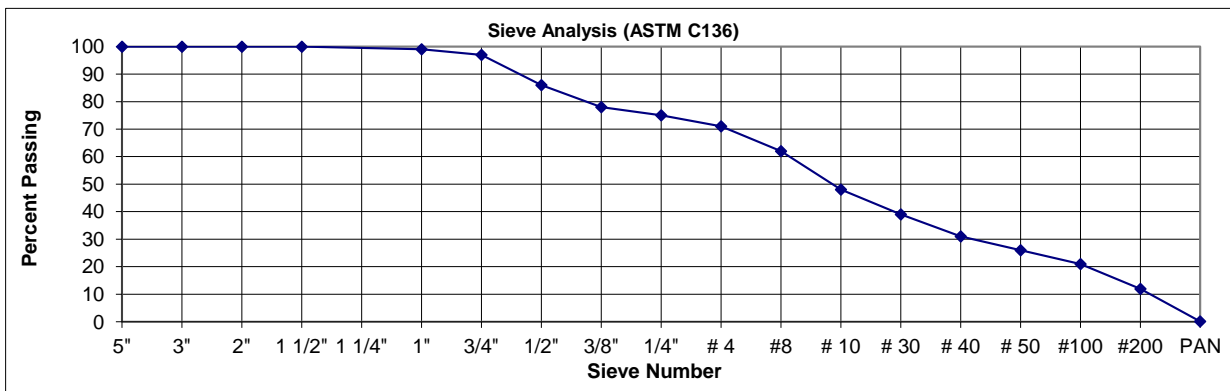
<b>Client:</b> Town of Greenwich 101 Field Point Road Greenwich, CT 06830  <b>Project:</b> Greenwich Cen. Middle Sch. 9 Indian Rock Lane Greenwich, CT 06830  <b>Project #:</b> 2021-11-0386A02	<b>Sample Source:</b>  Test Pit #1	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-1 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
	<b>Sample Use:</b> Subgrade	<b>Material Type:</b> Tan Gravel

ATANE Report #: MA0386081222-1

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	0.0	100	
1 1/4"	--		
1"	80.7	99	
3/4"	242.1	97	
1/2"	1022.1	86	
3/8"	1586.4	78	
1/4"	1810.8	75	
# 4	2108.5	71	
#8	2828.6	62	
# 10	3837.5	48	
# 30	4515.2	39	
# 40	5085.9	31	
# 50	5418.1	26	
#100	5854.5	21.0	
#200	6490.6	11.9	
PAN	7358.2	0.1	

<b>Wet Wash:</b>	No
<b>% Over #4, Under 3":</b>	29.0

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---------------------



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## SIEVE ANALYSIS ASTM DESIGNATION C136

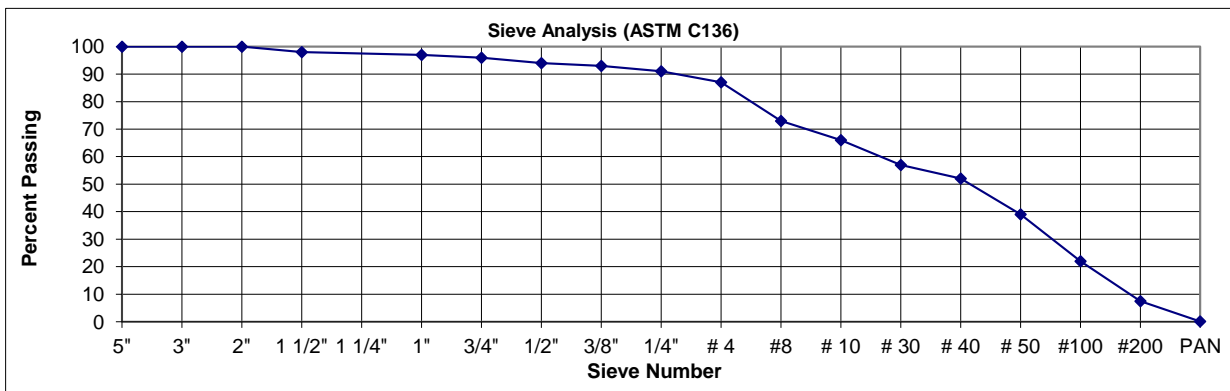
<b>Client:</b> Town of Greenwich 101 Field Point Road Greenwich, CT 06830  <b>Project:</b> Greenwich Cen. Middle Sch. 9 Indian Rock Lane Greenwich, CT 06830  <b>Project #:</b> 2021-11-0386A01	<b>Sample Source:</b>  Test Pit #2	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-7 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
	<b>Sample Use:</b> Subgrade	<b>Material Type:</b> Dark Brown Gravel

ATANE Report #: MA0386081222-7

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
			EARTH MOVING 31 20 00 2.01.G.4
5"	0.0	100	
3"	0.0	100	70-100
2"	52.1	100	
1 1/2"	212.4	98	
1 1/4"	--		
1"	439.3	97	
3/4"	573.2	96	45-95
1/2"	782.1	94	
3/8"	884.7	93	
1/4"	1208.7	91	
# 4	1646.7	87	30-90
#8	3508.5	73	
# 10	4334.4	66	25-80
# 30	5526.9	57	
# 40	6199.2	52	10-50
# 50	7770.4	39	
#100	9997.2	22.0	
#200	11872.6	7.5	0-10
PAN	12814.1	0.1	

<b>Wet Wash:</b>	No
<b>% Over #4, Under 3":</b>	13.0

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# ATANE SIEVE ANALYSIS ASTM DESIGNATION C136 Split Sample

## Lab Work Sheet

<b>Client:</b> Town of Greenwich 101 Field Point Road Greenwich, CT 06830  <b>Project:</b> Greenwich Cen. Middle Sch. 9 Indian Rock Lane Greenwich, CT 06830  <b>Project #:</b> 2021-11-0386A02	<b>Sample Source:</b>	<b>Sample Date:</b> 8/12/2022 <b>Sample #:</b> 220812-8 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
	<b>Test Pit #3</b>	
	<b>Sample Use:</b>	<b>Material Type:</b>
	Subgrade	Tan Gravel

ATANE Report #: MA00386081222-8

Sample Initial Dry Weight: 15,289.40

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)
5"	0.0	100.0
3"	0.0	100.0
2"	50.1	99.7
1 1/2"	173.8	98.9
1 1/4"	--	
1"	748.9	95.1
3/4"	878.4	94.3
1/2"	1095.2	92.8
3/8"	1268.1	91.7

Split sample to size appropriate for smaller sieves here

Wt of -3/8":	14021.3
Weight of New Split Sample:	692.7

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	%Passing (Split Sample)	% Passing (Total Sample)
--------------------------	----------------------	----------------------------	-----------------------------

Split Sample

1/4"	45.3	93.5	85.7
# 4	72.4	89.5	82.1
# 8	169.5	75.5	69.3
# 10	215.3	68.9	63.2
# 30	299.5	56.8	52.1
# 40	338.5	51.1	46.9
# 50	425.7	38.5	35.3
#100	517.8	25.2	23.2
#200	624.7	9.8	9.0
PAN	692.3	0.1	0.1



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## SIEVE ANALYSIS ASTM DESIGNATION C136

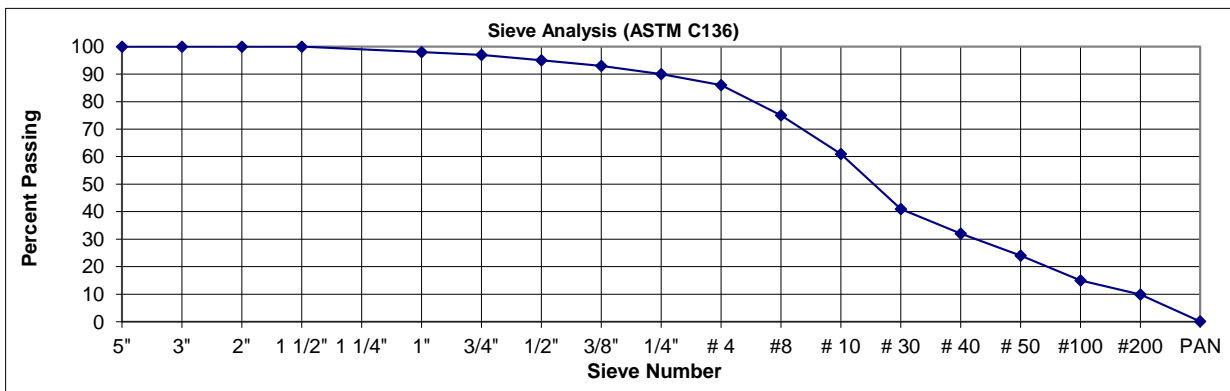
<b>Client:</b> <i>Town of Greenwich</i> <i>101 Field Point Road</i> <i>Greenwich, CT 06830</i>  <b>Project:</b> <i>Greenwich Cen. Middle Sch.</i> <i>9 Indian Rock Lane</i> <i>Greenwich, CT 06830</i>  <b>Project #:</b> <i>2021-11-0386A02</i>	<b>Sample Source:</b>  <i>Test Pit #4</i>	<b>Sample Date:</b> <i>08/12/22</i> <b>Sample #:</b> <i>220812-2</i> <b>Lab Tech:</b> <i>PJM</i> <b>Sampled by:</b> <i>MH</i>
	<b>Sample Use:</b> <i>Subgrade</i>	<b>Material Type:</b> <i>Tan Gravel</i>

ATANE Report #: MA0386081222-2

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	0.0	100	
1 1/4"	--		
1"	190.2	98	
3/4"	266.3	97	
1/2"	412.8	95	
3/8"	516.4	93	
1/4"	774.4	90	
# 4	1134.4	86	
#8	1958.4	75	
# 10	3089.4	61	
# 30	4671.9	41	
# 40	5391.8	32	
# 50	6000.5	24	
#100	6742.3	15.0	
#200	7145.0	9.9	
PAN	7927.4	0.1	

<b>Wet Wash:</b>	<i>No</i>
<b>% Over #4, Under 3":</b>	<i>14.0</i>

<b>Reviewed by:</b>
---------------------



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## SIEVE ANALYSIS ASTM DESIGNATION C136

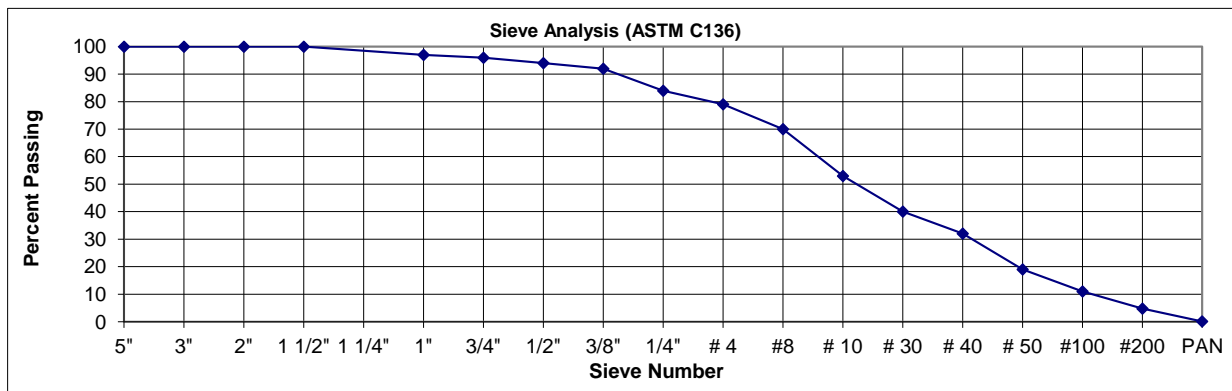
<b>Client:</b> <i>Town of Greenwich</i> 101 Field Point Road Greenwich, CT 06830	<b>Sample Source:</b>  <b>Test Pit #6</b>	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-11 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
<b>Project:</b> <i>Greenwich Cen. Middle Sch.</i> 9 Indian Rock Lane Greenwich, CT 06830	<b>Sample Use:</b> Subgrade	<b>Material Type:</b> Brown Gravel
<b>Project #:</b> 2022-32-0386A02		

ATANE Report #: MA0386081222-11

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	0.0	100	
1 1/4"	--		
1"	378.3	97	
3/4"	612.7	96	
1/2"	831.4	94	
3/8"	1072.8	92	
1/4"	2138.9	84	
# 4	2903.8	79	
#8	4136.0	70	
# 10	6483.5	53	
# 30	8181.2	40	
# 40	9338.6	32	
# 50	11169.6	19	
#100	12193.7	11.0	
#200	13073.6	4.8	
PAN	13717.9	0.1	

<b>Wet Wash:</b> No
<b>% Over #4, Under 3":</b> 21.0

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## SIEVE ANALYSIS ASTM DESIGNATION C136

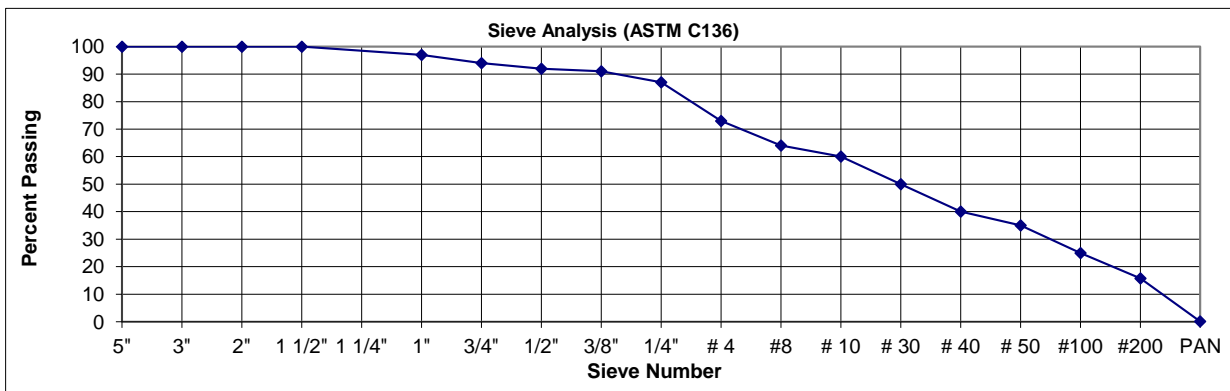
<b>Client:</b> Town of Greenwich 101 Field Point Road Greenwich, CT 06830  <b>Project:</b> Greenwich Cen. Middle Sch. 9 Indian Rock Lane Greenwich, CT 06830  <b>Project #:</b> 2021-11-0386A02	<b>Sample Source:</b>  Test Pit #8  <b>Sample Use:</b> Subgrade	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-3 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH  <b>Material Type:</b> Tan Gravel
---	--	---

ATANE Report #: MA0386081222-3

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	0.0	100	
1 1/4"	--		
1"	239.2	97	
3/4"	548.1	94	
1/2"	703.2	92	
3/8"	845.7	91	
1/4"	1232.8	87	
# 4	2556.1	73	
#8	3399.1	64	
# 10	3784.9	60	
# 30	4636.4	50	
# 40	5591.2	40	
# 50	6102.3	35	
#100	6983.4	25.0	
#200	7879.1	15.8	
PAN	9347.5	0.1	

<b>Wet Wash:</b>	No
<b>% Over #4, Under 3":</b>	27.0

<b>Reviewed by:</b>
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## SIEVE ANALYSIS ASTM DESIGNATION C136

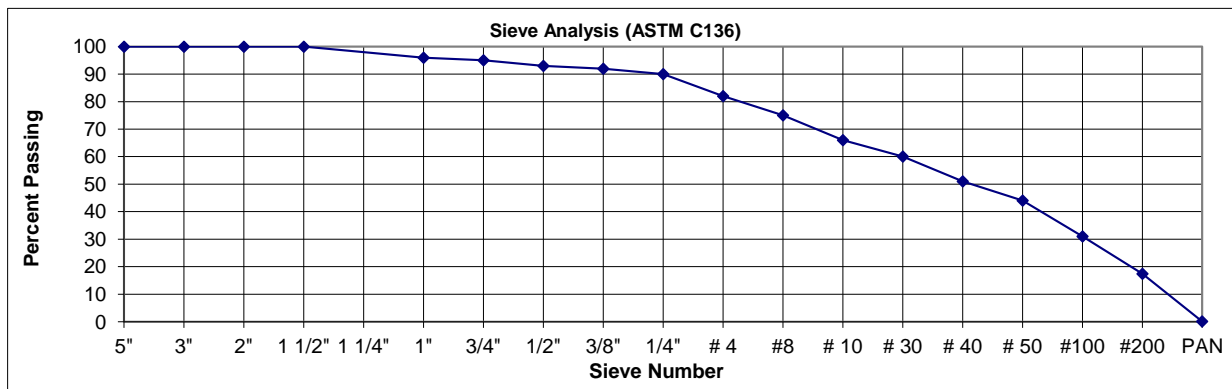
<b>Client:</b> <i>Town of Greenwich</i> 101 Field Point Road Greenwich, CT 06830  <b>Project:</b> <i>Greenwich Cen. Middle Sch.</i> 9 Indian Rock Lane Greenwich, CT 06830  <b>Project #:</b> 2021-11-0386A02	<b>Sample Source:</b>  Test Pit #9	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-9 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
	<b>Sample Use:</b> Subgrade	<b>Material Type:</b> Brown Gravel

ATANE Report #: MA0386081222-9

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	0.0	100	
1 1/4"	--		
1"	482.3	96	
3/4"	567.8	95	
1/2"	789.2	93	
3/8"	893.1	92	
1/4"	1074.0	90	
# 4	2077.5	82	
#8	2813.3	75	
# 10	3840.6	66	
# 30	4498.6	60	
# 40	5496.1	51	
# 50	6311.1	44	
#100	7797.6	31.0	
#200	9315.5	17.4	
PAN	11261.0	0.1	

<b>Wet Wash:</b>	No
<b>% Over #4, Under 3":</b>	18.0

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### SIEVE ANALYSIS ASTM DESIGNATION C136

<b>Client:</b> <i>Town of Greenwich</i> 101 Field Post Road Greenwich, CT 06830	<b>Sample Source:</b>  <b>Test Pit #12</b>	<b>Sample Date:</b> 08/12/22 <b>Sample #:</b> 220812-12 <b>Lab Tech:</b> PJM <b>Sampled by:</b> MH
<b>Project:</b> <i>Greenwich Cen. Middle Sch.</i> 9 Indian Rock Lane Greenwich, CT 06830	<b>Sample Use:</b> Subgrade	<b>Material Type:</b> Tan Gravel
<b>Project #:</b> 2021-11-0386A02		

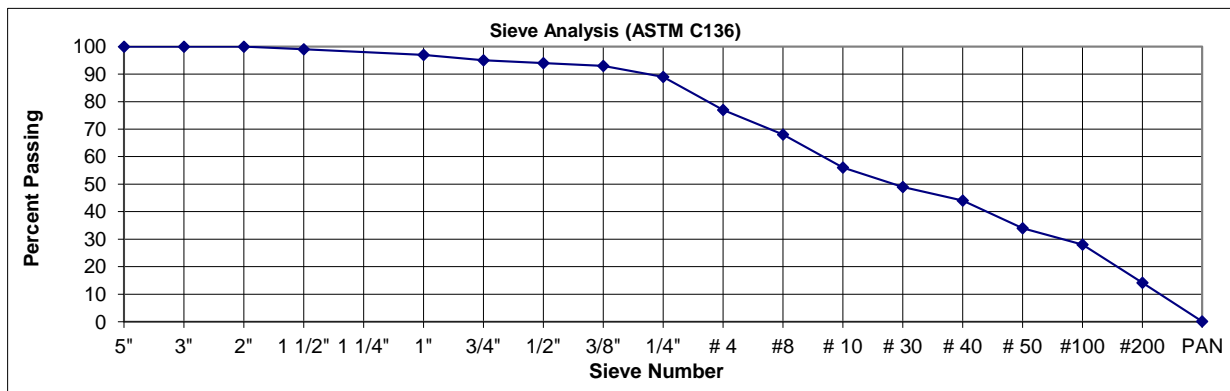
ATANE Report #: MA0386081222-12

SIEVE SIZE (IN / NO.)	WEIGHT (Retained)	% PASSING (Total Sample)	SPECIFICATIONS
5"	0.0	100	
3"	0.0	100	
2"	0.0	100	
1 1/2"	143.2	99	
1 1/4"	--		
1"	387.1	97	
3/4"	589.2	95	
1/2"	677.3	94	
3/8"	802.4	93	
1/4"	1338.8	89	
# 4	2699.6	77	
#8	3702.3	68	
# 10	5218.0	56	
# 30	6042.4	49	
# 40	6523.3	44	
# 50	7707.2	34	
#100	8421.9	28.0	
#200	10067.7	14.2	
PAN	11731.1	0.1	

Wet Wash: No

% Over #4, Under 3": 23.0

Reviewed by:



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**MATERIAL TESTING GROUP**

47 HUDSON STREET  
OSSINING, NY 10562

TEL: (914) 945- 9010  
FAX: (914) 945-9012

**SIEVE ANALYSIS**

**Report:** G-008 **ATANE Project #:** 2111-386A02  
**Sample Date:** **General Location:** Greenwich Central  
Middle School  
Greenwich CT  
**Test Date:** 10/7/2022  
**Sample Id:** Sample #8  
**Source:** Composite/ combined  
sample B-17-B-18& B-19

Sieve #	Weight, gms	% Retained	% Passing
2"	0.0	0.0	100
1 1/2"	0.0	0.0	100
1"	0.0	0.0	100
3/4"	60.4	3.8	96.2
1/2"	96.9	6.2	90.0
3/8"	64.0	4.1	85.9
1/4"	81.5	5.2	80.7
#4	47.8	3.0	77.7
#8	105.1	6.7	71.0
#16	109.4	7.0	64.0
#20	64.6	4.1	59.9
#30	66.7	4.2	55.7
#40	94.6	6.0	49.7
#60	151.0	9.5	40.2
#80	28.5	1.8	38.4
#100	99.3	6.3	32.0
#200	232.1	14.7	17.3
Material passing No 200 sieve by washing	258.6		
PAN	12.4	17.3	
TOTAL	1573.9		

Nature: Natural Soil. (Moisture Content # 5.3 %)

Color/ Odor / Impurities: Brownish /None /None

Sample free from larger gravel, debris, waste vegetation, frozen materials, organic materials & other deleterious matter.

**Submitted by ATANE**

### **SPECIFIC GRAVITY SOILS TEST REPORT (ASTM D 854)**

Client:  
Project:  
Address:  
Date Sampled:  
Test Date:  
Report #:  
HAKS Project #

Town of Greenwich  
Greenwich Central Middle School  
9, Indian rock Lane, Greenwich CT.  
Various Dates  
10/05/22 & 10/06/22  
01  
2021-11-0386A02

SAMPLE No.	LOCATION	Specific Gravity
1	Test Pit # 1	2.653
2	Test Pit # 2	2.659
3	Test Pit # 3	2.681
4	Test Pit # 4	2.677
5	Test Pit # 5	2.668
6	Test Pit # 9	2.680
7	Test Pit # 12	2.678
8	Composite / Combined Sample of B-17, B-18 & B-19	2.695

Lab Tech: NK

Lab Director: SG



# ATANE

MATERIAL TESTING GROUP

47 HUDSON STREET,  
OSSINING, NY 10562

TEL: (914)945-9010  
FAX: (914)945-9012

## LIQUID LIMIT, PLASTIC LIMIT & PLASTICITY INDEX OF SOILS TEST REPORT (ASTM D 4318)

Client:	Town of Greenwich
Project:	Greenwich Central Middle School
Address:	9, Indian rock Lane, Greenwich CT.
Date Sampled:	Various Dates
Test Date:	10/07/22 & 10/10/22
Report #:	02
HAKS Project #	2021-11-0386A02

LOCATION	Test Pit # 8	Test Pit # 9
Liquid Limit	21.1	22.5
Plastic Limit	18.3	19.1
Plasticity Index	2.8	3.4

Lab Tech: NK

Lab Director: SG

**APPENDIX 6:**  
**Laboratory Test Results – Chemical Test Results**





## ANALYTICAL REPORT

Lab Number:	L2243810
Client:	ATANE Engineering PC 56 Roland Street, Suite 202 Boston, MA 02129
ATTN:	Peter McCarthy
Phone:	(617) 778-7300
Project Name:	CENTRAL MIDDLE SCHOOL
Project Number:	Not Specified
Report Date:	09/07/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2243810-01	TP-SL1	SOIL	GREENWICH, CT	08/12/22 08:30	08/13/22
L2243810-02	TP-SL2	SOIL	GREENWICH, CT	08/12/22 10:30	08/13/22
L2243810-03	TP-SL3	SOIL	GREENWICH, CT	08/12/22 12:30	08/13/22
L2243810-04	TP-SL4	SOIL	GREENWICH, CT	08/12/22 14:30	08/13/22
L2243810-05	TP-SL5	SOIL	GREENWICH, CT	08/12/22 16:30	08/13/22



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**CT DEP Reasonable Confidence Protocols  
 Laboratory Analysis  
 QA/QC Certification Form**

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
1a	Were the method specified preservation and holding time requirements met?	YES
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	YES
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (<6°C)?	NO
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody?	NO
5b	Were these reporting limits met?	N/A
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?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

**Note:** 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 question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

### Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

### Case Narrative (continued)

#### RCP Related Narratives

##### Report Submission

In reference to question 5a:

Reporting limits were not specified.

##### Sample Receipt

In reference to question 3:

The samples were received at the laboratory above the required temperature range and were not on ice.

##### Volatile Organics

In reference to question 4:

L2243810-01 through -05: Initial Calibration Verification outside criteria: dichlorodifluoromethane (124%)

##### PAHs

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full RCP list of constituents identified in the method specific analyte list presented in the RCP documents.

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

Authorized Signature:

*Melissa Sturgis* Melissa Sturgis

Title: Technical Director/Representative

Date: 09/07/22

## QC OUTLIER SUMMARY REPORT

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2243810

**Project Number:** Not Specified

**Report Date:** 09/07/22

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
Volatile Petroleum Hydrocarbons - Westborough Lab								
VPH-18-2.1	TP-SL1	L2243810-01	2,5-Dibromotoluene-FID	Surrogate	137	70-130	-	potential high bias
VPH-18-2.1	TP-SL3	L2243810-03	2,5-Dibromotoluene-FID	Surrogate	131	70-130	-	potential high bias
VPH-18-2.1	TP-SL4	L2243810-04	2,5-Dibromotoluene-FID	Surrogate	137	70-130	-	potential high bias
VPH-18-2.1	TP-SL5	L2243810-05	2,5-Dibromotoluene-FID	Surrogate	133	70-130	-	potential high bias



# ORGANICS

# VOLATILES



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01  
 Client ID: TP-SL1  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 20:18  
 Analyst: JC  
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.3	--	1
1,1-Dichloroethane	ND		ug/kg	0.86	--	1
Chloroform	ND		ug/kg	1.3	--	1
Carbon tetrachloride	ND		ug/kg	0.86	--	1
1,2-Dichloropropane	ND		ug/kg	0.86	--	1
Dibromochloromethane	ND		ug/kg	0.86	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.86	--	1
Tetrachloroethene	ND		ug/kg	0.43	--	1
Chlorobenzene	ND		ug/kg	0.43	--	1
Trichlorofluoromethane	ND		ug/kg	3.4	--	1
1,2-Dichloroethane	ND		ug/kg	0.86	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.43	--	1
Bromodichloromethane	ND		ug/kg	0.43	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.86	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.43	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.43	--	1
1,1-Dichloropropene	ND		ug/kg	0.43	--	1
Bromoform	ND		ug/kg	3.4	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.43	--	1
Benzene	ND		ug/kg	0.43	--	1
Toluene	ND		ug/kg	0.86	--	1
Ethylbenzene	ND		ug/kg	0.86	--	1
Chloromethane	ND		ug/kg	3.4	--	1
Bromomethane	ND		ug/kg	1.7	--	1
Vinyl chloride	ND		ug/kg	0.86	--	1
Chloroethane	ND		ug/kg	1.7	--	1
1,1-Dichloroethene	ND		ug/kg	0.86	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01

Date Collected: 08/12/22 08:30

Client ID: TP-SL1

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.43	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.7	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	--	1
Methyl tert butyl ether	ND		ug/kg	1.7	--	1
p/m-Xylene	ND		ug/kg	1.7	--	1
o-Xylene	ND		ug/kg	0.86	--	1
Xylenes, Total	ND		ug/kg	0.86	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.86	--	1
Dibromomethane	ND		ug/kg	1.7	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.7	--	1
Styrene	ND		ug/kg	0.86	--	1
Dichlorodifluoromethane	ND		ug/kg	8.6	--	1
Acetone	ND		ug/kg	22	--	1
Carbon disulfide	ND		ug/kg	8.6	--	1
2-Butanone	ND		ug/kg	8.6	--	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	--	1
2-Hexanone	ND		ug/kg	8.6	--	1
Acrylonitrile	ND		ug/kg	3.4	--	1
Tetrahydrofuran	ND		ug/kg	3.4	--	1
2,2-Dichloropropane	ND		ug/kg	1.7	--	1
1,2-Dibromoethane	ND		ug/kg	0.86	--	1
1,3-Dichloropropane	ND		ug/kg	1.7	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.43	--	1
Bromobenzene	ND		ug/kg	1.7	--	1
n-Butylbenzene	ND		ug/kg	0.86	--	1
sec-Butylbenzene	ND		ug/kg	0.86	--	1
tert-Butylbenzene	ND		ug/kg	1.7	--	1
o-Chlorotoluene	ND		ug/kg	1.7	--	1
p-Chlorotoluene	ND		ug/kg	1.7	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	--	1
Hexachlorobutadiene	ND		ug/kg	3.4	--	1
Isopropylbenzene	ND		ug/kg	0.86	--	1
p-Isopropyltoluene	ND		ug/kg	0.86	--	1
Naphthalene	ND		ug/kg	3.4	--	1
n-Propylbenzene	ND		ug/kg	0.86	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01

Date Collected: 08/12/22 08:30

Client ID: TP-SL1

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.3	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	3.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 20:45  
 Analyst: JC  
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	2.1	--	1
1,1-Dichloroethane	ND		ug/kg	0.42	--	1
Chloroform	ND		ug/kg	0.63	--	1
Carbon tetrachloride	ND		ug/kg	0.42	--	1
1,2-Dichloropropane	ND		ug/kg	0.42	--	1
Dibromochloromethane	ND		ug/kg	0.42	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.42	--	1
Tetrachloroethene	ND		ug/kg	0.21	--	1
Chlorobenzene	ND		ug/kg	0.21	--	1
Trichlorofluoromethane	ND		ug/kg	1.7	--	1
1,2-Dichloroethane	ND		ug/kg	0.42	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.21	--	1
Bromodichloromethane	ND		ug/kg	0.21	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.42	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.21	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.21	--	1
1,1-Dichloropropene	ND		ug/kg	0.21	--	1
Bromoform	ND		ug/kg	1.7	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.21	--	1
Benzene	ND		ug/kg	0.21	--	1
Toluene	ND		ug/kg	0.42	--	1
Ethylbenzene	ND		ug/kg	0.42	--	1
Chloromethane	ND		ug/kg	1.7	--	1
Bromomethane	ND		ug/kg	0.84	--	1
Vinyl chloride	ND		ug/kg	0.42	--	1
Chloroethane	ND		ug/kg	0.84	--	1
1,1-Dichloroethene	ND		ug/kg	0.42	--	1
trans-1,2-Dichloroethene	ND		ug/kg	0.63	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.21	--	1
1,2-Dichlorobenzene	ND		ug/kg	0.84	--	1
1,3-Dichlorobenzene	ND		ug/kg	0.84	--	1
1,4-Dichlorobenzene	ND		ug/kg	0.84	--	1
Methyl tert butyl ether	ND		ug/kg	0.84	--	1
p/m-Xylene	ND		ug/kg	0.84	--	1
o-Xylene	ND		ug/kg	0.42	--	1
Xylenes, Total	ND		ug/kg	0.42	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.42	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.42	--	1
Dibromomethane	ND		ug/kg	0.84	--	1
1,2,3-Trichloropropane	ND		ug/kg	0.84	--	1
Styrene	ND		ug/kg	0.42	--	1
Dichlorodifluoromethane	ND		ug/kg	4.2	--	1
Acetone	ND		ug/kg	10	--	1
Carbon disulfide	ND		ug/kg	4.2	--	1
2-Butanone	ND		ug/kg	4.2	--	1
4-Methyl-2-pentanone	ND		ug/kg	4.2	--	1
2-Hexanone	ND		ug/kg	4.2	--	1
Acrylonitrile	ND		ug/kg	1.7	--	1
Tetrahydrofuran	ND		ug/kg	1.7	--	1
2,2-Dichloropropane	ND		ug/kg	0.84	--	1
1,2-Dibromoethane	ND		ug/kg	0.42	--	1
1,3-Dichloropropane	ND		ug/kg	0.84	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.21	--	1
Bromobenzene	ND		ug/kg	0.84	--	1
n-Butylbenzene	ND		ug/kg	0.42	--	1
sec-Butylbenzene	ND		ug/kg	0.42	--	1
tert-Butylbenzene	ND		ug/kg	0.84	--	1
o-Chlorotoluene	ND		ug/kg	0.84	--	1
p-Chlorotoluene	ND		ug/kg	0.84	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.2	--	1
Hexachlorobutadiene	ND		ug/kg	1.7	--	1
Isopropylbenzene	ND		ug/kg	0.42	--	1
p-Isopropyltoluene	ND		ug/kg	0.42	--	1
Naphthalene	ND		ug/kg	1.7	--	1
n-Propylbenzene	ND		ug/kg	0.42	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02

Date Collected: 08/12/22 10:30

Client ID: TP-SL2

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	0.84	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	0.84	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	0.84	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	0.84	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	2.1	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	1.7	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03  
 Client ID: TP-SL3  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 12:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 21:12  
 Analyst: JC  
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	9.3	--	1
1,1-Dichloroethane	ND		ug/kg	1.9	--	1
Chloroform	ND		ug/kg	2.8	--	1
Carbon tetrachloride	ND		ug/kg	1.9	--	1
1,2-Dichloropropane	ND		ug/kg	1.9	--	1
Dibromochloromethane	ND		ug/kg	1.9	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	--	1
Tetrachloroethene	ND		ug/kg	0.93	--	1
Chlorobenzene	ND		ug/kg	0.93	--	1
Trichlorofluoromethane	ND		ug/kg	7.4	--	1
1,2-Dichloroethane	ND		ug/kg	1.9	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.93	--	1
Bromodichloromethane	ND		ug/kg	0.93	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.9	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.93	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.93	--	1
1,1-Dichloropropene	ND		ug/kg	0.93	--	1
Bromoform	ND		ug/kg	7.4	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.93	--	1
Benzene	ND		ug/kg	0.93	--	1
Toluene	ND		ug/kg	1.9	--	1
Ethylbenzene	ND		ug/kg	1.9	--	1
Chloromethane	ND		ug/kg	7.4	--	1
Bromomethane	ND		ug/kg	3.7	--	1
Vinyl chloride	ND		ug/kg	1.9	--	1
Chloroethane	ND		ug/kg	3.7	--	1
1,1-Dichloroethene	ND		ug/kg	1.9	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.8	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

**Lab ID:** L2243810-03  
**Client ID:** TP-SL3  
**Sample Location:** GREENWICH, CT

**Date Collected:** 08/12/22 12:30  
**Date Received:** 08/13/22  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.93	--	1
1,2-Dichlorobenzene	ND		ug/kg	3.7	--	1
1,3-Dichlorobenzene	ND		ug/kg	3.7	--	1
1,4-Dichlorobenzene	ND		ug/kg	3.7	--	1
Methyl tert butyl ether	ND		ug/kg	3.7	--	1
p/m-Xylene	ND		ug/kg	3.7	--	1
o-Xylene	ND		ug/kg	1.9	--	1
Xylenes, Total	ND		ug/kg	1.9	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.9	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.9	--	1
Dibromomethane	ND		ug/kg	3.7	--	1
1,2,3-Trichloropropane	ND		ug/kg	3.7	--	1
Styrene	ND		ug/kg	1.9	--	1
Dichlorodifluoromethane	ND		ug/kg	19	--	1
Acetone	ND		ug/kg	46	--	1
Carbon disulfide	ND		ug/kg	19	--	1
2-Butanone	ND		ug/kg	19	--	1
4-Methyl-2-pentanone	ND		ug/kg	19	--	1
2-Hexanone	ND		ug/kg	19	--	1
Acrylonitrile	ND		ug/kg	7.4	--	1
Tetrahydrofuran	ND		ug/kg	7.4	--	1
2,2-Dichloropropane	ND		ug/kg	3.7	--	1
1,2-Dibromoethane	ND		ug/kg	1.9	--	1
1,3-Dichloropropane	ND		ug/kg	3.7	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.93	--	1
Bromobenzene	ND		ug/kg	3.7	--	1
n-Butylbenzene	ND		ug/kg	1.9	--	1
sec-Butylbenzene	ND		ug/kg	1.9	--	1
tert-Butylbenzene	ND		ug/kg	3.7	--	1
o-Chlorotoluene	ND		ug/kg	3.7	--	1
p-Chlorotoluene	ND		ug/kg	3.7	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.6	--	1
Hexachlorobutadiene	ND		ug/kg	7.4	--	1
Isopropylbenzene	ND		ug/kg	1.9	--	1
p-Isopropyltoluene	ND		ug/kg	1.9	--	1
Naphthalene	ND		ug/kg	7.4	--	1
n-Propylbenzene	ND		ug/kg	1.9	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03

Date Collected: 08/12/22 12:30

Client ID: TP-SL3

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	3.7	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.7	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.7	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.7	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	9.3	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	7.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 21:38  
 Analyst: JC  
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	--	1
1,1-Dichloroethane	ND		ug/kg	1.4	--	1
Chloroform	ND		ug/kg	2.1	--	1
Carbon tetrachloride	ND		ug/kg	1.4	--	1
1,2-Dichloropropane	ND		ug/kg	1.4	--	1
Dibromochloromethane	ND		ug/kg	1.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	--	1
Tetrachloroethene	ND		ug/kg	0.69	--	1
Chlorobenzene	ND		ug/kg	0.69	--	1
Trichlorofluoromethane	ND		ug/kg	5.5	--	1
1,2-Dichloroethane	ND		ug/kg	1.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	--	1
Bromodichloromethane	ND		ug/kg	0.69	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.69	--	1
1,1-Dichloropropene	ND		ug/kg	0.69	--	1
Bromoform	ND		ug/kg	5.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	--	1
Benzene	ND		ug/kg	0.69	--	1
Toluene	ND		ug/kg	1.4	--	1
Ethylbenzene	ND		ug/kg	1.4	--	1
Chloromethane	ND		ug/kg	5.5	--	1
Bromomethane	ND		ug/kg	2.8	--	1
Vinyl chloride	ND		ug/kg	1.4	--	1
Chloroethane	ND		ug/kg	2.8	--	1
1,1-Dichloroethene	ND		ug/kg	1.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.69	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	--	1
Methyl tert butyl ether	ND		ug/kg	2.8	--	1
p/m-Xylene	ND		ug/kg	2.8	--	1
o-Xylene	ND		ug/kg	1.4	--	1
Xylenes, Total	ND		ug/kg	1.4	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	--	1
Dibromomethane	ND		ug/kg	2.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	--	1
Styrene	ND		ug/kg	1.4	--	1
Dichlorodifluoromethane	ND		ug/kg	14	--	1
Acetone	ND		ug/kg	35	--	1
Carbon disulfide	ND		ug/kg	14	--	1
2-Butanone	ND		ug/kg	14	--	1
4-Methyl-2-pentanone	ND		ug/kg	14	--	1
2-Hexanone	ND		ug/kg	14	--	1
Acrylonitrile	ND		ug/kg	5.5	--	1
Tetrahydrofuran	ND		ug/kg	5.5	--	1
2,2-Dichloropropane	ND		ug/kg	2.8	--	1
1,2-Dibromoethane	ND		ug/kg	1.4	--	1
1,3-Dichloropropane	ND		ug/kg	2.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.69	--	1
Bromobenzene	ND		ug/kg	2.8	--	1
n-Butylbenzene	ND		ug/kg	1.4	--	1
sec-Butylbenzene	ND		ug/kg	1.4	--	1
tert-Butylbenzene	ND		ug/kg	2.8	--	1
o-Chlorotoluene	ND		ug/kg	2.8	--	1
p-Chlorotoluene	ND		ug/kg	2.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	--	1
Hexachlorobutadiene	ND		ug/kg	5.5	--	1
Isopropylbenzene	ND		ug/kg	1.4	--	1
p-Isopropyltoluene	ND		ug/kg	1.4	--	1
Naphthalene	ND		ug/kg	5.5	--	1
n-Propylbenzene	ND		ug/kg	1.4	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04

Date Collected: 08/12/22 14:30

Client ID: TP-SL4

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.9	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	5.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 22:05  
 Analyst: JC  
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	--	1
1,1-Dichloroethane	ND		ug/kg	1.0	--	1
Chloroform	ND		ug/kg	1.5	--	1
Carbon tetrachloride	ND		ug/kg	1.0	--	1
1,2-Dichloropropane	ND		ug/kg	1.0	--	1
Dibromochloromethane	ND		ug/kg	1.0	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	--	1
Tetrachloroethene	ND		ug/kg	0.50	--	1
Chlorobenzene	ND		ug/kg	0.50	--	1
Trichlorofluoromethane	ND		ug/kg	4.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.0	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	--	1
Bromodichloromethane	ND		ug/kg	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--	1
1,1-Dichloropropene	ND		ug/kg	0.50	--	1
Bromoform	ND		ug/kg	4.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--	1
Benzene	ND		ug/kg	0.50	--	1
Toluene	ND		ug/kg	1.0	--	1
Ethylbenzene	ND		ug/kg	1.0	--	1
Chloromethane	ND		ug/kg	4.0	--	1
Bromomethane	ND		ug/kg	2.0	--	1
Vinyl chloride	ND		ug/kg	1.0	--	1
Chloroethane	ND		ug/kg	2.0	--	1
1,1-Dichloroethene	ND		ug/kg	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	--	1
Methyl tert butyl ether	ND		ug/kg	2.0	--	1
p/m-Xylene	ND		ug/kg	2.0	--	1
o-Xylene	ND		ug/kg	1.0	--	1
Xylenes, Total	ND		ug/kg	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--	1
Dibromomethane	ND		ug/kg	2.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	--	1
Styrene	ND		ug/kg	1.0	--	1
Dichlorodifluoromethane	ND		ug/kg	10	--	1
Acetone	ND		ug/kg	25	--	1
Carbon disulfide	ND		ug/kg	10	--	1
2-Butanone	ND		ug/kg	10	--	1
4-Methyl-2-pentanone	ND		ug/kg	10	--	1
2-Hexanone	ND		ug/kg	10	--	1
Acrylonitrile	ND		ug/kg	4.0	--	1
Tetrahydrofuran	ND		ug/kg	4.0	--	1
2,2-Dichloropropane	ND		ug/kg	2.0	--	1
1,2-Dibromoethane	ND		ug/kg	1.0	--	1
1,3-Dichloropropane	ND		ug/kg	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--	1
Bromobenzene	ND		ug/kg	2.0	--	1
n-Butylbenzene	ND		ug/kg	1.0	--	1
sec-Butylbenzene	ND		ug/kg	1.0	--	1
tert-Butylbenzene	ND		ug/kg	2.0	--	1
o-Chlorotoluene	ND		ug/kg	2.0	--	1
p-Chlorotoluene	ND		ug/kg	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--	1
Hexachlorobutadiene	ND		ug/kg	4.0	--	1
Isopropylbenzene	ND		ug/kg	1.0	--	1
p-Isopropyltoluene	ND		ug/kg	1.0	--	1
Naphthalene	ND		ug/kg	4.0	--	1
n-Propylbenzene	ND		ug/kg	1.0	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05

Date Collected: 08/12/22 16:30

Client ID: TP-SL5

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	4.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 19:52  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1679071-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	0.50	--



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 19:52  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1679071-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
2-Butanone	ND		ug/kg	10	--
4-Methyl-2-pentanone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Acrylonitrile	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 08/23/22 19:52  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1679071-5					
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	4.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1679071-3 WG1679071-4								
Methylene chloride	96		96		70-130	0		30
1,1-Dichloroethane	104		104		70-130	0		30
Chloroform	106		104		70-130	2		30
Carbon tetrachloride	110		108		70-130	2		30
1,2-Dichloropropane	105		104		70-130	1		30
Dibromochloromethane	110		109		70-130	1		30
1,1,2-Trichloroethane	109		108		70-130	1		30
Tetrachloroethene	115		116		70-130	1		30
Chlorobenzene	107		107		70-130	0		30
Trichlorofluoromethane	112		110		70-130	2		30
1,2-Dichloroethane	102		101		70-130	1		30
1,1,1-Trichloroethane	111		109		70-130	2		30
Bromodichloromethane	104		105		70-130	1		30
trans-1,3-Dichloropropene	113		112		70-130	1		30
cis-1,3-Dichloropropene	98		98		70-130	0		30
1,1-Dichloropropene	115		116		70-130	1		30
Bromoform	105		106		70-130	1		30
1,1,1,2-Tetrachloroethane	102		106		70-130	4		30
Benzene	107		109		70-130	2		30
Toluene	108		107		70-130	1		30
Ethylbenzene	111		111		70-130	0		30
Chloromethane	109		110		52-130	1		30
Bromomethane	104		104		57-147	0		30



# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1679071-3 WG1679071-4								
Vinyl chloride	120		120		70-130	0		30
Chloroethane	112		112		70-130	0		30
1,1-Dichloroethene	110		112		70-130	2		30
trans-1,2-Dichloroethene	107		107		70-130	0		30
Trichloroethene	113		112		70-130	1		30
1,2-Dichlorobenzene	105		106		70-130	1		30
1,3-Dichlorobenzene	107		107		70-130	0		30
1,4-Dichlorobenzene	105		105		70-130	0		30
Methyl tert butyl ether	104		104		70-130	0		30
p/m-Xylene	115		115		70-130	0		30
o-Xylene	116		114		70-130	2		30
cis-1,2-Dichloroethene	105		106		70-130	1		30
Dibromomethane	104		103		70-130	1		30
1,2,3-Trichloropropane	100		101		70-130	1		30
Styrene	107		107		70-130	0		30
Dichlorodifluoromethane	117		117		30-146	0		30
Acetone	105		104		54-140	1		30
Carbon disulfide	98		99		59-130	1		30
2-Butanone	108		104		70-130	4		30
4-Methyl-2-pentanone	94		95		70-130	1		30
2-Hexanone	92		94		70-130	2		30
Acrylonitrile	98		97		70-130	1		30
Tetrahydrofuran	96		96		70-130	0		30

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2243810

**Project Number:** Not Specified

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1679071-3 WG1679071-4								
2,2-Dichloropropane	111		110		70-130	1		30
1,2-Dibromoethane	100		101		70-130	1		30
1,3-Dichloropropane	106		107		70-130	1		30
1,1,1,2-Tetrachloroethane	110		108		70-130	2		30
Bromobenzene	104		104		70-130	0		30
n-Butylbenzene	114		114		70-130	0		30
sec-Butylbenzene	112		114		70-130	2		30
tert-Butylbenzene	111		112		70-130	1		30
o-Chlorotoluene	105		106		70-130	1		30
p-Chlorotoluene	109		108		70-130	1		30
1,2-Dibromo-3-chloropropane	102		105		68-130	3		30
Hexachlorobutadiene	108		109		70-130	1		30
Isopropylbenzene	111		112		70-130	1		30
p-Isopropyltoluene	115		116		70-130	1		30
Naphthalene	110		112		70-130	2		30
n-Propylbenzene	110		111		70-130	1		30
1,2,3-Trichlorobenzene	109		110		70-130	1		30
1,2,4-Trichlorobenzene	111		113		70-130	2		30
1,3,5-Trimethylbenzene	109		110		70-130	1		30
1,2,4-Trimethylbenzene	110		110		70-130	0		30
trans-1,4-Dichloro-2-butene	106		105		70-130	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	113		113		70-130	0		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1679071-3 WG1679071-4

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	97		96		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	97		97		70-130



# SEMIVOLATILES

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**SAMPLE RESULTS**

**Lab ID:** L2243810-01  
**Client ID:** TP-SL1  
**Sample Location:** GREENWICH, CT

**Date Collected:** 08/12/22 08:30  
**Date Received:** 08/13/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 79,8270D  
**Analytical Date:** 08/27/22 01:26  
**Analyst:** CMM  
**Percent Solids:** 90%

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	100		30-130
2-Fluorobiphenyl	73		30-130
4-Terphenyl-d14	59		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 08/27/22 01:50  
 Analyst: CMM  
 Percent Solids: 95%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	100	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	100	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	100	--	1
Benzo(k)fluoranthene	ND		ug/kg	100	--	1
Chrysene	ND		ug/kg	100	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	100	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	100	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	100	--	1
2-Methylnaphthalene	ND		ug/kg	210	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	95		30-130
2-Fluorobiphenyl	73		30-130
4-Terphenyl-d14	65		30-130



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**SAMPLE RESULTS**

**Lab ID:** L2243810-03  
**Client ID:** TP-SL3  
**Sample Location:** GREENWICH, CT

**Date Collected:** 08/12/22 12:30  
**Date Received:** 08/13/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 79,8270D  
**Analytical Date:** 08/27/22 03:49  
**Analyst:** CMM  
**Percent Solids:** 89%

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	150	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	150	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	150	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	150	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	119		30-130
2-Fluorobiphenyl	86		30-130
4-Terphenyl-d14	76		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 08/27/22 03:02  
 Analyst: CMM  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	67		30-130
4-Terphenyl-d14	57		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 08/27/22 02:38  
 Analyst: CMM  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	96		30-130
2-Fluorobiphenyl	71		30-130
4-Terphenyl-d14	63		30-130



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 79,8270D  
**Analytical Date:** 08/26/22 22:14  
**Analyst:** CMM

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/25/22 23:35

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Semivolatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG1679889-1					
Acenaphthene	ND		ug/kg	130	--
Fluoranthene	ND		ug/kg	98	--
Naphthalene	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	98	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	98	--
Benzo(k)fluoranthene	ND		ug/kg	98	--
Chrysene	ND		ug/kg	98	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	98	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	98	--
Dibenzo(a,h)anthracene	ND		ug/kg	98	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	98	--
2-Methylnaphthalene	ND		ug/kg	200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	72		30-130
4-Terphenyl-d14	70		30-130



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG1679889-2 WG1679889-3								
Acenaphthene	74		68		40-140	8		30
Fluoranthene	74		68		40-140	8		30
Naphthalene	76		69		40-140	10		30
Benzo(a)anthracene	74		66		40-140	11		30
Benzo(a)pyrene	79		74		40-140	7		30
Benzo(b)fluoranthene	82		76		40-140	8		30
Benzo(k)fluoranthene	75		70		40-140	7		30
Chrysene	72		69		40-140	4		30
Acenaphthylene	79		72		40-140	9		30
Anthracene	78		71		40-140	9		30
Benzo(ghi)perylene	79		72		40-140	9		30
Fluorene	75		69		40-140	8		30
Phenanthrene	75		68		40-140	10		30
Dibenzo(a,h)anthracene	78		70		40-140	11		30
Indeno(1,2,3-cd)pyrene	85		78		40-140	9		30
Pyrene	75		69		40-140	8		30
2-Methylnaphthalene	76		69		40-140	10		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG1679889-2 WG1679889-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Nitrobenzene-d5	107		97		30-130
2-Fluorobiphenyl	80		73		30-130
4-Terphenyl-d14	78		72		30-130



# **PETROLEUM HYDROCARBONS**

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01  
 Client ID: TP-SL1  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/24/22 23:53  
 Analyst: BAD  
 Percent Solids: 90%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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## Gasoline Range Organics - Westborough Lab

Gasoline Range Organics	ND		ug/kg	2900	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	99		70-130
4-Bromofluorobenzene	87		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01  
 Client ID: TP-SL1  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/26/22 21:40  
 Analyst: JB  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	76			40-140		



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/25/22 00:23  
 Analyst: BAD  
 Percent Solids: 95%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/kg	3200	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,1,1-Trifluorotoluene	100			70-130		
4-Bromofluorobenzene	88			70-130		

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/26/22 22:49  
 Analyst: JB  
 Percent Solids: 95%

Extraction Method: EPA 3546  
 Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	35000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	67			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03  
 Client ID: TP-SL3  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 12:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/25/22 00:54  
 Analyst: BAD  
 Percent Solids: 89%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/kg	3400	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,1,1-Trifluorotoluene	99			70-130		
4-Bromofluorobenzene	86			70-130		



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03  
 Client ID: TP-SL3  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 12:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/26/22 23:24  
 Analyst: JB  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	37000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	54			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/25/22 01:24  
 Analyst: BAD  
 Percent Solids: 89%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Gasoline Range Organics - Westborough Lab						
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Gasoline Range Organics	ND		ug/kg	3200	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	99		70-130
4-Bromofluorobenzene	89		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/26/22 23:59  
 Analyst: JB  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	61			40-140		



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/25/22 01:55  
 Analyst: BAD  
 Percent Solids: 90%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/kg	2300	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,1,1-Trifluorotoluene	100			70-130		
4-Bromofluorobenzene	89			70-130		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 08/26/22 23:24  
 Analyst: JB  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	60			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M)  
 Analytical Date: 08/24/22 20:17  
 Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 01-04 Batch: WG1679588-10					
Gasoline Range Organics	ND		ug/kg	2500	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	100		70-130
4-Bromofluorobenzene	82		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M)  
 Analytical Date: 08/24/22 20:17  
 Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 05 Batch: WG1679592-4					
Gasoline Range Organics	ND		ug/kg	2500	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	100		70-130
4-Bromofluorobenzene	82		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**Method Blank Analysis**  
**Batch Quality Control**Analytical Method: 1,8015D(M)  
Analytical Date: 08/26/22 21:05  
Analyst: JBExtraction Method: EPA 3546  
Extraction Date: 08/26/22 00:00

Parameter	Result	Qualifier	Units	RL	MDL
Diesel Range Organics - Westborough Lab for sample(s): 01-05 Batch: WG1679890-1					
DRO (C10-C28)	ND		ug/kg	32000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	61		40-140

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1679588-8 WG1679588-9								
Gasoline Range Organics	81		89		80-120	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,1,1-Trifluorotoluene	100		100		70-130
4-Bromofluorobenzene	82		84		70-130



**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Gasoline Range Organics - Westborough Lab Associated sample(s): 05 Batch: WG1679592-2 WG1679592-3								
Gasoline Range Organics	81		89		80-120	9		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,1,1-Trifluorotoluene	100		100		70-130
4-Bromofluorobenzene	82		84		70-130

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Diesel Range Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG1679890-2								
DRO (C10-C28)	93		-		60-140	-		

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
o-Terphenyl	64				40-140

**Matrix Spike Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Gasoline Range Organics - Westborough Lab Associated sample(s): 05 QC Batch ID: WG1679592-6 QC Sample: L2243810-05 Client ID: TP-SL5												
Gasoline Range Organics	ND	18700	16000	86		-	-		80-120	-		20

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1,1,1-Trifluorotoluene	92				70-130
4-Bromofluorobenzene	80				70-130



Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

**Lab Duplicate Analysis**  
Batch Quality Control

Lab Number: L2243810

Report Date: 09/07/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 05 QC Batch ID: WG1679592-5 QC Sample: L2243810-05 Client ID: TP-SL5						
Gasoline Range Organics	ND	ND	ug/kg	NC		20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	100		101		70-130
4-Bromofluorobenzene	89		90		70-130

Diesel Range Organics - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1679890-3 QC Sample: L2243810-01 Client ID: TP-SL1						
DRO (C10-C28)	ND	ND	ug/kg	NC		20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	76		63		40-140

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01  
 Client ID: TP-SL1  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 17:20  
 Analyst: BAD  
 Percent Solids: 90%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	6.38	--	1
C9-C12 Aliphatics	ND		mg/kg	6.38	--	1
C9-C10 Aromatics	ND		mg/kg	6.38	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.38	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.38	--	1
Benzene	ND		mg/kg	0.128	--	1
Toluene	ND		mg/kg	0.128	--	1
Ethylbenzene	ND		mg/kg	0.128	--	1
p/m-Xylene	ND		mg/kg	0.128	--	1
o-Xylene	ND		mg/kg	0.128	--	1
Methyl tert butyl ether	ND		mg/kg	0.064	--	1
Naphthalene	ND		mg/kg	0.255	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	118		70-130
2,5-Dibromotoluene-FID	137	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01  
 Client ID: TP-SL1  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/29/22 14:14  
 Analyst: AL  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 08/26/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.13	--	1
C19-C36 Aliphatics	ND		mg/kg	7.13	--	1
C11-C22 Aromatics	ND		mg/kg	7.13	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.13	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	72		40-140
o-Terphenyl	87		40-140
2-Fluorobiphenyl	109		40-140
2-Bromonaphthalene	109		40-140





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 17:51  
 Analyst: BAD  
 Percent Solids: 95%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	6.62	--	1
C9-C12 Aliphatics	ND		mg/kg	6.62	--	1
C9-C10 Aromatics	ND		mg/kg	6.62	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.62	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.62	--	1
Benzene	ND		mg/kg	0.132	--	1
Toluene	ND		mg/kg	0.132	--	1
Ethylbenzene	ND		mg/kg	0.132	--	1
p/m-Xylene	ND		mg/kg	0.132	--	1
o-Xylene	ND		mg/kg	0.132	--	1
Methyl tert butyl ether	ND		mg/kg	0.066	--	1
Naphthalene	ND		mg/kg	0.265	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	113		70-130
2,5-Dibromotoluene-FID	130		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02  
 Client ID: TP-SL2  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 10:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/26/22 10:07  
 Analyst: JB  
 Percent Solids: 95%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 08/26/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	6.74	--	1
C19-C36 Aliphatics	ND		mg/kg	6.74	--	1
C11-C22 Aromatics	ND		mg/kg	6.74	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.74	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	72		40-140
o-Terphenyl	71		40-140
2-Fluorobiphenyl	85		40-140
2-Bromonaphthalene	84		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03  
 Client ID: TP-SL3  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 12:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 18:21  
 Analyst: BAD  
 Percent Solids: 89%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	7.48	--	1
C9-C12 Aliphatics	ND		mg/kg	7.48	--	1
C9-C10 Aromatics	ND		mg/kg	7.48	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.48	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.48	--	1
Benzene	ND		mg/kg	0.150	--	1
Toluene	ND		mg/kg	0.150	--	1
Ethylbenzene	ND		mg/kg	0.150	--	1
p/m-Xylene	ND		mg/kg	0.150	--	1
o-Xylene	ND		mg/kg	0.150	--	1
Methyl tert butyl ether	ND		mg/kg	0.075	--	1
Naphthalene	ND		mg/kg	0.299	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	114		70-130
2,5-Dibromotoluene-FID	131	Q	70-130





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03  
 Client ID: TP-SL3  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 12:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/26/22 08:51  
 Analyst: JB  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 08/26/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.17	--	1
C19-C36 Aliphatics	ND		mg/kg	7.17	--	1
C11-C22 Aromatics	10.3		mg/kg	7.17	--	1
C11-C22 Aromatics, Adjusted	10.3		mg/kg	7.17	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	67		40-140
2-Fluorobiphenyl	83		40-140
2-Bromonaphthalene	81		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 18:51  
 Analyst: BAD  
 Percent Solids: 89%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Sample Temperature upon receipt:

Received on Ice

Were samples received in methanol?

Covering the Soil

Methanol ratio:

1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	7.07	--	1
C9-C12 Aliphatics	ND		mg/kg	7.07	--	1
C9-C10 Aromatics	ND		mg/kg	7.07	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	7.07	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	7.07	--	1
Benzene	ND		mg/kg	0.141	--	1
Toluene	ND		mg/kg	0.141	--	1
Ethylbenzene	ND		mg/kg	0.141	--	1
p/m-Xylene	ND		mg/kg	0.141	--	1
o-Xylene	ND		mg/kg	0.141	--	1
Methyl tert butyl ether	ND		mg/kg	0.071	--	1
Naphthalene	ND		mg/kg	0.283	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	119		70-130
2,5-Dibromotoluene-FID	137	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04  
 Client ID: TP-SL4  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 14:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/26/22 09:16  
 Analyst: JB  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 08/26/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.45	--	1
C19-C36 Aliphatics	ND		mg/kg	7.45	--	1
C11-C22 Aromatics	ND		mg/kg	7.45	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.45	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	63		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	87		40-140





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 19:22  
 Analyst: BAD  
 Percent Solids: 90%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Sample Temperature upon receipt:

Received on Ice

Were samples received in methanol?

Covering the Soil

Methanol ratio:

1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	5.23	--	1
C9-C12 Aliphatics	ND		mg/kg	5.23	--	1
C9-C10 Aromatics	ND		mg/kg	5.23	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.23	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.23	--	1
Benzene	ND		mg/kg	0.104	--	1
Toluene	ND		mg/kg	0.104	--	1
Ethylbenzene	ND		mg/kg	0.104	--	1
p/m-Xylene	ND		mg/kg	0.104	--	1
o-Xylene	ND		mg/kg	0.104	--	1
Methyl tert butyl ether	ND		mg/kg	0.052	--	1
Naphthalene	ND		mg/kg	0.209	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	116		70-130
2,5-Dibromotoluene-FID	133	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05  
 Client ID: TP-SL5  
 Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30  
 Date Received: 08/13/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/26/22 09:42  
 Analyst: JB  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 08/26/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.38	--	1
C19-C36 Aliphatics	ND		mg/kg	7.38	--	1
C11-C22 Aromatics	ND		mg/kg	7.38	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.38	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	67		40-140
o-Terphenyl	66		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	81		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 08/26/22 09:53  
 Analyst: SR

Extraction Method: EPA 3546  
 Extraction Date: 08/25/22 09:59  
 Cleanup Method: EPH-19-2.1  
 Cleanup Date: 08/26/22

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-05 Batch: WG1679595-1					
C9-C18 Aliphatics	ND		mg/kg	6.47	--
C19-C36 Aliphatics	ND		mg/kg	6.47	--
C11-C22 Aromatics	ND		mg/kg	6.47	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.47	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	59		40-140
o-Terphenyl	65		40-140
2-Fluorobiphenyl	74		40-140
2-Bromonaphthalene	78		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 08/24/22 11:27  
 Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-05 Batch: WG1679604-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	106		70-130
2,5-Dibromotoluene-FID	121		70-130

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2243810

**Project Number:** Not Specified

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-05 Batch: WG1679595-2 WG1679595-3								
C9-C18 Aliphatics	48		43		40-140	11		25
C19-C36 Aliphatics	71		64		40-140	10		25
C11-C22 Aromatics	70		67		40-140	4		25
Naphthalene	61		58		40-140	5		25
2-Methylnaphthalene	63		60		40-140	5		25
Acenaphthylene	62		62		40-140	0		25
Acenaphthene	64		64		40-140	0		25
Fluorene	66		66		40-140	0		25
Phenanthrene	66		66		40-140	0		25
Anthracene	67		67		40-140	0		25
Fluoranthene	65		65		40-140	0		25
Pyrene	67		67		40-140	0		25
Benzo(a)anthracene	67		66		40-140	2		25
Chrysene	65		65		40-140	0		25
Benzo(b)fluoranthene	63		63		40-140	0		25
Benzo(k)fluoranthene	61		61		40-140	0		25
Benzo(a)pyrene	65		65		40-140	0		25
Indeno(1,2,3-cd)Pyrene	62		62		40-140	0		25
Dibenzo(a,h)anthracene	65		65		40-140	0		25
Benzo(ghi)perylene	58		58		40-140	0		25

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-05 Batch: WG1679595-2 WG1679595-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Chloro-Octadecane	58		56		40-140
o-Terphenyl	66		64		40-140
2-Fluorobiphenyl	77		74		40-140
2-Bromonaphthalene	80		77		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2243810

**Project Number:** Not Specified

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-05 Batch: WG1679604-2 WG1679604-3								
C5-C8 Aliphatics	108		109		70-130	1		25
C9-C12 Aliphatics	115		115		70-130	0		25
C9-C10 Aromatics	104		104		70-130	0		25
Benzene	104		104		70-130	0		25
Toluene	102		102		70-130	0		25
Ethylbenzene	105		104		70-130	1		25
p/m-Xylene	103		102		70-130	1		25
o-Xylene	100		99		70-130	1		25
Methyl tert butyl ether	98		96		70-130	3		25
Naphthalene	102		102		70-130	0		25
1,2,4-Trimethylbenzene	104		104		70-130	0		25
Pentane	98		98		70-130	0		25
2-Methylpentane	111		112		70-130	1		25
2,2,4-Trimethylpentane	112		113		70-130	1		25
n-Nonane	113		114		30-130	1		25
n-Decane	117		116		70-130	1		25
n-Butylcyclohexane	116		116		70-130	0		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	108		106		70-130
2,5-Dibromotoluene-FID	122		121		70-130

## METALS

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-01

Date Collected: 08/12/22 08:30

Client ID: TP-SL1

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.12	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Arsenic, Total	3.51		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Barium, Total	90.3		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Beryllium, Total	0.632		mg/kg	0.212	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Chromium, Total	17.8		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Copper, Total	5.47		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Lead, Total	6.40		mg/kg	2.12	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Nickel, Total	10.0		mg/kg	1.06	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Selenium, Total	ND		mg/kg	2.12	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Silver, Total	ND		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Thallium, Total	ND		mg/kg	2.12	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Vanadium, Total	24.8		mg/kg	0.425	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL
Zinc, Total	28.3		mg/kg	2.12	--	1	08/16/22 12:20	09/04/22 13:13	EPA 3050B	79,6010D	DL





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-02

Date Collected: 08/12/22 10:30

Client ID: TP-SL2

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.05	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Arsenic, Total	0.800		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Barium, Total	76.0		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Beryllium, Total	0.295		mg/kg	0.205	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Chromium, Total	13.0		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Copper, Total	10.3		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Lead, Total	3.04		mg/kg	2.05	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Nickel, Total	6.58		mg/kg	1.03	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Selenium, Total	ND		mg/kg	2.05	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Silver, Total	ND		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Thallium, Total	ND		mg/kg	2.05	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Vanadium, Total	12.5		mg/kg	0.411	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL
Zinc, Total	16.4		mg/kg	2.05	--	1	08/16/22 12:20	09/04/22 13:19	EPA 3050B	79,6010D	DL



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-03

Date Collected: 08/12/22 12:30

Client ID: TP-SL3

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.14	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Arsenic, Total	6.61		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Barium, Total	101		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Beryllium, Total	1.01		mg/kg	0.214	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Chromium, Total	20.8		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Copper, Total	30.8		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Lead, Total	9.56		mg/kg	2.14	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Nickel, Total	11.2		mg/kg	1.07	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Selenium, Total	ND		mg/kg	2.14	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Silver, Total	ND		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Thallium, Total	ND		mg/kg	2.14	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Vanadium, Total	39.4		mg/kg	0.427	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL
Zinc, Total	34.2		mg/kg	2.14	--	1	08/16/22 12:20	09/04/22 13:23	EPA 3050B	79,6010D	DL



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-04

Date Collected: 08/12/22 14:30

Client ID: TP-SL4

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	2.98		mg/kg	2.11	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Arsenic, Total	5.12		mg/kg	0.422	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Barium, Total	332		mg/kg	2.11	--	5	08/16/22 12:20	09/07/22 10:47	EPA 3050B	79,6010D	NB
Beryllium, Total	1.20		mg/kg	0.211	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.422	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Chromium, Total	68.6		mg/kg	0.422	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Copper, Total	27.1		mg/kg	2.11	--	5	08/16/22 12:20	09/07/22 10:47	EPA 3050B	79,6010D	NB
Lead, Total	7.49		mg/kg	2.11	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Nickel, Total	28.4		mg/kg	1.06	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Selenium, Total	ND		mg/kg	2.11	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Silver, Total	ND		mg/kg	0.422	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Thallium, Total	ND		mg/kg	2.11	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Vanadium, Total	66.1		mg/kg	0.422	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL
Zinc, Total	64.3		mg/kg	2.11	--	1	08/16/22 12:20	09/04/22 13:43	EPA 3050B	79,6010D	DL



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS**

Lab ID: L2243810-05

Date Collected: 08/12/22 16:30

Client ID: TP-SL5

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.09	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Arsenic, Total	3.91		mg/kg	0.418	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Barium, Total	77.4		mg/kg	0.418	--	1	08/16/22 12:20	09/07/22 10:40	EPA 3050B	79,6010D	NB
Beryllium, Total	0.687		mg/kg	0.209	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.418	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Chromium, Total	18.0		mg/kg	0.418	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Copper, Total	2.66		mg/kg	0.418	--	1	08/16/22 12:20	09/07/22 10:40	EPA 3050B	79,6010D	NB
Lead, Total	5.12		mg/kg	2.09	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Nickel, Total	9.03		mg/kg	1.04	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Selenium, Total	ND		mg/kg	2.09	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Silver, Total	ND		mg/kg	0.418	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Thallium, Total	ND		mg/kg	2.09	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Vanadium, Total	26.4		mg/kg	0.418	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL
Zinc, Total	26.3		mg/kg	2.09	--	1	08/16/22 12:20	09/04/22 13:48	EPA 3050B	79,6010D	DL





Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2243810

Project Number: Not Specified

Report Date: 09/07/22

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1675470-1										
Antimony, Total	ND		mg/kg	2.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Arsenic, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Barium, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Beryllium, Total	ND		mg/kg	0.200	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Cadmium, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Chromium, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Copper, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Lead, Total	ND		mg/kg	2.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Nickel, Total	ND		mg/kg	1.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Selenium, Total	ND		mg/kg	2.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Silver, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Thallium, Total	ND		mg/kg	2.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Vanadium, Total	ND		mg/kg	0.400	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL
Zinc, Total	ND		mg/kg	2.00	--	1	08/16/22 12:20	09/04/22 12:42	79,6010D	DL

### Prep Information

Digestion Method: EPA 3050B



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1675470-2 SRM Lot Number: D113-540								
Antimony, Total	127		-		20-250	-		30
Arsenic, Total	99		-		70-130	-		30
Barium, Total	100		-		75-125	-		30
Beryllium, Total	94		-		75-125	-		30
Cadmium, Total	91		-		75-125	-		30
Chromium, Total	91		-		70-130	-		30
Copper, Total	100		-		75-125	-		30
Lead, Total	89		-		72-128	-		30
Nickel, Total	95		-		70-130	-		30
Selenium, Total	93		-		66-134	-		30
Silver, Total	91		-		70-131	-		30
Thallium, Total	92		-		70-130	-		30
Vanadium, Total	89		-		74-126	-		30
Zinc, Total	91		-		70-130	-		30

# **INORGANICS & MISCELLANEOUS**

**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-01**Client ID:** TP-SL1**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 08:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Coarse**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	08/24/22 16:03	1,1030	MD





**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-02**Client ID:** TP-SL2**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 10:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Coarse**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
<b>Ignitability of Solids - Westborough Lab</b>				
Ignitability	NI	08/24/22 16:03	1,1030	MD



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-03**Client ID:** TP-SL3**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 12:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	08/24/22 16:03	1,1030	MD



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-04**Client ID:** TP-SL4**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 14:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	08/24/22 16:03	1,1030	MD



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-05**Client ID:** TP-SL5**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 16:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	08/24/22 16:03	1,1030	MD





Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

Lab Number: L2243810

Report Date: 09/07/22

## SAMPLE RESULTS

Lab ID: L2243810-01

Client ID: TP-SL1

Sample Location: GREENWICH, CT

Date Collected: 08/12/22 08:30

Date Received: 08/13/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	08/15/22 19:37	121,2540G	MF
pH (H)	6.5		SU	-	NA	1	-	08/15/22 20:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:19	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:43	125,7.3	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-02**Date Collected:** 08/12/22 10:30**Client ID:** TP-SL2**Date Received:** 08/13/22**Sample Location:** GREENWICH, CT**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.5		%	0.100	NA	1	-	08/15/22 19:37	121,2540G	MF
pH (H)	6.6		SU	-	NA	1	-	08/15/22 20:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:20	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:43	125,7.3	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22**SAMPLE RESULTS****Lab ID:** L2243810-03**Client ID:** TP-SL3**Sample Location:** GREENWICH, CT**Date Collected:** 08/12/22 12:30**Date Received:** 08/13/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.3		%	0.100	NA	1	-	08/15/22 19:37	121,2540G	MF
pH (H)	6.6		SU	-	NA	1	-	08/15/22 20:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:20	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:44	125,7.3	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2243810

Project Number: Not Specified

Report Date: 09/07/22

## SAMPLE RESULTS

Lab ID: L2243810-04

Date Collected: 08/12/22 14:30

Client ID: TP-SL4

Date Received: 08/13/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	08/15/22 19:37	121,2540G	MF
pH (H)	5.9		SU	-	NA	1	-	08/15/22 20:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:21	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:44	125,7.3	MJ





Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

Lab Number: L2243810

Report Date: 09/07/22

## SAMPLE RESULTS

Lab ID: L2243810-05

Client ID: TP-SL5

Sample Location: GREENWICH, CT

Date Collected: 08/12/22 16:30

Date Received: 08/13/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.2		%	0.100	NA	1	-	08/15/22 19:37	121,2540G	MF
pH (H)	6.0		SU	-	NA	1	-	08/15/22 20:16	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:21	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:45	125,7.3	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2243810

Project Number: Not Specified

Report Date: 09/07/22

### Method Blank Analysis

#### Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1675408-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 14:32	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1675651-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	08/16/22 12:25	08/16/22 15:07	125,7.3	MJ



**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2243810**Report Date:** 09/07/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1675408-2								
Sulfide, Reactive	106		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1675488-1								
pH	99		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1675651-2								
Cyanide, Reactive	93		-		30-125	-		40

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2243810

**Report Date:** 09/07/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1675408-3 QC Sample: L2243810-05 Client ID: TP-SL5						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1675651-3 QC Sample: L2243810-05 Client ID: TP-SL5						
Cyanide, Reactive	ND	ND	mg/kg	NC		40



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

Serial\_No:09072212:27  
**Lab Number:** L2243810  
**Report Date:** 09/07/22

### Sample Receipt and Container Information

Were project specific reporting limits specified?

NO

#### Cooler Information

**Cooler**                      **Custody Seal**  
A                                      Absent

#### Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2243810-01A	Vial MeOH preserved	A	NA		22.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2243810-01B	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-01C	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-01D	Plastic 2oz unpreserved for TS	A	NA		22.4	Y	Absent		TS(7)
L2243810-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		22.4	Y	Absent		CT-V-6010T(180),CT-AG-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-CU-6010T(180),CT-SB-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-CD-6010T(180),CT-BE-6010T(180),CT-TL-6010T(180)
L2243810-01F	Glass 500ml/16oz unpreserved	A	NA		22.4	Y	Absent		IGNIT-1030(14),REACTS(14),CT-PAH(14),EPH-20(14),PH-9045(1),REACTCN(14)
L2243810-02A	Vial MeOH preserved	A	NA		22.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2243810-02B	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-02C	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-02D	Plastic 2oz unpreserved for TS	A	NA		22.4	Y	Absent		TS(7)
L2243810-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		22.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-CU-6010T(180),CT-SB-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-CD-6010T(180),CT-TL-6010T(180),CT-BE-6010T(180)
L2243810-02F	Glass 500ml/16oz unpreserved	A	NA		22.4	Y	Absent		IGNIT-1030(14),REACTS(14),CT-PAH(14),EPH-20(14),PH-9045(1),REACTCN(14)
L2243810-03A	Vial MeOH preserved	A	NA		22.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2243810-03B	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-03C	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Serial\_No:**09072212:27  
**Lab Number:** L2243810  
**Report Date:** 09/07/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2243810-03D	Plastic 2oz unpreserved for TS	A	NA		22.4	Y	Absent		TS(7)
L2243810-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		22.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-SB-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180),CT-TL-6010T(180)
L2243810-03F	Glass 500ml/16oz unpreserved	A	NA		22.4	Y	Absent		REACTS(14),IGNIT-1030(14),CT-PAH(14),EPH-20(14),PH-9045(1),REACTCN(14)
L2243810-04A	Vial MeOH preserved	A	NA		22.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2243810-04B	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-04C	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-04D	Plastic 2oz unpreserved for TS	A	NA		22.4	Y	Absent		TS(7)
L2243810-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		22.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-SB-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180),CT-TL-6010T(180)
L2243810-04F	Glass 500ml/16oz unpreserved	A	NA		22.4	Y	Absent		IGNIT-1030(14),REACTS(14),EPH-20(14),CT-PAH(14),PH-9045(1),REACTCN(14)
L2243810-05A	Vial MeOH preserved	A	NA		22.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2243810-05B	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-05C	Vial water preserved	A	NA		22.4	Y	Absent	13-AUG-22 16:10	CT-8260HLW(14)
L2243810-05D	Plastic 2oz unpreserved for TS	A	NA		22.4	Y	Absent		TS(7)
L2243810-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		22.4	Y	Absent		CT-V-6010T(180),CT-AG-6010T(180),CT-AS-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-SB-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-TL-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180)
L2243810-05F	Glass 500ml/16oz unpreserved	A	NA		22.4	Y	Absent		REACTS(14),IGNIT-1030(14),CT-PAH(14),EPH-20(14),PH-9045(1),REACTCN(14)

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: Data Usability Report*

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2243810**Project Number:** Not Specified**Report Date:** 09/07/22**Footnotes**

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

**Terms**

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

**Data Qualifiers**

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**Report Format:** Data Usability Report





**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2243810  
**Report Date:** 09/07/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 79 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Versions 2.0 and 3.0, July and December 2006.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.
- 131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.
- 135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

## LIMITATION OF LIABILITIES

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

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



## Certification Information

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

**Westborough Facility**

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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

**Westborough Facility:**

**Drinking Water**

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

**Non-Potable Water**

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility:**

**Drinking Water**

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

**EPA 522, EPA 537.1.**

**Non-Potable Water**

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

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



# CHAIN OF CUSTODY

PAGE 1 OF 1

## Project Information

Westborough, MA    Mansfield, MA  
 TEL: 508-898-9220    TEL: 508-822-9300  
 FAX: 508-898-9193    FAX: 508-822-3268

Project Name: Central Middel School

## Client Information

Client: ATANE Engineers

Project Location: Greenwich, CT

Address: 56 Roland St.

Project #: --

Charlestown, MA 02129

Project Manager: Peter McCarthy

Phone: (617)838-7668

ALPHA Quote #: 19562

Fax: ☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Email: pmccarthy@ataneconsulting.com

☐ These samples have been Previously analyzed by Alpha Due Date: 8/15/22 Time: 12:00

## Other Project Specific Requirements/Comments/Detection Limits:

please send report to the following:  
 hraneau@ataneconsulting.com  
 psousa@ataneconsulting.com  
 pmccarthy@ataneconsulting.com

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
43810-01	TP-SL1	8/12/22	0830	S	MH
02	TP-SL2	8/12/22	1030	S	MH
03	TP-SL3	8/12/22	1230	S	MH
04	TP-SL4	8/12/22	1430	S	MH
05	TP-SL5	8/12/22	1630	S	MH
				S	
				S	
				S	
				S	
				S	
				S	

PLEASE ANSWER QUESTIONS ABOVE!

**IS YOUR PROJECT  
 MA MCP or CT RCP?**

FORM NO. 01-016  
(REV. 9-JAN-12)

Container Type

Preservative

Relinquished By:

PM/AA (ATANE)

Date/Time

8-13  
15:20

Received By:

Kenny for ANL

Date/Time

8/13/22 1520

Date Rec'd in Lab: 8/13/22

ALPHA Job #: L2243810

## Report Information Data Deliverables

☐ FAX☒ EMAIL

## Billing Information

☒ Same as Client info

PO #:

☐ ADEx☐ Add'l Deliverables

## Regulatory Requirements/Report Limits

State/Fed Program

Criteria

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes☐ No

Are MCP Analytical Methods Required?

☐ Yes☐ No

Are CT RCP (Reasonable Confidence Protocols) Required?

## ANALYSIS

8260	EPH, CT-PAH	VPH	TPH-DRO	TPH-GRO	CT-15METALS (MINUS HG)	pH, Ignitability, Reactivity												
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## SAMPLE HANDLING

### Filtration

☐ Done☐ Not Needed☐ Lab to do

### Preservation

☐ Lab to do

(Please specify below)

Sample Specific  
Comments

TOTAL # BOTTLES

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





## ANALYTICAL REPORT

Lab Number:	L2246257
Client:	ATANE Engineering PC 56 Roland Street, Suite 202 Boston, MA 02129
ATTN:	Peter McCarthy
Phone:	(617) 778-7300
Project Name:	CENTRAL MIDDLE SCHOOL
Project Number:	Not Specified
Report Date:	09/12/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

---

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



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2246257-01	B-SL-01	SOIL	GREENWICH, CT	08/23/22 12:00	08/25/22
L2246257-02	B-SL-02	SOIL	GREENWICH, CT	08/23/22 15:30	08/25/22
L2246257-03	B-SL-03	SOIL	GREENWICH, CT	08/24/22 12:30	08/25/22
L2246257-04	B-SL-04	SOIL	GREENWICH, CT	08/25/22 08:45	08/25/22
L2246257-05	B-SL-05	SOIL	GREENWICH, CT	08/25/22 10:15	08/25/22
L2246257-06	B-SL-06	SOIL	GREENWICH, CT	08/25/22 11:45	08/25/22
L2246257-07	B-SL-07	SOIL	GREENWICH, CT	08/23/22 08:45	08/25/22

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**CT DEP Reasonable Confidence Protocols  
Laboratory Analysis  
QA/QC Certification Form**

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
1a	Were the method specified preservation and holding time requirements met?	YES
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	YES
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (<6°C)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody?	NO
5b	Were these reporting limits met?	N/A
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?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

**Note:** 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 question B is "No", the data package does not meet the requirements for "Reasonable Confidence".



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

### Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

### Case Narrative (continued)

#### RCP Related Narratives

##### Report Submission

In reference to question 5a:

Reporting limits were not specified.

#### Volatile Organics

In reference to question 4:

L2246257-01 through -07: Initial Calibration Verification outside criteria: dichlorodifluoromethane (124%)


#### Semivolatile Organics

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full RCP list of constituents identified in the method specific analyte list presented in the RCP documents.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 09/12/22

# QC OUTLIER SUMMARY REPORT

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2246257

**Project Number:** Not Specified

**Report Date:** 09/12/22

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
Volatile Petroleum Hydrocarbons - Westborough Lab								
VPH-18-2.1	B-SL-01	L2246257-01	2,5-Dibromotoluene-FID	Surrogate	132	70-130	-	potential high bias
VPH-18-2.1	B-SL-03	L2246257-03	2,5-Dibromotoluene-PID	Surrogate	138	70-130	-	potential high bias
VPH-18-2.1	B-SL-03	L2246257-03	2,5-Dibromotoluene-FID	Surrogate	147	70-130	-	potential high bias
VPH-18-2.1	B-SL-04	L2246257-04	2,5-Dibromotoluene-PID	Surrogate	140	70-130	-	potential high bias
VPH-18-2.1	B-SL-04	L2246257-04	2,5-Dibromotoluene-FID	Surrogate	149	70-130	-	potential high bias
VPH-18-2.1	B-SL-06	L2246257-06	2,5-Dibromotoluene-FID	Surrogate	134	70-130	-	potential high bias

# ORGANICS

# **VOLATILES**



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 12:34  
 Analyst: JC  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.3	--	1
1,1-Dichloroethane	ND		ug/kg	1.4	--	1
Chloroform	ND		ug/kg	2.2	--	1
Carbon tetrachloride	ND		ug/kg	1.4	--	1
1,2-Dichloropropane	ND		ug/kg	1.4	--	1
Dibromochloromethane	ND		ug/kg	1.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	--	1
Tetrachloroethene	ND		ug/kg	0.73	--	1
Chlorobenzene	ND		ug/kg	0.73	--	1
Trichlorofluoromethane	ND		ug/kg	5.8	--	1
1,2-Dichloroethane	ND		ug/kg	1.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.73	--	1
Bromodichloromethane	ND		ug/kg	0.73	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.73	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.73	--	1
1,1-Dichloropropene	ND		ug/kg	0.73	--	1
Bromoform	ND		ug/kg	5.8	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.73	--	1
Benzene	ND		ug/kg	0.73	--	1
Toluene	ND		ug/kg	1.4	--	1
Ethylbenzene	ND		ug/kg	1.4	--	1
Chloromethane	ND		ug/kg	5.8	--	1
Bromomethane	ND		ug/kg	2.9	--	1
Vinyl chloride	ND		ug/kg	1.4	--	1
Chloroethane	ND		ug/kg	2.9	--	1
1,1-Dichloroethene	ND		ug/kg	1.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01

Date Collected: 08/23/22 12:00

Client ID: B-SL-01

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.73	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	--	1
Methyl tert butyl ether	ND		ug/kg	2.9	--	1
p/m-Xylene	ND		ug/kg	2.9	--	1
o-Xylene	ND		ug/kg	1.4	--	1
Xylenes, Total	ND		ug/kg	1.4	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	--	1
Dibromomethane	ND		ug/kg	2.9	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	--	1
Styrene	ND		ug/kg	1.4	--	1
Dichlorodifluoromethane	ND		ug/kg	14	--	1
Acetone	ND		ug/kg	36	--	1
Carbon disulfide	ND		ug/kg	14	--	1
2-Butanone	ND		ug/kg	14	--	1
4-Methyl-2-pentanone	ND		ug/kg	14	--	1
2-Hexanone	ND		ug/kg	14	--	1
Acrylonitrile	ND		ug/kg	5.8	--	1
Tetrahydrofuran	ND		ug/kg	5.8	--	1
2,2-Dichloropropane	ND		ug/kg	2.9	--	1
1,2-Dibromoethane	ND		ug/kg	1.4	--	1
1,3-Dichloropropane	ND		ug/kg	2.9	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.73	--	1
Bromobenzene	ND		ug/kg	2.9	--	1
n-Butylbenzene	ND		ug/kg	1.4	--	1
sec-Butylbenzene	ND		ug/kg	1.4	--	1
tert-Butylbenzene	ND		ug/kg	2.9	--	1
o-Chlorotoluene	ND		ug/kg	2.9	--	1
p-Chlorotoluene	ND		ug/kg	2.9	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	--	1
Hexachlorobutadiene	ND		ug/kg	5.8	--	1
Isopropylbenzene	ND		ug/kg	1.4	--	1
p-Isopropyltoluene	ND		ug/kg	1.4	--	1
Naphthalene	ND		ug/kg	5.8	--	1
n-Propylbenzene	ND		ug/kg	1.4	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01

Date Collected: 08/23/22 12:00

Client ID: B-SL-01

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.3	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	5.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	96		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 13:01  
 Analyst: NLK  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	10	--	1
1,1-Dichloroethane	ND		ug/kg	2.1	--	1
Chloroform	ND		ug/kg	3.1	--	1
Carbon tetrachloride	ND		ug/kg	2.1	--	1
1,2-Dichloropropane	ND		ug/kg	2.1	--	1
Dibromochloromethane	ND		ug/kg	2.1	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.1	--	1
Tetrachloroethene	ND		ug/kg	1.0	--	1
Chlorobenzene	ND		ug/kg	1.0	--	1
Trichlorofluoromethane	ND		ug/kg	8.3	--	1
1,2-Dichloroethane	ND		ug/kg	2.1	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	--	1
Bromodichloromethane	ND		ug/kg	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/kg	2.1	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.0	--	1
1,1-Dichloropropene	ND		ug/kg	1.0	--	1
Bromoform	ND		ug/kg	8.3	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	--	1
Benzene	ND		ug/kg	1.0	--	1
Toluene	ND		ug/kg	2.1	--	1
Ethylbenzene	ND		ug/kg	2.1	--	1
Chloromethane	ND		ug/kg	8.3	--	1
Bromomethane	ND		ug/kg	4.2	--	1
Vinyl chloride	ND		ug/kg	2.1	--	1
Chloroethane	ND		ug/kg	4.2	--	1
1,1-Dichloroethene	ND		ug/kg	2.1	--	1
trans-1,2-Dichloroethene	ND		ug/kg	3.1	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	1.0	--	1
1,2-Dichlorobenzene	ND		ug/kg	4.2	--	1
1,3-Dichlorobenzene	ND		ug/kg	4.2	--	1
1,4-Dichlorobenzene	ND		ug/kg	4.2	--	1
Methyl tert butyl ether	ND		ug/kg	4.2	--	1
p/m-Xylene	ND		ug/kg	4.2	--	1
o-Xylene	ND		ug/kg	2.1	--	1
Xylenes, Total	ND		ug/kg	2.1	--	1
cis-1,2-Dichloroethene	ND		ug/kg	2.1	--	1
1,2-Dichloroethene, Total	ND		ug/kg	2.1	--	1
Dibromomethane	ND		ug/kg	4.2	--	1
1,2,3-Trichloropropane	ND		ug/kg	4.2	--	1
Styrene	ND		ug/kg	2.1	--	1
Dichlorodifluoromethane	ND		ug/kg	21	--	1
Acetone	ND		ug/kg	52	--	1
Carbon disulfide	ND		ug/kg	21	--	1
2-Butanone	ND		ug/kg	21	--	1
4-Methyl-2-pentanone	ND		ug/kg	21	--	1
2-Hexanone	ND		ug/kg	21	--	1
Acrylonitrile	ND		ug/kg	8.3	--	1
Tetrahydrofuran	ND		ug/kg	8.3	--	1
2,2-Dichloropropane	ND		ug/kg	4.2	--	1
1,2-Dibromoethane	ND		ug/kg	2.1	--	1
1,3-Dichloropropane	ND		ug/kg	4.2	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	--	1
Bromobenzene	ND		ug/kg	4.2	--	1
n-Butylbenzene	ND		ug/kg	2.1	--	1
sec-Butylbenzene	ND		ug/kg	2.1	--	1
tert-Butylbenzene	ND		ug/kg	4.2	--	1
o-Chlorotoluene	ND		ug/kg	4.2	--	1
p-Chlorotoluene	ND		ug/kg	4.2	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.2	--	1
Hexachlorobutadiene	ND		ug/kg	8.3	--	1
Isopropylbenzene	ND		ug/kg	2.1	--	1
p-Isopropyltoluene	ND		ug/kg	2.1	--	1
Naphthalene	ND		ug/kg	8.3	--	1
n-Propylbenzene	ND		ug/kg	2.1	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02

Date Collected: 08/23/22 15:30

Client ID: B-SL-02

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	4.2	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.2	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.2	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.2	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	10	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	8.3	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 13:27  
 Analyst: NLK  
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	13	--	1
1,1-Dichloroethane	ND		ug/kg	2.7	--	1
Chloroform	ND		ug/kg	4.0	--	1
Carbon tetrachloride	ND		ug/kg	2.7	--	1
1,2-Dichloropropane	ND		ug/kg	2.7	--	1
Dibromochloromethane	ND		ug/kg	2.7	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.7	--	1
Tetrachloroethene	ND		ug/kg	1.3	--	1
Chlorobenzene	ND		ug/kg	1.3	--	1
Trichlorofluoromethane	ND		ug/kg	11	--	1
1,2-Dichloroethane	ND		ug/kg	2.7	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	--	1
Bromodichloromethane	ND		ug/kg	1.3	--	1
trans-1,3-Dichloropropene	ND		ug/kg	2.7	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.3	--	1
1,1-Dichloropropene	ND		ug/kg	1.3	--	1
Bromoform	ND		ug/kg	11	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	--	1
Benzene	ND		ug/kg	1.3	--	1
Toluene	ND		ug/kg	2.7	--	1
Ethylbenzene	ND		ug/kg	2.7	--	1
Chloromethane	ND		ug/kg	11	--	1
Bromomethane	ND		ug/kg	5.4	--	1
Vinyl chloride	ND		ug/kg	2.7	--	1
Chloroethane	ND		ug/kg	5.4	--	1
1,1-Dichloroethene	ND		ug/kg	2.7	--	1
trans-1,2-Dichloroethene	ND		ug/kg	4.0	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	1.3	--	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	--	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	--	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	--	1
Methyl tert butyl ether	ND		ug/kg	5.4	--	1
p/m-Xylene	ND		ug/kg	5.4	--	1
o-Xylene	ND		ug/kg	2.7	--	1
Xylenes, Total	ND		ug/kg	2.7	--	1
cis-1,2-Dichloroethene	ND		ug/kg	2.7	--	1
1,2-Dichloroethene, Total	ND		ug/kg	2.7	--	1
Dibromomethane	ND		ug/kg	5.4	--	1
1,2,3-Trichloropropane	ND		ug/kg	5.4	--	1
Styrene	ND		ug/kg	2.7	--	1
Dichlorodifluoromethane	ND		ug/kg	27	--	1
Acetone	ND		ug/kg	67	--	1
Carbon disulfide	ND		ug/kg	27	--	1
2-Butanone	ND		ug/kg	27	--	1
4-Methyl-2-pentanone	ND		ug/kg	27	--	1
2-Hexanone	ND		ug/kg	27	--	1
Acrylonitrile	ND		ug/kg	11	--	1
Tetrahydrofuran	ND		ug/kg	11	--	1
2,2-Dichloropropane	ND		ug/kg	5.4	--	1
1,2-Dibromoethane	ND		ug/kg	2.7	--	1
1,3-Dichloropropane	ND		ug/kg	5.4	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.3	--	1
Bromobenzene	ND		ug/kg	5.4	--	1
n-Butylbenzene	ND		ug/kg	2.7	--	1
sec-Butylbenzene	ND		ug/kg	2.7	--	1
tert-Butylbenzene	ND		ug/kg	5.4	--	1
o-Chlorotoluene	ND		ug/kg	5.4	--	1
p-Chlorotoluene	ND		ug/kg	5.4	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	8.1	--	1
Hexachlorobutadiene	ND		ug/kg	11	--	1
Isopropylbenzene	ND		ug/kg	2.7	--	1
p-Isopropyltoluene	ND		ug/kg	2.7	--	1
Naphthalene	ND		ug/kg	11	--	1
n-Propylbenzene	ND		ug/kg	2.7	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03

Date Collected: 08/24/22 12:30

Client ID: B-SL-03

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	5.4	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	13	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	11	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 13:53  
 Analyst: NLK  
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	12	--	1
1,1-Dichloroethane	ND		ug/kg	2.4	--	1
Chloroform	ND		ug/kg	3.6	--	1
Carbon tetrachloride	ND		ug/kg	2.4	--	1
1,2-Dichloropropane	ND		ug/kg	2.4	--	1
Dibromochloromethane	ND		ug/kg	2.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.4	--	1
Tetrachloroethene	ND		ug/kg	1.2	--	1
Chlorobenzene	ND		ug/kg	1.2	--	1
Trichlorofluoromethane	ND		ug/kg	9.7	--	1
1,2-Dichloroethane	ND		ug/kg	2.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	--	1
Bromodichloromethane	ND		ug/kg	1.2	--	1
trans-1,3-Dichloropropene	ND		ug/kg	2.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	--	1
1,1-Dichloropropene	ND		ug/kg	1.2	--	1
Bromoform	ND		ug/kg	9.7	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Benzene	ND		ug/kg	1.2	--	1
Toluene	ND		ug/kg	2.4	--	1
Ethylbenzene	ND		ug/kg	2.4	--	1
Chloromethane	ND		ug/kg	9.7	--	1
Bromomethane	ND		ug/kg	4.8	--	1
Vinyl chloride	ND		ug/kg	2.4	--	1
Chloroethane	ND		ug/kg	4.8	--	1
1,1-Dichloroethene	ND		ug/kg	2.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	3.6	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	--	1
Methyl tert butyl ether	ND		ug/kg	4.8	--	1
p/m-Xylene	ND		ug/kg	4.8	--	1
o-Xylene	ND		ug/kg	2.4	--	1
Xylenes, Total	ND		ug/kg	2.4	--	1
cis-1,2-Dichloroethene	ND		ug/kg	2.4	--	1
1,2-Dichloroethene, Total	ND		ug/kg	2.4	--	1
Dibromomethane	ND		ug/kg	4.8	--	1
1,2,3-Trichloropropane	ND		ug/kg	4.8	--	1
Styrene	ND		ug/kg	2.4	--	1
Dichlorodifluoromethane	ND		ug/kg	24	--	1
Acetone	ND		ug/kg	61	--	1
Carbon disulfide	ND		ug/kg	24	--	1
2-Butanone	ND		ug/kg	24	--	1
4-Methyl-2-pentanone	ND		ug/kg	24	--	1
2-Hexanone	ND		ug/kg	24	--	1
Acrylonitrile	ND		ug/kg	9.7	--	1
Tetrahydrofuran	ND		ug/kg	9.7	--	1
2,2-Dichloropropane	ND		ug/kg	4.8	--	1
1,2-Dibromoethane	ND		ug/kg	2.4	--	1
1,3-Dichloropropane	ND		ug/kg	4.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Bromobenzene	ND		ug/kg	4.8	--	1
n-Butylbenzene	ND		ug/kg	2.4	--	1
sec-Butylbenzene	ND		ug/kg	2.4	--	1
tert-Butylbenzene	ND		ug/kg	4.8	--	1
o-Chlorotoluene	ND		ug/kg	4.8	--	1
p-Chlorotoluene	ND		ug/kg	4.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.3	--	1
Hexachlorobutadiene	ND		ug/kg	9.7	--	1
Isopropylbenzene	ND		ug/kg	2.4	--	1
p-Isopropyltoluene	ND		ug/kg	2.4	--	1
Naphthalene	ND		ug/kg	9.7	--	1
n-Propylbenzene	ND		ug/kg	2.4	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04

Date Collected: 08/25/22 08:45

Client ID: B-SL-04

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	9.7	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 14:20  
 Analyst: NLK  
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	--	1
1,1-Dichloroethane	ND		ug/kg	1.2	--	1
Chloroform	ND		ug/kg	1.8	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	1.2	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	--	1
Tetrachloroethene	ND		ug/kg	0.62	--	1
Chlorobenzene	ND		ug/kg	0.62	--	1
Trichlorofluoromethane	ND		ug/kg	5.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	--	1
Bromodichloromethane	ND		ug/kg	0.62	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	--	1
1,1-Dichloropropene	ND		ug/kg	0.62	--	1
Bromoform	ND		ug/kg	5.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	--	1
Benzene	ND		ug/kg	0.62	--	1
Toluene	ND		ug/kg	1.2	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	5.0	--	1
Bromomethane	ND		ug/kg	2.5	--	1
Vinyl chloride	ND		ug/kg	1.2	--	1
Chloroethane	ND		ug/kg	2.5	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	--	1
Methyl tert butyl ether	ND		ug/kg	2.5	--	1
p/m-Xylene	ND		ug/kg	2.5	--	1
o-Xylene	ND		ug/kg	1.2	--	1
Xylenes, Total	ND		ug/kg	1.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	2.5	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	--	1
Styrene	ND		ug/kg	1.2	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	31	--	1
Carbon disulfide	ND		ug/kg	12	--	1
2-Butanone	ND		ug/kg	12	--	1
4-Methyl-2-pentanone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Acrylonitrile	ND		ug/kg	5.0	--	1
Tetrahydrofuran	ND		ug/kg	5.0	--	1
2,2-Dichloropropane	ND		ug/kg	2.5	--	1
1,2-Dibromoethane	ND		ug/kg	1.2	--	1
1,3-Dichloropropane	ND		ug/kg	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	--	1
Bromobenzene	ND		ug/kg	2.5	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	2.5	--	1
o-Chlorotoluene	ND		ug/kg	2.5	--	1
p-Chlorotoluene	ND		ug/kg	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	--	1
Hexachlorobutadiene	ND		ug/kg	5.0	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	5.0	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05

Date Collected: 08/25/22 10:15

Client ID: B-SL-05

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 14:46  
 Analyst: KJD  
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.0	--	1
1,1-Dichloroethane	ND		ug/kg	0.80	--	1
Chloroform	ND		ug/kg	1.2	--	1
Carbon tetrachloride	ND		ug/kg	0.80	--	1
1,2-Dichloropropane	ND		ug/kg	0.80	--	1
Dibromochloromethane	ND		ug/kg	0.80	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.80	--	1
Tetrachloroethene	ND		ug/kg	0.40	--	1
Chlorobenzene	ND		ug/kg	0.40	--	1
Trichlorofluoromethane	ND		ug/kg	3.2	--	1
1,2-Dichloroethane	ND		ug/kg	0.80	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.40	--	1
Bromodichloromethane	ND		ug/kg	0.40	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.80	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.40	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.40	--	1
1,1-Dichloropropene	ND		ug/kg	0.40	--	1
Bromoform	ND		ug/kg	3.2	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.40	--	1
Benzene	ND		ug/kg	0.40	--	1
Toluene	ND		ug/kg	0.80	--	1
Ethylbenzene	ND		ug/kg	0.80	--	1
Chloromethane	ND		ug/kg	3.2	--	1
Bromomethane	ND		ug/kg	1.6	--	1
Vinyl chloride	ND		ug/kg	0.80	--	1
Chloroethane	ND		ug/kg	1.6	--	1
1,1-Dichloroethene	ND		ug/kg	0.80	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.40	--	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	--	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	--	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	--	1
Methyl tert butyl ether	ND		ug/kg	1.6	--	1
p/m-Xylene	ND		ug/kg	1.6	--	1
o-Xylene	ND		ug/kg	0.80	--	1
Xylenes, Total	ND		ug/kg	0.80	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.80	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.80	--	1
Dibromomethane	ND		ug/kg	1.6	--	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	--	1
Styrene	ND		ug/kg	0.80	--	1
Dichlorodifluoromethane	ND		ug/kg	8.0	--	1
Acetone	ND		ug/kg	20	--	1
Carbon disulfide	ND		ug/kg	8.0	--	1
2-Butanone	ND		ug/kg	8.0	--	1
4-Methyl-2-pentanone	ND		ug/kg	8.0	--	1
2-Hexanone	ND		ug/kg	8.0	--	1
Acrylonitrile	ND		ug/kg	3.2	--	1
Tetrahydrofuran	ND		ug/kg	3.2	--	1
2,2-Dichloropropane	ND		ug/kg	1.6	--	1
1,2-Dibromoethane	ND		ug/kg	0.80	--	1
1,3-Dichloropropane	ND		ug/kg	1.6	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.40	--	1
Bromobenzene	ND		ug/kg	1.6	--	1
n-Butylbenzene	ND		ug/kg	0.80	--	1
sec-Butylbenzene	ND		ug/kg	0.80	--	1
tert-Butylbenzene	ND		ug/kg	1.6	--	1
o-Chlorotoluene	ND		ug/kg	1.6	--	1
p-Chlorotoluene	ND		ug/kg	1.6	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	--	1
Hexachlorobutadiene	ND		ug/kg	3.2	--	1
Isopropylbenzene	ND		ug/kg	0.80	--	1
p-Isopropyltoluene	ND		ug/kg	0.80	--	1
Naphthalene	ND		ug/kg	3.2	--	1
n-Propylbenzene	ND		ug/kg	0.80	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06

Date Collected: 08/25/22 11:45

Client ID: B-SL-06

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.6	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.6	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	3.2	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 15:13  
 Analyst: KJD  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	--	1
1,1-Dichloroethane	ND		ug/kg	0.98	--	1
Chloroform	ND		ug/kg	1.5	--	1
Carbon tetrachloride	ND		ug/kg	0.98	--	1
1,2-Dichloropropane	ND		ug/kg	0.98	--	1
Dibromochloromethane	ND		ug/kg	0.98	--	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	--	1
Tetrachloroethene	ND		ug/kg	0.49	--	1
Chlorobenzene	ND		ug/kg	0.49	--	1
Trichlorofluoromethane	ND		ug/kg	3.9	--	1
1,2-Dichloroethane	ND		ug/kg	0.98	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	--	1
Bromodichloromethane	ND		ug/kg	0.49	--	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	--	1
1,1-Dichloropropene	ND		ug/kg	0.49	--	1
Bromoform	ND		ug/kg	3.9	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	--	1
Benzene	ND		ug/kg	0.49	--	1
Toluene	ND		ug/kg	0.98	--	1
Ethylbenzene	ND		ug/kg	0.98	--	1
Chloromethane	ND		ug/kg	3.9	--	1
Bromomethane	ND		ug/kg	2.0	--	1
Vinyl chloride	ND		ug/kg	0.98	--	1
Chloroethane	ND		ug/kg	2.0	--	1
1,1-Dichloroethene	ND		ug/kg	0.98	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--	1

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07

Date Collected: 08/23/22 08:45

Client ID: B-SL-07

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	--	1
Methyl tert butyl ether	ND		ug/kg	2.0	--	1
p/m-Xylene	ND		ug/kg	2.0	--	1
o-Xylene	ND		ug/kg	0.98	--	1
Xylenes, Total	ND		ug/kg	0.98	--	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	--	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	--	1
Dibromomethane	ND		ug/kg	2.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	--	1
Styrene	ND		ug/kg	0.98	--	1
Dichlorodifluoromethane	ND		ug/kg	9.8	--	1
Acetone	ND		ug/kg	24	--	1
Carbon disulfide	ND		ug/kg	9.8	--	1
2-Butanone	ND		ug/kg	9.8	--	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	--	1
2-Hexanone	ND		ug/kg	9.8	--	1
Acrylonitrile	ND		ug/kg	3.9	--	1
Tetrahydrofuran	ND		ug/kg	3.9	--	1
2,2-Dichloropropane	ND		ug/kg	2.0	--	1
1,2-Dibromoethane	ND		ug/kg	0.98	--	1
1,3-Dichloropropane	ND		ug/kg	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	--	1
Bromobenzene	ND		ug/kg	2.0	--	1
n-Butylbenzene	ND		ug/kg	0.98	--	1
sec-Butylbenzene	ND		ug/kg	0.98	--	1
tert-Butylbenzene	ND		ug/kg	2.0	--	1
o-Chlorotoluene	ND		ug/kg	2.0	--	1
p-Chlorotoluene	ND		ug/kg	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	--	1
Hexachlorobutadiene	ND		ug/kg	3.9	--	1
Isopropylbenzene	ND		ug/kg	0.98	--	1
p-Isopropyltoluene	ND		ug/kg	0.98	--	1
Naphthalene	ND		ug/kg	3.9	--	1
n-Propylbenzene	ND		ug/kg	0.98	--	1



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07

Date Collected: 08/23/22 08:45

Client ID: B-SL-07

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	3.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 09:02  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-07 Batch: WG1682649-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	0.50	--



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 09:02  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-07 Batch: WG1682649-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
2-Butanone	ND		ug/kg	10	--
4-Methyl-2-pentanone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Acrylonitrile	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8260C  
 Analytical Date: 09/01/22 09:02  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-07 Batch: WG1682649-5					
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	4.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	80		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	89		70-130





# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1682649-3 WG1682649-4								
Methylene chloride	94		96		70-130	2		30
1,1-Dichloroethane	90		90		70-130	0		30
Chloroform	85		86		70-130	1		30
Carbon tetrachloride	74		75		70-130	1		30
1,2-Dichloropropane	95		98		70-130	3		30
Dibromochloromethane	89		92		70-130	3		30
1,1,2-Trichloroethane	100		104		70-130	4		30
Tetrachloroethene	96		95		70-130	1		30
Chlorobenzene	94		94		70-130	0		30
Trichlorofluoromethane	70		70		70-130	0		30
1,2-Dichloroethane	72		75		70-130	4		30
1,1,1-Trichloroethane	79		80		70-130	1		30
Bromodichloromethane	83		85		70-130	2		30
trans-1,3-Dichloropropene	96		99		70-130	3		30
cis-1,3-Dichloropropene	86		87		70-130	1		30
1,1-Dichloropropene	97		97		70-130	0		30
Bromoform	94		99		70-130	5		30
1,1,1,2-Tetrachloroethane	104		108		70-130	4		30
Benzene	99		100		70-130	1		30
Toluene	98		98		70-130	0		30
Ethylbenzene	95		95		70-130	0		30
Chloromethane	76		76		52-130	0		30
Bromomethane	86		84		57-147	2		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1682649-3 WG1682649-4								
Vinyl chloride	94		94		70-130	0		30
Chloroethane	97		97		70-130	0		30
1,1-Dichloroethene	103		102		70-130	1		30
trans-1,2-Dichloroethene	97		97		70-130	0		30
Trichloroethene	94		97		70-130	3		30
1,2-Dichlorobenzene	92		93		70-130	1		30
1,3-Dichlorobenzene	93		93		70-130	0		30
1,4-Dichlorobenzene	92		92		70-130	0		30
Methyl tert butyl ether	93		98		70-130	5		30
p/m-Xylene	98		98		70-130	0		30
o-Xylene	99		99		70-130	0		30
cis-1,2-Dichloroethene	95		96		70-130	1		30
Dibromomethane	86		90		70-130	5		30
1,2,3-Trichloropropane	96		101		70-130	5		30
Styrene	90		91		70-130	1		30
Dichlorodifluoromethane	67		66		30-146	2		30
Acetone	85		93		54-140	9		30
Carbon disulfide	93		93		59-130	0		30
2-Butanone	88		98		70-130	11		30
4-Methyl-2-pentanone	93		99		70-130	6		30
2-Hexanone	83		89		70-130	7		30
Acrylonitrile	90		97		70-130	7		30
Tetrahydrofuran	88		98		70-130	11		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1682649-3 WG1682649-4								
2,2-Dichloropropane	84		84		70-130	0		30
1,2-Dibromoethane	91		95		70-130	4		30
1,3-Dichloropropane	99		102		70-130	3		30
1,1,1,2-Tetrachloroethane	88		90		70-130	2		30
Bromobenzene	95		96		70-130	1		30
n-Butylbenzene	96		95		70-130	1		30
sec-Butylbenzene	97		96		70-130	1		30
tert-Butylbenzene	95		94		70-130	1		30
o-Chlorotoluene	96		95		70-130	1		30
p-Chlorotoluene	97		97		70-130	0		30
1,2-Dibromo-3-chloropropane	92		100		68-130	8		30
Hexachlorobutadiene	86		85		70-130	1		30
Isopropylbenzene	102		101		70-130	1		30
p-Isopropyltoluene	97		97		70-130	0		30
Naphthalene	100		103		70-130	3		30
n-Propylbenzene	100		99		70-130	1		30
1,2,3-Trichlorobenzene	93		94		70-130	1		30
1,2,4-Trichlorobenzene	96		96		70-130	0		30
1,3,5-Trimethylbenzene	96		96		70-130	0		30
1,2,4-Trimethylbenzene	96		97		70-130	1		30
trans-1,4-Dichloro-2-butene	89		94		70-130	5		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	95		94		70-130	1		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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CT RCP Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1682649-3 WG1682649-4

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	76		78		70-130
Toluene-d8	104		102		70-130
4-Bromofluorobenzene	107		105		70-130
Dibromofluoromethane	89		89		70-130



# SEMIVOLATILES

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/07/22 18:22  
 Analyst: SLR  
 Percent Solids: 88%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 02:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	150	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	190	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	150	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	150	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	150	--	1
Fluorene	ND		ug/kg	190	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	230	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	67		30-130
2-Fluorobiphenyl	61		30-130
4-Terphenyl-d14	65		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/07/22 18:46  
 Analyst: SLR  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 02:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	150	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	190	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	150	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	150	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	150	--	1
Fluorene	ND		ug/kg	190	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	230	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	81		30-130
2-Fluorobiphenyl	74		30-130
4-Terphenyl-d14	74		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/08/22 17:19  
 Analyst: JG  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 18:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	89		30-130
2-Fluorobiphenyl	88		30-130
4-Terphenyl-d14	88		30-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/08/22 17:43  
 Analyst: JG  
 Percent Solids: 94%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 18:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	110		ug/kg	100	--	1
Naphthalene	ND		ug/kg	170	--	1
Benzo(a)anthracene	ND		ug/kg	100	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	100	--	1
Benzo(k)fluoranthene	ND		ug/kg	100	--	1
Chrysene	ND		ug/kg	100	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	100	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	170	--	1
Phenanthrene	ND		ug/kg	100	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	100	--	1
2-Methylnaphthalene	ND		ug/kg	210	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		30-130
2-Fluorobiphenyl	74		30-130
4-Terphenyl-d14	73		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/08/22 18:06  
 Analyst: JG  
 Percent Solids: 96%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 18:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	ND		ug/kg	100	--	1
Naphthalene	ND		ug/kg	170	--	1
Benzo(a)anthracene	ND		ug/kg	100	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	100	--	1
Benzo(k)fluoranthene	ND		ug/kg	100	--	1
Chrysene	ND		ug/kg	100	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	100	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	170	--	1
Phenanthrene	ND		ug/kg	100	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	ND		ug/kg	100	--	1
2-Methylnaphthalene	ND		ug/kg	210	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	92		30-130
4-Terphenyl-d14	90		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/08/22 18:30  
 Analyst: JG  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 18:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Fluoranthene	140		ug/kg	110	--	1
Naphthalene	ND		ug/kg	180	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	140	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	140	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	140	--	1
Fluorene	ND		ug/kg	180	--	1
Phenanthrene	110		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	--	1
Pyrene	110		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	80		30-130
2-Fluorobiphenyl	75		30-130
4-Terphenyl-d14	66		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 79,8270D  
 Analytical Date: 09/07/22 19:09  
 Analyst: SLR  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 02:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP PAHs - Westborough Lab						
Acenaphthene	ND		ug/kg	150	--	1
Fluoranthene	ND		ug/kg	110	--	1
Naphthalene	ND		ug/kg	190	--	1
Benzo(a)anthracene	ND		ug/kg	110	--	1
Benzo(a)pyrene	ND		ug/kg	150	--	1
Benzo(b)fluoranthene	ND		ug/kg	110	--	1
Benzo(k)fluoranthene	ND		ug/kg	110	--	1
Chrysene	ND		ug/kg	110	--	1
Acenaphthylene	ND		ug/kg	150	--	1
Anthracene	ND		ug/kg	110	--	1
Benzo(ghi)perylene	ND		ug/kg	150	--	1
Fluorene	ND		ug/kg	190	--	1
Phenanthrene	ND		ug/kg	110	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	--	1
Pyrene	ND		ug/kg	110	--	1
2-Methylnaphthalene	ND		ug/kg	230	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		30-130
2-Fluorobiphenyl	82		30-130
4-Terphenyl-d14	84		30-130

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 79,8270D  
**Analytical Date:** 09/06/22 12:04  
**Analyst:** IM

**Extraction Method:** EPA 3546  
**Extraction Date:** 09/04/22 19:30

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Semivolatile Organics - Westborough Lab for sample(s): 01-02,07 Batch: WG1683541-1					
Acenaphthene	ND		ug/kg	130	--
Fluoranthene	ND		ug/kg	100	--
Naphthalene	ND		ug/kg	170	--
Benzo(a)anthracene	ND		ug/kg	100	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	100	--
Benzo(k)fluoranthene	ND		ug/kg	100	--
Chrysene	ND		ug/kg	100	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	100	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	170	--
Phenanthrene	ND		ug/kg	100	--
Dibenzo(a,h)anthracene	ND		ug/kg	100	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	100	--
2-Methylnaphthalene	ND		ug/kg	200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	86		30-130
4-Terphenyl-d14	101		30-130





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 79,8270D  
 Analytical Date: 09/08/22 09:55  
 Analyst: JG

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 18:07

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Semivolatile Organics - Westborough Lab for sample(s): 03-06 Batch: WG1684604-1					
Acenaphthene	ND		ug/kg	130	--
Fluoranthene	ND		ug/kg	98	--
Naphthalene	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	98	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	98	--
Benzo(k)fluoranthene	ND		ug/kg	98	--
Chrysene	ND		ug/kg	98	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	98	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	98	--
Dibenzo(a,h)anthracene	ND		ug/kg	98	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	98	--
2-Methylnaphthalene	ND		ug/kg	200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	89		30-130
4-Terphenyl-d14	104		30-130



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1683541-2 WG1683541-3								
Acenaphthene	84		82		40-140	2		30
Fluoranthene	87		85		40-140	2		30
Naphthalene	80		79		40-140	1		30
Benzo(a)anthracene	82		82		40-140	0		30
Benzo(a)pyrene	88		90		40-140	2		30
Benzo(b)fluoranthene	87		87		40-140	0		30
Benzo(k)fluoranthene	87		89		40-140	2		30
Chrysene	84		84		40-140	0		30
Acenaphthylene	81		78		40-140	4		30
Anthracene	88		86		40-140	2		30
Benzo(ghi)perylene	87		86		40-140	1		30
Fluorene	84		82		40-140	2		30
Phenanthrene	85		84		40-140	1		30
Dibenzo(a,h)anthracene	86		85		40-140	1		30
Indeno(1,2,3-cd)pyrene	95		93		40-140	2		30
Pyrene	86		86		40-140	0		30
2-Methylnaphthalene	81		78		40-140	4		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1683541-2 WG1683541-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Nitrobenzene-d5	80		81		30-130
2-Fluorobiphenyl	78		77		30-130
4-Terphenyl-d14	85		85		30-130

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 03-06 Batch: WG1684604-2 WG1684604-3								
Acenaphthene	76		68		40-140	11		30
Fluoranthene	78		70		40-140	11		30
Naphthalene	75		66		40-140	13		30
Benzo(a)anthracene	74		68		40-140	8		30
Benzo(a)pyrene	80		70		40-140	13		30
Benzo(b)fluoranthene	82		70		40-140	16		30
Benzo(k)fluoranthene	75		70		40-140	7		30
Chrysene	75		68		40-140	10		30
Acenaphthylene	76		68		40-140	11		30
Anthracene	79		71		40-140	11		30
Benzo(ghi)perylene	71		68		40-140	4		30
Fluorene	77		68		40-140	12		30
Phenanthrene	75		68		40-140	10		30
Dibenzo(a,h)anthracene	71		67		40-140	6		30
Indeno(1,2,3-cd)pyrene	77		74		40-140	4		30
Pyrene	78		71		40-140	9		30
2-Methylnaphthalene	76		66		40-140	14		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
CT RCP Semivolatile Organics - Westborough Lab Associated sample(s): 03-06 Batch: WG1684604-2 WG1684604-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Nitrobenzene-d5	79		71		30-130
2-Fluorobiphenyl	78		68		30-130
4-Terphenyl-d14	84		73		30-130



# **PETROLEUM HYDROCARBONS**

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 14:06  
 Analyst: BAD  
 Percent Solids: 88%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/kg	2700	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,1,1-Trifluorotoluene	104			70-130		
4-Bromofluorobenzene	94			70-130		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/05/22 10:39  
 Analyst: MC  
 Percent Solids: 88%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 03:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	75			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 15:38  
 Analyst: BAD  
 Percent Solids: 85%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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## Gasoline Range Organics - Westborough Lab

Gasoline Range Organics	ND		ug/kg	3000	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	106		70-130
4-Bromofluorobenzene	97		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/05/22 11:04  
 Analyst: MC  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 03:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	37000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	66			40-140		



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 16:09  
 Analyst: BAD  
 Percent Solids: 90%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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## Gasoline Range Organics - Westborough Lab

Gasoline Range Organics	ND		ug/kg	2500	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	102		70-130
4-Bromofluorobenzene	93		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/08/22 10:13  
 Analyst: JB  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	66			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 16:40  
 Analyst: BAD  
 Percent Solids: 94%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Gasoline Range Organics - Westborough Lab**

Gasoline Range Organics	ND		ug/kg	1900	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	103		70-130
4-Bromofluorobenzene	93		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/08/22 11:23  
 Analyst: JB  
 Percent Solids: 94%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	35000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	86			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 17:11  
 Analyst: BAD  
 Percent Solids: 96%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Gasoline Range Organics - Westborough Lab						
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Gasoline Range Organics	ND		ug/kg	2600	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	103		70-130
4-Bromofluorobenzene	94		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/08/22 10:48  
 Analyst: JB  
 Percent Solids: 96%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	33000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	72			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 17:42  
 Analyst: BAD  
 Percent Solids: 89%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/kg	2600	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,1,1-Trifluorotoluene	101			70-130		
4-Bromofluorobenzene	90			70-130		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/08/22 11:58  
 Analyst: JB  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	36000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	61			40-140		

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 18:12  
 Analyst: BAD  
 Percent Solids: 85%

Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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## Gasoline Range Organics - Westborough Lab

Gasoline Range Organics	ND		ug/kg	5100	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	101		70-130
4-Bromofluorobenzene	90		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 09/07/22 19:16  
 Analyst: JB  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 03:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel Range Organics - Westborough Lab						
DRO (C10-C28)	ND		ug/kg	38000	--	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
o-Terphenyl	65			40-140		



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M)  
 Analytical Date: 09/01/22 13:02  
 Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 01-07 Batch: WG1682950-4					
Gasoline Range Organics	ND		ug/kg	2500	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	104		70-130
4-Bromofluorobenzene	89		70-130

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**Method Blank Analysis**  
**Batch Quality Control**Analytical Method: 1,8015D(M)  
Analytical Date: 09/05/22 09:24  
Analyst: MCExtraction Method: EPA 3546  
Extraction Date: 09/05/22 03:17

Parameter	Result	Qualifier	Units	RL	MDL
Diesel Range Organics - Westborough Lab for sample(s): 01-02,07 Batch: WG1683577-1					
DRO (C10-C28)	ND		ug/kg	32000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	75		40-140

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**Method Blank Analysis**  
**Batch Quality Control**Analytical Method: 1,8015D(M)  
Analytical Date: 09/08/22 08:28  
Analyst: JBExtraction Method: EPA 3546  
Extraction Date: 09/07/22 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Diesel Range Organics - Westborough Lab for sample(s): 03-06 Batch: WG1684496-1					
DRO (C10-C28)	ND		ug/kg	32000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	74		40-140

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-07 Batch: WG1682950-2 WG1682950-3								
Gasoline Range Organics	88		93		80-120	6		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,1,1-Trifluorotoluene	106		105		70-130
4-Bromofluorobenzene	102		92		70-130

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Diesel Range Organics - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1683577-2								
DRO (C10-C28)	70		-		60-140	-		

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
o-Terphenyl	60				40-140



**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Diesel Range Organics - Westborough Lab Associated sample(s): 03-06 Batch: WG1684496-2								
DRO (C10-C28)	86		-		60-140	-		

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
o-Terphenyl	70				40-140

**Matrix Spike Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1682950-6 QC Sample: L2246257-01 Client ID: B-SL-01												
Gasoline Range Organics	ND	21600	19000	88		-	-		80-120	-		20

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1,1,1-Trifluorotoluene	93				70-130
4-Bromofluorobenzene	84				70-130

# Lab Duplicate Analysis

## Batch Quality Control

Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

Lab Number: L2246257

Report Date: 09/12/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab	Associated sample(s): 01-07	QC Batch ID: WG1682950-5	QC Sample: L2246257-01	Client ID: B-SL-01		

Gasoline Range Organics	ND	ND	ug/kg	NC	20
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Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	104		104		70-130
4-Bromofluorobenzene	94		95		70-130

Diesel Range Organics - Westborough Lab	Associated sample(s): 01-02,07	QC Batch ID: WG1683577-3	QC Sample: L2246257-07	Client ID: B-SL-07
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DRO (C10-C28)	ND	ND	ug/kg	NC	20
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Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	65		79		40-140

Diesel Range Organics - Westborough Lab	Associated sample(s): 03-06	QC Batch ID: WG1684496-3	QC Sample: L2246257-03	Client ID: B-SL-03
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DRO (C10-C28)	ND	ND	ug/kg	NC	20
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Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	66		63		40-140

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 20:59  
 Analyst: KJD  
 Percent Solids: 88%

**Trap:** EST, Carbopack B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Sample Temperature upon receipt:

Received on Ice

Were samples received in methanol?

Covering the Soil

Methanol ratio:

1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Volatile Petroleum Hydrocarbons - Westborough Lab**

C5-C8 Aliphatics	ND		mg/kg	6.10	--	1
C9-C12 Aliphatics	ND		mg/kg	6.10	--	1
C9-C10 Aromatics	ND		mg/kg	6.10	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.10	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.10	--	1
Benzene	ND		mg/kg	0.122	--	1
Toluene	ND		mg/kg	0.122	--	1
Ethylbenzene	ND		mg/kg	0.122	--	1
p/m-Xylene	ND		mg/kg	0.122	--	1
o-Xylene	ND		mg/kg	0.122	--	1
Methyl tert butyl ether	ND		mg/kg	0.061	--	1
Naphthalene	ND		mg/kg	0.244	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	124		70-130
2,5-Dibromotoluene-FID	132	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01  
 Client ID: B-SL-01  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 12:00  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/06/22 10:26  
 Analyst: AL  
 Percent Solids: 88%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 04:27  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/05/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.34	--	1
C19-C36 Aliphatics	ND		mg/kg	7.34	--	1
C11-C22 Aromatics	ND		mg/kg	7.34	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.34	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	52		40-140
o-Terphenyl	54		40-140
2-Fluorobiphenyl	62		40-140
2-Bromonaphthalene	63		40-140





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 21:28  
 Analyst: KJD  
 Percent Solids: 85%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	6.79	--	1
C9-C12 Aliphatics	ND		mg/kg	6.79	--	1
C9-C10 Aromatics	ND		mg/kg	6.79	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	6.79	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	6.79	--	1
Benzene	ND		mg/kg	0.136	--	1
Toluene	ND		mg/kg	0.136	--	1
Ethylbenzene	ND		mg/kg	0.136	--	1
p/m-Xylene	ND		mg/kg	0.136	--	1
o-Xylene	ND		mg/kg	0.136	--	1
Methyl tert butyl ether	ND		mg/kg	0.068	--	1
Naphthalene	ND		mg/kg	0.272	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	120		70-130
2,5-Dibromotoluene-FID	128		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02  
 Client ID: B-SL-02  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 15:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/06/22 11:01  
 Analyst: AL  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 04:27  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/05/22

**Quality Control Information**

Condition of sample received:  
 Sample Temperature upon receipt:  
 Sample Extraction method:

Satisfactory  
 Received on Ice  
 Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.54	--	1
C19-C36 Aliphatics	ND		mg/kg	7.54	--	1
C11-C22 Aromatics	ND		mg/kg	7.54	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.54	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	54		40-140
o-Terphenyl	52		40-140
2-Fluorobiphenyl	60		40-140
2-Bromonaphthalene	61		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 21:58  
 Analyst: KJD  
 Percent Solids: 90%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	5.54	--	1
C9-C12 Aliphatics	ND		mg/kg	5.54	--	1
C9-C10 Aromatics	ND		mg/kg	5.54	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.54	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.54	--	1
Benzene	ND		mg/kg	0.111	--	1
Toluene	ND		mg/kg	0.111	--	1
Ethylbenzene	ND		mg/kg	0.111	--	1
p/m-Xylene	ND		mg/kg	0.111	--	1
o-Xylene	ND		mg/kg	0.111	--	1
Methyl tert butyl ether	ND		mg/kg	0.055	--	1
Naphthalene	ND		mg/kg	0.221	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	138	Q	70-130
2,5-Dibromotoluene-FID	147	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03  
 Client ID: B-SL-03  
 Sample Location: GREENWICH, CT

Date Collected: 08/24/22 12:30  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/11/22 19:19  
 Analyst: JB  
 Percent Solids: 90%

Extraction Method: EPA 3546  
 Extraction Date: 09/06/22 15:07  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/10/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.29	--	1
C19-C36 Aliphatics	ND		mg/kg	7.29	--	1
C11-C22 Aromatics	ND		mg/kg	7.29	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.29	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	67		40-140
o-Terphenyl	67		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	79		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 22:28  
 Analyst: KJD  
 Percent Solids: 94%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received:

Satisfactory

Sample Temperature upon receipt:

Received on Ice

Were samples received in methanol?

Covering the Soil

Methanol ratio:

1:1.4

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	4.14	--	1
C9-C12 Aliphatics	ND		mg/kg	4.14	--	1
C9-C10 Aromatics	ND		mg/kg	4.14	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	4.14	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	4.14	--	1
Benzene	ND		mg/kg	0.083	--	1
Toluene	ND		mg/kg	0.083	--	1
Ethylbenzene	ND		mg/kg	0.083	--	1
p/m-Xylene	ND		mg/kg	0.083	--	1
o-Xylene	ND		mg/kg	0.083	--	1
Methyl tert butyl ether	ND		mg/kg	0.041	--	1
Naphthalene	ND		mg/kg	0.166	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	140	Q	70-130
2,5-Dibromotoluene-FID	149	Q	70-130





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04  
 Client ID: B-SL-04  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/08/22 09:11  
 Analyst: SR  
 Percent Solids: 94%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 09:15  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/08/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.06	--	1
C19-C36 Aliphatics	15.6		mg/kg	7.06	--	1
C11-C22 Aromatics	10.1		mg/kg	7.06	--	1
C11-C22 Aromatics, Adjusted	10.1		mg/kg	7.06	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	61		40-140
o-Terphenyl	65		40-140
2-Fluorobiphenyl	83		40-140
2-Bromonaphthalene	85		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 22:58  
 Analyst: KJD  
 Percent Solids: 96%

**Trap:** EST, Carbopack B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	5.39	--	1
C9-C12 Aliphatics	ND		mg/kg	5.39	--	1
C9-C10 Aromatics	ND		mg/kg	5.39	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.39	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.39	--	1
Benzene	ND		mg/kg	0.108	--	1
Toluene	ND		mg/kg	0.108	--	1
Ethylbenzene	ND		mg/kg	0.108	--	1
p/m-Xylene	ND		mg/kg	0.108	--	1
o-Xylene	ND		mg/kg	0.108	--	1
Methyl tert butyl ether	ND		mg/kg	0.054	--	1
Naphthalene	ND		mg/kg	0.216	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	107		70-130
2,5-Dibromotoluene-FID	115		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05  
 Client ID: B-SL-05  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 10:15  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/08/22 08:46  
 Analyst: SR  
 Percent Solids: 96%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 09:15  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/08/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	6.81	--	1
C19-C36 Aliphatics	ND		mg/kg	6.81	--	1
C11-C22 Aromatics	ND		mg/kg	6.81	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.81	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	71		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	89		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 23:27  
 Analyst: KJD  
 Percent Solids: 89%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1:1 +/- 25%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	5.89	--	1
C9-C12 Aliphatics	ND		mg/kg	5.89	--	1
C9-C10 Aromatics	ND		mg/kg	5.89	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.89	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.89	--	1
Benzene	ND		mg/kg	0.118	--	1
Toluene	ND		mg/kg	0.118	--	1
Ethylbenzene	ND		mg/kg	0.118	--	1
p/m-Xylene	ND		mg/kg	0.118	--	1
o-Xylene	ND		mg/kg	0.118	--	1
Methyl tert butyl ether	ND		mg/kg	0.059	--	1
Naphthalene	ND		mg/kg	0.235	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	125		70-130
2,5-Dibromotoluene-FID	134	Q	70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06  
 Client ID: B-SL-06  
 Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/08/22 08:21  
 Analyst: SR  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 09:15  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/08/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.36	--	1
C19-C36 Aliphatics	ND		mg/kg	7.36	--	1
C11-C22 Aromatics	10.2		mg/kg	7.36	--	1
C11-C22 Aromatics, Adjusted	10.2		mg/kg	7.36	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	73		40-140
2-Fluorobiphenyl	84		40-140
2-Bromonaphthalene	86		40-140





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 23:57  
 Analyst: KJD  
 Percent Solids: 85%

**Trap:** EST, Carboxen B/Carboxen 1000&1001**Analytical Column:** Restek, RTX-502.2, 105m, 0.53ID, 3um**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Were samples received in methanol? Covering the Soil  
 Methanol ratio: 1.7:1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Petroleum Hydrocarbons - Westborough Lab</b>						
C5-C8 Aliphatics	ND		mg/kg	11.1	--	1
C9-C12 Aliphatics	ND		mg/kg	11.1	--	1
C9-C10 Aromatics	ND		mg/kg	11.1	--	1
C5-C8 Aliphatics, Adjusted	ND		mg/kg	11.1	--	1
C9-C12 Aliphatics, Adjusted	ND		mg/kg	11.1	--	1
Benzene	ND		mg/kg	0.221	--	1
Toluene	ND		mg/kg	0.221	--	1
Ethylbenzene	ND		mg/kg	0.221	--	1
p/m-Xylene	ND		mg/kg	0.221	--	1
o-Xylene	ND		mg/kg	0.221	--	1
Methyl tert butyl ether	ND		mg/kg	0.111	--	1
Naphthalene	ND		mg/kg	0.443	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	101		70-130
2,5-Dibromotoluene-FID	108		70-130



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07  
 Client ID: B-SL-07  
 Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45  
 Date Received: 08/25/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/06/22 11:35  
 Analyst: AL  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 04:27  
 Cleanup Method1: EPH-19-2.1  
 Cleanup Date1: 09/05/22

**Quality Control Information**

Condition of sample received: Satisfactory  
 Sample Temperature upon receipt: Received on Ice  
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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**Extractable Petroleum Hydrocarbons - Westborough Lab**

C9-C18 Aliphatics	ND		mg/kg	7.54	--	1
C19-C36 Aliphatics	ND		mg/kg	7.54	--	1
C11-C22 Aromatics	ND		mg/kg	7.54	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	7.54	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	52		40-140
o-Terphenyl	59		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	72		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/06/22 09:51  
 Analyst: AL

Extraction Method: EPA 3546  
 Extraction Date: 09/05/22 04:27  
 Cleanup Method: EPH-19-2.1  
 Cleanup Date: 09/05/22

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-02,07 Batch: WG1683581-1					
C9-C18 Aliphatics	ND		mg/kg	6.32	--
C19-C36 Aliphatics	ND		mg/kg	6.32	--
C11-C22 Aromatics	ND		mg/kg	6.32	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.32	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	55		40-140
2-Fluorobiphenyl	59		40-140
2-Bromonaphthalene	60		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/11/22 17:13  
 Analyst: JB

Extraction Method: EPA 3546  
 Extraction Date: 09/06/22 15:07  
 Cleanup Method: EPH-19-2.1  
 Cleanup Date: 09/10/22

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 03 Batch: WG1684032-1					
C9-C18 Aliphatics	ND		mg/kg	6.37	--
C19-C36 Aliphatics	ND		mg/kg	6.37	--
C11-C22 Aromatics	ND		mg/kg	6.37	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.37	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	71		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	89		40-140
2-Bromonaphthalene	89		40-140

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 135,EPH-19-2.1  
 Analytical Date: 09/08/22 08:35  
 Analyst: SR

Extraction Method: EPA 3546  
 Extraction Date: 09/07/22 09:15  
 Cleanup Method: EPH-19-2.1  
 Cleanup Date: 09/08/22

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 04-06 Batch: WG1684337-1					
C9-C18 Aliphatics	ND		mg/kg	6.34	--
C19-C36 Aliphatics	ND		mg/kg	6.34	--
C11-C22 Aromatics	ND		mg/kg	6.34	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.34	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	53		40-140
o-Terphenyl	58		40-140
2-Fluorobiphenyl	69		40-140
2-Bromonaphthalene	71		40-140



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 131, VPH-18-2.1  
 Analytical Date: 09/03/22 14:28  
 Analyst: BAD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-07 Batch: WG1684904-4					
C5-C8 Aliphatics	ND		mg/kg	5.00	--
C9-C12 Aliphatics	ND		mg/kg	5.00	--
C9-C10 Aromatics	ND		mg/kg	5.00	--
C5-C8 Aliphatics, Adjusted	ND		mg/kg	5.00	--
C9-C12 Aliphatics, Adjusted	ND		mg/kg	5.00	--
Benzene	ND		mg/kg	0.100	--
Toluene	ND		mg/kg	0.100	--
Ethylbenzene	ND		mg/kg	0.100	--
p/m-Xylene	ND		mg/kg	0.100	--
o-Xylene	ND		mg/kg	0.100	--
Methyl tert butyl ether	ND		mg/kg	0.050	--
Naphthalene	ND		mg/kg	0.200	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,5-Dibromotoluene-PID	103		70-130
2,5-Dibromotoluene-FID	108		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1683581-2 WG1683581-3								
C9-C18 Aliphatics	50		48		40-140	4		25
C19-C36 Aliphatics	69		73		40-140	6		25
C11-C22 Aromatics	65		74		40-140	13		25
Naphthalene	57		62		40-140	8		25
2-Methylnaphthalene	59		65		40-140	10		25
Acenaphthylene	60		65		40-140	8		25
Acenaphthene	61		68		40-140	11		25
Fluorene	63		70		40-140	11		25
Phenanthrene	64		72		40-140	12		25
Anthracene	64		74		40-140	14		25
Fluoranthene	63		72		40-140	13		25
Pyrene	65		75		40-140	14		25
Benzo(a)anthracene	64		75		40-140	16		25
Chrysene	63		74		40-140	16		25
Benzo(b)fluoranthene	61		71		40-140	15		25
Benzo(k)fluoranthene	59		69		40-140	16		25
Benzo(a)pyrene	62		73		40-140	16		25
Indeno(1,2,3-cd)Pyrene	59		70		40-140	17		25
Dibenzo(a,h)anthracene	60		70		40-140	15		25
Benzo(ghi)perylene	56		66		40-140	16		25

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1683581-2 WG1683581-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Chloro-Octadecane	58		62		40-140
o-Terphenyl	60		67		40-140
2-Fluorobiphenyl	61		68		40-140
2-Bromonaphthalene	60		68		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG1684032-2 WG1684032-3								
C9-C18 Aliphatics	59		58		40-140	2		25
C19-C36 Aliphatics	82		81		40-140	1		25
C11-C22 Aromatics	73		76		40-140	4		25
Naphthalene	63		67		40-140	6		25
2-Methylnaphthalene	64		68		40-140	6		25
Acenaphthylene	64		67		40-140	5		25
Acenaphthene	66		69		40-140	4		25
Fluorene	68		71		40-140	4		25
Phenanthrene	70		73		40-140	4		25
Anthracene	71		74		40-140	4		25
Fluoranthene	74		75		40-140	1		25
Pyrene	73		75		40-140	3		25
Benzo(a)anthracene	73		75		40-140	3		25
Chrysene	72		74		40-140	3		25
Benzo(b)fluoranthene	70		71		40-140	1		25
Benzo(k)fluoranthene	67		69		40-140	3		25
Benzo(a)pyrene	71		72		40-140	1		25
Indeno(1,2,3-cd)Pyrene	64		65		40-140	2		25
Dibenzo(a,h)anthracene	66		67		40-140	2		25
Benzo(ghi)perylene	61		61		40-140	0		25

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG1684032-2 WG1684032-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Chloro-Octadecane	69		67		40-140
o-Terphenyl	67		69		40-140
2-Fluorobiphenyl	79		81		40-140
2-Bromonaphthalene	80		82		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		



# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 04-06 Batch: WG1684337-2 WG1684337-3								
C9-C18 Aliphatics	44		44		40-140	0		25
C19-C36 Aliphatics	66		63		40-140	5		25
C11-C22 Aromatics	68		59		40-140	14		25
Naphthalene	61		54		40-140	12		25
2-Methylnaphthalene	63		55		40-140	14		25
Acenaphthylene	63		55		40-140	14		25
Acenaphthene	65		56		40-140	15		25
Fluorene	67		58		40-140	14		25
Phenanthrene	67		58		40-140	14		25
Anthracene	68		59		40-140	14		25
Fluoranthene	67		57		40-140	16		25
Pyrene	68		59		40-140	14		25
Benzo(a)anthracene	68		59		40-140	14		25
Chrysene	67		58		40-140	14		25
Benzo(b)fluoranthene	64		56		40-140	13		25
Benzo(k)fluoranthene	62		54		40-140	14		25
Benzo(a)pyrene	66		57		40-140	15		25
Indeno(1,2,3-cd)Pyrene	62		55		40-140	12		25
Dibenzo(a,h)anthracene	64		56		40-140	13		25
Benzo(ghi)perylene	58		53		40-140	9		25

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 04-06 Batch: WG1684337-2 WG1684337-3								

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
Chloro-Octadecane	59		55		40-140
o-Terphenyl	65		55		40-140
2-Fluorobiphenyl	75		65		40-140
2-Bromonaphthalene	77		67		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Lab Number:** L2246257

**Project Number:** Not Specified

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-07 Batch: WG1684904-2 WG1684904-3								
C5-C8 Aliphatics	96		98		70-130	2		25
C9-C12 Aliphatics	110		111		70-130	1		25
C9-C10 Aromatics	100		100		70-130	0		25
Benzene	100		101		70-130	1		25
Toluene	101		102		70-130	1		25
Ethylbenzene	102		103		70-130	1		25
p/m-Xylene	102		102		70-130	0		25
o-Xylene	99		99		70-130	0		25
Methyl tert butyl ether	90		90		70-130	1		25
Naphthalene	94		95		70-130	1		25
1,2,4-Trimethylbenzene	100		100		70-130	0		25
Pentane	82		85		70-130	4		25
2-Methylpentane	96		98		70-130	2		25
2,2,4-Trimethylpentane	105		107		70-130	2		25
n-Nonane	110		112		30-130	2		25
n-Decane	108		110		70-130	2		25
n-Butylcyclohexane	110		112		70-130	2		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,5-Dibromotoluene-PID	99		97		70-130
2,5-Dibromotoluene-FID	103		102		70-130

Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2246257

Project Number: Not Specified

Report Date: 09/12/22

### Fractionation Check Standard Quality Control

Fractionation check standard for 070219

Parameter	% Recovery	QC Criteria
C9-C18 Aliphatics	92	40-140
C19-C36 Aliphatics	89	40-140
C11-C22 Aromatics	75	40-140
Naphthalene	59	40-140
2-Methylnaphthalene	60	40-140
Acenaphthylene	59	40-140
Acenaphthene	61	40-140
Fluorene	63	40-140
Phenanthrene	63	40-140
Anthracene	67	40-140
Fluoranthene	65	40-140
Pyrene	64	40-140
Benzo(a)anthracene	63	40-140
Chrysene	66	40-140
Benzo(b)fluoranthene	62	40-140
Benzo(k)fluoranthene	70	40-140
Benzo(a)pyrene	58	40-140
Indeno(1,2,3-cd)Pyrene	63	40-140
Dibenzo(a,h)anthracene	64	40-140
Benzo(g,h,i)perylene	64	40-140
Nonane	73	30-140
Decane	75	40-140
Dodecane	80	40-140
Tetradecane	84	40-140
Hexadecane	90	40-140
Octadecane	88	40-140
Nonadecane	83	40-140
Eicosane	86	40-140
Docosane	83	40-140
Tetracosane	82	40-140
Hexacosane	82	40-140
Octacosane	82	40-140
triacontane	81	40-140
Hexatriacontane	80	40-140
% Naphthalene Breakthrough	0	0-5
% 2-Methylnaphthalene Breakthrough	0	0-5

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**Fractionation Check Standard  
Quality Control**

Fractionation check standard for 070219

Surrogate	% Recovery	QC Criteria
Chloro-Octadecane	58	40-140
o-Terphenyl	69	40-140
2-Fluorobiphenyl	59	40-140
2-Bromonaphthalene	61	40-140



## METALS

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-01

Date Collected: 08/23/22 12:00

Client ID: B-SL-01

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.18	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Arsenic, Total	1.59		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Barium, Total	55.9		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Beryllium, Total	0.279		mg/kg	0.218	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Chromium, Total	12.7		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Copper, Total	7.59		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Lead, Total	4.87		mg/kg	2.18	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Nickel, Total	7.53		mg/kg	1.09	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.18	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.18	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Vanadium, Total	13.9		mg/kg	0.436	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC
Zinc, Total	20.0		mg/kg	2.18	--	1	08/26/22 23:30	09/01/22 16:54	EPA 3050B	79,6010D	MC



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-02

Date Collected: 08/23/22 15:30

Client ID: B-SL-02

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Arsenic, Total	2.17		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Barium, Total	71.0		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Beryllium, Total	0.328		mg/kg	0.230	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Chromium, Total	16.7		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Copper, Total	12.4		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Lead, Total	3.90		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Nickel, Total	8.64		mg/kg	1.15	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Vanadium, Total	15.4		mg/kg	0.461	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC
Zinc, Total	18.7		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 16:57	EPA 3050B	79,6010D	MC



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-03

Date Collected: 08/24/22 12:30

Client ID: B-SL-03

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.10	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Arsenic, Total	1.00		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Barium, Total	94.3		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Beryllium, Total	0.538		mg/kg	0.210	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Chromium, Total	18.2		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Copper, Total	8.58		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Lead, Total	4.32		mg/kg	2.10	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Nickel, Total	7.41		mg/kg	1.05	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.10	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.10	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Vanadium, Total	16.4		mg/kg	0.419	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC
Zinc, Total	26.1		mg/kg	2.10	--	1	08/26/22 23:30	09/01/22 17:01	EPA 3050B	79,6010D	MC



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-04

Date Collected: 08/25/22 08:45

Client ID: B-SL-04

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.06	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Arsenic, Total	2.22		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Barium, Total	220		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Beryllium, Total	0.412		mg/kg	0.206	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Chromium, Total	41.3		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Copper, Total	28.7		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Lead, Total	8.04		mg/kg	2.06	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Nickel, Total	18.2		mg/kg	1.03	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.06	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.06	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Vanadium, Total	36.6		mg/kg	0.412	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC
Zinc, Total	32.7		mg/kg	2.06	--	1	08/26/22 23:30	09/01/22 17:04	EPA 3050B	79,6010D	MC





**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-05

Date Collected: 08/25/22 10:15

Client ID: B-SL-05

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Arsenic, Total	0.821		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Barium, Total	575		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Beryllium, Total	0.444		mg/kg	0.200	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Chromium, Total	79.2		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Copper, Total	27.9		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Lead, Total	5.86		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Nickel, Total	27.9		mg/kg	1.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Vanadium, Total	66.1		mg/kg	0.401	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC
Zinc, Total	46.3		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 21:20	EPA 3050B	79,6010D	MC



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-06

Date Collected: 08/25/22 11:45

Client ID: B-SL-06

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.17	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Arsenic, Total	3.38		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Barium, Total	176		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Beryllium, Total	0.500		mg/kg	0.217	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Chromium, Total	32.0		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Copper, Total	16.6		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Lead, Total	26.5		mg/kg	2.17	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Nickel, Total	14.3		mg/kg	1.09	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.17	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.17	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Vanadium, Total	32.2		mg/kg	0.435	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC
Zinc, Total	41.4		mg/kg	2.17	--	1	08/26/22 23:30	09/01/22 21:24	EPA 3050B	79,6010D	MC



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS**

Lab ID: L2246257-07

Date Collected: 08/23/22 08:45

Client ID: B-SL-07

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Arsenic, Total	3.08		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Barium, Total	156		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Beryllium, Total	0.991		mg/kg	0.230	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Chromium, Total	56.0		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Copper, Total	20.7		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Lead, Total	6.94		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Nickel, Total	20.0		mg/kg	1.15	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Selenium, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Silver, Total	ND		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Thallium, Total	ND		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Vanadium, Total	46.4		mg/kg	0.460	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC
Zinc, Total	37.9		mg/kg	2.30	--	1	08/26/22 23:30	09/01/22 21:27	EPA 3050B	79,6010D	MC



Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2246257

Project Number: Not Specified

Report Date: 09/12/22

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1680151-1										
Antimony, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Arsenic, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Barium, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Beryllium, Total	ND		mg/kg	0.200	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Cadmium, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Chromium, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Copper, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Lead, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Nickel, Total	ND		mg/kg	1.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Selenium, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Silver, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Thallium, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Vanadium, Total	ND		mg/kg	0.400	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC
Zinc, Total	ND		mg/kg	2.00	--	1	08/26/22 23:30	09/01/22 16:42	79,6010D	MC

### Prep Information

Digestion Method: EPA 3050B



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1680151-2 SRM Lot Number: D113-540								
Antimony, Total	122		-		20-250	-		30
Arsenic, Total	88		-		70-130	-		30
Barium, Total	95		-		75-125	-		30
Beryllium, Total	116		-		75-125	-		30
Cadmium, Total	93		-		75-125	-		30
Chromium, Total	93		-		70-130	-		30
Copper, Total	86		-		75-125	-		30
Lead, Total	82		-		72-128	-		30
Nickel, Total	88		-		70-130	-		30
Selenium, Total	90		-		66-134	-		30
Silver, Total	88		-		70-131	-		30
Thallium, Total	95		-		70-130	-		30
Vanadium, Total	86		-		74-126	-		30
Zinc, Total	81		-		70-130	-		30



# **INORGANICS & MISCELLANEOUS**

**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-01**Client ID:** B-SL-01**Sample Location:** GREENWICH, CT**Date Collected:** 08/23/22 12:00**Date Received:** 08/25/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Coarse**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/06/22 09:14	1,1030	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

### SAMPLE RESULTS

**Lab ID:** L2246257-02  
**Client ID:** B-SL-02  
**Sample Location:** GREENWICH, CT

**Date Collected:** 08/23/22 15:30  
**Date Received:** 08/25/22  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

### Test Material Information

**Source of Material:** Unknown  
**Description of Material:** Non-Metallic - Damp Soil  
**Particle Size:** Coarse  
**Preliminary Burning Time (sec):** 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/06/22 09:14	1,1030	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-03**Client ID:** B-SL-03**Sample Location:** GREENWICH, CT**Date Collected:** 08/24/22 12:30**Date Received:** 08/25/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/06/22 11:13	1,1030	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-04**Client ID:** B-SL-04**Sample Location:** GREENWICH, CT**Date Collected:** 08/25/22 08:45**Date Received:** 08/25/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/22 14:52	1,1030	MJ





**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-05**Client ID:** B-SL-05**Sample Location:** GREENWICH, CT**Date Collected:** 08/25/22 10:15**Date Received:** 08/25/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/22 14:52	1,1030	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-06**Client ID:** B-SL-06**Sample Location:** GREENWICH, CT**Date Collected:** 08/25/22 11:45**Date Received:** 08/25/22**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Test Material Information****Source of Material:** Unknown**Description of Material:** Non-Metallic - Damp Soil**Particle Size:** Medium**Preliminary Burning Time (sec):** 120

<b>Parameter</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analytical Method</b>	<b>Analyst</b>
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/22 14:52	1,1030	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

Lab Number: L2246257

Report Date: 09/12/22

**SAMPLE RESULTS**

Lab ID: L2246257-07

Client ID: B-SL-07

Sample Location: GREENWICH, CT

Date Collected: 08/23/22 08:45

Date Received: 08/25/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

**Test Material Information**

Source of Material: Unknown

Description of Material: Non-Metallic - Damp Soil

Particle Size: Coarse

Preliminary Burning Time (sec): 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/06/22 09:14	1,1030	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-01**Date Collected:** 08/23/22 12:00**Client ID:** B-SL-01**Date Received:** 08/25/22**Sample Location:** GREENWICH, CT**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.7		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	6.0		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:44	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:12	125,7.3	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-02**Date Collected:** 08/23/22 15:30**Client ID:** B-SL-02**Date Received:** 08/25/22**Sample Location:** GREENWICH, CT**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.4		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	6.3		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	09/02/22 13:10	09/02/22 15:32	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	09/02/22 13:10	09/02/22 14:59	125,7.3	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2246257

Project Number: Not Specified

Report Date: 09/12/22

## SAMPLE RESULTS

Lab ID: L2246257-03

Date Collected: 08/24/22 12:30

Client ID: B-SL-03

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.6		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	6.7		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	09/02/22 17:50	09/02/22 19:55	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	--	1	09/02/22 17:50	09/02/22 20:05	125,7.3	TL





Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2246257

Project Number: Not Specified

Report Date: 09/12/22

## SAMPLE RESULTS

Lab ID: L2246257-04

Date Collected: 08/25/22 08:45

Client ID: B-SL-04

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.7		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	8.4		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:48	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:18	125,7.3	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Lab Number: L2246257

Project Number: Not Specified

Report Date: 09/12/22

## SAMPLE RESULTS

Lab ID: L2246257-05

Date Collected: 08/25/22 10:15

Client ID: B-SL-05

Date Received: 08/25/22

Sample Location: GREENWICH, CT

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.6		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	8.0		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:48	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:19	125,7.3	MJ



Project Name: CENTRAL MIDDLE SCHOOL

Project Number: Not Specified

Lab Number: L2246257

Report Date: 09/12/22

## SAMPLE RESULTS

Lab ID: L2246257-06

Client ID: B-SL-06

Sample Location: GREENWICH, CT

Date Collected: 08/25/22 11:45

Date Received: 08/25/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	7.9		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:49	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:20	125,7.3	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**SAMPLE RESULTS****Lab ID:** L2246257-07**Date Collected:** 08/23/22 08:45**Client ID:** B-SL-07**Date Received:** 08/25/22**Sample Location:** GREENWICH, CT**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.3		%	0.100	NA	1	-	08/26/22 17:27	121,2540G	TR
pH (H)	7.4		SU	-	NA	1	-	08/29/22 18:36	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:45	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:13	125,7.3	MJ



**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

### Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01,07 Batch: WG1680859-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:09	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01,07 Batch: WG1680861-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	08/29/22 10:55	08/29/22 12:42	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 04-06 Batch: WG1680963-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:14	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 04-06 Batch: WG1681314-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	08/30/22 10:10	08/30/22 12:44	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1682992-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	09/02/22 13:10	09/02/22 14:58	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1682996-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	09/02/22 13:10	09/02/22 15:31	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG1683095-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	09/02/22 17:50	09/02/22 20:04	125,7.3	TL
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG1683096-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	09/02/22 17:50	09/02/22 19:54	125,7.3	TL



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** CENTRAL MIDDLE SCHOOL

**Project Number:** Not Specified

**Lab Number:** L2246257

**Report Date:** 09/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,07 Batch: WG1680859-2								
Sulfide, Reactive	110		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01,07 Batch: WG1680861-2								
Cyanide, Reactive	89		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 04-06 Batch: WG1680963-2								
Sulfide, Reactive	102		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1681032-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 04-06 Batch: WG1681314-2								
Cyanide, Reactive	69		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1682992-2								
Sulfide, Reactive	101		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1682996-2								
Cyanide, Reactive	71		-		30-125	-		40



**Lab Control Sample Analysis****Batch Quality Control****Project Name:** CENTRAL MIDDLE SCHOOL**Project Number:** Not Specified**Lab Number:** L2246257**Report Date:** 09/12/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG1683095-2					
Sulfide, Reactive	115	-	60-125	-	40
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG1683096-2					
Cyanide, Reactive	70	-	30-125	-	40

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Serial\_No:**09122214:38  
**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Sample Receipt and Container Information**

Were project specific reporting limits specified? NO

**Cooler Information**

**Cooler**                      **Custody Seal**  
A                                      Absent

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246257-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-01B	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-01C	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-01D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-SB-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-BE-6010T(180),CT-TL-6010T(180),CT-CD-6010T(180)
L2246257-01F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),REACTS(14),CT-PAH(14),EPH-20(14),TPH-DRO(14),PH-9045(1),REACTCN(14)
L2246257-02A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-02B	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-02C	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-02D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-SB-6010T(180),CT-AS-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-CR-6010T(180),CT-BA-6010T(180),CT-ZN-6010T(180),CT-TL-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180)
L2246257-02F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		REACTS(14),IGNIT-1030(14),CT-PAH(14),EPH-20(14),TPH-DRO(14),PH-9045(1),REACTCN(14)
L2246257-03A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-03B	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Serial\_No:**09122214:38  
**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246257-03C	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-03D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-SB-6010T(180),CT-CU-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-CR-6010T(180),CT-BA-6010T(180),CT-ZN-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180),CT-TL-6010T(180)
L2246257-03F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),REACTS(14),EPH-20(14),CT-PAH(14),TPH-DRO(14),PH-9045(1),REACTCN(14)
L2246257-04A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-04B	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-04C	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-04D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-SB-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-AS-6010T(180),CT-PB-6010T(180),CT-NI-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-CD-6010T(180),CT-BE-6010T(180),CT-TL-6010T(180)
L2246257-04F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),REACTS(14),EPH-20(14),CT-PAH(14),TPH-DRO(14),PH-9045(1),REACTCN(14)
L2246257-05A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-05B	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-05C	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-05D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-CU-6010T(180),CT-AS-6010T(180),CT-SE-6010T(180),CT-SB-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-CD-6010T(180),CT-BE-6010T(180),CT-TL-6010T(180)
L2246257-05F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),REACTS(14),EPH-20(14),CT-PAH(14),TPH-DRO(14),PH-9045(1),REACTCN(14)

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Serial\_No:**09122214:38  
**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2246257-06A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-06B	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-06C	Vial water preserved	A	NA		2.4	Y	Absent	26-AUG-22 06:39	CT-8260HLW(14)
L2246257-06D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-AG-6010T(180),CT-V-6010T(180),CT-SB-6010T(180),CT-AS-6010T(180),CT-CU-6010T(180),CT-SE-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-ZN-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-TL-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180)
L2246257-06F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		REACTS(14),IGNIT-1030(14),EPH-20(14),CT-PAH(14),TPH-DRO(14),PH-9045(1),REACTCN(14)
L2246257-07A	Vial MeOH preserved	A	NA		2.4	Y	Absent		TPH-GRO(14),VPH-DELUX-18(28),CT-8260HLW(14)
L2246257-07B	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-07C	Vial water preserved	A	NA		2.4	Y	Absent	23-AUG-22 15:35	CT-8260HLW(14)
L2246257-07D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L2246257-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		CT-V-6010T(180),CT-AG-6010T(180),CT-SB-6010T(180),CT-SE-6010T(180),CT-CU-6010T(180),CT-AS-6010T(180),CT-NI-6010T(180),CT-PB-6010T(180),CT-BA-6010T(180),CT-CR-6010T(180),CT-ZN-6010T(180),CT-BE-6010T(180),CT-CD-6010T(180),CT-TL-6010T(180)
L2246257-07F	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),REACTS(14),CT-PAH(14),EPH-20(14),TPH-DRO(14),PH-9045(1),REACTCN(14)

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: Data Usability Report*

**Project Name:** CENTRAL MIDDLE SCHOOL**Lab Number:** L2246257**Project Number:** Not Specified**Report Date:** 09/12/22**Footnotes**

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

**Terms**

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

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

**Data Qualifiers**

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**Report Format:** Data Usability Report





**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** CENTRAL MIDDLE SCHOOL  
**Project Number:** Not Specified

**Lab Number:** L2246257  
**Report Date:** 09/12/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 79 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Versions 2.0 and 3.0, July and December 2006.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.
- 131 Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MassDEP, February 2018, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of VPH under the Massachusetts Contingency Plan, WSC-CAM-IVA, June 1, 2018.
- 135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

## LIMITATION OF LIABILITIES

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

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



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

Page 1 of 1

**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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



# Walkup Drive  
Westboro, MA 01581  
Tel: 508-898-9220

320 Forbes Blvd  
Mansfield, MA 02048  
Tel: 508-822-9300

# CHAIN OF CUSTODY

PAGE \_\_\_\_\_ OF \_\_\_\_\_

Date Rec'd in Lab: 8/26/22

ALPHA Job #: 2246257

## Project Information

Project Name: Central Middle Sch

Project Location: Greenwich, CT

Project #: —

Project Manager: Paul Sousa

ALPHA Quote #: —

## Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

## Report Information - Data Deliverables

☐ ADEX

☐ EMAIL

## Billing Information

☐ Same as Client Info

PO #:

## Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods  
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)  
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)  
☐ Yes ☐ No NPDES RGP  
☐ Other State /Fed Program Criteria

## Client Information

Client: ATANE

Address: 56 Roland St.

Suite 202 Charlestown MA 02129

Phone: (617) 838 7668

Email:

## Additional Project Information:

hramzan@ataneconsulting.com  
 psousa@ataneconsulting.com  
 pmccarthy@ataneconsulting.com

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler Initials
--------------------------------	-----------	--------------------	------	------------------	---------------------

46257-01	B-SL-01	8/23/22	1200	SOIL	DSM
02	B-SL-02	8/23/22	1530		
03	B-SL-03	8/24/22	1230		
04	B-SL-04	8/25/22	0845		
05	B-SL-05	8/25/22	1015		
06	B-SL-06	8/25/22	1145		
07	B-SL-07	8/23/22	0845		

ANALYSIS	VOC: 8260 624 524.2	SVOC: 8260 624 524.2	METALS: 8260 624 524.2	METALS: 8260 624 524.2	EPH: 8260 624 524.2	VPH: 8260 624 524.2	PCB: 8260 624 524.2	TPH: 8260 624 524.2	FAH: 8260 624 524.2	VPH: 8260 624 524.2	TPH: 8260 624 524.2	TPH: 8260 624 524.2	CT-15 METALS (Min H <sub>2</sub> O)	pH, Ignitability, Reactivity	SAMPLE INFO	Sample Comments
															Filtration	
															Field	
															Lab to do	
															Preservation	
															Lab to do	

Container Type  
 P= Plastic  
 A= Amber glass  
 V= Vial  
 G= Glass  
 B= Bacteria cup  
 C= Cube  
 O= Other  
 E= Encofe  
 D= BOD Bottle

Preservative  
 A= None  
 B= HCl  
 C= HNO<sub>3</sub>  
 D= H<sub>2</sub>SO<sub>4</sub>  
 E= NaOH  
 F= MeOH  
 G= NaHSO<sub>4</sub>  
 H= Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
 I= Ascorbic Acid  
 J= NH<sub>4</sub>Cl  
 K= Zn Acetate  
 O= Other

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.