

Final Phase II Environmental Site Assessment

**Vacant Land
11201-19 South Michigan Avenue
Chicago, Illinois 60628**

June 8, 2023



**Brecheisen
Engineering,
Inc.**

Environmental Consulting & Engineering

Final Phase II Environmental Site Assessment

**Vacant Land
11201-19 South Michigan Avenue
Chicago, Illinois 60628**

Parcel Index Numbers:

25-22-107-001
25-22-107-002
25-22-107-003
25-22-107-004

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June 8, 2023

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EXECUTIVE SUMMARY

Project Overview

Brecheisen Engineering, Inc. (BEI) was retained by the City of Chicago Department of Assets, Information and Services (AIS) to conduct a Phase II Environmental Site Assessment (ESA) on a tract of real estate located at 11201-19 South Michigan Avenue in the Pullman neighborhood of Chicago, Illinois. The performance of the Phase II ESA was necessary to characterize the nature and extent of potential impacts related to recognized environmental conditions (RECs) identified in a December 5, 2022 Phase I ESA completed for the Site. The purpose of the Phase II ESA was to characterize potential impacts related to the RECs as well as generally characterize the conditions of the Site through the advancement of soil borings, the installation of monitoring wells, and the laboratory analyses of soil and groundwater. Soil borings were intended to characterize both the fill materials and subsurface soils at the Site.

Site Description

The Site is zoned “M1-1” for manufacturing use. The Site is vacant and no structures remain. The Site consists of four (4) parcels of contiguous land totaling approximately 29,543 square feet (0.7-acres) and comprised of four (4) Parcel Index Numbers (PINs) as summarized below:

PIN	Address	Area (ft ²)
25-22-107-001	11201-19 S. Michigan Ave.	21,558
25-22-107-002		3,851
25-22-107-003		3,476
25-22-107-004		658

The Site is located in the northwest ¼ of the northwest ¼ of Section 22, Township 37 North, Range 14 East, southeast of the intersection of South Michigan Avenue and East 112th Street in Chicago, Illinois. The Site is shown relative to surrounding geographical features on the Site Location Map included as Figure 1.

Recognized Environmental Conditions

BEI completed a Phase I ESA for the Site was completed on December 5, 2022. The Phase I ESA identified the following RECs in connection with the Site:

On-Site

- *The documented existence of gasoline, fuel oil and oil underground storage tanks at 11201-13 S. Michigan Ave., the lack of documentation pertaining to their status, removal or integrity, and the potential for a release(s) of petroleum*

products and/or hazardous substances to impact the soil and/or groundwater beneath the Site.

Off-Site

- *The historical use of the southern adjacent site located at 11221 S. Michigan Ave. as a former cleaner, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the southern neighboring site located at 11223 S. Michigan Ave. as a former cleaner, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the northern neighboring site at 11155 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the northern neighboring site at 11151 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the western neighboring site at 11200 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the western neighboring site located at 11212 S. Michigan Ave. as a plating works, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 15,000-gallon fuel oil tank (1950) and two (2) gasoline tanks (1939) at the western neighboring site at 11218-24 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the western neighboring site located at 34 E. 112th Pl. as a former paints store and historical cleaner, the potential use, handling and generation of hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the southwestern neighboring site at 11242 S. Michigan Ave. as a printing facility, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the southwestern neighboring site at 11246 S. Michigan Ave. as a paint store, the associated use, generation and handling of petroleum*

- products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- The historical use of the southeastern neighboring site located at 11250-52 S. Edbrooke Ave. as a machine shop, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source.*

The RECs have been shown on the Site Features Map, included as Figure 2.

Summary of Phase II ESA Results

Ground Penetrating Radar Survey

On March 29, 2023, BEI oversaw the performance of a ground penetrating radar (GPR) survey by Earth Solutions, Inc. There were no obstacles covering the Site during the performance of the GPR survey that would potentially impede the radar penetration. A GSSI SIR-3000 was used to perform the GPR survey with a 400 MHz antenna. The GPR survey was conducted across the entire Site. Overall, the GPR survey was conducted using an approximate 3-foot grid spacing across the entire Site in a north-south and in an east-west direction. No anomalies indicative of a potentially buried underground storage tank (UST) were detected during the GPR survey. Although, the GPR provided insight into the subsurface conditions as rubble fill materials were observed over the majority of the Site. The GPR survey report is included in Appendix A.

Soil Investigation

Twelve (12) soil borings were drilled in the areas most likely to have been impacted based on the historical Site activities and the AIS-approved Sampling and Analysis Plan (SAP). At least two (2) soil samples from each soil boring were analyzed for various combinations of volatile organic compounds (VOCs), benzene, ethylbenzene, toluene, xylenes (BETX), polynuclear aromatic hydrocarbons (PNAs) and Resource Conservation and Recovery Act (RCRA) metals. The soil boring locations have been shown relative to the RECs for the Site on Figure 3. Photographs of Site investigation activities have been included in Appendix B. A complete description of field observations has been provided on the Soil Boring Logs included in Appendix C.

No VOCs or BETX compounds were detected at levels exceeding the most restrictive Tier 1 SROs in any of the soil samples analyzed. However, certain PNAs, and RCRA metals were detected in the Site's surficial (0-3 feet below grade) and subsurface soils (3-12 feet below grade) at levels exceeding the most restrictive residential and construction worker Tier 1 Soil Remediation Objectives (SROs) for various exposure pathways.

The estimated extent of impacted soils exceeding the most restrictive Tier 1 SROs has been shown on Figures 5 through 7 for various exposure pathways. Soil analytical results were compared to the residential and construction worker Tier 1 SROs on Tables 1

through 3. A complete copy of the soil laboratory analytical reports has been provided in Appendix E.

Groundwater Investigation

Three (3) soil borings were completed as 1-inch diameter polyvinyl chloride (PVC) temporary monitoring wells in accordance with the site-specific SAP. Groundwater samples were collected from three (3) temporary monitoring well for VOCs, PNAs and RCRA metals. Temporary monitoring well locations have been shown relative to the RECs for the Site on Figure 3. Temporary monitoring well construction logs are included in Appendix D.

Temporary monitoring well top-of-casing elevations were surveyed and groundwater elevations were measured using an electronic water level meter in order to determine the regional groundwater flow direction beneath the Site. Based on the groundwater elevation data, groundwater flow direction beneath the Site is southeasterly. A groundwater contour map has been provided as Figure 4.

No VOCs or PNAs were detected at levels exceeding the Tier 1 Groundwater Remediation Objectives (GROs) for Class I or Class II groundwater. Groundwater analytical results were also compared to the Tier 1 GROs for the indoor air inhalation exposure route published in 35 Illinois Administrative Code (IAC), Part 742, Appendix B, Table H; none of the volatile compounds were detected in the groundwater beneath the Site at the stated laboratory detection limits and thus, no volatile compounds were detected in groundwater at levels exceeding the most conservative Tier 1 GROs for indoor air inhalation. Groundwater analytical results are compared to the Tier 1 GROs on Tables 4 through 6. A complete copy of the groundwater analytical report is provided in Appendix F.

Contaminants-of-Concern

Based on the results of the Tier 1 and limited Tier 2 Evaluations, the following contaminants-of-concern have been identified at the Site:

- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Dibenzo(a,h)anthracene
- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury

Exposure Pathways

Based on the results of the Tier 1 and limited Tier 2 Evaluations, the remediation objectives are exceeded for the following exposure pathways at the Site:

- Residential Soil Ingestion
- Construction Worker Inhalation
- Soil Component of Class I Groundwater Ingestion
- Class I Groundwater Ingestion

Conclusions and Recommendations

The nature and extent of soil and groundwater impacts at the Site has been adequately characterized. Based on the confirmed presence of soil impacts at levels exceeding the most restrictive residential and construction worker Tier 1 SROs for various exposure pathways, and considering the Site's future use for residential purposes, BEI recommends that the rubble fill materials be excavated and properly disposed during redevelopment activities, with engineered barriers and institutional controls implemented as needed to mitigate human exposure to any residual impacted media.

Institutional controls are recommended in accordance with Subpart J of 35 IAC 742 to eliminate human exposure to groundwater beneath the Site. The City of Chicago groundwater ordinance or a site-specific groundwater use restriction may be used as an institutional control to prohibit the use of groundwater beneath the Site for potable purposes. Pursuant to Section 742.312(b)(3), the use of Table H (Section 742.Appendix B) to eliminate the indoor inhalation exposure route carries with it the need to place an institutional control on the property in accordance with Subpart J of 35 IAC 742. Therefore, potential future buildings shall be constructed with a full concrete slab-on-grade foundation or with a full concrete basement floor and walls. Future Site buildings shall not be constructed with earthen crawl spaces, earthen floors, stone foundations, partial concrete floors, or unsealed sumps.

Engineered barriers are recommended in accordance with Subpart K of 35 IAC 742 to eliminate human exposure to the contaminated soil beneath the Site. Based on the soil analytical results, there were no exceedances of the residential Tier 1 SROs for soil ingestion in the surficial (0-3 feet below grade) soils at the Site; therefore, the existing three feet of clean soil can be utilized as an engineered barrier to mitigate exposure to the subsurface soil exceedances of the Tier 1 SROs for residential soil ingestion and eliminate the residential soil ingestion exposure pathway. Should the existing engineered barrier be disturbed during Site redevelopment activities, it will be necessary to reconstruct the engineered barrier in order to meet the requirements of Sections 742.1100 and 742.1105. Any geological materials imported to the Site during redevelopment activities should be analyzed and demonstrated to originate from an uncontaminated source.

Any soil that is removed from the Site as part of remediation or redevelopment should be characterized for proper disposal. Based on the detection of certain compounds at levels exceeding the construction worker Tier 1 SROs for inhalation, a site-specific Health and Safety Plan (HASP) and a construction worker caution zone (CWCZ) should be implemented prior to any future redevelopment or construction activities in order to allow construction workers to take appropriate health and safety precautions.

1.0 INTRODUCTION

1.1 Project Overview

Brecheisen Engineering, Inc. (BEI) was retained by the City of Chicago Department of Assets, Information and Services (AIS) to conduct a Phase II Environmental Site Assessment (ESA) on a tract of real estate located at 11201-19 South Michigan Avenue in the Pullman neighborhood of Chicago, Illinois (the Site). The performance of the Phase II ESA was necessary to characterize the nature and extent of potential impacts related to recognized environmental conditions (RECs) identified in a December 5, 2022 Phase I ESA completed for the Site. The purpose of the Phase II ESA was to characterize potential impacts related to the RECs as well as generally characterize the conditions of the Site through the advancement of soil borings, the installation of monitoring wells, and the laboratory analyses of soil and groundwater. Soil borings were intended to characterize both the fill materials and subsurface soils at the Site.

1.2 Site Location

The Site is located in the northwest ¼ of the northwest ¼ of Section 22, Township 37 North, Range 14 East, southeast of the intersection of South Michigan Avenue and East 112th Street in Chicago, Illinois. The Site is shown relative to surrounding geographical features on the Site Location Map included as Figure 1.

1.3 Site Description

The Site is zoned “M1-1” for manufacturing use. The Site is vacant and no structures remain. The Site consists of four (4) parcels of contiguous land totaling approximately 29,543 square feet (0.7-acres) and comprised of four (4) Parcel Index Numbers (PINs) as summarized below:

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25-22-107-003		3,476
25-22-107-004		658

Northern and some western adjacent sites are also zoned “M1-1” for manufacturing. Southern, eastern and some western adjacent sites are zoned “B1-3” for business use.

Surrounding sites are described as follows:

North: North of the Site is East 112th Street, beyond which is commercial development along South Michigan Avenue.

South: South of the Site is a vacant commercial building, beyond which is commercial development along South Michigan Avenue.

East: East of the Site is a public alleyway, beyond which is vacant land and residential development.

1.4 Recognized Environmental Conditions

BEI completed a Phase I ESA for the Site was completed on December 5, 2022. The Phase I ESA identified the following RECs in connection with the Site:

On-Site

- *The documented existence of gasoline, fuel oil and oil underground storage tanks at 11201-13 S. Michigan Ave., the lack of documentation pertaining to their status, removal or integrity, and the potential for a release(s) of petroleum products and/or hazardous substances to impact the soil and/or groundwater beneath the Site.*

Off-Site

- *The historical use of the southern adjacent site located at 11221 S. Michigan Ave. as a former cleaner, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the southern neighboring site located at 11223 S. Michigan Ave. as a former cleaner, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the northern neighboring site at 11155 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the northern neighboring site at 11151 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 1,000-gallon fuel oil tank at the western neighboring site at 11200 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
- *The historical use of the western neighboring site located at 11212 S. Michigan Ave. as a plating works, the associated use, generation and handling of petroleum products*

- and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
- *The documented existence of one (1) 15,000-gallon fuel oil tank (1950) and two (2) gasoline tanks (1939) at the western neighboring site at 11218-24 S. Michigan Ave. and the potential for a release(s) of petroleum products into the soil and/or groundwater to impact the Site from this off-site source;*
 - *The historical use of the western neighboring site located at 34 E. 112th Pl. as a former paints store and historical cleaner, the potential use, handling and generation of hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
 - *The historical use of the southwestern neighboring site at 11242 S. Michigan Ave. as a printing facility, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
 - *The historical use of the southwestern neighboring site at 11246 S. Michigan Ave. as a paint store, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source;*
 - *The historical use of the southeastern neighboring site located at 11250-52 S. Edbrooke Ave. as a machine shop, the associated use, generation and handling of petroleum products and/or hazardous substances, and the potential for a release(s) into the soil and/or groundwater to impact the Site from this off-site source.*

The RECs have been shown on the Site Features Map, included as Figure 2.

1.5 Documents Reviewed

During the performance of the Phase II ESA, BEI reviewed its December 5, 2022 Phase I ESA, Illinois Administrative Code (IAC) Title 35 Part 740, *Site Remediation Program*, Title 35 IAC Part 742, *Tiered Approach to Corrective Action Objectives* (TACO), the IEPA-published “Chemicals Not in TACO” Tier I Tables, and the December 5, 2022 *City of Chicago Polynuclear Aromatic Hydrocarbon Concentrations in Background Soils* Memorandum published by the Illinois Environmental Protection Agency (EPA).

1.6 Specific Tasks Undertaken

The Phase II ESA consisted of the following elements.

1.6.1 Site-Specific Sampling and Analysis Plan

Based on the nature and locations of the RECs described in Section 1.4, BEI proposed a site-specific Sampling and Analysis Plan (SAP) to AIS for review and approval. Upon AIS approval of the SAP, BEI performed the Phase II ESA.

1.6.2 Ground Penetrating Radar Survey

Based on the documented existence of gasoline, fuel oil and oil underground storage tanks (USTs) at the Site, a ground penetrating radar (GPR) survey was performed across the entire Site in an effort to identify USTs beneath the Site.

1.6.3 Soil Investigation

Twelve (12) soil borings were drilled in the areas most likely to have been impacted by the RECs identified for the Site. At least two (2) soil samples from each soil boring were analyzed for various combinations of volatile organic compounds (VOCs), benzene, ethylbenzene, toluene and xylenes (BETX), polynuclear aromatic hydrocarbons (PNAs), Resource Conservation and Recovery Act (RCRA) metals and pH.

1.6.4 Groundwater Investigation

Three (3) soil borings were completed as 1-inch diameter temporary PVC monitoring wells in the areas most likely to have been impacted from the RECs identified for the Site. Groundwater samples were collected from three (3) temporary monitoring well for VOCs, PNAs and RCRA metals. In addition, temporary monitoring well top-of-casing elevations were surveyed and groundwater elevations were measured in order to determine the direction of regional groundwater flow beneath the Site.

1.6.5 Phase II ESA Report

The Phase II ESA Report has presented the methods and results of the field sampling activities, including a comparison of the laboratory analytical results to the applicable Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Remediation Objectives.

1.7 Limitations and Exceptions

There were no limitations associated with the performance of this Phase II ESA.

2.0 SITE CHARACTERIZATION

2.1 Physical Setting

2.1.1 Site Topography

Based on the 1997 United States Geological Survey (USGS) Lake Calumet Quadrangle Map, the elevation of the Site is approximately 603 feet above mean sea level. The topography of the Site involves a relatively steep decline in elevation to the east. The western portion of the Site is approximately twelve (12) feet higher than the eastern portion of the Site.

2.1.2 Site Geology/Hydrogeology

Based on the Illinois State Geological Survey (ISGS) Circular 460, the Site is situated on the Carmi Member of the Equality Formation (ec). The Carmi Member of the Equality

Formation is described as “largely quiet-water lake sediments; dominantly well bedded silt, locally laminated and containing thin beds of clay; local lenses of sand and sandy gravel along beaches.”

Field observations of native soils encountered during soil sampling activities revealed that subsurface conditions were consistent with the published soil types for the Site. However, urban fill materials likely related to the razing of the prior Site building in 2019 were consistently observed throughout the Site to depths ranging from surface grade to twenty (20) feet below grade. Beneath the overlying fill materials, native soils consisted predominantly of silty clay and clayey silt with varying consistencies ranging from soft to firm.

2.1.3 Surface Water Bodies

According to the 1997 USGS Lake Calumet Quadrangle Map, the closest surface water body is located in Palmer Park, approximately 1,600 feet northeast of the Site. Lake Calumet exists approximately 1.25-miles east of the Site.

2.1.4 Wetlands

Based on the search results from the National Wetland Inventory (NWI), no wetlands exist at the Site or at any adjacent sites.

2.1.5 Flooding

Based on the December 5, 2022 Phase I ESA, neither the Site nor any surrounding sites are located within the 100-year or the 500-year flood hazard area.

2.2 Site History

The Site was at least partially developed by 1897 with a residential dwelling. By 1911, the Site was fully developed for commercial purposes and was consisted of multiple “stores.” The Site was redeveloped by 1939 and used as “The People’s Store,” which was a department store and warehouse. Records of USTs existed for the Site and included: one (1) 2,000-gallon gasoline tank installed in 1952, one (1) 10,000-gallon fuel oil UST installed in the 1940s and one (1) 65-gallon oil UST (no date). In 1994, an attempt was made to remove one (1) 1,000-gallon fuel oil UST; however, it was not found and two (2) 275-gallon aboveground tanks were removed from the Site instead. Building inspections also documented the existence of two (2) flammable gas tanks located in the electrical room at the rear of the property northeast area in 2017. The Site buildings were demolished in 2019 and the Site has been vacant since that time.

3.0 SITE INVESTIGATION

3.1 Site-Specific Sampling Plan

In order to investigate the RECs identified in the December 5, 2022 Phase I ESA, BEI prepared a site-specific SAP. The SAP involved the performance of a GPR survey in an

effort to identify potential USTs documented at the Site, followed by the completion of twelve (12) soil borings and three (3) one-inch diameter temporary monitoring wells to assess the potential impacts to soil and groundwater.

3.1.1 Ground Penetrating Radar Survey

On March 29, 2023, BEI oversaw the performance of a GPR survey by Earth Solutions, Inc. There were no obstacles covering the Site during the performance of the GPR survey that would potentially impede the radar penetration. A GSSI SIR-3000 was used to perform the GPR survey with a 400 MHz antenna. The GPR survey was conducted in a grid pattern across the entire Site. The GPR survey was conducted using an approximate 3-foot grid spacing across the entire Site in a north-south and in an east-west direction. No anomalies indicative of a potentially buried UST were detected during the GPR survey. Although, the GPR provided insight into the subsurface conditions as rubble fill materials were observed over the majority of the Site. The GPR survey report is included in Appendix A.

3.1.2 Soil Borings

Twelve (12) soil borings were drilled as part of the Phase II ESA to characterize potential impacts associated with the Site’s RECs in both the fill material and subsurface material at the Site. In general, the soil borings were intended to establish the presence or absence of soil impacts associated with the Site’s RECs. Therefore, sampling locations were chosen in the areas most likely to have been impacted. The purpose of each soil boring has been summarized on Table 3.1.1.

Table 3.1.1
 Soil and Groundwater Sampling and Analysis Plan

Boring ID	Analyses Performed				Rationale
	Shallow	Depth (ft)	Deep	Depth (ft)	
B-1 / TMW-1	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs; northern neighboring fuel oil USTs
B-2	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs; northern neighboring fuel oil USTs
B-3	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs; northern neighboring fuel oil USTs
B-4	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs.
B-5	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs.
B-6	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Former gasoline & fuel oil USTs, oil tanks and ASTs.
B-7	VOCs, PNAs, RCRA metals	0-3	VOCs, PNAs, RCRA metals	TBD	Oil tank permit; western neighboring plating works
B-8	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Oil tank permit

Boring ID	Analyses Performed				Rationale
	Shallow	Depth (ft)	Deep	Depth (ft)	
B-9	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	TBD	Oil tank permit
B-10 / TMW-2	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	TBD	Southern former cleaners; southwestern neighboring paints store and printer; western neighboring F.O./gasoline USTs
B-11	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	TBD	Southern former cleaners
B-12 / TMW-3	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	TBD	Southern former cleaners; SE neighboring machine shop

On March 30, 2023, BEI oversaw the advancement of soil borings B-1 through B-12 at the Site. Soil boring B-1 was advanced to a terminal depth ranging from to 24-feet to characterize the Site’s geology and to determine the location of potential water bearing units. The remaining eleven (11) soil borings were advanced to a terminal depth ranging from six (6) to twenty (20) feet. Fill materials comprised of crushed concrete, bricks, wood, sand and gravel were encountered from surface grade to depths ranging from nine (9) to twenty (20) feet below grade and were underlain by native silty clay. It is noted that according to the Sanborn maps reviewed for the December 5, 2022 Phase I ESA, the former Site building was constructed with both a basement and a sub-basement.

Due to the widespread existence of rubble fill materials related to the 2019 demolition of the former Site building, refusal was encountered at five (5) soil boring locations (B-6, B-8, B-9, B-10, B-11 and B-12); therefore, on April 14, 2023, BEI oversaw the advancement of soil borings B-6a, B-8a, B-10a, B-11a and B-12a. Soil borings B-10a and B-11a were advanced to a terminal depth of 24-feet. Soil boring B-6a was advanced to a terminal depth of 16-feet and soil boring B-12a was advanced to a terminal depth of 12-feet. Soil boring B-8a continually encountered refusal at depths ranging from 12 to 15 feet below grade and did not penetrate the native soil beneath the rubble fill material.

Subsurface penetration was achieved using a track-mounted Geoprobe using standard dual-tube and macrocore sampling techniques. Soil samples were retrieved from each depth interval in sterile PVC liners. Soil samples were collected continuously at 3-foot intervals and classified by BEI using the United Soil Classification System (USCS). Geoprobe drill rods and sampling barrels were decontaminated between soil borings. Photographs of site investigation activities have been included in Appendix B. A complete description of field observations has been provided on the Soil Boring Logs in Appendix C. The soil boring locations are shown on Figure 3.

Soil samples were transferred directly from the Geoprobe liner sleeve into the laboratory-provided sample containers using dedicated latex gloves for each sample interval, labeled, designated for potential analysis, and placed in a cooler on ice to maintain a temperature of 4°C. A duplicate portion of sampled soil was sealed in a pre-labeled plastic bag and set aside

to be field screened. Soil samples from each depth interval were classified according to their predominant geological characteristics. After a sufficient time had elapsed to allow the soil vapors to equilibrate with the air in the sample bags, the sealed soil vapors were field screened using a photo-ionization detector (PID). All soil samples were labeled and maintained at 4°C until they were transferred to an Illinois-accredited laboratory under the appropriate chain-of-custody procedures.

3.1.3 Temporary Monitoring Wells

Three (3) soil borings were completed as 1-inch diameter PVC temporary monitoring wells. The temporary monitoring well locations have also been shown on Figure 3. The purpose of each temporary monitoring well is summarized on Table 3.1.1. The temporary monitoring wells were intended to establish the presence or absence of groundwater impacts associated with the RECs illustrated on Figure 2 and they were installed in the areas most likely to have been impacted from past Site use(s).

On March 30, 2023, soil boring B-1 was completed as temporary monitoring well TMW-1. On April 14, 2023, soil borings B-10a and B-12a were completed as respective temporary monitoring wells TMW-2 and TMW-3. Temporary monitoring wells were constructed of 1-inch diameter Schedule 40 PVC materials and included ten (10) to fifteen (15) foot screens with 0.010-inch slotted openings. Based on site-specific hydrogeology, the screened intervals were completed approximately 9 to 24 feet below grade for TMW-1 and TMW-2 while TMW-3 was screened from 2 to 12 feet below grade as the ground elevation at the TMW-3 location is approximately twelve (12) feet lower than the ground elevation at TMW-1 and TMW-2. The temporary monitoring well construction logs have been provided in Appendix D.

Upon completion of temporary monitoring well installation activities, top-of-casing elevations were surveyed relative to an arbitrarily assigned datum of 100.00-feet. Temporary monitoring wells were developed by purging groundwater from each well using a dedicated disposable bailer. Temporary monitoring wells were developed by purging a minimum of three well volumes. After sufficient time had elapsed to allow groundwater levels to equilibrate, on April 20, 2023, BEI collected groundwater elevation data using a Solinst™ electronic water level meter. The water level meter was decontaminated after its use in each well using an Alconox™ solution and distilled rinse-water. Based on the top-of-casing elevations and the depth-to-water measurements, groundwater elevations beneath the Site were calculated and have been summarized on the following table.

Table 3.1.2
 Groundwater Elevation Summary (April 20, 2023)

Monitoring Well ID	TMW-1	TMW-2	TMW-3
Top-of-Casing Elevation (ft)	100.00	99.46	88.08
Depth-to-Groundwater (ft)	11.15	17.50	6.55
Groundwater Elevation (ft)	88.85	81.96	81.53

Based on the data summarized in Table 3.1.2, groundwater flow direction beneath the Site is southeasterly. A Groundwater Contour Map has been provided as Figure 4.

On April 20, 2023, after a minimum of three well volumes were purged from each temporary monitoring well, BEI collected groundwater samples from TMW-1, TMW-2 and TMW-3 using dedicated disposable bailers. Groundwater was transferred directly from the temporary monitoring wells into the laboratory-provided sample containers. All groundwater samples were labeled and placed in a cooler on ice to maintain the required temperature of 4°C until they were transferred to an Illinois-accredited laboratory under standard chain-of-custody procedures.

3.1.4 Soil Sample Selection

The analyses performed and the associated rationale for each soil sample has been summarized on the following table.

Table 3.1.3
 Soil Sample Selection Rationale

Boring ID	Analyses Performed				Rationale
	Shallow	Depth (ft)	Deep	Depth (ft)	
B-1	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	6-9 16-20	Former gasoline & fuel oil USTs, oil tanks and ASTs; Northern neighboring fuel oil USTs; Vertical definition of impacts.
B-2	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	6-9	Former gasoline & fuel oil USTs, oil tanks and ASTs; Northern neighboring fuel oil USTs.
B-3	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	3-6 12-16	Former gasoline & fuel oil USTs, oil tanks and ASTs; Northern neighboring fuel oil USTs; Vertical definition of impacts.
B-4	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	6-9 16-20	Former gasoline & fuel oil USTs, oil tanks and ASTs; Vertical definition of impacts.
B-5	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	3-6 16-20	Former gasoline & fuel oil USTs, oil tanks and ASTs; Vertical definition of impacts.
B-6	VOCs, SVOCs, PCBs, Pesticides, TAL Inorganics	0-3	VOCs, SVOCs, PCBs, Pesticides, TAL Inorganics	3-6 9-12	Former gasoline & fuel oil USTs, oil tanks and ASTs; Vertical definition of impacts.
B-7	VOCs, PNAs, RCRA metals	0-3	VOCs, PNAs, RCRA metals	6-9 16-20	Oil tank permit; Western neighboring plating works; Vertical definition of impacts.
B-8	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	3-6 6-9	Oil tank permit.
B-9	BETX, PNAs, RCRA Metals	0-3	BETX, PNAs, RCRA Metals	6-9	Oil tank permit.

Boring ID	Analyses Performed				Rationale
	Shallow	Depth (ft)	Deep	Depth (ft)	
B-10	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	6-9 20-24	Southern former cleaners; Southwestern neighboring paints store and printer; Western neighboring F.O./gasoline USTs; Vertical definition of impacts.
B-11	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	9-12 16-20	Southern former cleaners; Vertical definition of impacts.
B-12	VOCs, PNAs, RCRA Metals	0-3	VOCs, PNAs, RCRA Metals	3-6 9-12	Southern former cleaners; Southeastern neighboring machine shop; Vertical definition of impacts.

At least two (2) soil samples were submitted from each soil boring for laboratory analyses of the targeted analytes. One (1) shallow soil sample was collected from the surficial soils (0 to 3 feet below grade) and at least one (1) deeper soil sample was collected from the soil horizon potentially impacted based on field observations and PID readings. If no potential impacts were observed, the soil sample just above the soil-groundwater interface was collected for analysis.

Twelve (12) soil samples were analyzed for VOCs, eighteen (18) soil samples were analyzed for BETX, thirty-four (34) soil samples were analyzed for PNAs, thirty-three (33) soil samples were analyzed for RCRA (8) metals, two (2) soil samples were analyzed for chromium and lead, one (1) soil sample was analyzed for arsenic and one (1) soil sample was analyzed for TCLP lead.

3.1.5 Groundwater Sample Selection

The analyses performed and the associated rationale for the groundwater sample selection has been summarized on the following table.

Table 3.1.4
 Groundwater Sample Selection Rationale

Well ID	Analyses Performed	Rationale
TMW-1	VOCs, PNAs, RCRA metals	Former gasoline & fuel oil USTs, oil tanks and ASTs; Northern neighboring fuel oil USTs.
TMW-2	VOCs, PNAs, RCRA metals	Southern former cleaners; Southwestern neighboring paints store and printer; Western neighboring F.O./gasoline USTs;
TMW-3	VOCs, PNAs, RCRA metals	Southern former cleaners; Southeastern neighboring machine shop.

Three (3) groundwater samples were submitted for laboratory analyses of VOCs, PNAs and RCRA metals.

3.2 Analytical Results

3.2.1 Soil Tier 1 Evaluation

Soil analytical results were compared to the residential Tier 1 Soil Remediation Objectives (Tier 1 SROs) published in 35 IAC 742 (TACO). Soil analytical results were also compared to the construction worker Tier 1 SROs in consideration of future redevelopment activities. The Tier 1 SROs represent acceptable baseline contaminant concentrations that are based on a conservative exposure scenario. In addition, soil analytical results were also compared to the corrected (95th Percentile) background concentrations for PNAs within the corporate limits of the City of Chicago, which were published by the Illinois EPA on December 5, 2022. If approved, these concentrations can be used as area background levels in accordance with 35 IAC 742.415. Until 35 IAC 742, Appendix A, Table H is amended to reflect these concentrations, a person performing investigative or remedial activities at this Site may request these concentrations be approved for use in determining area background levels pursuant to 35 IAC 742.405(b)(2).

No VOCs were detected at levels exceeding the most restrictive Tier 1 SROs in any of the soil samples analyzed. However, certain PNAs and RCRA metals were detected at levels exceeding the most stringent Tier 1 SROs for various exposure pathways. Soil analytical results have been summarized on Tables 1 through 3. The complete soil laboratory analytical reports are included in Appendix E. Tier 1 exceedances for each exposure pathway are discussed individually in the following subsections.

Soil Ingestion Exceedances

No VOCs were detected at levels exceeding the residential Tier 1 SROs for the soil ingestion exposure pathway. However, certain PNAs and RCRA metals were detected at levels exceeding the Tier 1 SROs for the residential soil ingestion exposure pathway at the locations summarized on the following table.

Table 3.2.1
 Residential Soil Ingestion Exceedances

Boring ID	Sample Depth (ft)	Contaminant(s)
B-3	3-6	Arsenic
B-4	9-12	Dibenzo(a,h)anthracene
B-6	3-6	Dibenzo(a,h)anthracene
B-7	6-9	Dibenzo(a,h)anthracene
B-8	0-3	Dibenzo(a,h)anthracene Lead
B-9	0-3	Dibenzo(a,h)anthracene
B-12	0-3	Dibenzo(a,h)anthracene Arsenic

The estimated extent of impacted soils exceeding the Tier 1 SROs for the residential soil ingestion exposure pathway is shown on Figure 5. Each soil sample listed above was delineated vertically by a deeper soil sample from below the impacted depth interval that met the Tier 1 SRO for the residential soil ingestion pathway.

Soil Inhalation Exceedances

No VOCs, PNAs or RCRA metals were detected in the Site’s soils at levels exceeding the Tier 1 SROs for the residential soil inhalation exposure pathway. Thus, this exposure pathway may be eliminated from further consideration.

Construction Worker Exceedances

There were no exceedances of the Tier 1 SROs for the construction worker soil ingestion exposure pathway. No VOCs or PNAs were detected in the Site’s soils at levels exceeding the construction worker Tier 1 SROs for the soil inhalation exposure pathway. However, mercury was detected at levels exceeding the construction worker Tier 1 SROs for the soil inhalation exposure pathway at the sampling locations summarized on the following table.

Table 3.2.3
 Construction Worker Exceedances

Boring ID	Sample Depth (ft)	Contaminant(s)	Pathway Exceeded
B-4	0-3	Mercury	Inhalation
B-5	0-3	Mercury	Inhalation
B-6	0-3	Mercury	Inhalation
B-6	3-6	Mercury	Inhalation
B-7	6-9	Mercury	Inhalation
B-8	0-3	Mercury	Inhalation
B-8	3-9	Mercury	Inhalation
B-9	0-3	Mercury	Inhalation
B-11	3-6	Mercury	Inhalation
B-12	0-3	Mercury	Inhalation

The estimated extent of impacted soils exceeding the construction worker Tier 1 SROs for the soil inhalation exposure pathway has been shown on Figure 6.

Soil Migration to Groundwater Exceedances

No VOCs were detected in the Site’s soils at levels exceeding the Tier 1 SROs for the soil migration to Class I or Class II groundwater exposure pathway. However, certain PNAs and RCRA metals were detected at levels exceeding the Tier 1 SROs for the soil migration to groundwater exposure pathway at the locations summarized on the following table.

Table 3.2.4
 Soil Migration to Groundwater Exceedances

Boring ID	Sample Depth (ft)	Contaminant(s)	Class
B-1	0-3	Lead	I
B-1	6-9	Chromium Lead	I I
B-4	0-3	Chromium Lead	I I
B-4	9-12	Benzo(a)anthracene Benzo(b)fluoranthene Dibenzo(a,h)anthracene	I I I
B-5	0-3	Lead	I
B-5	3-6	Lead	I
B-6	0-3	Lead	I
B-6	3-6	Benzo(a)anthracene Lead	I I
B-7	0-3	Cadmium Chromium	I I
B-7	6-9	Benzo(a)anthracene Cadmium Chromium Lead	I I I I
B-8	0-3	Benzo(a)anthracene Chromium Lead	I I I
B-8	3-6	Cadmium Chromium Lead	I I I
B-9	0-3	Benzo(a)anthracene Chromium Lead	I I I
B-10	0-3	Chromium Lead	I I
B-11	0-3	Benzo(a)anthracene Chromium Lead	I I I
B-11	3-12	Benzo(a)anthracene Chromium Lead	I I I
B-12	0-3	Benzo(a)anthracene Benzo(b)fluoranthene Dibenzo(a,h)anthracene Lead	I I I I
B-12	3-6	Chromium Lead	I I

The estimated extent of impacted soils exceeding the Tier 1 SROs for the soil migration to groundwater exposure pathway has been shown on Figure 7.

Toxicity Characteristic Leaching Procedure - Lead

The soil sample exhibiting the highest detected level of total lead was designated for TCLP analyses to determine if soil at the Site exhibited hazardous toxicity characteristics. Soil sample B-8 (0-3) exhibited the highest total lead concentrations of 600 mg/kg. The corresponding TCLP result of 0.011 mg/L indicated that lead was not detected at a level exceeding the toxicity characteristic threshold value of 5 mg/L (40 CFR 261).

3.2.2 Groundwater Tier 1 Evaluation

Groundwater analytical results were compared to the Tier 1 Groundwater Remediation Objectives (Tier 1 GROs) published in 35 IAC 742. The Tier 1 GROs represent acceptable baseline contaminant concentrations based on a conservative exposure scenario. No VOCs or PNAs were detected at levels exceeding the most restrictive Tier 1 GROs for Class I groundwater; however, lead was detected at a level exceeding the Tier 1 GRO for Class I groundwater at TMW-2. Groundwater analytical results have been summarized on Tables 4 through 6. The complete groundwater laboratory analytical report has been included in Appendix F.

3.2.3 Indoor Air Inhalation

Groundwater analytical results were also compared to the Tier 1 GROs for the indoor air inhalation exposure route published in 35 IAC 742, Appendix B, Table H. Table H was selected because the impacted soil appears to be within 5-feet of surface grade and thus, within 5-feet of a potential future Site building. The Tier 1 GROs represent acceptable baseline contaminant concentrations based on a conservative exposure scenario. None of the volatile compounds were detected in the groundwater beneath the Site at the stated laboratory detection limits and thus, no volatile compounds were detected in groundwater at levels exceeding the most conservative Tier 1 GROs for indoor air inhalation. The complete groundwater laboratory analytical report has been included in Appendix F.

Pursuant to Section 742.312(b)(3), the use of Table H (Section 742.Appendix B) to eliminate the indoor inhalation exposure route carries with it the need to place an institutional control on the property in accordance with Subpart J of 35 IAC 742. Therefore, potential future buildings shall be constructed with a full concrete slab-on-grade foundation or with a full concrete basement floor and walls. Future Site buildings shall not be constructed with earthen crawl spaces, earthen floors, stone foundations, partial concrete floors, or unsealed sumps.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Overview

BEI was retained by AIS to conduct a Phase II ESA on a tract of real estate located at 11201-19 South Michigan Avenue in the Pullman neighborhood of Chicago, Illinois. The performance of the Phase II ESA was necessary to characterize the nature and extent of potential impacts related to RECs identified in a December 5, 2022 Phase I ESA completed for the Site. The purpose of the Phase II ESA was to characterize potential impacts related to

the RECs as well as generally characterize the conditions of the Site through the advancement of soil borings, the installation of monitoring wells, and the laboratory analyses of soil and groundwater. Soil borings were intended to characterize both the fill materials and subsurface soils at the Site.

4.1.1 Ground Penetrating Radar Survey

On March 29, 2023, BEI oversaw the performance of a GPR survey by Earth Solutions, Inc. There were no obstacles covering the Site during the performance of the GPR survey that would potentially impede the radar penetration. A GSSI SIR-3000 was used to perform the GPR survey with a 400 MHz antenna. The GPR survey was conducted across the entire Site. Overall, the GPR survey was conducted using an approximate 3-foot grid spacing across the entire Site in a north-south and in an east-west direction. No anomalies indicative of a potentially buried UST were detected during the GPR survey. Although, the GPR provided insight into the subsurface conditions as rubble fill materials were observed over the majority of the Site. The GPR survey report is included in Appendix A.

4.1.2 Soil Investigation

Twelve (12) soil borings were drilled in the areas most likely to have been impacted based on the historical Site activities and the AIS-approved SAP. At least two (2) soil samples from each soil boring were analyzed for various combinations of VOCs, BETX, PNAs and RCRA metals. The soil boring locations have been shown relative to the RECs for the Site on Figure 3. Photographs of Site investigation activities have been included in Appendix B. A complete description of field observations has been provided on the Soil Boring Logs included in Appendix C.

No VOCs or BETX compounds were detected at levels exceeding the most restrictive Tier 1 SROs in any of the soil samples analyzed. However, certain PNAs, and RCRA metals were detected in the Site's surficial (0-3 feet below grade) and subsurface soils (3-12 feet below grade) at levels exceeding the most restrictive residential and construction worker Tier 1 SROs for various exposure pathways.

The estimated extent of impacted soils exceeding the most restrictive Tier 1 SROs has been shown on Figures 5 through 7 for various exposure pathways. Soil analytical results were compared to the residential and construction worker Tier 1 SROs on Tables 1 through 3. A complete copy of the soil laboratory analytical reports has been provided in Appendix E.

4.1.3 Groundwater Investigation

Three (3) soil borings were completed as 1-inch diameter PVC temporary monitoring wells in accordance with the site-specific SAP. Groundwater samples were collected from three (3) temporary monitoring well for VOCs, PNAs and RCRA metals. Temporary monitoring well locations have been shown relative to the RECs for the Site on Figure 3. Temporary monitoring well construction logs are included in Appendix D.

Temporary monitoring well top-of-casing elevations were surveyed and groundwater elevations were measured using an electronic water level meter in order to determine the regional groundwater flow direction beneath the Site. Based on the groundwater elevation data, groundwater flow direction beneath the Site is southeasterly. A groundwater contour map has been provided as Figure 4.

No VOCs or PNAs were detected at levels exceeding the Tier 1 GROs for Class I or Class II groundwater. Groundwater analytical results were also compared to the Tier 1 GROs for the indoor air inhalation exposure route published in 35 IAC 742, Appendix B, Table H; none of the volatile compounds were detected in the groundwater beneath the Site at the stated laboratory detection limits and thus, no volatile compounds were detected in groundwater at levels exceeding the most conservative Tier 1 GROs for indoor air inhalation. Groundwater analytical results are compared to the Tier 1 GROs on Tables 4 through 6. A complete copy of the groundwater analytical report is provided in Appendix F.

4.2 Contaminants-of-Concern

Based on the results of the Tier 1 and limited Tier 2 Evaluations, the following contaminants-of-concern have been identified at the Site:

- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Dibenzo(a,h)anthracene
- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury

4.3 Exposure Pathways

Based on the results of the Tier 1 and limited Tier 2 Evaluations, the remediation objectives are exceeded for the following exposure pathways at the Site:

- Residential Soil Ingestion
- Construction Worker Inhalation
- Soil Component of Class I Groundwater Ingestion
- Class I Groundwater Ingestion

4.4 Conclusions and Recommendations

The nature and extent of soil and groundwater impacts at the Site has been adequately characterized. Based on the confirmed presence of soil impacts at levels exceeding the most

restrictive residential and construction worker Tier 1 SROs for various exposure pathways, and considering the Site's future use for residential purposes, BEI recommends that the rubble fill materials be excavated and properly disposed during redevelopment activities, with engineered barriers and institutional controls implemented as needed to mitigate human exposure to any residual impacted media.

Institutional controls are recommended in accordance with Subpart J of 35 IAC 742 to eliminate human exposure to groundwater beneath the Site. The City of Chicago groundwater ordinance or a site-specific groundwater use restriction may be used as an institutional control to prohibit the use of groundwater beneath the Site for potable purposes. Pursuant to Section 742.312(b)(3), the use of Table H (Section 742.Appendix B) to eliminate the indoor inhalation exposure route carries with it the need to place an institutional control on the property in accordance with Subpart J of 35 IAC 742. Therefore, potential future buildings shall be constructed with a full concrete slab-on-grade foundation or with a full concrete basement floor and walls. Future Site buildings shall not be constructed with earthen crawl spaces, earthen floors, stone foundations, partial concrete floors, or unsealed sumps.

Engineered barriers are recommended in accordance with Subpart K of 35 IAC 742 to eliminate human exposure to the contaminated soil beneath the Site. Based on the soil analytical results, there were no exceedances of the residential Tier 1 SROs for soil ingestion in the surficial (0-3 feet below grade) soils at the Site; therefore, the existing three feet of clean soil can be utilized as an engineered barrier to mitigate exposure to the subsurface soil exceedances of the Tier 1 SROs for residential soil ingestion and eliminate the residential soil ingestion exposure pathway. Should the existing engineered barrier be disturbed during Site redevelopment activities, it will be necessary to reconstruct the engineered barrier in order to meet the requirements of Sections 742.1100 and 742.1105. Any geological materials imported to the Site during redevelopment activities should be analyzed and demonstrated to originate from an uncontaminated source.

Any soil that is removed from the Site as part of remediation or redevelopment should be characterized for proper disposal. Based on the detection of certain compounds at levels exceeding the construction worker Tier 1 SROs for inhalation, a site-specific Health and Safety Plan (HASP) and a construction worker caution zone (CWCZ) should be implemented prior to any future redevelopment or construction activities in order to allow construction workers to take appropriate health and safety precautions.

5.0 CLOSING REMARKS

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a Site. The performance of this Phase II ESA was intended to reduce, but not eliminate, uncertainty regarding the potential for soil and / or groundwater contamination in connection with this Site within reasonable limits of time and cost. The information presented herein was based field observations and analytical results from the areas of the Site and media that were actually investigated. BEI

makes no express or implied warranties regarding the absence or existence of recognized environmental conditions in areas and/or media that were not investigated as part of this Phase II ESA. This report was prepared exclusively for the City of Chicago, Department of Assets, Information and Services, Department of Planning and Development and the Department of Law, and is not for the use or benefit of any other person or entity. The contents of this report may not be quoted in whole or in part. Furthermore, this report may not be relied upon by any person or entity without the express written consent of BEI.

6.0 REFERENCES

Brecheisen Engineering, Inc. December 5, 2022. *Final Phase I Environmental Site Assessment. Vacant Land, 11201-19 South Michigan Avenue, Chicago, Illinois.* Chicago, Illinois.

Illinois Environmental Protection Agency. December 5, 2022. *City of Chicago Polynuclear Aromatic Hydrocarbon Concentrations in Background Soils.* Springfield, Illinois.
<https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/cleanup-programs/taco/documents/polynuclear-aromatic-hydrocarbons-background-city-of-chicago.pdf> (Accessed May 31, 2023).

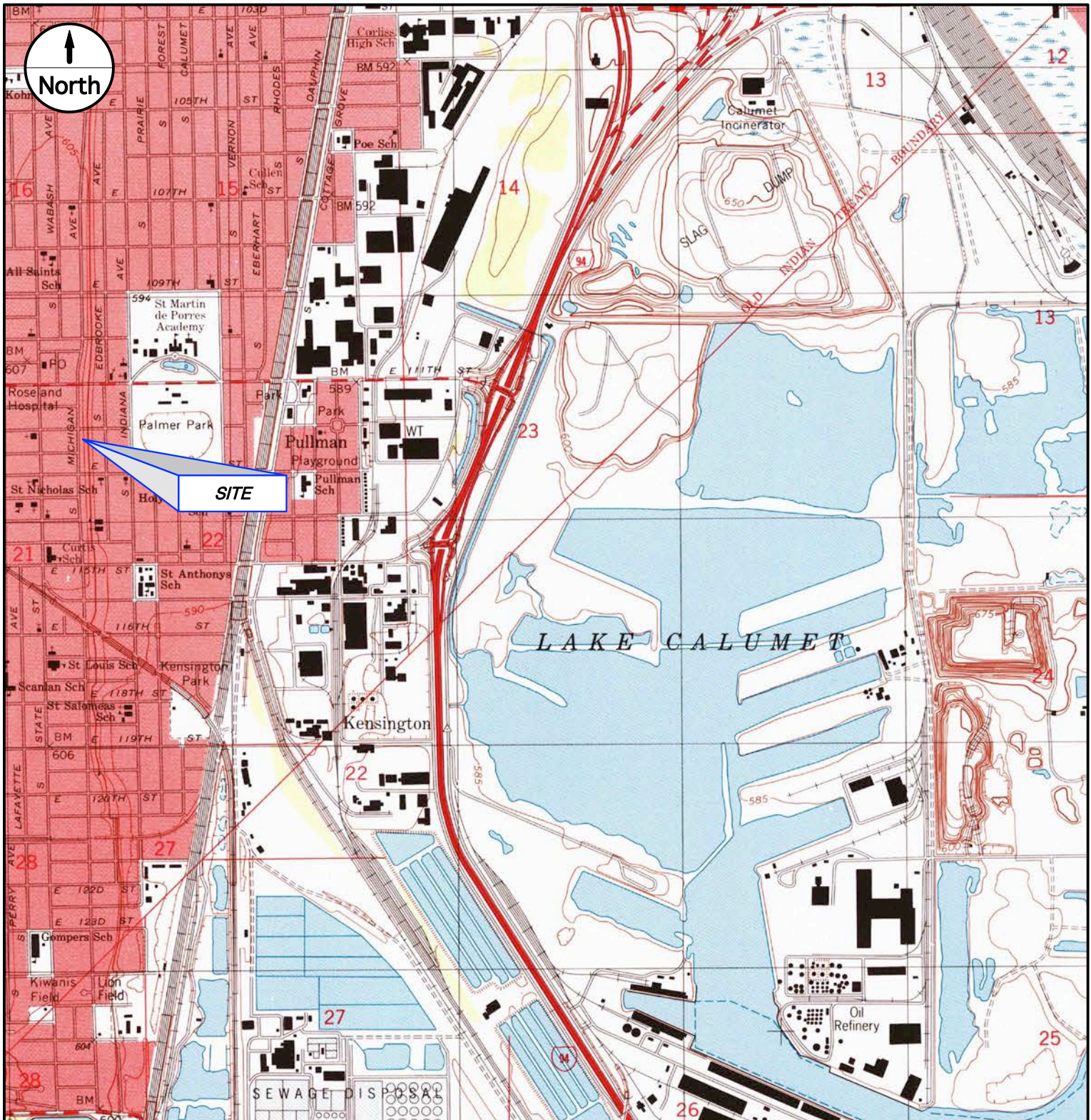
Illinois Pollution Control Board. July 15, 2013. *Tiered Approach to Corrective Action Objectives.* Title 35 Illinois Administrative Code, Part 742. Springfield, Illinois.

Illinois Pollution Control Board. February 17, 2004. *Site Remediation Program.* Springfield, Illinois.

Illinois State Geological Survey. 1971. *Circular 460 Summary of the Geology in the Chicago Area.* Springfield, Illinois.

United States Geological Survey. 1997. *Lake Calumet 7.5 Minute Quadrangle Map.* Washington DC.

FIGURES



Adapted From: USGS Topographic Map
 Lake Calumet - 1997 - 7.5 Minute Series



**Brecheisen
 Engineering,
 Inc.**

Scale: 1 : 24,000

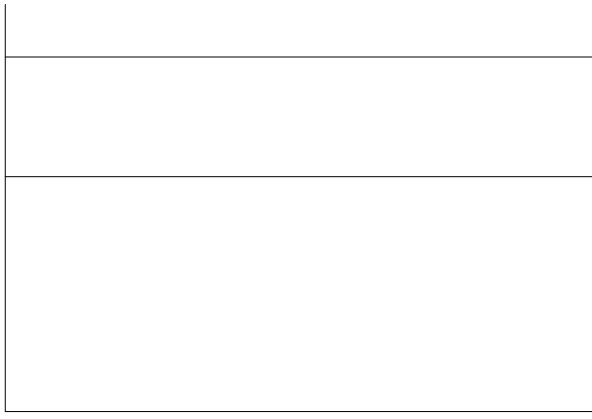
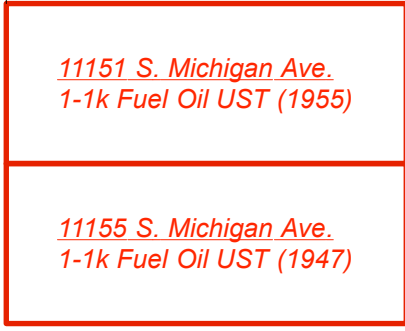
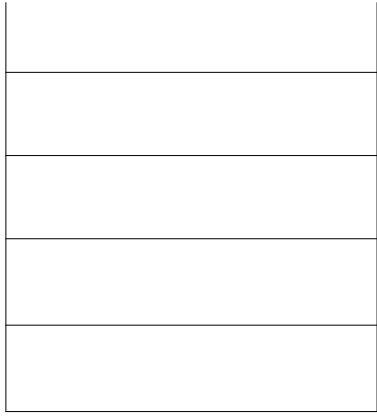
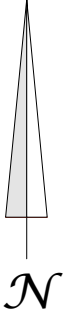
Date: May 2023

Project No: 20-AIS-0001

Drawn By: TAB

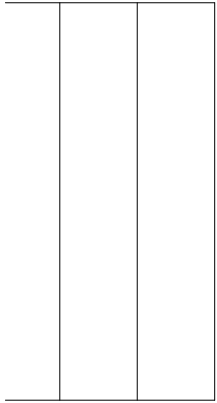
Figure 1
 Site Location Map

Vacant Land
 11201-19 S. Michigan Ave.
 Chicago, Illinois 60628

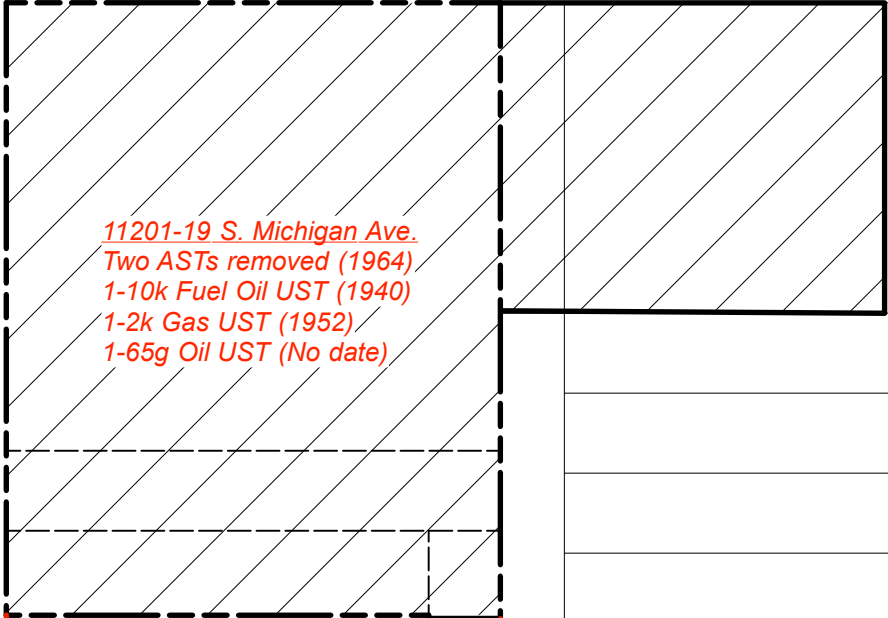


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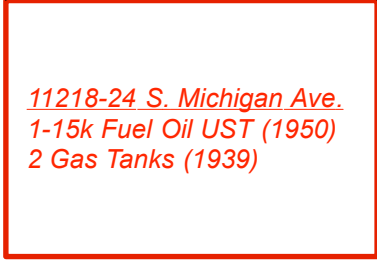
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154.44'

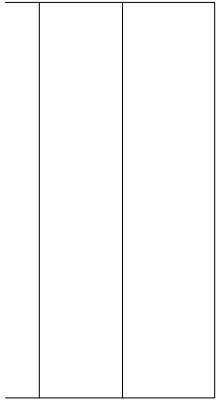
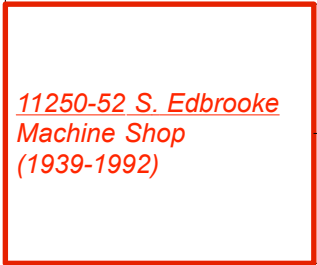
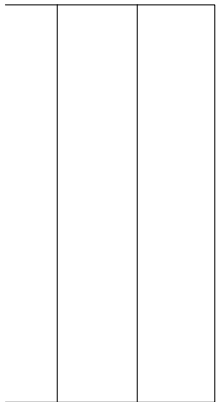


191.31'



34 E. 112th Pl.
Paints (1975-2004)
Laundries (1923)

E. 112TH PLACE



**Brecheisen
Engineering,
Inc.**

Scale: 0' 30' 60'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from Cook County Tax Map (2021).

LEGEND

 Site Boundary

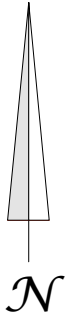
 Former Site Building

 PIN Boundary

Note: Recognized Environmental Conditions (RECs shown in Red).

**Figure 2
Site Features Map**

Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628



E. 112TH STREET

S. MICHIGAN AVENUE

11151 S. Michigan Ave.
1-1k Fuel Oil UST (1955)

11155 S. Michigan Ave.
1-1k Fuel Oil UST (1947)

11200 S. Michigan Ave.
1-1k Fuel Oil UST (1955)

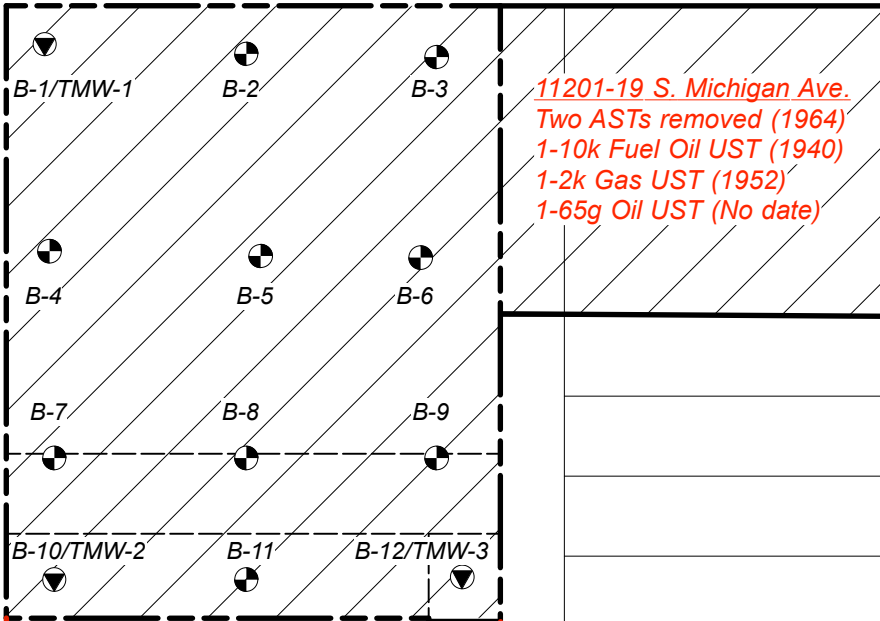
11212 S. Michigan Ave.
Plating Works (1939)

11218-24 S. Michigan Ave.
1-15k Fuel Oil UST (1950)
2 Gas Tanks (1939)

34 E. 112th Pl.
Paints (1975-2004)
Laundries (1923)

154.44'

191.31'



11201-19 S. Michigan Ave.
Two ASTs removed (1964)
1-10k Fuel Oil UST (1940)
1-2k Gas UST (1952)
1-65g Oil UST (No date)

11211-23 S. Michigan Ave.
Historical Cleaner (1923)

E. 112TH PLACE

11242 S. Michigan Ave.
Printing (1939-1950)

11246 S. Michigan Ave.
Paints (1911-1975)

11250-52 S. Edbrooke
Machine Shop
(1939-1992)



**Brecheisen
Engineering,
Inc.**

Scale: 0' 30' 60'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from
Cook County Tax Map (2021).

LEGEND

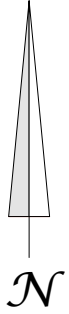
- Site Boundary
- Former Site Building
- PIN Boundary
- Soil Boring Location
- Temporary Monitoring Well Location

Note: Recognized Environmental
Conditions (RECs shown in Red).

**Figure 3
Soil and Groundwater
Sampling Locations**

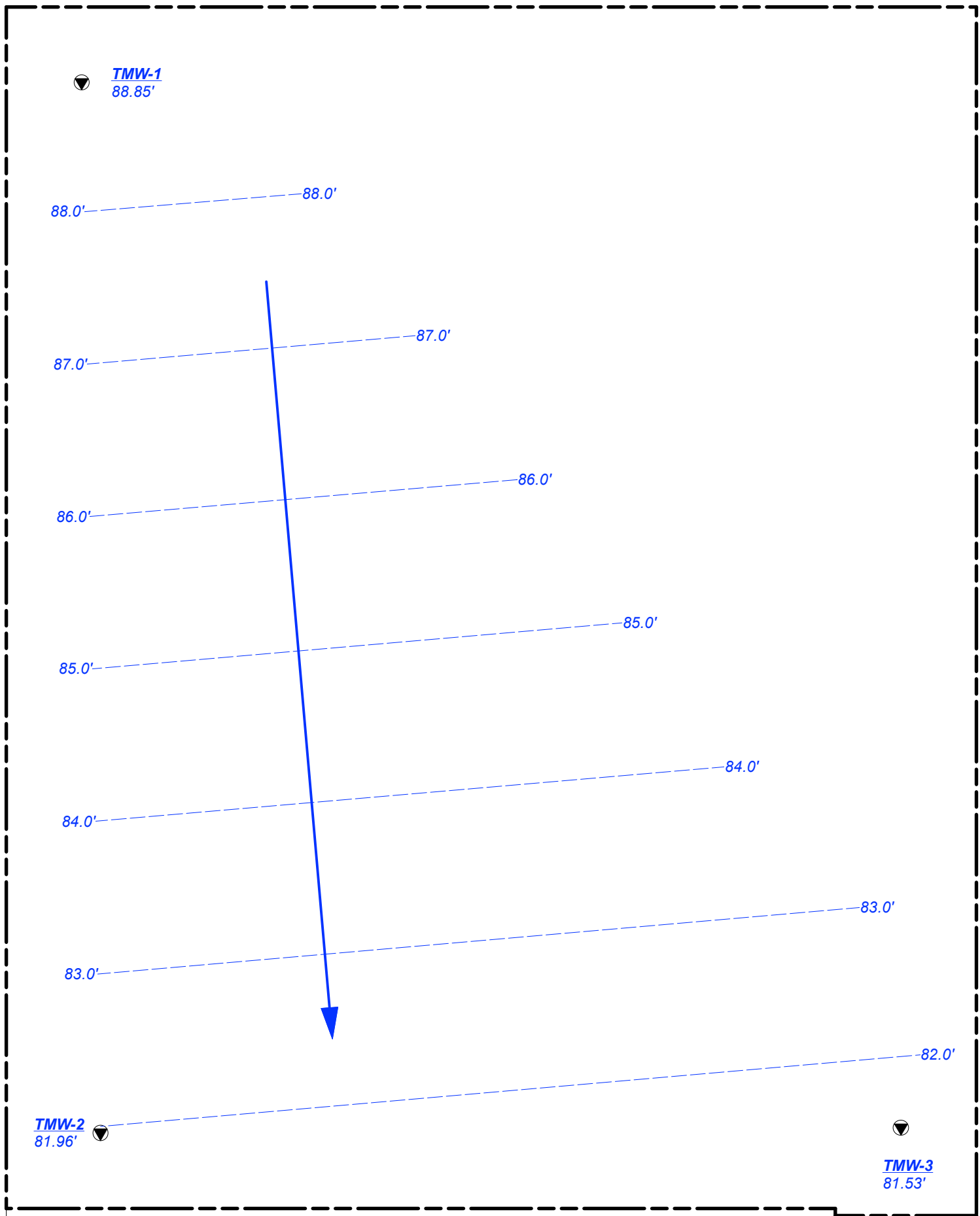
Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628

E. 112TH STREET (66-FOOT R.O.W.)



S. MICHIGAN AVENUE (66-FOOT R.O.W.)

Public Alleyway (20-foot R.O.W.)



**Brecheisen
Engineering,
Inc.**

Scale: 0' 20'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from Cook County Tax Map (2021).

LEGEND

Site Boundary

Groundwater Elevation Contour

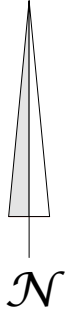
Temporary Monitoring Well Location

Groundwater Elevation Contour

**Figure 4
Groundwater Contour Map**

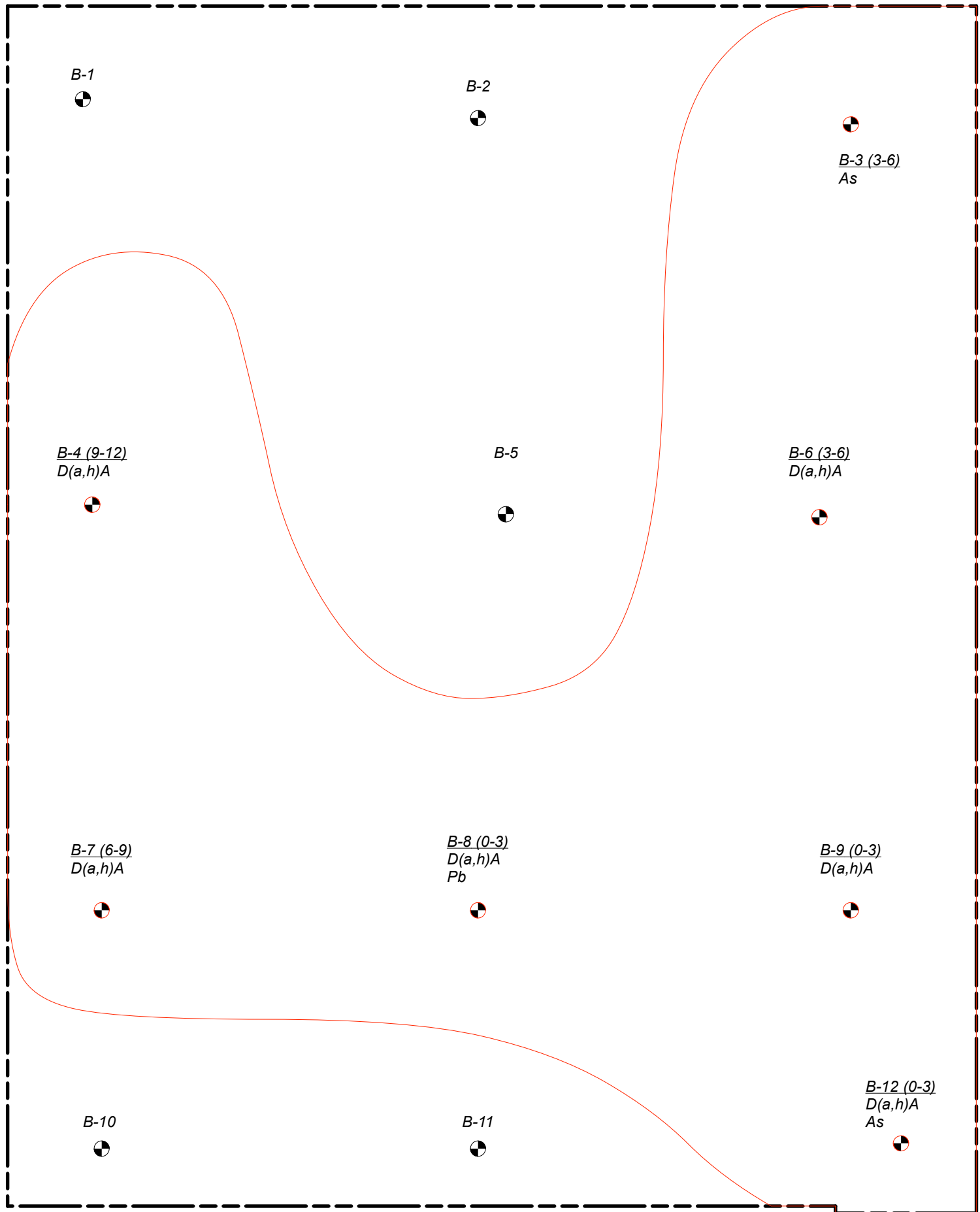
Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628

E. 112TH STREET (66-FOOT R.O.W.)



S. MICHIGAN AVENUE (66-FOOT R.O.W.)

Public Alleyway (20-foot R.O.W.)



Notes:
 D(a,h)A = Dibenzo(a,h)Anthracene
 As = Arsenic
 Pb = Lead



**Brecheisen
 Engineering,
 Inc.**

Scale: 0' 20'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from Cook County Tax Map (2021).

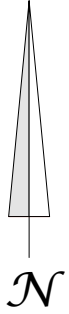
LEGEND

- Estimated extent of soil impacts exceeding the residential Tier 1 SROs for Soil Ingestion
- Site Boundary
- Soil Boring Location

**Figure 5
 Soil Ingestion Exceedances**

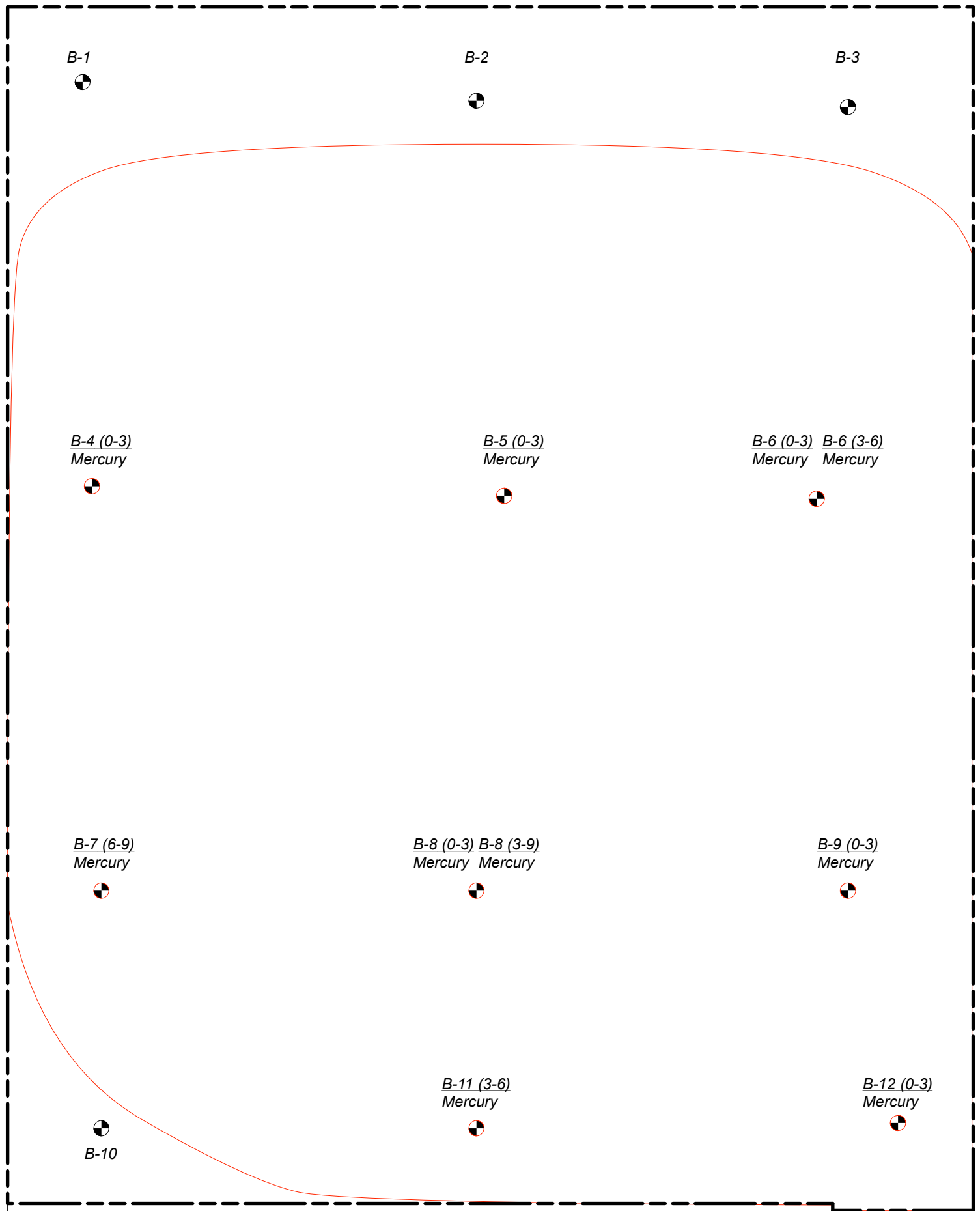
Vacant Land
 11201-19 S. Michigan Ave.
 Chicago, IL 60628

E. 112TH STREET (66-FOOT R.O.W.)



S. MICHIGAN AVENUE (66-FOOT R.O.W.)

Public Alleyway (20-foot R.O.W.)



Brecheisen Engineering, Inc.

Scale: 0' 20'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from Cook County Tax Map (2021).

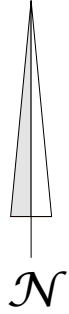
LEGEND

- Estimated extent of soil impacts exceeding the construction worker Tier 1 SROs for Soil Inhalation
- Site Boundary
- Soil Boring Location

Figure 6
Construction Worker Exceedances

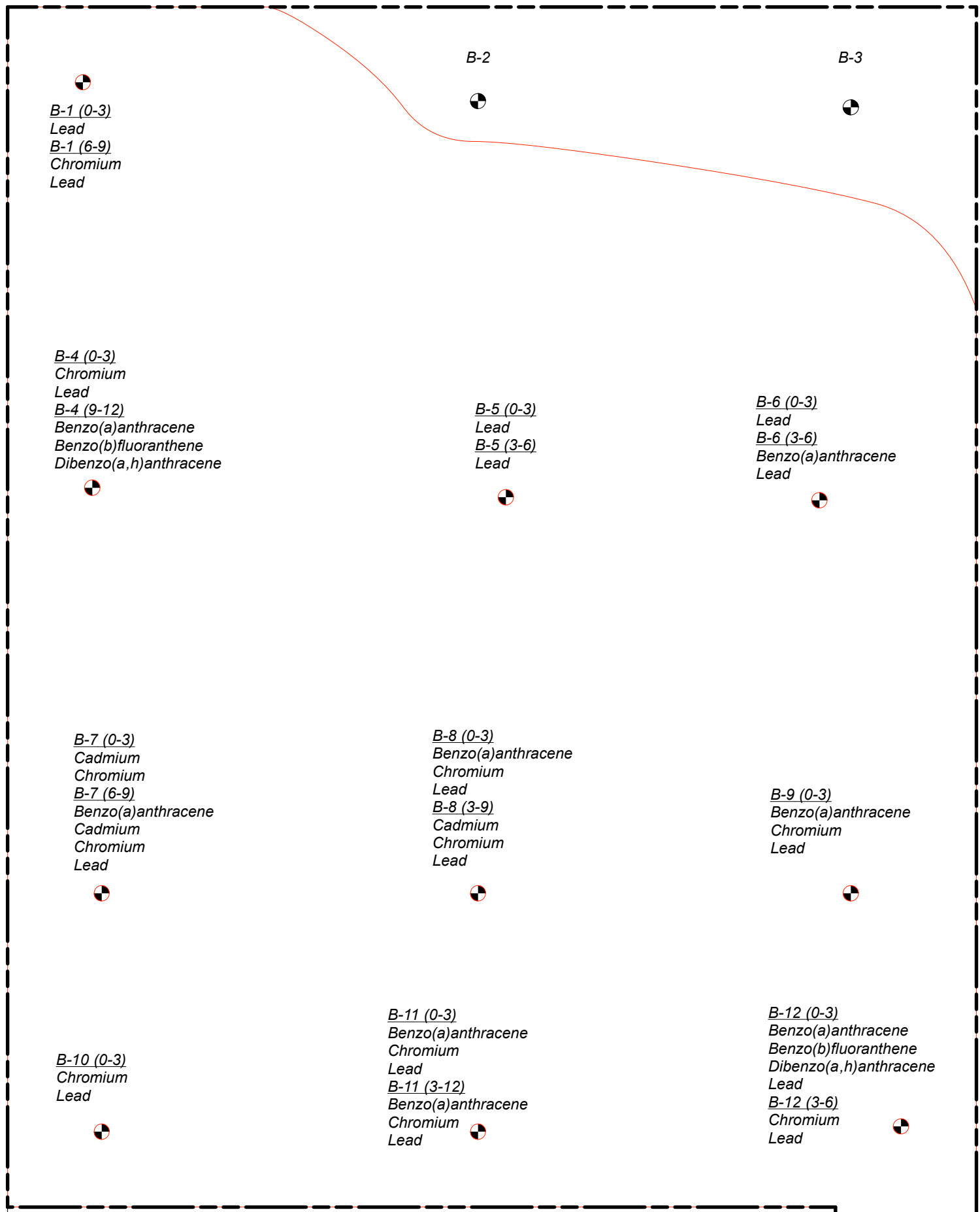
Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628

E. 112TH STREET (66-FOOT R.O.W.)



S. MICHIGAN AVENUE (66-FOOT R.O.W.)

Public Alleyway (20-foot R.O.W.)



**Brecheisen
Engineering,
Inc.**

Scale: 0' 20'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from Cook County Tax Map (2021).

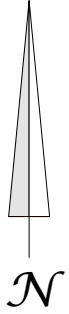
LEGEND

- Estimated extent of soil impacts exceeding the residential Tier 1 SROs for Soil Migration to Class I Groundwater
- Site Boundary
- Soil Boring Location

**Figure 7
Soil Migration to
Class I Groundwater Exceedances**

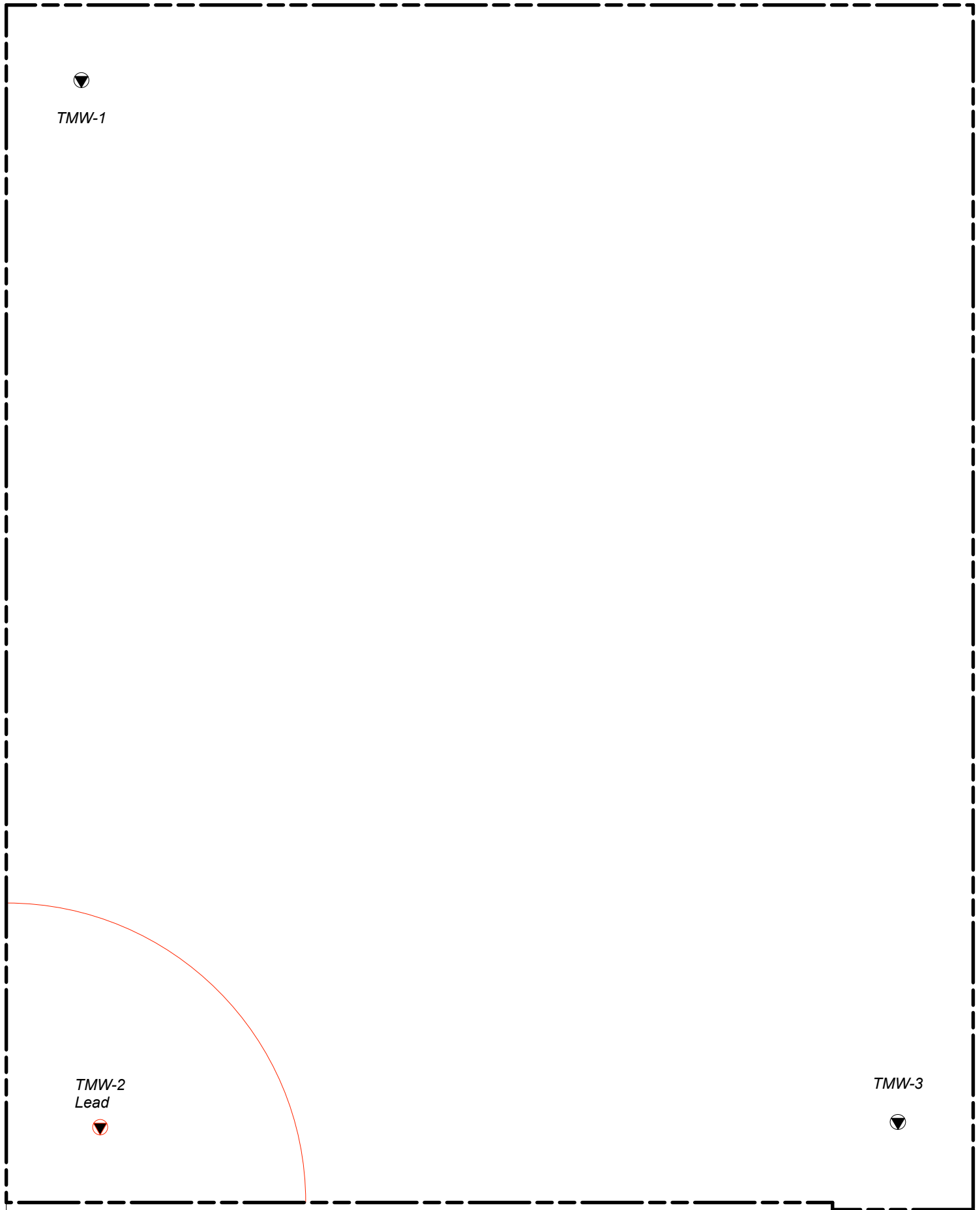
Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628

E. 112TH STREET (66-FOOT R.O.W.)



S. MICHIGAN AVENUE (66-FOOT R.O.W.)

Public Alleyway (20-foot R.O.W.)



**Brecheisen
Engineering,
Inc.**

Scale: 0' 20'

Date: May 2023

Project No.: 20-AISEHS-0001

Checked By: TAB

Note: Site boundaries adapted from
Cook County Tax Map (2021).

LEGEND

Estimated extent of groundwater
impacts exceeding the
Tier 1 GROs for Class I
Groundwater Ingestion

Site Boundary

Temporary Monitoring Well Location

**Figure 8
Groundwater Ingestion Exceedances
Class I**

Vacant Land
11201-19 S. Michigan Ave.
Chicago, IL 60628

TABLES

Table 1
Soil Analytical Results
BETX / VOCs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-1 (0-3)	B-1 (6-9)	B-2 (0-3)	B-2 (6-9)	B-3 (0-3)	B-3 (3-6)	B-4 (0-3)	B-4 (9-12)	B-5 (0-3)	B-5 (3-6)	B-5 (16-20)	B-6 (0-3)	B-6 (3-6)	B-6s (9-12)	Tier 1 SROs					
															Residential		Construction Worker		Migration to Groundwater	
															Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	70,000	100,000	--	100,000	25	25
Benzene	< 0.0067	< 0.0048	< 0.0044	< 0.0050	< 0.0049	< 0.0055	< 0.0049	< 0.0051	< 0.0057	< 0.0075	< 0.0046	< 0.0046	< 0.0043	< 0.0048	12	0.8	2,300	2.2	0.03	0.17
Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	3,000	2,000	3,000	0.6	0.6
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	81	53	16,000	140	0.8	0.8
Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	110	10	1,000	3.9	0.2	1.2
2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	47,000 ^a	25,000 ^a	120,000 ^a	730 ^a	17 ^a	17 ^a
Carbon disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800	720	20,000	9.0	32	160
Carbon tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	0.3	410	0.90	0.07	0.33
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600	130	4,100	1.3	1	6.5
Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	1,500 ^a	20,000 ^a	39 ^a	--	--
Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	100	0.3	2,000	0.76	0.6	2.9
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	110 ^a	--	5 ^a	--	--
Dibromochloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600	1,300	41,000	1,300	0.4	0.4
1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7,800	1,300	200,000	130	23	110
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7	0.4	1,400	0.99	0.02	0.1
1,1-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3,900	290	10,000	3.0	0.06	0.3
cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	780	1,200	20,000	1,200	0.4	1.1
trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600	3,100	41,000	3,100	0.7	3.4
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9	15	1,800	0.50	0.03	0.15
cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.4	1.1	1,200	0.39	0.004	0.02
trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.4	1.1	1,200	0.39	0.004	0.02
Ethylbenzene	< 0.0067	< 0.0048	< 0.0044	< 0.0050	< 0.0049	< 0.0055	< 0.0049	< 0.0051	< 0.0057	< 0.0075	< 0.0046	< 0.0046	< 0.0043	< 0.0048	7,800	400	20,000	58	13	19
2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	390 ^a	450 ^a	1,000 ^a	47 ^a	0.16 ^a	0.16 ^a
4-Methyl-2-pentanone (MIBK)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6,300 ^a	3,100 ^a	160,000 ^a	340 ^a	2.5 ^a	2.5 ^a
Methylene chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	85	13	12,000	34	0.02	0.2
Methyl tert-butyl ether	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	780	8,800	2,000	140	0.32	0.32
Styrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16,000	1,500	41,000	430	4	18
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.2 ^a	0.62 ^a	620 ^a	1.7 ^a	0.0035 ^a	0.0035 ^a
Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12	11	2,400	28	0.06	0.3
Toluene	0.0073	< 0.0048	< 0.0044	< 0.0050	0.0085	< 0.0055	< 0.0049	< 0.0051	< 0.0057	< 0.0075	< 0.0046	< 0.0046	< 0.0043	< 0.0048	16,000	650	410,000	42	12	29
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	1,200	--	1,200	2	9.6
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	310	1,800	8,200	1,800	0.02	0.3
Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	58	5	1,200	12	0.06	0.3
Vinyl chloride	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.46	0.28	170	1.1	0.01	0.07
Xylenes, Total	< 0.020	< 0.015	< 0.013	< 0.015	< 0.014	< 0.016	< 0.015	< 0.016	< 0.017	< 0.023	< 0.014	< 0.014	< 0.013	< 0.014	16,000	320	41,000	5.6	150	150

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 5035/8260B.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

Bold print indicates analyte exceeded Tier 1 SRO.

NS denotes Not Sampled for that analyte.

^aTier 1 SRO from IEPA issued "Chemicals not in TACO Tier I Tables (revised 10/30/2012).

Table 1
Soil Analytical Results
BETX / VOCs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-7 (0-3)	B-7 (6-9)	B-7 (16-20)	B-8 (0-3)	B-8 (3-6)	B-9 (0-3)	B-9 (6-9)	B-10 (0-3)	B-10 (6-9)	B-10a (20-24)	B-11 (0-3)	B-11 (9-12)	B-11a (16-20)	B-12 (0-3)	B-12 (3-6)	B-12a (9-12)	Tier 1 SROs					
																	Residential		Construction Worker		Migration to Groundwater	
																	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Acetone	< 0.11	< 0.081	< 0.067	NS	NS	NS	NS	< 0.10	< 0.084	< 0.076	< 0.10	< 0.097	< 0.070	0.18	< 0.091	< 0.083	70,000	100,000	--	100,000	25	25
Benzene	< 0.0073	< 0.0054	< 0.0045	< 0.0053	< 0.0059	< 0.0088	< 0.0057	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	12	0.8	2,300	2.2	0.03	0.17
Bromodichloromethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	10	3,000	2,000	3,000	0.6	0.6
Bromoform	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	81	53	16,000	140	0.8	0.8
Bromomethane	< 0.014	< 0.011	< 0.0089	NS	NS	NS	NS	< 0.013	< 0.011	< 0.010	< 0.014	< 0.012	< 0.0093	< 0.011	< 0.012	< 0.011	110	10	1,000	3.9	0.2	1.2
2-Butanone	< 0.11	< 0.081	< 0.067	NS	NS	NS	NS	< 0.10	< 0.084	< 0.076	< 0.10	< 0.097	< 0.070	< 0.087	< 0.091	< 0.083	47,000 ^a	25,000 ^a	120,000 ^a	730 ^a	17 ^a	17 ^a
Carbon disulfide	< 0.073	< 0.054	< 0.045	NS	NS	NS	NS	< 0.067	< 0.056	< 0.051	< 0.069	< 0.064	< 0.047	< 0.057	< 0.060	< 0.055	7,800	720	20,000	9.0	32	160
Carbon tetrachloride	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	5	0.3	410	0.90	0.07	0.33
Chlorobenzene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	1,600	130	4,100	1.3	1	6.5
Chloroethane	< 0.014	< 0.011	< 0.0089	NS	NS	NS	NS	< 0.013	< 0.011	< 0.010	< 0.014	< 0.012	< 0.0093	< 0.011	< 0.012	< 0.011	--	1,500 ^a	20,000 ^a	39 ^a	--	--
Chloroform	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	100	0.3	2,000	0.76	0.6	2.9
Chloromethane	< 0.014	< 0.011	< 0.0089	NS	NS	NS	NS	< 0.013	< 0.011	< 0.010	< 0.014	< 0.012	< 0.0093	< 0.011	< 0.012	< 0.011	--	110 ^a	--	5 ^a	--	--
Dibromochloromethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	1,600	1,300	41,000	1,300	0.4	0.4
1,1-Dichloroethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	7,800	1,300	200,000	130	23	110
1,2-Dichloroethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	7	0.4	1,400	0.99	0.02	0.1
1,1-Dichloroethene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	3,900	290	10,000	3.0	0.06	0.3
cis-1,2-Dichloroethene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	780	1,200	20,000	1,200	0.4	1.1
trans-1,2-Dichloroethene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	1,600	3,100	41,000	3,100	0.7	3.4
1,2-Dichloropropane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	9	15	1,800	0.50	0.03	0.15
cis-1,3-Dichloropropene	< 0.0029	< 0.0022	< 0.0018	NS	NS	NS	NS	< 0.0027	< 0.0022	< 0.0020	< 0.0028	< 0.0026	< 0.0019	< 0.0023	< 0.0024	< 0.0022	6.4	1.1	1,200	0.39	0.004	0.02
trans-1,3-Dichloropropene	< 0.0029	< 0.0022	< 0.0018	NS	NS	NS	NS	< 0.0027	< 0.0022	< 0.0020	< 0.0028	< 0.0026	< 0.0019	< 0.0023	< 0.0024	< 0.0022	6.4	1.1	1,200	0.39	0.004	0.02
Ethylbenzene	< 0.0073	< 0.0054	< 0.0045	< 0.0053	< 0.0059	< 0.0088	< 0.0057	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	7,800	400	20,000	58	13	19
2-Hexanone	< 0.029	< 0.022	< 0.018	NS	NS	NS	NS	< 0.027	< 0.022	< 0.020	< 0.028	< 0.026	< 0.019	< 0.023	< 0.024	< 0.022	390 ^a	450 ^a	1,000 ^a	47 ^a	0.16 ^a	0.16 ^a
4-Methyl-2-pentanone (MIBK)	< 0.029	< 0.022	< 0.018	NS	NS	NS	NS	< 0.027	< 0.022	< 0.020	< 0.028	< 0.026	< 0.019	< 0.023	< 0.024	< 0.022	6,300 ^a	3,100 ^a	160,000 ^a	340 ^a	2.5 ^a	2.5 ^a
Methylene chloride	< 0.014	< 0.011	< 0.0089	NS	NS	NS	NS	< 0.013	< 0.011	< 0.010	< 0.014	< 0.012	< 0.0093	< 0.011	< 0.012	< 0.011	85	13	12,000	34	0.02	0.2
Methyl tert-butyl ether	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	780	8,800	2,000	140	0.32	0.32
Styrene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	16,000	1,500	41,000	430	4	18
1,1,2,2-Tetrachloroethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	3.2 ^a	0.62 ^a	620 ^a	1.7 ^a	0.0035 ^a	0.0035 ^a
Tetrachloroethene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	12	11	2,400	28	0.06	0.3
Toluene	< 0.0073	< 0.0054	< 0.0045	< 0.0053	< 0.0059	< 0.0088	< 0.0057	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	16,000	650	410,000	42	12	29
1,1,1-Trichloroethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	--	1,200	--	1,200	2	9.6
1,1,2-Trichloroethane	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	310	1,800	8,200	1,800	0.02	0.3
Trichloroethene	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	58	5	1,200	12	0.06	0.3
Vinyl chloride	< 0.0073	< 0.0054	< 0.0045	NS	NS	NS	NS	< 0.0067	< 0.0056	< 0.0051	< 0.0069	< 0.0064	< 0.0047	< 0.0057	< 0.0060	< 0.0055	0.46	0.28	170	1.1	0.01	0.07
Xylenes, Total	< 0.022	< 0.016	< 0.013	< 0.015	< 0.018	< 0.026	< 0.017	< 0.020	< 0.016	< 0.015	< 0.021	< 0.020	< 0.014	< 0.017	< 0.018	< 0.017	16,000	320	41,000	5.6	150	150

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 5035/8260B.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

Bold print indicates analyte exceeded Tier 1 SRO.

NS denotes Not Sampled for that analyte.

^aTier 1 SRO from IEPA issued "Chemicals not in TACO Tier 1 Tables (revised 10/30/2012).

Table 2
Soil Analytical Results
PNAs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-1	B-1	B-1	B-2	B-2	B-3	B-3	B-3	Tier 1 SROs					
									Residential		Construction Worker		Migration to Groundwater	
Sample Depth (ft)	(0-3)	(6-9)	(16-20)	(0-3)	(6-9)	(0-3)	(3-6)	(12-16)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23						
Acenaphthene	0.080	0.052	< 0.039	< 0.038	< 0.041	< 0.036	< 0.041	< 0.040	4,700	--	120,000	--	570	2,900
Acenaphthylene	0.085	0.082	< 0.039	< 0.038	< 0.041	< 0.036	< 0.041	< 0.040	2,300 ^a	--	61,000 ^a	--	85 ^a	420 ^a
Anthracene	0.33	0.23	< 0.039	< 0.038	< 0.041	0.047	0.067	< 0.040	23,000	--	610,000	--	12,000	59,000
Benzo(a)anthracene	1.2	0.82	< 0.039	0.080	< 0.041	0.17	0.40	< 0.040	11 ^b	--	170	--	2	8
Benzo(a)pyrene	1.3	0.90	< 0.039	0.10	< 0.041	0.18	0.46	< 0.040	11 ^b	--	17	--	8	82
Benzo(b)fluoranthene	1.4	0.95	< 0.039	0.10	< 0.041	0.18	0.53	< 0.040	13 ^b	--	170	--	5	25
Benzo(g,h,i)perylene	0.90	0.61	< 0.039	0.081	< 0.041	0.12	0.38	< 0.040	2,300 ^a	--	61,000 ^a	--	27,000 ^a	130,000 ^a
Benzo(k)fluoranthene	0.96	0.60	< 0.039	0.076	< 0.041	0.14	0.30	< 0.040	9	--	1,700	--	49	250
Chrysene	1.2	0.90	< 0.039	0.10	< 0.041	0.19	0.51	< 0.040	88	--	17,000	--	160	800
Dibenzo(a,h)anthracene	0.43	0.29	< 0.039	< 0.038	< 0.041	0.063	0.16	< 0.040	1.0 ^b	--	17	--	2	7.6
Fluoranthene	2.3	1.7	< 0.039	0.16	< 0.041	0.32	0.96	< 0.040	3,100	--	82,000	--	4,300	21,000
Fluorene	0.13	0.069	< 0.039	< 0.038	< 0.041	< 0.036	< 0.041	< 0.040	3,100	--	82,000	--	560	2,800
Indeno(1,2,3-cd)pyrene	0.80	0.54	< 0.039	0.055	< 0.041	0.11	0.32	< 0.040	5.8 ^b	--	170	--	14	69
Naphthalene	0.058	< 0.041	< 0.039	< 0.038	< 0.041	< 0.036	< 0.041	< 0.040	1,600	170	4,100	1.8	12	18
Phenanthrene	1.2	0.84	< 0.039	0.083	< 0.041	0.19	0.43	< 0.040	2,300 ^a	--	61,000 ^a	--	210 ^a	1,100 ^a
Pyrene	1.9	1.4	< 0.039	0.14	< 0.041	0.29	0.76	< 0.040	2,300	--	61,000	--	4,200	21,000

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 8270C.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

NS denotes "not sampled" for that analyte.

Bold print indicates analyte exceeded Tier 1 SRO.

^aTier I SRO from IEPA issued "Chemicals not in TACO Tier I Tables (revised 10/30/2012).

^bTier I SRO from December 5, 2022 Correction to Section 742. Appendix A: Table H - Concentrations of PNA chemicals in background soils.

Table 2
Soil Analytical Results
PNAs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-4	B-4	B-4	B-4	B-5	B-5	B-5	B-6	B-6	B-6a	Tier 1 SROs					
											Residential		Construction Worker		Migration to Groundwater	
											Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Depth (ft)	(0-3)	(9-12)	(12-16)	(16-20)	(0-3)	(3-6)	(16-20)	(0-3)	(3-6)	(12-16)						
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	4/14/23						
Acenaphthene	0.14	0.77	< 0.040	< 0.039	0.096	0.086	< 0.039	0.061	0.16	< 0.038	4,700	--	120,000	--	570	2,900
Acenaphthylene	0.12	1.2	< 0.040	< 0.039	0.20	< 0.042	< 0.039	0.36	0.60	< 0.038	2,300 ^a	--	61,000 ^a	--	85 ^a	420 ^a
Anthracene	0.44	2.9	< 0.040	< 0.039	0.58	0.26	< 0.039	0.52	1.6	< 0.038	23,000	--	610,000	--	12,000	59,000
Benzo(a)anthracene	1.1	5.6	< 0.040	< 0.039	1.6	0.75	< 0.039	1.6	3.5	< 0.038	11 ^b	--	170	--	2	8
Benzo(a)pyrene	1.3	6.5	< 0.040	< 0.039	1.7	0.79	< 0.039	1.9	3.6	< 0.038	11 ^b	--	17	--	8	82
Benzo(b)fluoranthene	1.2	6.1	< 0.040	< 0.039	1.7	0.81	< 0.039	2.2	3.7	< 0.038	13 ^b	--	170	--	5	25
Benzo(g,h,i)perylene	0.75	4.6	< 0.040	< 0.039	1.1	0.51	< 0.039	1.2	1.9	< 0.038	2,300 ^a	--	61,000 ^a	--	27,000 ^a	130,000 ^a
Benzo(k)fluoranthene	0.96	4.9	< 0.040	< 0.039	1.6	0.51	< 0.039	1.4	2.8	< 0.038	9	--	1,700	--	49	250
Chrysene	1.2	6.5	< 0.040	< 0.039	1.7	0.80	< 0.039	1.7	3.8	< 0.038	88	--	17,000	--	160	800
Dibenzo(a,h)anthracene	0.39	2.1	< 0.040	< 0.039	0.54	0.26	< 0.039	0.61	1.1	< 0.038	1.0 ^b	--	17	--	2	7.6
Fluoranthene	2.2	12	< 0.040	< 0.039	2.8	1.6	< 0.039	2.5	6.8	< 0.038	3,100	--	82,000	--	4,300	21,000
Fluorene	0.17	1.2	< 0.040	< 0.039	0.14	0.098	< 0.039	0.067	0.27	< 0.038	3,100	--	82,000	--	560	2,800
Indeno(1,2,3-cd)pyrene	0.70	4.2	< 0.040	< 0.039	1.0	0.46	< 0.039	1.1	1.9	< 0.038	5.8 ^b	--	170	--	14	69
Naphthalene	0.10	0.17	< 0.040	< 0.039	0.051	0.055	< 0.039	< 0.038	0.046	< 0.038	1,600	170	4,100	1.8	12	18
Phenanthrene	1.6	8.6	< 0.040	< 0.039	1.4	1.1	< 0.039	0.87	2.4	< 0.038	2,300 ^a	--	61,000 ^a	--	210 ^a	1,100 ^a
Pyrene	1.9	11	< 0.040	< 0.039	2.4	1.4	< 0.039	2.2	6.0	< 0.038	2,300	--	61,000	--	4,200	21,000

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 8270C.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

NS denotes "not sampled" for that analyte.

Bold print indicates analyte exceeded Tier 1 SRO.

^aTier I SRO from IEPA issued "Chemicals not in TACO Tier I Tables (revised 10/30/2012).

^bTier I SRO from December 5, 2022 Correction to Section 742. Appendix A: Table H - Concentrations of PNA chemicals in background soils.

Table 2
Soil Analytical Results
PNAs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-7	B-7	B-7	B-8	B-8	B-9	B-9	Tier 1 SROs					
								Residential		Construction Worker		Migration to Groundwater	
Sample Depth (ft)	(0-3)	(6-9)	(16-20)	(0-3)	(3-6)	(0-3)	(6-9)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23						
Acenaphthene	0.052	0.63	< 0.040	0.49	0.054	0.11	0.043	4,700	--	120,000	--	570	2,900
Acenaphthylene	0.13	< 0.40	< 0.040	0.17	0.052	0.70	< 0.040	2,300 ^a	--	61,000 ^a	--	85 ^a	420 ^a
Anthracene	0.20	1.6	< 0.040	1.9	0.21	0.92	0.10	23,000	--	610,000	--	12,000	59,000
Benzo(a)anthracene	0.74	4.2	< 0.040	4.1	0.64	3.1	0.31	11 ^b	--	170	--	2	8
Benzo(a)pyrene	0.89	4.5	< 0.040	4.0	0.75	3.7	0.31	11 ^b	--	17	--	8	82
Benzo(b)fluoranthene	0.79	4.4	< 0.040	3.3	0.70	3.6	0.37	13 ^b	--	170	--	5	25
Benzo(g,h,i)perylene	0.57	2.9	< 0.040	2.2	0.48	2.2	0.23	2,300 ^a	--	61,000 ^a	--	27,000 ^a	130,000 ^a
Benzo(k)fluoranthene	0.81	3.6	< 0.040	3.1	0.54	3.1	0.21	9	--	1,700	--	49	250
Chrysene	0.81	4.6	< 0.040	4.1	0.69	3.3	0.32	88	--	17,000	--	160	800
Dibenzo(a,h)anthracene	0.29	1.4	< 0.040	1.1	0.25	1.1	0.12	1.0 ^b	--	17	--	2	7.6
Fluoranthene	1.3	10	< 0.040	9.1	1.3	4.1	0.66	3,100	--	82,000	--	4,300	21,000
Fluorene	0.079	0.74	< 0.040	0.56	0.058	0.14	0.044	3,100	--	82,000	--	560	2,800
Indeno(1,2,3-cd)pyrene	0.52	2.6	< 0.040	2.1	0.44	2.1	0.21	5.8 ^b	--	170	--	14	69
Naphthalene	< 0.039	< 0.40	< 0.040	0.15	< 0.038	0.070	< 0.040	1,600	170	4,100	1.8	12	18
Phenanthrene	0.63	7.4	0.072	6.5	0.72	1.4	0.50	2,300 ^a	--	61,000 ^a	--	210 ^a	1,100 ^a
Pyrene	1.2	8.1	< 0.040	7.7	1.0	3.8	0.51	2,300	--	61,000	--	4,200	21,000

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 8270C.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

NS denotes "not sampled" for that analyte.

Bold print indicates analyte exceeded Tier 1 SRO.

^aTier I SRO from IEPA issued "Chemicals not in TACO Tier I Tables (revised 10/30/2012).

^bTier I SRO from December 5, 2022 Correction to Section 742. Appendix A: Table H - Concentrations of PNA chemicals in background soils.

Table 2
Soil Analytical Results
PNAs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-10	B-10	B-10a	B-11	B-11	B-11a	B-12	B-12	B-12a	Tier 1 SROs					
										Residential		Construction Worker		Migration to Groundwater	
Sample Depth (ft)	(0-3)	(6-9)	(16-20)	(0-3)	(9-12)	(16-20)	(0-3)	(3-6)	(9-12)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	4/14/23	3/30/23	3/30/23	4/14/23	3/30/23	3/30/23	4/14/23						
Acenaphthene	0.039	0.075	< 0.039	0.22	0.22	< 0.037	0.51	0.13	< 0.038	4,700	--	120,000	--	570	2,900
Acenaphthylene	0.072	< 0.036	< 0.039	0.48	0.10	< 0.037	1.1	0.087	< 0.038	2,300 ^a	--	61,000 ^a	--	85 ^a	420 ^a
Anthracene	0.13	0.28	< 0.039	1.0	1.1	< 0.037	2.8	0.50	< 0.038	23,000	--	610,000	--	12,000	59,000
Benzo(a)anthracene	0.50	0.80	0.081	2.9	2.6	< 0.037	7.7	1.3	< 0.038	11 ^b	--	170	--	2	8
Benzo(a)pyrene	0.58	0.82	0.076	3.2	2.4	< 0.037	7.8	1.5	< 0.038	11 ^b	--	17	--	8	82
Benzo(b)fluoranthene	0.61	0.80	0.068	3.1	2.2	< 0.037	7.2	1.4	< 0.038	13 ^b	--	170	--	5	25
Benzo(g,h,i)perylene	0.38	0.51	0.053	1.9	1.4	< 0.037	4.1	0.94	< 0.038	2,300 ^a	--	61,000 ^a	--	27,000 ^a	130,000 ^a
Benzo(k)fluoranthene	0.42	0.55	0.055	2.6	1.8	< 0.037	7.5	1.1	< 0.038	9	--	1,700	--	49	250
Chrysene	0.56	0.84	0.094	3.1	2.6	< 0.037	8.0	1.5	< 0.038	88	--	17,000	--	160	800
Dibenzo(a,h)anthracene	0.20	0.26	< 0.039	1.0	0.71	< 0.037	2.2	0.47	< 0.038	1.0 ^b	--	17	--	2	7.6
Fluoranthene	0.93	1.8	0.20	5.3	7.0	< 0.037	14	2.8	< 0.038	3,100	--	82,000	--	4,300	21,000
Fluorene	< 0.039	0.095	< 0.039	0.29	0.29	< 0.037	0.66	0.14	< 0.038	3,100	--	82,000	--	560	2,800
Indeno(1,2,3-cd)pyrene	0.34	0.47	0.046	1.9	1.3	< 0.037	4.0	0.85	< 0.038	5.8 ^b	--	170	--	14	69
Naphthalene	< 0.039	0.045	< 0.039	0.28	0.089	< 0.037	0.20	0.19	< 0.038	1,600	170	4,100	1.8	12	18
Phenanthrene	0.51	1.2	0.19	3.5	3.4	< 0.037	7.5	1.7	0.045	2,300 ^a	--	61,000 ^a	--	210 ^a	1,100 ^a
Pyrene	0.80	1.4	0.16	4.6	4.5	< 0.037	12	2.3	< 0.038	2,300	--	61,000	--	4,200	21,000

NOTES

All concentrations listed in mg/kg (ppm).

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A and B.

All samples analyzed pursuant to SW-846 USEPA Method 8270C.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

NS denotes "not sampled" for that analyte.

Bold print indicates analyte exceeded Tier 1 SRO.

^aTier 1 SRO from IEPA issued "Chemicals not in TACO Tier I Tables (revised 10/30/2012).

^bTier 1 SRO from December 5, 2022 Correction to Section 742. Appendix A: Table H - Concentrations of PNA chemicals in background soils.

Table 3
Soil Analytical Results
RCRA Metals
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-1	B-1	B-1	B-2	B-2	B-3	B-3	B-3	Tier 1 SROs					
									Residential		Construction Worker		Migration to Groundwater ^a	
Sample Depth (ft)	(0-3)	(6-9)	(12-16)	(0-3)	(6-9)	(0-3)	(3-6)	(12-16)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23						
pH	8.22	11.3	NS	8.42	7.43	8.44	7.97	NS	--	--	--	--	--	--
Arsenic	9.0	7.7	NS	10	13	3.0	16	9.4	13	750	61	25,000	29	120
Barium	180	240	NS	47	64	24	93	NS	5,500	690,000	14,000	870,000	1,700	1,700
Cadmium	1.1	10	NS	< 0.52	< 0.55	< 0.51	< 0.60	NS	78	1,800	200	59,000	11	110
Chromium	24	93	18	21	26	6.2	26	NS	230	270	4,100	690	21	--
Lead	180	240	17	30	34	62	72	NS	400	--	700	--	107	1,420
TCLP Lead ^b	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--	0.0075 ^b	0.1 ^b
Mercury	0.080	< 0.041	NS	< 0.041	< 0.045	0.045	< 0.044	NS	23	10	61	0.1	3.3	16
Selenium	< 0.98	< 1.1	NS	< 1.0	1.3	< 1.0	1.2	NS	390	--	1,000	--	1.3	1.3
Silver	< 0.98	< 1.1	NS	< 1.0	< 1.1	< 1.0	< 1.2	NS	390	--	1,000	--	13	--

NOTES

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A, B, C and D.

All samples analyzed pursuant to SW-846 USEPA Method 6010B/7470A.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

"NS" indicates "Not Sampled" for that parameter.

Bold / Shaded print indicates analyte exceeded Tier 1 SRO.

^a Most restrictive value corresponding to detected pH range of 6.9 - 9.0 shown; however, detected levels compared to actual pH-specific Tier 1 SRO for each parameter.

Table 3
Soil Analytical Results
RCRA Metals
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-4	B-4	B-4	B-5	B-5	B-5	B-6	B-6	B-6a	Tier 1 SROs					
										Residential		Construction Worker		Migration to Groundwater ^a	
Sample Depth (ft)	(0-3)	(9-12)	(12-16)	(0-3)	(3-6)	(16-20)	(0-3)	(3-6)	(9-12)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	4/14/23						
pH	7.76	7.88	8.15	8.16	8.11	7.98	8.25	8.18	8.12	--	--	--	--	--	--
Arsenic	10	6.6	NS	13	7.7	7.5	6.6	13	12	13	750	61	25,000	29	120
Barium	140	170	NS	110	280	67	92	160	25	5,500	690,000	14,000	870,000	1,700	1,700
Cadmium	2.5	1.1	NS	1.3	9.4	< 0.53	0.59	< 0.57	< 0.52	78	1,800	200	59,000	11	110
Chromium	47	19	17	23	24	28	12	25	20	230	270	4,100	690	21	--
Lead	260	130	16	180	290	17	150	140	17	400	--	700	--	107	1,420
TCLP Lead ^b	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--	0.0075 ^b	0.1 ^b
Mercury	0.13	0.074	NS	0.35	0.085	< 0.039	0.17	0.30	< 0.020	23	10	61	0.1	3.3	16
Selenium	< 1.1	< 1.1	NS	< 1.1	< 1.2	< 1.1	< 1.2	< 1.1	1.0	390	--	1,000	--	1.3	1.3
Silver	< 1.1	< 1.1	NS	< 1.1	< 1.2	< 1.1	< 1.2	< 1.1	< 1.0	390	--	1,000	--	13	--

NOTES

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A, B, C and D.

All samples analyzed pursuant to SW-846 USEPA Method 6010B/7470A.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

"NS" indicates "Not Sampled" for that parameter.

Bold / Shaded print indicates analyte exceeded Tier 1 SRO.

^a Most restrictive value corresponding to detected pH range of 6.9 - 9.0 shown; however, detected levels compared to actual pH-specific Tier 1 SRO for each parameter.

Table 3
Soil Analytical Results
RCRA Metals
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-7	B-7	B-7	B-8	B-8	B-8a	B-8a	B-9	B-9	Tier 1 SROs					
										Residential		Construction Worker		Migration to Groundwater ^a	
										Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Depth (ft)	(0-3)	(6-9)	(16-20)	(0-3)	(3-6)	(3-6)	(6-9)	(0-3)	(6-9)						
Sample Date	3/30/23	3/30/23	3/30/23	3/30/23	3/30/23	4/14/23	4/14/23	3/30/23	3/30/23						
pH	8.29	9.75	8.30	7.69	8.44	7.85	7.88	8.26	11.1	--	--	--	--	--	--
Arsenic	9.1	7.2	11	9.8	5.4	7.9	7.7	13	4.0	13	750	61	25,000	29	120
Barium	90	300	51	210	160	200	280	250	130	5,500	690,000	14,000	870,000	1,700	1,700
Cadmium	21	15	< 0.51	9.9	15	0.75	1.1	2.8	< 0.54	78	1,800	200	59,000	11	110
Chromium	200	150	23	99	48	20	25	36	21	230	270	4,100	690	21	--
Lead	93	150	16	600	120	240	210	320	13	400	--	700	--	107	1,420
TCLP Lead ^b	NS	NS	NS		NS	NS	NS	NS	NS	--	--	--	--	0.0075 ^b	0.1 ^b
Mercury	0.095	0.15	< 0.040	0.11	0.23	0.29	0.11	0.14	< 0.040	23	10	61	0.1	3.3	16
Selenium	< 1.1	< 1.0	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	390	--	1,000	--	1.3	1.3
Silver	< 1.1	< 1.0	< 1.0	1.4	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	390	--	1,000	--	13	--

NOTES

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A, B, C and D.

All samples analyzed pursuant to SW-846 USEPA Method 6010B/7470A.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

"NS" indicates "Not Sampled" for that parameter.

Bold / Shaded print indicates analyte exceeded Tier 1 SRO.

^a Most restrictive value corresponding to detected pH range of 6.9 - 9.0 shown; however, detected levels compared to actual pH-specific Tier 1 SRO for each parameter.

Table 3
Soil Analytical Results
RCRA Metals
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	B-10	B-10	B-10a	B-11	B-11	B-11	B-11a	B-12	B-12	B-12a	Tier 1 SROs					
											Residential		Construction Worker		Migration to Groundwater ^a	
Sample Depth (ft)	(0-3)	(6-9)	(20-24)	(0-3)	(3-6)	(9-12)	(16-20)	(0-3)	(3-6)	(9-12)	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Sample Date	3/30/23	3/30/23	4/14/23	3/30/23	3/30/23	3/30/23	4/14/23	3/30/23	3/30/23	4/14/23						
pH	8.76	11.2	8.10	9.11	8.42	11.5	8.59	8.49	9.16	9.73	--	--	--	--	--	--
Arsenic	5.0	4.2	6.9	11	7.3	5.3	6.8	14	7.2	9.5	13	750	61	25,000	29	120
Barium	75	100	38	300	150	180	47	270	440	41	5,500	690,000	14,000	870,000	1,700	1,700
Cadmium	5.1	< 0.47	< 0.55	1.7	9.5	0.79	< 0.53	1.9	0.98	< 0.51	78	1,800	200	59,000	11	110
Chromium	47	13	17	33	140	17	18	21	29	17	230	270	4,100	690	21	--
Lead	140	50	12	240	150	120	12	330	290	14	400	--	700	--	107	1,420
TCLP Lead ^b	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--	--	--	0.0075 ^b	0.1 ^b
Mercury	< 0.043	< 0.037	< 0.022	0.10	0.13	< 0.041	< 0.021	0.14	0.080	< 0.020	23	10	61	0.1	3.3	16
Selenium	< 1.1	< 0.94	< 1.1	< 1.2	< 1.0	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	390	--	1,000	--	1.3	1.3
Silver	< 1.1	< 0.94	< 1.1	< 1.2	< 1.0	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	390	--	1,000	--	13	--

NOTES

Tier 1 SROs from 35 IAC 742, Appendix B, Tables A, B, C and D.
All samples analyzed pursuant to SW-846 USEPA Method 6010B/7470A.
“<” indicates that analyte was not detected at stated detection limit.
“--” indicates value not available in 35 IAC 742.
“NS” indicates “Not Sampled” for that parameter.
Bold / Shaded print indicates analyte exceeded Tier 1 SRO.

^a Most restrictive value corresponding to detected pH range of 6.9 - 9.0 shown; however, detected levels compared to actual pH-specific Tier 1 SRO for each parameter.

Table 4
Groundwater Analytical Results
VOCs
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	TMW-1	TMW-2	TMW-3	Tier 1 GROs		
				Class I	Class II	Indoor Inhalation
Sample Date	4/20/23	4/20/23	4/20/23			
1,1,1-Trichloroethane	<0.005	<0.005	<0.005	0.2	1.0	1,000
1,1,2,2-Tetrachloroethane	<0.005	<0.005	<0.005	0.0043 ^a	0.0043 ^a	--
1,1,2-Trichloroethane	<0.005	<0.005	<0.005	0.005	0.05	4,400
1,1-Dichloroethane	<0.005	<0.005	<0.005	0.7	3.5	180
1,1-Dichloroethene	<0.005	<0.005	<0.005	0.007	0.035	24
1,2-Dichloroethane	<0.005	<0.005	<0.005	0.005	0.025	0.054
1,2-Dichloropropane	<0.005	<0.005	<0.005	0.005	0.025	0.12
2-Butanone	<0.005	<0.005	<0.005	4.2 ^a	4.2 ^a	10,000
2-Hexanone	<0.005	<0.005	<0.005	0.035 ^a	0.035 ^a	--
Acetone	<0.100	<0.100	<0.100	6.3	6.3	1,000,000
Benzene	<0.002	<0.002	<0.002	0.005	0.025	0.11
Bromodichloromethane	<0.002	<0.002	<0.002	0.0002	0.0002	6,700
Bromoform	<0.002	<0.002	<0.002	0.001	0.001	3.1
Bromomethane	<0.005	<0.005	<0.005	0.0098	0.049	--
Carbon disulfide	<0.005	<0.005	<0.005	0.7	3.5	67
Carbon tetrachloride	<0.005	<0.005	<0.005	0.005	0.025	0.02
Chlorobenzene	<0.005	<0.005	<0.005	0.1	0.5	26
Chloroethane	<0.005	<0.005	<0.005	--	--	--
Chloroform	<0.005	<0.005	<0.005	0.0002	0.001	0.07
Chloromethane	<0.005	<0.005	<0.005	--	--	--
cis-1,2-Dichloroethene	<0.005	<0.005	<0.005	0.07	0.20	3,500
cis & trans-1,3-Dichloropropene	<0.004	<0.004	<0.004	0.001	0.005	0.14
Dibromochloromethane	<0.005	<0.005	<0.005	0.14	0.14	--
Ethylbenzene	<0.005	<0.005	<0.005	0.7	1.0	0.37
4-Methyl-2-pentanone (MIBK)	<0.005	<0.005	<0.005	0.56 ^a	0.56 ^a	--
Methylene chloride	<0.005	<0.005	<0.005	0.005	0.050	2.1
Methyl tert-butyl ether	<0.005	<0.005	<0.005	0.07	0.07	1,900
Styrene	<0.005	<0.005	<0.005	0.1	0.5	310
Tetrachloroethene	<0.002	<0.002	<0.002	0.005	0.025	0.091
Toluene	<0.005	<0.005	<0.005	1.0	2.5	530
trans-1,2-Dichloroethene	<0.005	<0.005	<0.005	0.1	0.5	16
Trichloroethene	<0.002	<0.002	<0.002	0.005	0.025	0.34
Vinyl chloride	<0.002	<0.002	<0.002	0.002	0.01	0.028
Xylenes, Total	<0.005	<0.005	<0.005	10.0	10.0	30

NOTES

All concentrations listed in mg/L (ppm).

Tier 1 GROs from 35 IAC 742, Appendix B, Table E.

All samples analyzed pursuant to SW-846 USEPA Method 8260B.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

"NS" denotes Not Sampled for that parameter.

Bold print indicates analyte exceeded Tier 1 GRO.

Table 5
 Groundwater Analytical Results
 PNAs
 11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	TMW-1	TMW-2	TMW-3	Tier 1 GROs		
				Class I	Class II	Indoor Inhalation
Sample Date	4/20/23	4/20/23	4/20/23			
Acenaphthene	<0.001	<0.001	<0.001	0.42	2.1	--
Acenaphthylene	<0.001	<0.001	<0.001	0.21 ^a	1.05 ^a	--
Anthracene	<0.0005	<0.0005	<0.0005	2.1	10.5	--
Benz(a)anthracene	<0.0001	<0.0001	<0.0001	0.00013	0.00065	--
Benzo(a)pyrene	<0.0002	<0.0002	<0.0002	0.0002	0.0020	--
Benzo(b)fluoranthene	<0.0018	<0.0018	<0.0018	0.00018	0.00090	--
Benzo(g,h,i)perylene	<0.0003	<0.0003	<0.0003	0.21 ^a	1.05 ^a	--
Benzo(k)fluoranthene	<0.00017	<0.00017	<0.00017	0.00017	0.00085	--
Chrysene	<0.0002	<0.0002	<0.0002	0.0015	0.0075	--
Dibenz(a,h)anthracene	<0.0002	<0.0002	<0.0002	0.0003	0.0015	--
Fluoranthene	<0.0002	<0.0002	<0.0002	0.2800	1.4000	--
Fluorene	<0.002	<0.002	<0.002	0.2800	1.4000	--
Indeno(1,2,3-cd)pyrene	<0.0003	<0.0003	<0.0003	0.00043	0.00215	--
Naphthalene	<0.001	<0.001	<0.001	0.14	0.22	0.075
Phenanthrene	<0.0005	<0.0005	<0.0005	0.21 ^a	1.05 ^a	--
Pyrene	<0.0002	<0.0002	0.00028	0.21	1.05	--

NOTES

All concentrations listed in mg/L (ppm).

Tier 1 GROs from 35 IAC 742, Appendix B, Table E.

All samples analyzed pursuant to SW-846 USEPA Method 8270C/D.

"<" indicates that analyte was not detected at stated detection limit.

"--" indicates value not available in 35 IAC 742.

Blank cells indicate sample not analyzed for that parameter.

Bold print indicates analyte exceeded Tier 1 GRO.

Table 6
Groundwater Analytical Results
RCRA Metals
11201-19 S. Michigan Ave. / Chicago, Illinois

Sample ID	TMW-1	TMW-2	TMW-3	Tier 1 GROs		
				Class I	Class II	Indoor Inhalation
Sample Date	4/20/23	4/20/23	4/20/23			
Arsenic	<0.01	<0.01	<0.01	0.050	0.200	--
Barium	0.028	0.101	0.277	2.0	2.0	--
Cadmium	<0.005	<0.005	<0.005	0.005	0.050	--
Chromium	<0.005	0.04	<0.005	0.10	1.0	--
Lead	<0.005	0.3	<0.005	0.0075	0.1000	--
Mercury	<0.0005	<0.0005	<0.0005	0.002	0.010	0.053
Selenium	<0.01	<0.01	0.017	0.050	0.050	--
Silver	<0.005	<0.005	<0.005	0.050	--	--

NOTES

All concentrations listed in mg/L (ppm).

Tier 1 GROs from 35 IAC 742, Appendix B, Table E.

Samples analyzed pursuant to Method SW6010C (Method 7470A for mercury; 335.4R1.0 for cyanide).

“<“ indicates that analyte was not detected at stated detection limit.

“--” indicates value not available in 35 IAC 742.

“NS” denotes Not Sampled for that parameter.

Bold / Shaded print indicates analyte exceeded Tier 1 GRO.

APPENDIX A

Ground Penetrating Radar Survey Report



Brecheisen Engineering, Inc
5340 N Sheridan Rd
Chicago, IL 60640
773-334-3944/office
tom@beichicago.com

Scanning Report for 11201-11219 S Michigan Ave Chicago, IL

Description:

On 03-29-23 **Subsurface Radar Solutions, LLC** scanned using ground penetrating radar (GPR) at **11201-11219 S Michigan Ave Chicago, IL**. The property is currently an undeveloped site. We were hired to scan and look for any potential UST's and clear boring locations of utilities. Tom with Brecheisen Engineering, Inc. was on site for the scan directing where to scan.

Methodology:

The GPR unit used was a GSSI SIR-3000 with a 400mhz antenna. GPR equipment uses a high frequency electromagnetic signal pulsed into the ground. The pulsed energy is then reflected back to the instrument where the time difference between returned pulses gives the user the necessary data to interpret the presence of a utility or other anomaly. In order to scan using GPR the surface needs to be relatively flat and dry, which it was. We were able to see to a depth varying from 4'-4' 6" below the surface. The website to the manufacturer of the equipment used is www.geophysical.com if you'd like additional information on the equipment used or GPR technology.

Another method we used in locating utilities was using EM equipment. EM locating equipment operates using electromagnetic induction. The equipment used was Radiodetection and the model was an RD 7100 wand and a TX-5, 5 watt transmitter. The RD 7100 was used to look for and locate any buried power, communications, water, or gas we could find near the boring locations. We use the Radiodetection equipment to induce a certain electromagnetic frequency into a utility and locate that frequency.

Findings:

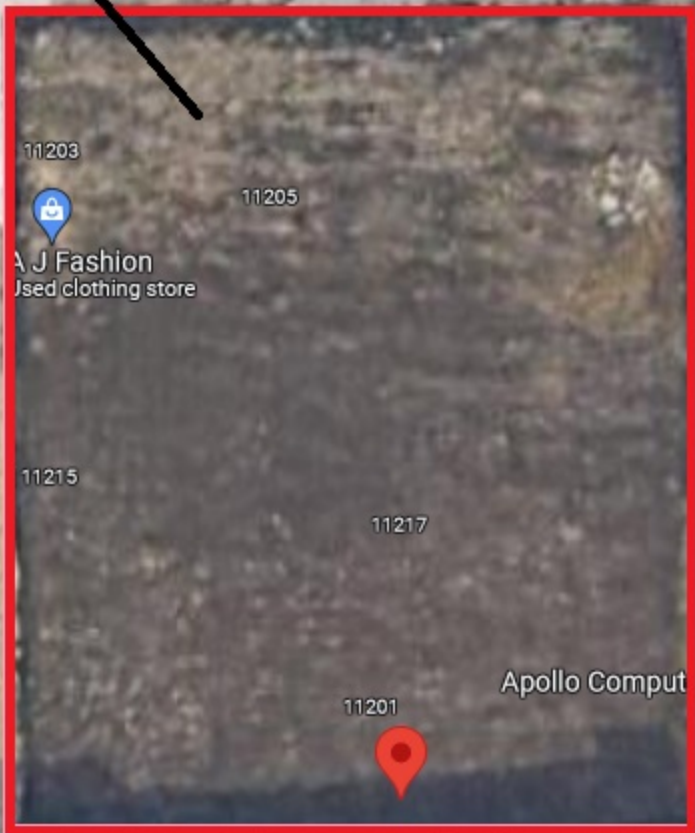
Upon completion of the GPR survey we were unable to locate any potential UST's. We scanned in a grid pattern, scanning in perpendicular lines. The subsurface appears to be a rubble fill over the majority of the area scanned. Please feel free to contact me with any questions.

Respectfully Submitted,

Anthony M. Savino
Subsurface Radar Solutions LLC
17750 Beaverton Rd Capron, IL 61012
815-405-5185

112th St

Area scanned using GPR Equipment



11203

11205

A J Fashion
Used clothing store

11215

11217

11201

Apollo Computers

P ParkChicago #408606

11223

11221

12

11225

11201-11219 S Michigan Ave
Chicago, IL

11227

APPENDIX B

Site Investigation Photographs



Photo 1: GPR surveying activities on the southeastern portion of the Site (typical).



Photo 2: GPR surveying activities on the south-central portion of the Site (typical).



Photo 3: GPR surveying activities on the southeastern portion of the Site (typical).



Photo 4: GPR surveying activities on the south-central portion of the Site (typical).



Photo 5: Drilling activities at B-1 (typical).



Photo 6: Drilling activities at B-2 (typical).



Photo 7: Drilling activities at B-3 (typical).



Photo 8: Drilling activities at B-4 (typical).



Photo 9: Drilling activities at B-5 (typical).



Photo 10: Drilling activities at B-6 (typical).



Photo 11: Drilling activities at B-7 (typical).



Photo 12: Drilling activities at B-8 (typical).



Photo 13: Drilling activities at B-10 (typical).



Photo 14: Drilling activities at B-11 (typical).



Photo 15: Drilling activities at B-12 (typical).



Photo 16: Drilling activities at B-10a (typical).



Photo 17: Drilling activities at B-12a (typical).



Photo 18: Drilling activities at B-8a (typical).



Photo 19: Drilling activities at B-11a (typical).



Photo 20: Drilling activities at B-6a (typical).



Photo 21: FILL materials observed at B-10a (0-3).



Photo 22: FILL materials observed at B-10a (3-6).



Photo 23: Wood FILL materials observed at B-10a (6-9).



Photo 24: FILL materials observed from B-10a (12-16).



Photo 25: FILL materials observed from B-10a (16-20).



Photo 26: FILL materials observed at B-12a (3-6).



Photo 27: FILL materials observed at B-8a (3-6).



Photo 28: Wood FILL materials observed at B-8a (3-6).



Photo 29: FILL materials observed at B-8a (6-9).



Photo 30: Wood FILL materials observed at B-8a (6-9).



Photo 31: Wood FILL materials observed at B-11a (6-9).



Photo 32: FILL materials observed at B-11a (12-16).

APPENDIX C

Soil Boring Logs



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-1

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
6	0.0	33	Sand and gravel FILL with some brown / gray silty clay Loose, Soft, Moist (GP/CH)	
9	0.0	33	Crushed concrete and brick FILL grading to brown silty clay @ 11' Loose, Firm, Moist (GP/CH)	
12	0.0	67	Brown silty clay with trace gravel Firm, Moist (CH)	
16	0.0	100	Gray silty clay with trace gravel Firm, Moist to wet (CH)	
20	0.0	100	Brown silty clay with some silt grading to gray silty clay @ 22' Soft, Loose, Moist (CH/SM)	
24			End of boring 24-feet below grade.	

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~16'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 8:00 am	Finished: 9:05 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-2

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	100	Topsoil underlain by brown sand Loose, Moist (SW/SP)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL with some brown sand, gravel and clay Loose, Firm, Moist (SP/GP/CH)	
6	0.0	33	Crushed concrete and brick FILL with some wood, sand and gravel Loose, Moist (SP/GP)	
9	0.0	100	Brown silty clay with some sand and gravel Soft, Loose, Moist (CH/SP)	
12	0.0	100	Brown silty clay with trace gravel grading to gray silty clay @ 13' Soft, Moist (CH)	
16			End of boring 16-feet below grade.	
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 12:35 pm	Finished: 12:55 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-3

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	67	Topsoil underlain by brown sand Loose, Moist (SW/SP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand, gravel and clay Loose, Firm, Moist (SP/GP/CH)	
6	0.0	33	Crushed concrete and brick FILL with some wood, sand and gravel Loose, Moist (SP/GP)	
9	0.0	33	Brown silty clay with some sand and gravel Soft, Loose, Moist (CH/SP)	
12	0.0	100	Brown silty clay with trace gravel grading to gray silty clay @ 13' Soft, Moist (CH)	
16			End of boring 16-feet below grade.	
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 12:00 pm	Finished: 12:30 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-4

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by dark brown silty clay and some sand and gravel FILL Loose, Firm, Moist (SP/GP/CH)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL with some sand and gravel and some brown silty clay Loose, Moist (SP/GP/CH)	
6	0.0	67	Dark brown silty clay with trace sand and gravel Soft to firm, Moist (CH)	
9	0.0	50	Crushed concrete and brick FILL with some sand and gravel and brown silty clay Loose, Soft, Moist (GP/CH)	
12	0.0	100	Brown silty clay with trace gravel grades to gray silty clay @ 14' Firm to stiff, Moist (CH)	
16	0.0	100	Gray silty clay with trace gravel Soft, Moist (CH)	
20			End of boring 20-feet below grade.	
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~14'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 9:10 am	Finished: 9:45 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-5

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	67	Topsoil underlain by dark brown silty clay and some sand and gravel and crushed concrete and brick FILL Loose, Stiff, Moist (SP/GP/CH)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some dark brown sand Loose, Moist (SP/GP)	
6	0.0	100	Crushed concrete and brick FILL Loose, Moist (GP)	
9	0.0	33	Crushed concrete and brick FILL Loose, Moist (GP)	
12	NA	0	NO RECOVERY	
16	0.0	100	Brown / gray silty clay with trace gravel Soft, Moist to wet (CH)	
20			End of boring 20-feet below grade.	
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~16'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 12:55 pm	Finished: 1:25 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-6

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by dark brown silty clay and some sand and gravel and crushed concrete and brick FILL Loose, Stiff, Moist (SP/GP/CH)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL Loose, Moist (SP/GP)	
6			REFUSAL @ 6-feet. End of boring 6-feet below grade.	
9				
12				
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 1:35 pm	Finished: 1:45 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-6a

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	No visual or olfactory evidence of contamination
	0.0	50	Topsoil underlain by dark brown sand and gravel grading to clay @ 2' Loose, Firm, Moist (SW/SP/CH)	
3	0.0	50	Brown silty clay with some sand and gravel Loose, Firm, Moist (SP/GP/CH)	
6	0.0	50	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
9	0.0	33	Crushed brick FILL with some sand and gravel and some clayey silt Loose, Moist (CH/SP/SM)	
12	0.0	100	Brown/gray silty clay with trace gravel grading to gray silty clay @ 14' Soft, Moist (CH)	
16			End of boring 16-feet below grade.	
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: April 14, 2023
	Started: 3:00 pm	Finished: 3:45 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-7

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
0	0.0	33	Topsoil underlain by crushed concrete and brick FILL with some dark brown sand and gravel Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL with some sand and gravel and wood Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete and brick FILL with some sand and gravel and wood and brown silty clay Loose, Firm, Moist (SP/GP/CH)	
9	0.0	33	Crushed concrete FILL Loose, Moist (GP)	
12	0.0	33	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (GP/SP)	
16	0.0	100	Gray silty clay with trace gravel Soft, Moist (CH)	
20			End of boring 20-feet below grade.	
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~16'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 10:00 am	Finished: 11:00 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-8

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by dark brown silty clay and some sand and gravel and crushed concrete and brick FILL Loose, Stiff, Moist (SP/GP/CH)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
6			REFUSAL @ 6-feet. End of boring 6-feet below grade.	
9				
12				
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 4:15 pm	Finished: 4:30 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-8a

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by crushed brick FILL with some sand and gravel Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand and gravel and wood Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
9	0.0	33	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
12			REFUSAL @ 12-feet. End of boring 12-feet below grade.	
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: April 14, 2023
	Started: 12:15 pm	Finished: 2:00 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-9

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by crushed concrete and brick FILL Loose, Moist (GP)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete and brick FILL Loose, Moist (SP/GP)	
9			REFUSAL @ 9-feet. End of boring 9-feet below grade.	
12				
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 1:55 pm	Finished: 2:30 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-10

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	67	Topsoil underlain by dark brown sand and clay with crushed concrete, brick, wood and glass FILL Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete and brick FILL with some wood, sand and gravel Loose, Firm, Moist (SP/GP)	
9	0.0	33	Crushed concrete and brick FILL Loose, Moist (GP)	
12			REFUSAL @ 12-feet. End of boring 12-feet below grade.	
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 11:10 am	Finished: 11:35 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-10a

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	67	Topsoil underlain by crushed brick, sand, gravel and brick FILL Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete, brick, sand, gravel, and wood FILL Loose, Soft, Moist (SP/GP)	
9	0.0	33	Crushed brick and concrete FILL underlain by brown sand and clay Loose, Firm, Moist (GP/CH)	
12	0.0	67	Sand and gravel FILL with some crushed brick, concrete, carpet and wood FILL Loose, Moist (GP)	
16	0.0	50	Sand and gravel FILL with some crushed brick, concrete Loose, Moist to wet (GP)	
20	0.0	20	Gray silty clay with trace gravel Soft to firm, Moist (CH)	
24			End of boring 24-feet below grade.	

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~19'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: April 14, 2023
	Started: 8:00 am	Finished: 8:45 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-11

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	50	Topsoil underlain by brown silty clay with some crushed concrete, brick, wood, sand and gravel FILL Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	50	Crushed concrete FILL Loose, Moist (GP)	
6	NA	0	NO RECOVERY	
9	0.0	33	Crushed concrete FILL with some brown sand and gravel Loose, Moist (SP/GP)	
12			REFUSAL @ 12-feet. End of boring 12-feet below grade.	
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 3:10 pm	Finished: 3:45 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-11a

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil by crushed brick, sand, gravel and brick FILL Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)	
6	0.0	50	Crushed concrete, brick, sand, gravel, and wood FILL Loose, Moist (SP/GP)	
9	0.0	33	Crushed concrete, brick, sand, gravel, and wood FILL Loose, Moist (SP/GP)	
12	0.0	100	Crushed brick and concrete FILL Loose, Moist (GP)	
16	0.0	10	Sand and gravel FILL underlain by gray silty clay with trace gravel Loose, Soft, Moist to wet (GP/CH)	
20	0.0	100	Gray silty clay with trace gravel Soft to firm, Moist (CH)	
24			End of boring 24-feet below grade.	

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~20'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: April 14, 2023
	Started: 2:15 pm	Finished: 2:50 pm



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-12

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil underlain by crushed concrete and brick FILL Loose, Moist (GP)	No visual or olfactory evidence of contamination
3	0.0	33	Crushed concrete and brick FILL Loose, Moist (SP/GP)	
6	0.0	33	Crushed concrete and brick FILL Loose, Moist (SP/GP)	
9			REFUSAL @ 8-feet. End of boring 8-feet below grade.	
12				
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: Not encountered	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: March 30, 2023
	Started: 11:45 am	Finished: 11:55 am



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Boring No.

B-12a

DEPTH (ft)	PID (ppm)	RECOVERY (%)	SOIL DESCRIPTION	OBSERVATIONS
0			SURFACE GRADE = Vegetated Urban Fill	
	0.0	33	Topsoil by crushed brick, sand, gravel and brick FILL Loose, Moist (SP/GP)	No visual or olfactory evidence of contamination
3	0.0	67	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)	
6	NA	0	NO RECOVERY	
9	0.0	33	Gray silty clay Soft, Moist to wet (CH)	
12			End of boring 12-feet below grade.	
16				
20				
24				

NOTES: Shaded interval submitted for laboratory analysis.	Logging Method: ASTM D-2488	Logged By: Tom Brecheisen
	Depth to Groundwater: ~10'	Method: Geoprobe
	BEI Project No: 20-AISEHS-0001	Date: April 14, 2023
	Started: 9:15 am	Finished: 10:45 am

APPENDIX D

Temporary Monitoring Well Construction Logs



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Well No.

TMW-1

DEPTH	SCHEMATIC	ELEVATIONS	DETAILS	PID (ppm)	OBSERVATIONS		
0		100.00' Top of Casing	Well Vault: None Surface Seal: Bentonite Annular Sealant: Bentonite Bentonite Type: 1/4" Pellets Type of Sand Pack: No. 5 quartz				
		99.75' Top of Seal			0.0	Topsoil underlain by crushed concrete and brick FILL with some sand and gravel; Loose, Moist (SP/GP)	
3					0.0	Crushed concrete and brick FILL with some sand and gravel Loose, Moist (SP/GP)	
6		7.75' Total Seal Interval			0.0	Sand and gravel FILL with some brown / gray silty clay Loose, Soft, Moist (GP/CH)	
9				92.00' Top of Sand 91.00' Top of Screen	0.0	Crushed concrete and brick FILL grading to brown silty clay @ 11' Loose, Firm, Moist (GP/CH)	
12					0.0	Brown silty clay with trace gravel Firm, Moist (CH)	
16		15.00' Total Screen Interval			0.0	Gray silty clay with trace gravel Firm, Moist to wet (CH)	
20					0.0	Brown silty clay with some silt grading to gray silty clay @ 22' Soft, Loose, Moist (CH/SM)	
24				76.00' Bottom of Screen			
End of boring 24-feet below grade.							

Well Construction Materials		Measurements	
Riser Pipe	Sch. 40 PVC	Riser pipe length	9-feet
Riser Coupling Joint	Sch. 40 PVC	Screen length	15-feet
Screen	Sch. 40 PVC	Screen Slot Size	0.010-inch
Screen-Riser Coupling	Sch. 40 PVC	Depth to Water while Drilling	~16'
Protective Casing	None	Depth to Water after Drilling	11.15'

Driller:	D. Stefansson	Engineer:	T. Brecheisen
Drilling Method:	Geoprobe	Date Started:	30-Mar-23
Drilling Fluids	None	Date Completed:	30-Mar-23



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Well No.

TMW-2

DEPTH	SCHEMATIC	ELEVATIONS	DETAILS	PID (ppm)	OBSERVATIONS
0		99.46' Top of Casing	Well Vault: None Surface Seal: Bentonite Annular Sealant: Bentonite Bentonite Type: 1/4" Pellets Type of Sand Pack: No. 5 quartz		
		99.21' Top of Seal		0.0	Topsoil underlain by crushed brick, sand, gravel and brick FILL Loose, Moist (SP/GP)
3				0.0	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)
6		7.75' Total Seal Interval		0.0	Crushed concrete, brick, sand, gravel, and wood FILL Loose, Soft, Moist (SP/GP)
9		91.46' Top of Sand		0.0	Crushed brick and concrete FILL underlain by brown sand and clay Loose, Firm, Moist (GP/CH)
		90.46' Top of Screen		0.0	Sand and gravel FILL with some crushed brick, concrete, carpet and wood FILL Loose, Moist (GP)
12				0.0	Sand and gravel FILL with some crushed brick, concrete
16		15.00' Total Screen Interval		0.0	Loose, Moist to wet (GP)
20				0.0	Gray silty clay with trace gravel Soft to firm, Moist (CH)
24				75.46' Bottom of Screen	
End of boring 24-feet below grade.					

Well Construction Materials		Measurements	
Riser Pipe	Sch. 40 PVC	Riser pipe length	9-feet
Riser Coupling Joint	Sch. 40 PVC	Screen length	15-feet
Screen	Sch. 40 PVC	Screen Slot Size	0.010-inch
Screen-Riser Coupling	Sch. 40 PVC	Depth to Water while Drilling	~19'
Protective Casing	None	Depth to Water after Drilling	17.50'

Driller:	J. Luna	Engineer:	T. Brecheisen
Drilling Method:	Geoprobe	Date Started:	14-Apr-23
Drilling Fluids	None	Date Completed:	14-Apr-23



**Brecheisen
Engineering,
Inc.**

Site Name and Location:

Vacant Land
11201-19 S. Michigan Ave.
Chicago, Illinois 60628

Well No.
TMW-3

DEPTH	SCHEMATIC	ELEVATIONS	DETAILS	PID (ppm)	OBSERVATIONS	
0		88.08' Top of Casing	Well Vault: None	0.0	Topsoil by crushed brick, sand, gravel and brick FILL Loose, Moist (SP/GP)	
		87.83' Top of Seal	Surface Seal: Bentonite			
		1.25' Total Seal Interval	Annular Sealant: Bentonite	Type of Sand Pack: No. 5 quartz	0.0	Crushed concrete and brick FILL with some brown sand and gravel Loose, Moist (SP/GP)
3		86.58' Top of Sand	Bentonite Type: 1/4" Pellets			
		86.08' Top of Screen			NA	NO RECOVERY
6		10.0' Total Screen Interval				
9				0.0	Gray silty clay Soft, Moist to wet (CH)	
12	End of boring 12-feet below grade.					
16						

Well Construction Materials		Measurements	
Riser Pipe	Sch. 40 PVC	Riser pipe length	2-feet
Riser Coupling Joint	Sch. 40 PVC	Screen length	10-feet
Screen	Sch. 40 PVC	Screen Slot Size	0.010-inch
Screen-Riser Coupling	Sch. 40 PVC	Depth to Water while Drilling	~10'
Protective Casing	None	Depth to Water after Drilling	6.55'

Driller:	J. Luna	Engineer:	T. Brecheisen
Drilling Method:	Geoprobe	Date Started:	14-Apr-23
Drilling Fluids	None	Date Completed:	14-Apr-23

APPENDIX E

Soil Analytical Results

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

May 10, 2023

Brecheisen Engineering, Inc.
5430 N. Sheridan Rd., Suite 807
Chicago, IL 60640
Telephone: (312) 659-0052
Fax: (773) 472-8301

Analytical Report for STAT Work Order: 23031055 Revision 0

RE: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL.

Dear Brecheisen Engineering, Inc.:

STAT Analysis received 50 samples for the referenced project on 3/30/2023 7:15:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAP standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,



Craig Chawla
Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples as received and tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

Client: Brecheisen Engineering, Inc.**Project:** 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL.**Work Order:** 23031055 Revision 0**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
23031055-001A	B-1 (0-3)		3/30/2023 8:05:00 AM	3/30/2023
23031055-001B	B-1 (0-3)		3/30/2023 8:05:00 AM	3/30/2023
23031055-002A	B-1 (3-6)		3/30/2023 8:10:00 AM	3/30/2023
23031055-003A	B-1 (6-9)		3/30/2023 8:15:00 AM	3/30/2023
23031055-003B	B-1 (6-9)		3/30/2023 8:15:00 AM	3/30/2023
23031055-004A	B-1 (9-12)		3/30/2023 8:25:00 AM	3/30/2023
23031055-005A	B-1 (12-16)		3/30/2023 8:45:00 AM	3/30/2023
23031055-005B	B-1 (12-16)		3/30/2023 8:45:00 AM	3/30/2023
23031055-006A	B-1 (16-20)		3/30/2023 8:55:00 AM	3/30/2023
23031055-006B	B-1 (16-20)		3/30/2023 8:55:00 AM	3/30/2023
23031055-007A	B-1 (20-24)		3/30/2023 9:05:00 AM	3/30/2023
23031055-008A	B-2 (0-3)		3/30/2023 12:35:00 PM	3/30/2023
23031055-008B	B-2 (0-3)		3/30/2023 12:35:00 PM	3/30/2023
23031055-009A	B-2 (3-6)		3/30/2023 12:40:00 PM	3/30/2023
23031055-009B	B-2 (3-6)		3/30/2023 12:40:00 PM	3/30/2023
23031055-010A	B-2 (6-9)		3/30/2023 12:45:00 PM	3/30/2023
23031055-010B	B-2 (6-9)		3/30/2023 12:45:00 PM	3/30/2023
23031055-011A	B-2 (9-12)		3/30/2023 12:50:00 PM	3/30/2023
23031055-012A	B-2 (12-16)		3/30/2023 12:55:00 PM	3/30/2023
23031055-012B	B-2 (12-16)		3/30/2023 12:55:00 PM	3/30/2023
23031055-013A	B-3 (0-3)		3/30/2023 12:05:00 PM	3/30/2023
23031055-013B	B-3 (0-3)		3/30/2023 12:05:00 PM	3/30/2023
23031055-014A	B-3 (3-6)		3/30/2023 12:10:00 PM	3/30/2023
23031055-014B	B-3 (3-6)		3/30/2023 12:10:00 PM	3/30/2023
23031055-015A	B-3 (6-9)		3/30/2023 12:15:00 PM	3/30/2023
23031055-016A	B-3 (9-12)		3/30/2023 12:20:00 PM	3/30/2023
23031055-017A	B-3 (12-16)		3/30/2023 12:30:00 PM	3/30/2023
23031055-017B	B-3 (12-16)		3/30/2023 12:30:00 PM	3/30/2023
23031055-018A	B-4 (0-3)		3/30/2023 9:15:00 AM	3/30/2023
23031055-018B	B-4 (0-3)		3/30/2023 9:15:00 AM	3/30/2023
23031055-019A	B-4 (3-6)		3/30/2023 9:20:00 AM	3/30/2023
23031055-019B	B-4 (3-6)		3/30/2023 9:20:00 AM	3/30/2023
23031055-020A	B-4 (6-9)		3/30/2023 9:25:00 AM	3/30/2023
23031055-021A	B-4 (9-12)		3/30/2023 9:30:00 AM	3/30/2023
23031055-021B	B-4 (9-12)		3/30/2023 9:30:00 AM	3/30/2023
23031055-022A	B-4 (12-16)		3/30/2023 9:35:00 AM	3/30/2023
23031055-022B	B-4 (12-16)		3/30/2023 9:35:00 AM	3/30/2023
23031055-023A	B-4 (16-20)		3/30/2023 9:45:00 AM	3/30/2023

Client: Brecheisen Engineering, Inc.

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL.

Work Order Sample Summary

Work Order: 23031055 Revision 0

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
23031055-024A	B-5 (0-3)		3/30/2023 1:00:00 PM	3/30/2023
23031055-024B	B-5 (0-3)		3/30/2023 1:00:00 PM	3/30/2023
23031055-025A	B-5 (3-6)		3/30/2023 1:05:00 PM	3/30/2023
23031055-025B	B-5 (3-6)		3/30/2023 1:05:00 PM	3/30/2023
23031055-026A	B-5 (6-9)		3/30/2023 1:10:00 PM	3/30/2023
23031055-027A	B-5 (9-12)		3/30/2023 1:15:00 PM	3/30/2023
23031055-028A	B-5 (16-20)		3/30/2023 1:25:00 PM	3/30/2023
23031055-028B	B-5 (16-20)		3/30/2023 1:25:00 PM	3/30/2023
23031055-029A	B-6 (0-3)		3/30/2023 1:40:00 PM	3/30/2023
23031055-029B	B-6 (0-3)		3/30/2023 1:40:00 PM	3/30/2023
23031055-030A	B-6 (3-6)		3/30/2023 1:45:00 PM	3/30/2023
23031055-030B	B-6 (3-6)		3/30/2023 1:45:00 PM	3/30/2023
23031055-031A	B-7 (0-3)		3/30/2023 10:00:00 AM	3/30/2023
23031055-031B	B-7 (0-3)		3/30/2023 10:00:00 AM	3/30/2023
23031055-032A	B-7 (3-6)		3/30/2023 10:10:00 AM	3/30/2023
23031055-033A	B-7 (6-9)		3/30/2023 10:20:00 AM	3/30/2023
23031055-033B	B-7 (6-9)		3/30/2023 10:20:00 AM	3/30/2023
23031055-034A	B-7 (9-12)		3/30/2023 10:45:00 AM	3/30/2023
23031055-035A	B-7 (12-16)		3/30/2023 10:55:00 AM	3/30/2023
23031055-036A	B-7 (16-20)		3/30/2023 11:00:00 AM	3/30/2023
23031055-036B	B-7 (16-20)		3/30/2023 11:00:00 AM	3/30/2023
23031055-037A	B-8 (0-3)		3/30/2023 4:20:00 PM	3/30/2023
23031055-037B	B-8 (0-3)		3/30/2023 4:20:00 PM	3/30/2023
23031055-038A	B-8 (3-6)		3/30/2023 4:30:00 PM	3/30/2023
23031055-038B	B-8 (3-6)		3/30/2023 4:30:00 PM	3/30/2023
23031055-039A	B-9 (0-3)		3/30/2023 2:00:00 PM	3/30/2023
23031055-039B	B-9 (0-3)		3/30/2023 2:00:00 PM	3/30/2023
23031055-040A	B-9 (3-6)		3/30/2023 2:25:00 PM	3/30/2023
23031055-041A	B-9 (6-9)		3/30/2023 2:30:00 PM	3/30/2023
23031055-041B	B-9 (6-9)		3/30/2023 2:30:00 PM	3/30/2023
23031055-042A	B-10 (0-3)		3/30/2023 11:10:00 AM	3/30/2023
23031055-042B	B-10 (0-3)		3/30/2023 11:10:00 AM	3/30/2023
23031055-043A	B-10 (3-6)		3/30/2023 11:15:00 AM	3/30/2023
23031055-044A	B-10 (6-9)		3/30/2023 11:25:00 AM	3/30/2023
23031055-044B	B-10 (6-9)		3/30/2023 11:25:00 AM	3/30/2023
23031055-045A	B-10 (9-12)		3/30/2023 11:35:00 AM	3/30/2023
23031055-046A	B-11 (0-3)		3/30/2023 3:15:00 PM	3/30/2023
23031055-046B	B-11 (0-3)		3/30/2023 3:15:00 PM	3/30/2023
23031055-047A	B-11 (3-6)		3/30/2023 3:30:00 PM	3/30/2023
23031055-048A	B-11 (9-12)		3/30/2023 3:45:00 PM	3/30/2023

Client: Brecheisen Engineering, Inc.

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL.

Work Order Sample Summary

Work Order: 23031055 Revision 0

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
23031055-048B	B-11 (9-12)		3/30/2023 3:45:00 PM	3/30/2023
23031055-049A	B-12 (0-3)		3/30/2023 11:45:00 AM	3/30/2023
23031055-049B	B-12 (0-3)		3/30/2023 11:45:00 AM	3/30/2023
23031055-050A	B-12 (3-6)		3/30/2023 11:55:00 AM	3/30/2023
23031055-050B	B-12 (3-6)		3/30/2023 11:55:00 AM	3/30/2023

CLIENT: Brecheisen Engineering, Inc.
Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL.
Work Order: 23031055 Revision 0

CASE NARRATIVE

The metals Matrix Spike/Matrix Spike Duplicate (MS/MSD) prepared from sample B-3 (0-3) (23031055-013) had the following outside control limits:

Barium: 141%/129% (MS/MSD) recovery (QC limits 75-125%)

Lead: 164%/166% (MS/MSD) recovery (QC limits 75-125%)

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-1 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 8:05:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-001

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0067		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0067		mg/Kg-dry	1	4/5/2023
Toluene	0.0073	0.0067		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.020		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.080	0.038		mg/Kg-dry	1	4/6/2023
Acenaphthylene	0.085	0.038		mg/Kg-dry	1	4/6/2023
Anthracene	0.33	0.038		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	1.2	0.038		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	1.3	0.038		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	1.4	0.038		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	0.90	0.038		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	0.96	0.038		mg/Kg-dry	1	4/6/2023
Chrysene	1.2	0.038		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	0.43	0.038		mg/Kg-dry	1	4/6/2023
Fluoranthene	2.3	0.038		mg/Kg-dry	1	4/6/2023
Fluorene	0.13	0.038		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	0.80	0.038		mg/Kg-dry	1	4/6/2023
Naphthalene	0.058	0.038		mg/Kg-dry	1	4/6/2023
Phenanthrene	1.2	0.038		mg/Kg-dry	1	4/6/2023
Pyrene	1.9	0.038		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	9.0	0.98		mg/Kg-dry	10	4/7/2023
Barium	180	0.98		mg/Kg-dry	10	4/7/2023
Cadmium	1.1	0.49		mg/Kg-dry	10	4/7/2023
Chromium	24	0.98		mg/Kg-dry	10	4/7/2023
Lead	180	0.49		mg/Kg-dry	10	4/7/2023
Selenium	ND	0.98		mg/Kg-dry	10	4/7/2023
Silver	ND	0.98	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.080	0.040		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.22			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	14.0	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-1 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 8:15:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-003

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0048		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0048		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0048		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.052	0.041		mg/Kg-dry	1	4/6/2023
Acenaphthylene	0.082	0.041		mg/Kg-dry	1	4/6/2023
Anthracene	0.23	0.041		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	0.82	0.041		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	0.90	0.041		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	0.95	0.041		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	0.61	0.041		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	0.60	0.041		mg/Kg-dry	1	4/6/2023
Chrysene	0.90	0.041		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	0.29	0.041		mg/Kg-dry	1	4/6/2023
Fluoranthene	1.7	0.041		mg/Kg-dry	1	4/6/2023
Fluorene	0.069	0.041		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	0.54	0.041		mg/Kg-dry	1	4/6/2023
Naphthalene	ND	0.041		mg/Kg-dry	1	4/6/2023
Phenanthrene	0.84	0.041		mg/Kg-dry	1	4/6/2023
Pyrene	1.4	0.041		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	7.7	1.1		mg/Kg-dry	10	4/7/2023
Barium	240	1.1		mg/Kg-dry	10	4/7/2023
Cadmium	10	0.56		mg/Kg-dry	10	4/7/2023
Chromium	93	1.1		mg/Kg-dry	10	4/7/2023
Lead	240	0.56		mg/Kg-dry	10	4/7/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/7/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	11.3			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	19.4	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-1 (12-16)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 8:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-005

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/25/2023	Analyst: MDS
Chromium	18	1.0		mg/Kg-dry	10	4/26/2023
Lead	17	0.50		mg/Kg-dry	10	4/26/2023
pH (25 °C)	SW9045C				Prep Date: 4/24/2023	Analyst: BAS
pH	7.89		H	pH Units	1	4/24/2023
Percent Moisture	D2974				Prep Date: 4/25/2023	Analyst: BAS
Percent Moisture	15.9	0.2	*	wt%	1	4/26/2023

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-1 (16-20)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 8:55:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-006

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/12/2023	Analyst: TEM
Acenaphthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Acenaphthylene	ND	0.039		mg/Kg-dry	1	4/13/2023
Anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Chrysene	ND	0.039		mg/Kg-dry	1	4/13/2023
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Fluorene	ND	0.039		mg/Kg-dry	1	4/13/2023
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/13/2023
Phenanthrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Percent Moisture	D2974				Prep Date: 4/12/2023	Analyst: BAS
Percent Moisture	16.3	0.2	*	wt%	1	4/13/2023

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-2 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 12:35:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-008

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0044		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0044		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0044		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.013		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	ND	0.038		mg/Kg-dry	1	4/6/2023
Acenaphthylene	ND	0.038		mg/Kg-dry	1	4/6/2023
Anthracene	ND	0.038		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	0.080	0.038		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	0.10	0.038		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	0.10	0.038		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	0.081	0.038		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	0.076	0.038		mg/Kg-dry	1	4/6/2023
Chrysene	0.10	0.038		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	ND	0.038		mg/Kg-dry	1	4/6/2023
Fluoranthene	0.16	0.038		mg/Kg-dry	1	4/6/2023
Fluorene	ND	0.038		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	0.055	0.038		mg/Kg-dry	1	4/6/2023
Naphthalene	ND	0.038		mg/Kg-dry	1	4/6/2023
Phenanthrene	0.083	0.038		mg/Kg-dry	1	4/6/2023
Pyrene	0.14	0.038		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	10	1.0		mg/Kg-dry	10	4/7/2023
Barium	47	1.0		mg/Kg-dry	10	4/7/2023
Cadmium	ND	0.52		mg/Kg-dry	10	4/7/2023
Chromium	21	1.0		mg/Kg-dry	10	4/7/2023
Lead	30	0.52		mg/Kg-dry	10	4/7/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/7/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.42			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	14.0	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-2 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 12:45:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-010

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0050		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0050		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0050		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	ND	0.041		mg/Kg-dry	1	4/6/2023
Acenaphthylene	ND	0.041		mg/Kg-dry	1	4/6/2023
Anthracene	ND	0.041		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	ND	0.041		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	ND	0.041		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	ND	0.041		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	ND	0.041		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	ND	0.041		mg/Kg-dry	1	4/6/2023
Chrysene	ND	0.041		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	ND	0.041		mg/Kg-dry	1	4/6/2023
Fluoranthene	ND	0.041		mg/Kg-dry	1	4/6/2023
Fluorene	ND	0.041		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	ND	0.041		mg/Kg-dry	1	4/6/2023
Naphthalene	ND	0.041		mg/Kg-dry	1	4/6/2023
Phenanthrene	ND	0.041		mg/Kg-dry	1	4/6/2023
Pyrene	ND	0.041		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	13	1.1		mg/Kg-dry	10	4/7/2023
Barium	64	1.1		mg/Kg-dry	10	4/7/2023
Cadmium	ND	0.55		mg/Kg-dry	10	4/7/2023
Chromium	26	1.1		mg/Kg-dry	10	4/7/2023
Lead	34	0.55		mg/Kg-dry	10	4/7/2023
Selenium	1.3	1.1		mg/Kg-dry	10	4/7/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.045		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	7.43			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	20.5	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-3 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 12:05:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-013

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0049		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0049		mg/Kg-dry	1	4/5/2023
Toluene	0.0085	0.0049		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.014		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	ND	0.036		mg/Kg-dry	1	4/6/2023
Acenaphthylene	ND	0.036		mg/Kg-dry	1	4/6/2023
Anthracene	0.047	0.036		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	0.17	0.036		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	0.18	0.036		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	0.18	0.036		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	0.12	0.036		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	0.14	0.036		mg/Kg-dry	1	4/6/2023
Chrysene	0.19	0.036		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	0.063	0.036		mg/Kg-dry	1	4/6/2023
Fluoranthene	0.32	0.036		mg/Kg-dry	1	4/6/2023
Fluorene	ND	0.036		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	0.11	0.036		mg/Kg-dry	1	4/6/2023
Naphthalene	ND	0.036		mg/Kg-dry	1	4/6/2023
Phenanthrene	0.19	0.036		mg/Kg-dry	1	4/6/2023
Pyrene	0.29	0.036		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	3.0	1.0		mg/Kg-dry	10	4/7/2023
Barium	24	1.0		mg/Kg-dry	10	4/7/2023
Cadmium	ND	0.51		mg/Kg-dry	10	4/7/2023
Chromium	6.2	1.0		mg/Kg-dry	10	4/7/2023
Lead	62	0.51		mg/Kg-dry	10	4/7/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/7/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.045	0.038		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.44			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	9.8	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
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 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 R - RPD outside accepted recovery limits
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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-3 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 12:10:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-014

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0055		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0055		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0055		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.016		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	ND	0.041		mg/Kg-dry	1	4/6/2023
Acenaphthylene	ND	0.041		mg/Kg-dry	1	4/6/2023
Anthracene	0.067	0.041		mg/Kg-dry	1	4/6/2023
Benz(a)anthracene	0.40	0.041		mg/Kg-dry	1	4/6/2023
Benzo(a)pyrene	0.46	0.041		mg/Kg-dry	1	4/6/2023
Benzo(b)fluoranthene	0.53	0.041		mg/Kg-dry	1	4/6/2023
Benzo(g,h,i)perylene	0.38	0.041		mg/Kg-dry	1	4/6/2023
Benzo(k)fluoranthene	0.30	0.041		mg/Kg-dry	1	4/6/2023
Chrysene	0.51	0.041		mg/Kg-dry	1	4/6/2023
Dibenz(a,h)anthracene	0.16	0.041		mg/Kg-dry	1	4/6/2023
Fluoranthene	0.96	0.041		mg/Kg-dry	1	4/6/2023
Fluorene	ND	0.041		mg/Kg-dry	1	4/6/2023
Indeno(1,2,3-cd)pyrene	0.32	0.041		mg/Kg-dry	1	4/6/2023
Naphthalene	ND	0.041		mg/Kg-dry	1	4/6/2023
Phenanthrene	0.43	0.041		mg/Kg-dry	1	4/6/2023
Pyrene	0.76	0.041		mg/Kg-dry	1	4/6/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	16	1.2		mg/Kg-dry	10	4/7/2023
Barium	93	1.2		mg/Kg-dry	10	4/7/2023
Cadmium	ND	0.60		mg/Kg-dry	10	4/7/2023
Chromium	26	1.2		mg/Kg-dry	10	4/7/2023
Lead	72	0.60		mg/Kg-dry	10	4/7/2023
Selenium	1.2	1.2		mg/Kg-dry	10	4/7/2023
Silver	ND	1.2	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.044		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	7.97			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	19.9	0.2	*	wt%	1	4/7/2023

Qualifiers:
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 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
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 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-3 (12-16)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 12:30:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-017

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/12/2023	Analyst: TEM
Acenaphthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Acenaphthylene	ND	0.040		mg/Kg-dry	1	4/13/2023
Anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(a)anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(a)pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(b)fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(g,h,i)perylene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(k)fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Chrysene	ND	0.040		mg/Kg-dry	1	4/13/2023
Dibenz(a,h)anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Fluorene	ND	0.040		mg/Kg-dry	1	4/13/2023
Indeno(1,2,3-cd)pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Naphthalene	ND	0.040		mg/Kg-dry	1	4/13/2023
Phenanthrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/25/2023	Analyst: MMR
Arsenic	9.4	1.2		mg/Kg-dry	10	4/28/2023
Percent Moisture	D2974				Prep Date: 4/12/2023	Analyst: BAS
Percent Moisture	19.2	0.2	*	wt%	1	4/13/2023

Qualifiers:
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 * - Non-accredited parameter

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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-4 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 9:15:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-018

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CBG
Benzene	ND	0.0049		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0049		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0049		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.14	0.040		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.12	0.040		mg/Kg-dry	1	4/7/2023
Anthracene	0.44	0.040		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	1.1	0.040		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	1.3	0.040		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	1.2	0.040		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.75	0.040		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.96	0.040		mg/Kg-dry	1	4/7/2023
Chrysene	1.2	0.040		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.39	0.040		mg/Kg-dry	1	4/7/2023
Fluoranthene	2.2	0.040		mg/Kg-dry	1	4/7/2023
Fluorene	0.17	0.040		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.70	0.040		mg/Kg-dry	1	4/7/2023
Naphthalene	0.10	0.040		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.6	0.040		mg/Kg-dry	1	4/7/2023
Pyrene	1.9	0.040		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 5/2/2023	Analyst: MDS
Arsenic	10	1.1		mg/Kg-dry	10	5/4/2023
Barium	140	1.1		mg/Kg-dry	10	5/4/2023
Cadmium	2.5	0.56		mg/Kg-dry	10	5/4/2023
Chromium	47	1.1		mg/Kg-dry	10	5/4/2023
Lead	260	0.56		mg/Kg-dry	10	5/4/2023
Selenium	ND	1.1		mg/Kg-dry	10	5/4/2023
Silver	ND	1.1	*	mg/Kg-dry	10	5/4/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.13	0.043		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	7.76			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	18.2	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-4 (9-12)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 9:30:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-021

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B			Prep Date: 4/2/2023		Analyst: CDM
Benzene	ND	0.0051		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0051		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0051		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.016		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)			Prep Date: 4/6/2023		Analyst: TEM
Acenaphthene	0.77	0.040		mg/Kg-dry	1	4/7/2023
Acenaphthylene	1.2	0.040		mg/Kg-dry	1	4/7/2023
Anthracene	2.9	0.040		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	5.6	0.20		mg/Kg-dry	5	4/10/2023
Benzo(a)pyrene	6.5	0.20		mg/Kg-dry	5	4/10/2023
Benzo(b)fluoranthene	6.1	0.20		mg/Kg-dry	5	4/10/2023
Benzo(g,h,i)perylene	4.6	0.040		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	4.9	0.040		mg/Kg-dry	1	4/7/2023
Chrysene	6.5	0.20		mg/Kg-dry	5	4/10/2023
Dibenz(a,h)anthracene	2.1	0.040		mg/Kg-dry	1	4/7/2023
Fluoranthene	12	0.20		mg/Kg-dry	5	4/10/2023
Fluorene	1.2	0.040		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	4.2	0.040		mg/Kg-dry	1	4/7/2023
Naphthalene	0.17	0.040		mg/Kg-dry	1	4/7/2023
Phenanthrene	8.6	0.20		mg/Kg-dry	5	4/10/2023
Pyrene	11	0.20		mg/Kg-dry	5	4/10/2023
Metals by ICP/MS	SW6020A (SW3050B)			Prep Date: 5/2/2023		Analyst: MDS
Arsenic	6.6	1.1		mg/Kg-dry	10	5/4/2023
Barium	170	1.1		mg/Kg-dry	10	5/4/2023
Cadmium	1.1	0.55		mg/Kg-dry	10	5/4/2023
Chromium	19	1.1		mg/Kg-dry	10	5/4/2023
Lead	130	0.55		mg/Kg-dry	10	5/4/2023
Selenium	ND	1.1		mg/Kg-dry	10	5/4/2023
Silver	ND	1.1	*	mg/Kg-dry	10	5/4/2023
Mercury	SW7471B			Prep Date: 4/3/2023		Analyst: SH
Mercury	0.074	0.039		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C			Prep Date: 4/5/2023		Analyst: BAS
pH	7.88			pH Units	1	4/5/2023
Percent Moisture	D2974			Prep Date: 4/6/2023		Analyst: RW
Percent Moisture	18.0	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-4 (12-16)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 9:35:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-022

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/12/2023		Analyst: TEM	
Acenaphthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Acenaphthylene	ND	0.040		mg/Kg-dry	1	4/13/2023
Anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benz(a)anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(a)pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(b)fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(g,h,i)perylene	ND	0.040		mg/Kg-dry	1	4/13/2023
Benzo(k)fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Chrysene	ND	0.040		mg/Kg-dry	1	4/13/2023
Dibenz(a,h)anthracene	ND	0.040		mg/Kg-dry	1	4/13/2023
Fluoranthene	ND	0.040		mg/Kg-dry	1	4/13/2023
Fluorene	ND	0.040		mg/Kg-dry	1	4/13/2023
Indeno(1,2,3-cd)pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Naphthalene	ND	0.040		mg/Kg-dry	1	4/13/2023
Phenanthrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Pyrene	ND	0.040		mg/Kg-dry	1	4/13/2023
Metals by ICP/MS	SW6020A (SW3050B)		Prep Date: 4/25/2023		Analyst: MMR	
Chromium	17	1.1		mg/Kg-dry	10	4/28/2023
Lead	16	0.57		mg/Kg-dry	10	4/28/2023
pH (25 °C)	SW9045C		Prep Date: 4/24/2023		Analyst: BAS	
pH	8.15		H	pH Units	1	4/24/2023
Percent Moisture	D2974		Prep Date: 4/12/2023		Analyst: BAS	
Percent Moisture	17.4	0.2	*	wt%	1	4/13/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-4 (16-20)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 9:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-023

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/12/2023	Analyst: TEM
Acenaphthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Acenaphthylene	ND	0.039		mg/Kg-dry	1	4/13/2023
Anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	4/13/2023
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Chrysene	ND	0.039		mg/Kg-dry	1	4/13/2023
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	4/13/2023
Fluoranthene	ND	0.039		mg/Kg-dry	1	4/13/2023
Fluorene	ND	0.039		mg/Kg-dry	1	4/13/2023
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/13/2023
Phenanthrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Pyrene	ND	0.039		mg/Kg-dry	1	4/13/2023
Percent Moisture	D2974				Prep Date: 4/12/2023	Analyst: BAS
Percent Moisture	16.2	0.2	*	wt%	1	4/13/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-5 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 1:00:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-024

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.017		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.096	0.040		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.20	0.040		mg/Kg-dry	1	4/7/2023
Anthracene	0.58	0.040		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	1.6	0.040		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	1.7	0.040		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	1.7	0.040		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	1.1	0.040		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	1.6	0.040		mg/Kg-dry	1	4/7/2023
Chrysene	1.7	0.040		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.54	0.040		mg/Kg-dry	1	4/7/2023
Fluoranthene	2.8	0.040		mg/Kg-dry	1	4/7/2023
Fluorene	0.14	0.040		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	1.0	0.040		mg/Kg-dry	1	4/7/2023
Naphthalene	0.051	0.040		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.4	0.040		mg/Kg-dry	1	4/7/2023
Pyrene	2.4	0.040		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	13	1.1		mg/Kg-dry	10	4/7/2023
Barium	110	1.1		mg/Kg-dry	10	4/7/2023
Cadmium	1.3	0.57		mg/Kg-dry	10	4/7/2023
Chromium	23	1.1		mg/Kg-dry	10	4/7/2023
Lead	180	0.57		mg/Kg-dry	10	4/7/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/7/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.35	0.042		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.16			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	17.4	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-5 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 1:05:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-025

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0075		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0075		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0075		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.023		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.086	0.042		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.042		mg/Kg-dry	1	4/7/2023
Anthracene	0.26	0.042		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.75	0.042		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.79	0.042		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.81	0.042		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.51	0.042		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.51	0.042		mg/Kg-dry	1	4/7/2023
Chrysene	0.80	0.042		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.26	0.042		mg/Kg-dry	1	4/7/2023
Fluoranthene	1.6	0.042		mg/Kg-dry	1	4/7/2023
Fluorene	0.098	0.042		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.46	0.042		mg/Kg-dry	1	4/7/2023
Naphthalene	0.055	0.042		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.1	0.042		mg/Kg-dry	1	4/7/2023
Pyrene	1.4	0.042		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	7.7	1.2		mg/Kg-dry	10	4/7/2023
Barium	280	1.2		mg/Kg-dry	10	4/7/2023
Cadmium	9.4	0.62		mg/Kg-dry	10	4/7/2023
Chromium	24	1.2		mg/Kg-dry	10	4/7/2023
Lead	290	0.62		mg/Kg-dry	10	4/7/2023
Selenium	ND	1.2		mg/Kg-dry	10	4/7/2023
Silver	ND	1.2	*	mg/Kg-dry	10	4/7/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.085	0.043		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.11			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	21.7	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-5 (16-20)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 1:25:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-028

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.014		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	ND	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.039		mg/Kg-dry	1	4/7/2023
Anthracene	ND	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	ND	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	ND	0.039		mg/Kg-dry	1	4/7/2023
Fluorene	ND	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	ND	0.039		mg/Kg-dry	1	4/7/2023
Pyrene	ND	0.039		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/24/2023	Analyst: MDS
Arsenic	7.5	1.1		mg/Kg-dry	10	4/26/2023
Barium	59	1.1		mg/Kg-dry	10	4/26/2023
Cadmium	ND	0.55		mg/Kg-dry	10	4/26/2023
Chromium	21	1.1		mg/Kg-dry	10	4/26/2023
Lead	16	0.55		mg/Kg-dry	10	4/26/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/26/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/26/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.039		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	7.98			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	16.0	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-6 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 1:40:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-029

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0046		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.014		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.061	0.038		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.36	0.038		mg/Kg-dry	1	4/7/2023
Anthracene	0.52	0.038		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	1.6	0.038		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	1.9	0.038		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	2.2	0.038		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	1.2	0.038		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	1.4	0.038		mg/Kg-dry	1	4/7/2023
Chrysene	1.7	0.038		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.61	0.038		mg/Kg-dry	1	4/7/2023
Fluoranthene	2.5	0.038		mg/Kg-dry	1	4/7/2023
Fluorene	0.067	0.038		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	1.1	0.038		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.038		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.87	0.038		mg/Kg-dry	1	4/7/2023
Pyrene	2.2	0.038		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	6.6	1.2		mg/Kg-dry	10	4/8/2023
Barium	92	1.2		mg/Kg-dry	10	4/8/2023
Cadmium	0.59	0.58		mg/Kg-dry	10	4/8/2023
Chromium	12	1.2		mg/Kg-dry	10	4/8/2023
Lead	150	0.58		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.2		mg/Kg-dry	10	4/8/2023
Silver	ND	1.2	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.17	0.039		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.25			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.2	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-6 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 1:45:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-030

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0043		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0043		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0043		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.013		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.16	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.60	0.039		mg/Kg-dry	1	4/7/2023
Anthracene	1.6	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	3.5	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	3.6	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	3.7	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	1.9	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	2.8	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	3.8	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	1.1	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	6.8	0.20		mg/Kg-dry	5	4/10/2023
Fluorene	0.27	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	1.9	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	0.046	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	2.4	0.039		mg/Kg-dry	1	4/7/2023
Pyrene	6.0	0.20		mg/Kg-dry	5	4/10/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	13	1.1		mg/Kg-dry	10	4/8/2023
Barium	160	1.1		mg/Kg-dry	10	4/8/2023
Cadmium	ND	0.57		mg/Kg-dry	10	4/8/2023
Chromium	25	1.1		mg/Kg-dry	10	4/8/2023
Lead	140	0.57		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/8/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.30	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.18			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	16.8	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 10:00:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-031

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.11		mg/Kg-dry	1	4/5/2023
Benzene	ND	0.0073		mg/Kg-dry	1	4/5/2023
Bromodichloromethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
Bromoform	ND	0.0073		mg/Kg-dry	1	4/5/2023
Bromomethane	ND	0.014		mg/Kg-dry	1	4/5/2023
2-Butanone	ND	0.11		mg/Kg-dry	1	4/5/2023
Carbon disulfide	ND	0.073		mg/Kg-dry	1	4/5/2023
Carbon tetrachloride	ND	0.0073		mg/Kg-dry	1	4/5/2023
Chlorobenzene	ND	0.0073		mg/Kg-dry	1	4/5/2023
Chloroethane	ND	0.014		mg/Kg-dry	1	4/5/2023
Chloroform	ND	0.0073		mg/Kg-dry	1	4/5/2023
Chloromethane	ND	0.014		mg/Kg-dry	1	4/5/2023
Dibromochloromethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,1-Dichloroethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,2-Dichloroethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,1-Dichloroethene	ND	0.0073		mg/Kg-dry	1	4/5/2023
cis-1,2-Dichloroethene	ND	0.0073		mg/Kg-dry	1	4/5/2023
trans-1,2-Dichloroethene	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,2-Dichloropropane	ND	0.0073		mg/Kg-dry	1	4/5/2023
cis-1,3-Dichloropropene	ND	0.0029		mg/Kg-dry	1	4/5/2023
trans-1,3-Dichloropropene	ND	0.0029		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0073		mg/Kg-dry	1	4/5/2023
2-Hexanone	ND	0.029		mg/Kg-dry	1	4/5/2023
4-Methyl-2-pentanone	ND	0.029		mg/Kg-dry	1	4/5/2023
Methylene chloride	ND	0.014		mg/Kg-dry	1	4/5/2023
Methyl tert-butyl ether	ND	0.0073		mg/Kg-dry	1	4/5/2023
Styrene	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,1,2,2-Tetrachloroethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
Tetrachloroethene	ND	0.0073		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,1,1-Trichloroethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
1,1,2-Trichloroethane	ND	0.0073		mg/Kg-dry	1	4/5/2023
Trichloroethene	ND	0.0073		mg/Kg-dry	1	4/5/2023
Vinyl chloride	ND	0.0073		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.022		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.052	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.13	0.039		mg/Kg-dry	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 R - RPD outside accepted recovery limits
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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 10:00:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-031

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	0.20	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.74	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.89	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.79	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.57	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.81	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	0.81	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.29	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	1.3	0.039		mg/Kg-dry	1	4/7/2023
Fluorene	0.079	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.52	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.63	0.039		mg/Kg-dry	1	4/7/2023
Pyrene	1.2	0.039		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	9.1	1.1		mg/Kg-dry	10	4/8/2023
Barium	90	1.1		mg/Kg-dry	10	4/8/2023
Cadmium	21	0.57		mg/Kg-dry	10	4/8/2023
Chromium	200	1.1		mg/Kg-dry	10	4/8/2023
Lead	93	0.57		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/8/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.095	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.29			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.2	0.2	*	wt%	1	4/7/2023

Qualifiers:
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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 10:20:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-033

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.081		mg/Kg-dry	1	4/5/2023
Benzene	ND	0.0054		mg/Kg-dry	1	4/5/2023
Bromodichloromethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
Bromoform	ND	0.0054		mg/Kg-dry	1	4/5/2023
Bromomethane	ND	0.011		mg/Kg-dry	1	4/5/2023
2-Butanone	ND	0.081		mg/Kg-dry	1	4/5/2023
Carbon disulfide	ND	0.054		mg/Kg-dry	1	4/5/2023
Carbon tetrachloride	ND	0.0054		mg/Kg-dry	1	4/5/2023
Chlorobenzene	ND	0.0054		mg/Kg-dry	1	4/5/2023
Chloroethane	ND	0.011		mg/Kg-dry	1	4/5/2023
Chloroform	ND	0.0054		mg/Kg-dry	1	4/5/2023
Chloromethane	ND	0.011		mg/Kg-dry	1	4/5/2023
Dibromochloromethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,1-Dichloroethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,2-Dichloroethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,1-Dichloroethene	ND	0.0054		mg/Kg-dry	1	4/5/2023
cis-1,2-Dichloroethene	ND	0.0054		mg/Kg-dry	1	4/5/2023
trans-1,2-Dichloroethene	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,2-Dichloropropane	ND	0.0054		mg/Kg-dry	1	4/5/2023
cis-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/5/2023
trans-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/5/2023
Ethylbenzene	ND	0.0054		mg/Kg-dry	1	4/5/2023
2-Hexanone	ND	0.022		mg/Kg-dry	1	4/5/2023
4-Methyl-2-pentanone	ND	0.022		mg/Kg-dry	1	4/5/2023
Methylene chloride	ND	0.011		mg/Kg-dry	1	4/5/2023
Methyl tert-butyl ether	ND	0.0054		mg/Kg-dry	1	4/5/2023
Styrene	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,1,2,2-Tetrachloroethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
Tetrachloroethene	ND	0.0054		mg/Kg-dry	1	4/5/2023
Toluene	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,1,1-Trichloroethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
1,1,2-Trichloroethane	ND	0.0054		mg/Kg-dry	1	4/5/2023
Trichloroethene	ND	0.0054		mg/Kg-dry	1	4/5/2023
Vinyl chloride	ND	0.0054		mg/Kg-dry	1	4/5/2023
Xylenes, Total	ND	0.016		mg/Kg-dry	1	4/5/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.63	0.40		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.40		mg/Kg-dry	1	4/7/2023

Qualifiers:
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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 10:20:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-033

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	1.6	0.40		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	4.2	0.40		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	4.5	0.40		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	4.4	0.40		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	2.9	0.40		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	3.6	0.40		mg/Kg-dry	1	4/7/2023
Chrysene	4.6	0.40		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	1.4	0.40		mg/Kg-dry	1	4/7/2023
Fluoranthene	10	0.40		mg/Kg-dry	1	4/7/2023
Fluorene	0.74	0.40		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	2.6	0.40		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.40		mg/Kg-dry	1	4/7/2023
Phenanthrene	7.4	0.40		mg/Kg-dry	1	4/7/2023
Pyrene	8.1	0.40		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	7.2	1.0		mg/Kg-dry	10	4/8/2023
Barium	300	1.0		mg/Kg-dry	10	4/8/2023
Cadmium	15	0.51		mg/Kg-dry	10	4/8/2023
Chromium	150	1.0		mg/Kg-dry	10	4/8/2023
Lead	150	0.51		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/8/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.15	0.042		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	9.75			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	17.0	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (16-20)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:00:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-036

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM
Acetone	ND	0.067		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0045		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0045		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.0089		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.067		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.045		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0045		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0045		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.0089		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0045		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.0089		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0045		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0045		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0045		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0018		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0018		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0045		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.018		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.018		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.0089		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0045		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0045		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0045		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0045		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0045		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.013		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS		SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM
Acenaphthene	ND	0.040		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.040		mg/Kg-dry	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
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 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-7 (16-20)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:00:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-036

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	ND	0.040		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	ND	0.040		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	ND	0.040		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	ND	0.040		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	ND	0.040		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	ND	0.040		mg/Kg-dry	1	4/7/2023
Chrysene	ND	0.040		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	ND	0.040		mg/Kg-dry	1	4/7/2023
Fluoranthene	ND	0.040		mg/Kg-dry	1	4/7/2023
Fluorene	ND	0.040		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	ND	0.040		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.040		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.072	0.040		mg/Kg-dry	1	4/7/2023
Pyrene	ND	0.040		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/24/2023	Analyst: MDS
Arsenic	11	1.0		mg/Kg-dry	10	4/26/2023
Barium	55	1.0		mg/Kg-dry	10	4/26/2023
Cadmium	ND	0.52		mg/Kg-dry	10	4/26/2023
Chromium	20	1.0		mg/Kg-dry	10	4/26/2023
Lead	16	0.52		mg/Kg-dry	10	4/26/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/26/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/26/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.040		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.30			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	17.6	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-8 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 4:20:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-037

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Benzene	ND	0.0053		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0053		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0053		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.49	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.17	0.039		mg/Kg-dry	1	4/7/2023
Anthracene	1.9	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	4.1	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	4.0	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	3.3	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	2.2	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	3.1	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	4.1	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	1.1	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	9.1	0.19		mg/Kg-dry	5	4/10/2023
Fluorene	0.56	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	2.1	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	0.15	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	6.5	0.19		mg/Kg-dry	5	4/10/2023
Pyrene	7.7	0.19		mg/Kg-dry	5	4/10/2023
Metals by ICP/MS	SW6020A (SW3050B)		Prep Date: 4/6/2023		Analyst: MDS	
Arsenic	9.8	1.0		mg/Kg-dry	10	4/8/2023
Barium	210	1.0		mg/Kg-dry	10	4/8/2023
Cadmium	9.9	0.50		mg/Kg-dry	10	4/8/2023
Chromium	99	1.0		mg/Kg-dry	10	4/8/2023
Lead	600	0.50		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/8/2023
Silver	1.4	1.0	*	mg/Kg-dry	10	4/8/2023
TCLP Metals by ICP/MS	SW1311/6020A (SW3005A)		Prep Date: 5/9/2023		Analyst: MDS	
Lead	0.011	0.0050		mg/L	5	5/9/2023
Mercury	SW7471B		Prep Date: 4/3/2023		Analyst: SH	
Mercury	0.11	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C		Prep Date: 4/5/2023		Analyst: BAS	
pH	7.69			pH Units	1	4/5/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-8 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 4:20:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-037

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.1	0.2	*	wt%	1	4/7/2023

Qualifiers:

ND - Not Detected at the Reporting Limit
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 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-8 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 4:30:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-038

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0059		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0059		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0059		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.018		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.054	0.038		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.052	0.038		mg/Kg-dry	1	4/7/2023
Anthracene	0.21	0.038		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.64	0.038		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.75	0.038		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.70	0.038		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.48	0.038		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.54	0.038		mg/Kg-dry	1	4/7/2023
Chrysene	0.69	0.038		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.25	0.038		mg/Kg-dry	1	4/7/2023
Fluoranthene	1.3	0.038		mg/Kg-dry	1	4/7/2023
Fluorene	0.058	0.038		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.44	0.038		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.038		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.72	0.038		mg/Kg-dry	1	4/7/2023
Pyrene	1.0	0.038		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 5/2/2023	Analyst: MDS
Arsenic	5.4	1.1		mg/Kg-dry	10	5/4/2023
Barium	160	1.1		mg/Kg-dry	10	5/4/2023
Cadmium	15	0.53		mg/Kg-dry	10	5/4/2023
Chromium	48	1.1		mg/Kg-dry	10	5/4/2023
Lead	120	0.53		mg/Kg-dry	10	5/4/2023
Selenium	ND	1.1		mg/Kg-dry	10	5/4/2023
Silver	ND	1.1	*	mg/Kg-dry	10	5/4/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.23	0.039		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.44			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.3	0.2	*	wt%	1	4/7/2023

Qualifiers:
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 HT - Sample received past holding time
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 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-9 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 2:00:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-039

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0088		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0088		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0088		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.026		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.11	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.70	0.039		mg/Kg-dry	1	4/7/2023
Anthracene	0.92	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	3.1	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	3.7	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	3.6	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	2.2	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	3.1	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	3.3	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	1.1	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	4.1	0.039		mg/Kg-dry	1	4/7/2023
Fluorene	0.14	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	2.1	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	0.070	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.4	0.039		mg/Kg-dry	1	4/7/2023
Pyrene	3.8	0.039		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	13	1.1		mg/Kg-dry	10	4/8/2023
Barium	250	1.1		mg/Kg-dry	10	4/8/2023
Cadmium	2.8	0.57		mg/Kg-dry	10	4/8/2023
Chromium	36	1.1		mg/Kg-dry	10	4/8/2023
Lead	320	0.57		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/8/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.14	0.038		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.26			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.7	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-9 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 2:30:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-041

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/2/2023	Analyst: CDM
Benzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.017		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Acenaphthene	0.043	0.040		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.040		mg/Kg-dry	1	4/7/2023
Anthracene	0.10	0.040		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.31	0.040		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.31	0.040		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.37	0.040		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.23	0.040		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.21	0.040		mg/Kg-dry	1	4/7/2023
Chrysene	0.32	0.040		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.12	0.040		mg/Kg-dry	1	4/7/2023
Fluoranthene	0.66	0.040		mg/Kg-dry	1	4/7/2023
Fluorene	0.044	0.040		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.21	0.040		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.040		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.50	0.040		mg/Kg-dry	1	4/7/2023
Pyrene	0.51	0.040		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	4.0	1.1		mg/Kg-dry	10	4/8/2023
Barium	130	1.1		mg/Kg-dry	10	4/8/2023
Cadmium	ND	0.54		mg/Kg-dry	10	4/8/2023
Chromium	21	1.1		mg/Kg-dry	10	4/8/2023
Lead	13	0.54		mg/Kg-dry	10	4/8/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/8/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/8/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.040		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	11.1			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	18.2	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:10:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-042

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.10		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0067		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0067		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.013		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.10		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.067		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0067		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0067		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.013		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0067		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.013		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0067		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0067		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0067		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0027		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0027		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0067		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.027		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.027		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.013		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0067		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0067		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0067		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0067		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0067		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.020		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.039	0.039		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.072	0.039		mg/Kg-dry	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:10:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-042

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	0.13	0.039		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.50	0.039		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.58	0.039		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.61	0.039		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.38	0.039		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.42	0.039		mg/Kg-dry	1	4/7/2023
Chrysene	0.56	0.039		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.20	0.039		mg/Kg-dry	1	4/7/2023
Fluoranthene	0.93	0.039		mg/Kg-dry	1	4/7/2023
Fluorene	ND	0.039		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.34	0.039		mg/Kg-dry	1	4/7/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/7/2023
Phenanthrene	0.51	0.039		mg/Kg-dry	1	4/7/2023
Pyrene	0.80	0.039		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	5.0	1.1		mg/Kg-dry	10	4/13/2023
Barium	75	1.1		mg/Kg-dry	10	4/13/2023
Cadmium	5.1	0.54		mg/Kg-dry	10	4/13/2023
Chromium	47	1.1		mg/Kg-dry	10	4/13/2023
Lead	140	0.54		mg/Kg-dry	10	4/13/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/13/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/13/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.043		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.76			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	15.5	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
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Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:25:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-044

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.084		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0056		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0056		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.011		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.084		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.056		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0056		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0056		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.011		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0056		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.011		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0056		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0056		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0056		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0056		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.022		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.022		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.011		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0056		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0056		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0056		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0056		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0056		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.016		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.075	0.036		mg/Kg-dry	1	4/7/2023
Acenaphthylene	ND	0.036		mg/Kg-dry	1	4/7/2023

Qualifiers:
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 HT - Sample received past holding time
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 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (6-9)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:25:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-044

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS						
	SW8270C (SW3550B)			Prep Date: 4/6/2023		Analyst: TEM
Anthracene	0.28	0.036		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	0.80	0.036		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	0.82	0.036		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	0.80	0.036		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.51	0.036		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	0.55	0.036		mg/Kg-dry	1	4/7/2023
Chrysene	0.84	0.036		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.26	0.036		mg/Kg-dry	1	4/7/2023
Fluoranthene	1.8	0.036		mg/Kg-dry	1	4/7/2023
Fluorene	0.095	0.036		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.47	0.036		mg/Kg-dry	1	4/7/2023
Naphthalene	0.045	0.036		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.2	0.036		mg/Kg-dry	1	4/7/2023
Pyrene	1.4	0.036		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS						
	SW6020A (SW3050B)			Prep Date: 4/6/2023		Analyst: MDS
Arsenic	4.2	0.94		mg/Kg-dry	10	4/13/2023
Barium	100	0.94		mg/Kg-dry	10	4/13/2023
Cadmium	ND	0.47		mg/Kg-dry	10	4/13/2023
Chromium	13	0.94		mg/Kg-dry	10	4/13/2023
Lead	50	0.47		mg/Kg-dry	10	4/13/2023
Selenium	ND	0.94		mg/Kg-dry	10	4/13/2023
Silver	ND	0.94	*	mg/Kg-dry	10	4/13/2023
Mercury						
	SW7471B			Prep Date: 4/3/2023		Analyst: SH
Mercury	ND	0.037		mg/Kg-dry	1	4/5/2023
pH (25 °C)						
	SW9045C			Prep Date: 4/5/2023		Analyst: BAS
pH	11.2			pH Units	1	4/5/2023
Percent Moisture						
	D2974			Prep Date: 4/6/2023		Analyst: RW
Percent Moisture	9.1	0.2	*	wt%	1	4/7/2023

Qualifiers:
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 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
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Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 3:15:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-046

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.10		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0069		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0069		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.014		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.10		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.069		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0069		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0069		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.014		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0069		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.014		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0069		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0069		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0069		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0028		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0028		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0069		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.028		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.028		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.014		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0069		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0069		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0069		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0069		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0069		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.021		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.22	0.041		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.48	0.041		mg/Kg-dry	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 3:15:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-046

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	1.0	0.041		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	2.9	0.041		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	3.2	0.041		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	3.1	0.041		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	1.9	0.041		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	2.6	0.041		mg/Kg-dry	1	4/7/2023
Chrysene	3.1	0.041		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	1.0	0.041		mg/Kg-dry	1	4/7/2023
Fluoranthene	5.3	0.21		mg/Kg-dry	5	4/10/2023
Fluorene	0.29	0.041		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	1.9	0.041		mg/Kg-dry	1	4/7/2023
Naphthalene	0.28	0.041		mg/Kg-dry	1	4/7/2023
Phenanthrene	3.5	0.041		mg/Kg-dry	1	4/7/2023
Pyrene	4.6	0.041		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	11	1.2		mg/Kg-dry	10	4/13/2023
Barium	300	1.2		mg/Kg-dry	10	4/13/2023
Cadmium	1.7	0.60		mg/Kg-dry	10	4/13/2023
Chromium	33	1.2		mg/Kg-dry	10	4/13/2023
Lead	240	0.60		mg/Kg-dry	10	4/13/2023
Selenium	ND	1.2		mg/Kg-dry	10	4/13/2023
Silver	ND	1.2	*	mg/Kg-dry	10	4/13/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.10	0.040		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	9.11			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	20.4	0.2	*	wt%	1	4/7/2023

Qualifiers:
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STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 3:30:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-047

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	SW6020A (SW3050B)		Prep Date: 4/25/2023		Analyst: MMR	
Arsenic	7.3	1.0		mg/Kg-dry	10	4/28/2023
Barium	150	1.0		mg/Kg-dry	10	4/28/2023
Cadmium	9.5	0.51		mg/Kg-dry	10	4/28/2023
Chromium	140	1.0		mg/Kg-dry	10	4/28/2023
Lead	150	0.51		mg/Kg-dry	10	4/28/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/28/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/28/2023
Mercury	SW7471B		Prep Date: 4/24/2023		Analyst: SH	
Mercury	0.13	0.019		mg/Kg-dry	1	4/25/2023
pH (25 °C)	SW9045C		Prep Date: 4/24/2023		Analyst: BAS	
pH	8.42		H	pH Units	1	4/24/2023
Percent Moisture	D2974		Prep Date: 4/25/2023		Analyst: BAS	
Percent Moisture	15.6	0.2	*	wt%	1	4/26/2023

Qualifiers:

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (9-12)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 3:45:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-048

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM	
Acetone	ND	0.097		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0064		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0064		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.012		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.097		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.064		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0064		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0064		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.012		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0064		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.012		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0064		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0064		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0064		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0026		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0026		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0064		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.026		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.026		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.012		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0064		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0064		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0064		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0064		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0064		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.020		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.22	0.041		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.10	0.041		mg/Kg-dry	1	4/7/2023

Qualifiers:
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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (9-12)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 3:45:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-048

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	1.1	0.041		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	2.6	0.041		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	2.4	0.041		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	2.2	0.041		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	1.4	0.041		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	1.8	0.041		mg/Kg-dry	1	4/7/2023
Chrysene	2.6	0.041		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.71	0.041		mg/Kg-dry	1	4/7/2023
Fluoranthene	7.0	0.20		mg/Kg-dry	5	4/10/2023
Fluorene	0.29	0.041		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	1.3	0.041		mg/Kg-dry	1	4/7/2023
Naphthalene	0.089	0.041		mg/Kg-dry	1	4/7/2023
Phenanthrene	3.4	0.041		mg/Kg-dry	1	4/7/2023
Pyrene	4.5	0.041		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	5.3	1.1		mg/Kg-dry	10	4/13/2023
Barium	180	1.1		mg/Kg-dry	10	4/13/2023
Cadmium	0.79	0.54		mg/Kg-dry	10	4/13/2023
Chromium	17	1.1		mg/Kg-dry	10	4/13/2023
Lead	120	0.54		mg/Kg-dry	10	4/13/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/13/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/13/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	ND	0.041		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	11.5			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	19.3	0.2	*	wt%	1	4/7/2023

Qualifiers:
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Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-049

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		SW5035/8260B		Prep Date: 4/2/2023		Analyst: CDM
Acetone	0.18	0.087		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0057		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.011		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.087		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.057		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0057		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.011		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0057		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.011		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0057		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0057		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0057		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0023		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0023		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0057		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.023		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.023		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.011		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0057		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0057		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0057		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0057		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.017		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS		SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM
Acenaphthene	0.51	0.038		mg/Kg-dry	1	4/7/2023
Acenaphthylene	1.1	0.038		mg/Kg-dry	1	4/7/2023

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Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (0-3)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-049

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	2.8	0.038		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	7.7	0.19		mg/Kg-dry	5	4/10/2023
Benzo(a)pyrene	7.8	0.19		mg/Kg-dry	5	4/10/2023
Benzo(b)fluoranthene	7.2	0.19		mg/Kg-dry	5	4/10/2023
Benzo(g,h,i)perylene	4.1	0.038		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	7.5	0.19		mg/Kg-dry	5	4/10/2023
Chrysene	8.0	0.19		mg/Kg-dry	5	4/10/2023
Dibenz(a,h)anthracene	2.2	0.038		mg/Kg-dry	1	4/7/2023
Fluoranthene	14	0.19		mg/Kg-dry	5	4/10/2023
Fluorene	0.66	0.038		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	4.0	0.038		mg/Kg-dry	1	4/7/2023
Naphthalene	0.20	0.038		mg/Kg-dry	1	4/7/2023
Phenanthrene	7.5	0.19		mg/Kg-dry	5	4/10/2023
Pyrene	12	0.19		mg/Kg-dry	5	4/10/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	14	1.0		mg/Kg-dry	10	4/13/2023
Barium	270	1.0		mg/Kg-dry	10	4/13/2023
Cadmium	1.9	0.51		mg/Kg-dry	10	4/13/2023
Chromium	21	1.0		mg/Kg-dry	10	4/13/2023
Lead	330	0.51		mg/Kg-dry	10	4/13/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/13/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/13/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.14	0.040		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	8.49			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	12.8	0.2	*	wt%	1	4/7/2023

Qualifiers:
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Date Reported: May 10, 2023

ANALYTICAL RESULTS

Date Printed: May 10, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:55:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-050

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B		Prep Date: 4/2/2023		Analyst: CBG	
Acetone	ND	0.091		mg/Kg-dry	1	4/6/2023
Benzene	ND	0.0060		mg/Kg-dry	1	4/6/2023
Bromodichloromethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
Bromoform	ND	0.0060		mg/Kg-dry	1	4/6/2023
Bromomethane	ND	0.012		mg/Kg-dry	1	4/6/2023
2-Butanone	ND	0.091		mg/Kg-dry	1	4/6/2023
Carbon disulfide	ND	0.060		mg/Kg-dry	1	4/6/2023
Carbon tetrachloride	ND	0.0060		mg/Kg-dry	1	4/6/2023
Chlorobenzene	ND	0.0060		mg/Kg-dry	1	4/6/2023
Chloroethane	ND	0.012		mg/Kg-dry	1	4/6/2023
Chloroform	ND	0.0060		mg/Kg-dry	1	4/6/2023
Chloromethane	ND	0.012		mg/Kg-dry	1	4/6/2023
Dibromochloromethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,2-Dichloroethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,1-Dichloroethene	ND	0.0060		mg/Kg-dry	1	4/6/2023
cis-1,2-Dichloroethene	ND	0.0060		mg/Kg-dry	1	4/6/2023
trans-1,2-Dichloroethene	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,2-Dichloropropane	ND	0.0060		mg/Kg-dry	1	4/6/2023
cis-1,3-Dichloropropene	ND	0.0024		mg/Kg-dry	1	4/6/2023
trans-1,3-Dichloropropene	ND	0.0024		mg/Kg-dry	1	4/6/2023
Ethylbenzene	ND	0.0060		mg/Kg-dry	1	4/6/2023
2-Hexanone	ND	0.024		mg/Kg-dry	1	4/6/2023
4-Methyl-2-pentanone	ND	0.024		mg/Kg-dry	1	4/6/2023
Methylene chloride	ND	0.012		mg/Kg-dry	1	4/6/2023
Methyl tert-butyl ether	ND	0.0060		mg/Kg-dry	1	4/6/2023
Styrene	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,1,2,2-Tetrachloroethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
Tetrachloroethene	ND	0.0060		mg/Kg-dry	1	4/6/2023
Toluene	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,1,1-Trichloroethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
1,1,2-Trichloroethane	ND	0.0060		mg/Kg-dry	1	4/6/2023
Trichloroethene	ND	0.0060		mg/Kg-dry	1	4/6/2023
Vinyl chloride	ND	0.0060		mg/Kg-dry	1	4/6/2023
Xylenes, Total	ND	0.018		mg/Kg-dry	1	4/6/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)		Prep Date: 4/6/2023		Analyst: TEM	
Acenaphthene	0.13	0.041		mg/Kg-dry	1	4/7/2023
Acenaphthylene	0.087	0.041		mg/Kg-dry	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: May 10, 2023

Date Printed: May 10, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (3-6)

Work Order: 23031055 Revision 0

Collection Date: 3/30/2023 11:55:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago,

Matrix: Soil

Lab ID: 23031055-050

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/6/2023	Analyst: TEM
Anthracene	0.50	0.041		mg/Kg-dry	1	4/7/2023
Benz(a)anthracene	1.3	0.041		mg/Kg-dry	1	4/7/2023
Benzo(a)pyrene	1.5	0.041		mg/Kg-dry	1	4/7/2023
Benzo(b)fluoranthene	1.4	0.041		mg/Kg-dry	1	4/7/2023
Benzo(g,h,i)perylene	0.94	0.041		mg/Kg-dry	1	4/7/2023
Benzo(k)fluoranthene	1.1	0.041		mg/Kg-dry	1	4/7/2023
Chrysene	1.5	0.041		mg/Kg-dry	1	4/7/2023
Dibenz(a,h)anthracene	0.47	0.041		mg/Kg-dry	1	4/7/2023
Fluoranthene	2.8	0.041		mg/Kg-dry	1	4/7/2023
Fluorene	0.14	0.041		mg/Kg-dry	1	4/7/2023
Indeno(1,2,3-cd)pyrene	0.85	0.041		mg/Kg-dry	1	4/7/2023
Naphthalene	0.19	0.041		mg/Kg-dry	1	4/7/2023
Phenanthrene	1.7	0.041		mg/Kg-dry	1	4/7/2023
Pyrene	2.3	0.041		mg/Kg-dry	1	4/7/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/6/2023	Analyst: MDS
Arsenic	7.2	1.1		mg/Kg-dry	10	4/13/2023
Barium	440	1.1		mg/Kg-dry	10	4/13/2023
Cadmium	0.98	0.56		mg/Kg-dry	10	4/13/2023
Chromium	29	1.1		mg/Kg-dry	10	4/13/2023
Lead	290	0.56		mg/Kg-dry	10	4/13/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/13/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/13/2023
Mercury	SW7471B				Prep Date: 4/3/2023	Analyst: SH
Mercury	0.080	0.044		mg/Kg-dry	1	4/5/2023
pH (25 °C)	SW9045C				Prep Date: 4/5/2023	Analyst: BAS
pH	9.16			pH Units	1	4/5/2023
Percent Moisture	D2974				Prep Date: 4/6/2023	Analyst: RW
Percent Moisture	20.5	0.2	*	wt%	1	4/7/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis

2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
 e-mail address: STATinfo@STATAnalysis.com

CHAIN OF CUSTODY RECORD

N^o: # **936458** Page: **1** of **3**

Company: Brecheisen Engineering, Inc.
 Project Number: 20-AISELTS-0001 Client Tracking No.:
 Project Name: 11201-19 S. Michigan
 Project Location: Chicago, IL
 Sampler(s): Thomas Brecheisen
 Report To: Thomas Brecheisen Phone: 773-334-3944
 Fax: 844-731-6259
 e-mail: tm@brecheisen.com

QC Level: 1 2 3 4

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	Lab No.:	am/pm
B-1 (0-3)	3/30/23	8:05	S		✓	F	4	001	
B-1 (3-6)	3/30/23	8:10	S		✓	A	1	002	
B-1 (6-9)	3/30/23	8:15	S		✓	F	4	003	
B-1 (9-12)	3/30/23	8:25	S		✓	A	1	004	
B-1 (12-16)	3/30/23	8:45	S		✓	F	4	005	
B-1 (16-20)	3/30/23	8:55	S		✓	A	1	006	
B-1 (20-24)	3/30/23	9:05	S		✓	F	4	007	
B-2 (0-3)	3/30/23	12:35	S		✓	A	1	008	
B-2 (3-6)	3/30/23	12:40	S		✓	F	4	009	
B-2 (6-9)	3/30/23	12:45	S		✓	A	1	010	
B-2 (9-12)	3/30/23	12:50	S		✓	F	4	011	
B-2 (12-16)	3/30/23	12:55	S		✓	A	1	012	
B-3 (0-3)	3/30/23	12:05	S		✓	F	4	013	
B-3 (3-6)	3/30/23	12:10	S		✓	A	1	014	
B-3 (6-9)	3/30/23	12:15	S		✓	F	4	015	
B-3 (9-12)	3/30/23	12:20	S		✓	A	1	016	
B-3 (12-16)	3/30/23	12:30	S		✓	F	4	017	
B-4 (0-3)	3/30/23	9:15	S		✓	A	1	018	
B-4 (3-6)	3/30/23	9:20	S		✓	F	4	019	
B-4 (6-9)	3/30/23	9:25	S		✓	A	1	020	

BETX
 PNHs
 RCRA metals/pH

Quote No.:
 P.O. No.:
 Turn Around Time (Days):
 1 2 3 4 5-7 10
 Results Needed:

Additional Information:
 Lab No.:
 001
 Hold
 002
 Hold
 003
 Hold
 004
 Hold
 005
 Hold
 006
 Hold
 007
 Hold
 008
 Hold
 009
 Hold
 010
 Hold
 011
 Hold
 012
 Hold
 013
 Hold
 014
 Hold
 015
 Hold
 016
 Hold
 017
 Hold
 018
 Hold
 019
 Hold
 020
 Hold

Laboratory Work Order No.:
 23031055
 Received on Ice: Yes No
 Temperature: 2.9 °C

Comments: Detection limits must meet MDLs specified in 35 IAC 742.
 Preservation Code: A = None B = HNO₃ C = NaOH
 D = H₂SO₄ E = HCl F = 5035/EnCore G = Other

Relinquished by: (Signature) Thomas A. Brecheisen Date/Time: 3-30-23 19:15
 Received by: (Signature) _____ Date/Time: 3-30-23 19:15
 Relinquished by: (Signature) _____ Date/Time: _____
 Received by: (Signature) _____ Date/Time: _____
 Relinquished by: (Signature) _____ Date/Time: _____
 Received by: (Signature) _____ Date/Time: _____

CHAIN OF CUSTODY RECORD

Company: Brecheisen Engineering, Inc.
 Project Number: 20-ADSEHS-0001 Client Tracking No.:
 Project Name: 11201-19 S. Michigan
 Project Location: Chicago, IL
 Sampler(s): Thomas Brecheisen
 Report To: Thomas Brecheisen Phone: 773-334-3524
 QC Level: 1 2 3 4

Fax: 844-731-6255
 e-mail: tom.brecheisen@brecheisen.com

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preser	No. of Containers	Lab No.:
B-9 (6-9)	3/30/23	14:30	S		✓	F	4	041
B-10 (6-3)	3/30/23	11:10	S		✓	F	4	042
B-10 (3-6)	3/30/23	11:15	S		✓	A	1	043
B-10 (6-9)	3/30/23	11:25	S		✓	F	4	044
B-10 (9-12)	3/30/23	11:35	S		✓	F	1	045
B-11 (6-3)	3/30/23	15:15	S		✓	F	4	046
B-11 (3-6)	3/30/23	15:30	S		✓	A	1	047
B-11 (9-12)	3/30/23	15:45	S		✓	F	4	048
B-12 (0-3)	3/30/23	11:45	S		✓	F	4	049
B-12 (3-6)	3/30/23	11:55	S		✓	F	4	050

Additional Information:	Lab No.:
	041
	042
Hold	043
	044
Hold	045
	046
	047
	048
	049
	050

Turn Around Time (Days):	1	2	3	4	5	7	10
Results Needed:							

Quote No.:

P.O. No.:

Relinquished by: (Signature) Thomas A. Brecheisen Date/Time: 3-30-23 19:15
 Received by: (Signature) _____ Date/Time: 3-30-23 19:15
 Relinquished by: (Signature) _____ Date/Time: _____
 Received by: (Signature) _____ Date/Time: _____
 Relinquished by: (Signature) _____ Date/Time: _____
 Received by: (Signature) _____ Date/Time: _____

Comments: Detection limits must meet MDLs specified in 35 IAL 742.

Laboratory Work Order No.: 23031055

Received on Ice: Yes No
 Temperature: 29 °C

Preservation Code: A = None B = HNO₃ C = NaOH
 D = H₂SO₄ E = HCl F = 5035/EnCore G = Other

Sample Receipt Checklist

Client Name BRECHEISEN

Date and Time Received: 3/30/2023 7:15:00 PM

Work Order Number 23031055

Received by: JMH

Checklist completed by: MM 3/30/2023
Signature Date

Reviewed by: JRP 3/31/2023
initials Date

Matrix: Carrier name: Client Delivered

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels/containers? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container or Temp Blank temperature in compliance? Yes No Temperature 2.9 °C
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Samples pH checked? Yes No Checked by: _____
- Water - Samples properly preserved? Yes No pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

Craig Chawla

From: Tom Brecheisen <tom@beichicago.com>
Sent: Tuesday, April 11, 2023 6:21 PM
To: Craig Chawla
Subject: Re: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL. 23031055

Good afternoon Craig,

Can you please analyze the following samples for PNAs:

B-1 (16-20)
B-3 (12-16)
B-4 (12-16) and (16-20)

Thank you and regards,

Tom

Brecheisen Engineering, Inc.
5430 N. Sheridan Rd., Suite 807
Chicago, Illinois 60640
773-334-3944
tom@beichicago.com

Craig Chawla

From: Tom Brecheisen <tom@beichicago.com>
Sent: Friday, April 21, 2023 6:48 AM
To: Craig Chawla
Subject: Re: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL. 23031055

Good morning Craig,

1. Please re-analyze the following samples for Arsenic:

B-5 (16-20)

B-7 (16-20)

2. Please analyze the following soil samples previously submitted on Hold:

B-1 (12-16): Chromium, Lead and pH

B-3 (12-16): Arsenic

B-4 (12-16): Chromium, Lead and pH

B-11 (3-6): RCRA metals and pH

Please let me know if you have any questions.

Thank you and regards,

Tom

On Apr 13, 2023, at 4:00 PM, Craig Chawla <cchawla@statanalysis.com> wrote:

Hi Tom,

The complete data set, included added PNAs are attached. Let me know if you need to add any additional analysis. If not, I will issue the final report.

Craig Chawla
STAT Analysis
(312)733-0551

The information contained in this e-mail message and any attachments is confidential information intended only for the use of the individual or entities named above. If the reader of this message is not the intended recipient you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by e-mail at the originating address.

From: Craig Chawla
Sent: Thursday, April 13, 2023 1:24 PM
To: 'Tom Brecheisen'
Subject: RE: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL. 23031055

Hi Tom,

Craig Chawla

From: Tom Brecheisen <tom@beichicago.com>
Sent: Friday, May 05, 2023 5:47 PM
To: Craig Chawla
Subject: Re: 20-AISEHS-0001, 11201-19 S. Michigan, Chicago, IL. 23031055

Hi Craig,

Please analyze sample B-8 (0-3) for TCLP Lead.

Thank you and regards,

Tom

Brecheisen Engineering, Inc.
5430 N. Sheridan Rd., Suite 807
Chicago, Illinois 60640
773-334-3944
tom@beichicago.com

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

April 27, 2023

Brecheisen Engineering, Inc.
5430 N. Sheridan Rd., Suite 807
Chicago, IL 60640
Telephone: (312) 659-0052
Fax: (773) 472-8301

Analytical Report for STAT Work Order: 23040534 Revision 0

RE: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chicago, IL. 60628

Dear Brecheisen Engineering, Inc.:

STAT Analysis received 14 samples for the referenced project on 4/14/2023 5:25:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAP standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,



Craig Chawla
Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples as received and tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

Client: Brecheisen Engineering, Inc.**Project:** 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chicag**Work Order Sample Summary****Work Order:** 23040534 Revision 0

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
23040534-001A	B-10 (12-16)		4/14/2023 8:30:00 AM	4/14/2023
23040534-002A	B-10 (16-20)		4/14/2023 8:40:00 AM	4/14/2023
23040534-003A	B-10 (20-24)		4/14/2023 8:45:00 AM	4/14/2023
23040534-003B	B-10 (20-24)		4/14/2023 8:45:00 AM	4/14/2023
23040534-004A	B-12 (9-12)		4/14/2023 10:45:00 AM	4/14/2023
23040534-004B	B-12 (9-12)		4/14/2023 10:45:00 AM	4/14/2023
23040534-005A	B-8 (0-3)		4/14/2023 12:20:00 PM	4/14/2023
23040534-006A	B-8 (3-6)		4/14/2023 12:25:00 PM	4/14/2023
23040534-006B	B-8 (3-6)		4/14/2023 12:25:00 PM	4/14/2023
23040534-007A	B-8 (6-9)		4/14/2023 12:35:00 PM	4/14/2023
23040534-008A	B-8 (9-12)		4/14/2023 12:50:00 PM	4/14/2023
23040534-009A	B-11 (12-16)		4/14/2023 2:35:00 PM	4/14/2023
23040534-010A	B-11 (16-20)		4/14/2023 2:40:00 PM	4/14/2023
23040534-010B	B-11 (16-20)		4/14/2023 2:40:00 PM	4/14/2023
23040534-011A	B-11 (20-24)		4/14/2023 2:50:00 PM	4/14/2023
23040534-011B	B-11 (20-24)		4/14/2023 2:50:00 PM	4/14/2023
23040534-012A	B-6 (6-9)		4/14/2023 3:15:00 PM	4/14/2023
23040534-013A	B-6 (9-12)		4/14/2023 3:25:00 PM	4/14/2023
23040534-013B	B-6 (9-12)		4/14/2023 3:25:00 PM	4/14/2023
23040534-014A	B-6 (12-16)		4/14/2023 3:40:00 PM	4/14/2023
23040534-014B	B-6 (12-16)		4/14/2023 3:40:00 PM	4/14/2023

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (20-24)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 8:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-003

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		SW5035/8260B		Prep Date: 4/21/2023		Analyst: CBG
Acetone	ND	0.076		mg/Kg-dry	1	4/23/2023
Benzene	ND	0.0051		mg/Kg-dry	1	4/23/2023
Bromodichloromethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
Bromoform	ND	0.0051		mg/Kg-dry	1	4/23/2023
Bromomethane	ND	0.010		mg/Kg-dry	1	4/23/2023
2-Butanone	ND	0.076		mg/Kg-dry	1	4/23/2023
Carbon disulfide	ND	0.051		mg/Kg-dry	1	4/23/2023
Carbon tetrachloride	ND	0.0051		mg/Kg-dry	1	4/23/2023
Chlorobenzene	ND	0.0051		mg/Kg-dry	1	4/23/2023
Chloroethane	ND	0.010		mg/Kg-dry	1	4/23/2023
Chloroform	ND	0.0051		mg/Kg-dry	1	4/23/2023
Chloromethane	ND	0.010		mg/Kg-dry	1	4/23/2023
Dibromochloromethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,1-Dichloroethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,2-Dichloroethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,1-Dichloroethene	ND	0.0051		mg/Kg-dry	1	4/23/2023
cis-1,2-Dichloroethene	ND	0.0051		mg/Kg-dry	1	4/23/2023
trans-1,2-Dichloroethene	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,2-Dichloropropane	ND	0.0051		mg/Kg-dry	1	4/23/2023
cis-1,3-Dichloropropene	ND	0.0020		mg/Kg-dry	1	4/23/2023
trans-1,3-Dichloropropene	ND	0.0020		mg/Kg-dry	1	4/23/2023
Ethylbenzene	ND	0.0051		mg/Kg-dry	1	4/23/2023
2-Hexanone	ND	0.020		mg/Kg-dry	1	4/23/2023
4-Methyl-2-pentanone	ND	0.020		mg/Kg-dry	1	4/23/2023
Methylene chloride	ND	0.010		mg/Kg-dry	1	4/23/2023
Methyl tert-butyl ether	ND	0.0051		mg/Kg-dry	1	4/23/2023
Styrene	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,1,2,2-Tetrachloroethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
Tetrachloroethene	ND	0.0051		mg/Kg-dry	1	4/23/2023
Toluene	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,1,1-Trichloroethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
1,1,2-Trichloroethane	ND	0.0051		mg/Kg-dry	1	4/23/2023
Trichloroethene	ND	0.0051		mg/Kg-dry	1	4/23/2023
Vinyl chloride	ND	0.0051		mg/Kg-dry	1	4/23/2023
Xylenes, Total	ND	0.015		mg/Kg-dry	1	4/23/2023
Semivolatile Organic Compounds by GC/MS		SW8270C (SW3550B)		Prep Date: 4/20/2023		Analyst: TEM
Acenaphthene	ND	0.039		mg/Kg-dry	1	4/21/2023
Acenaphthylene	ND	0.039		mg/Kg-dry	1	4/21/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

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Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-10 (20-24)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 8:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-003

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS						
	SW8270C (SW3550B)			Prep Date: 4/20/2023		Analyst: TEM
Anthracene	ND	0.039		mg/Kg-dry	1	4/21/2023
Benz(a)anthracene	0.081	0.039		mg/Kg-dry	1	4/21/2023
Benzo(a)pyrene	0.076	0.039		mg/Kg-dry	1	4/21/2023
Benzo(b)fluoranthene	0.068	0.039		mg/Kg-dry	1	4/21/2023
Benzo(g,h,i)perylene	0.053	0.039		mg/Kg-dry	1	4/21/2023
Benzo(k)fluoranthene	0.055	0.039		mg/Kg-dry	1	4/21/2023
Chrysene	0.094	0.039		mg/Kg-dry	1	4/21/2023
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	4/21/2023
Fluoranthene	0.20	0.039		mg/Kg-dry	1	4/21/2023
Fluorene	ND	0.039		mg/Kg-dry	1	4/21/2023
Indeno(1,2,3-cd)pyrene	0.046	0.039		mg/Kg-dry	1	4/21/2023
Naphthalene	ND	0.039		mg/Kg-dry	1	4/21/2023
Phenanthrene	0.19	0.039		mg/Kg-dry	1	4/21/2023
Pyrene	0.16	0.039		mg/Kg-dry	1	4/21/2023
Metals by ICP/MS						
	SW6020A (SW3050B)			Prep Date: 4/19/2023		Analyst: MDS
Arsenic	6.9	1.1		mg/Kg-dry	10	4/24/2023
Barium	38	1.1		mg/Kg-dry	10	4/24/2023
Cadmium	ND	0.55		mg/Kg-dry	10	4/24/2023
Chromium	17	1.1		mg/Kg-dry	10	4/24/2023
Lead	12	0.55		mg/Kg-dry	10	4/24/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/24/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/24/2023
Mercury						
	SW7471B			Prep Date: 4/17/2023		Analyst: SH
Mercury	ND	0.022		mg/Kg-dry	1	4/18/2023
pH (25 °C)						
	SW9045C			Prep Date: 4/20/2023		Analyst: BAS
pH	8.10			pH Units	1	4/20/2023
Percent Moisture						
	D2974			Prep Date: 4/21/2023		Analyst: BAS
Percent Moisture	16.3	0.2	*	wt%	1	4/24/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
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 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: April 27, 2023

ANALYTICAL RESULTS

Date Printed: April 27, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (9-12)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 10:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-004

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		SW5035/8260B		Prep Date: 4/21/2023		Analyst: CBG
Acetone	ND	0.083		mg/Kg-dry	1	4/23/2023
Benzene	ND	0.0055		mg/Kg-dry	1	4/23/2023
Bromodichloromethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
Bromoform	ND	0.0055		mg/Kg-dry	1	4/23/2023
Bromomethane	ND	0.011		mg/Kg-dry	1	4/23/2023
2-Butanone	ND	0.083		mg/Kg-dry	1	4/23/2023
Carbon disulfide	ND	0.055		mg/Kg-dry	1	4/23/2023
Carbon tetrachloride	ND	0.0055		mg/Kg-dry	1	4/23/2023
Chlorobenzene	ND	0.0055		mg/Kg-dry	1	4/23/2023
Chloroethane	ND	0.011		mg/Kg-dry	1	4/23/2023
Chloroform	ND	0.0055		mg/Kg-dry	1	4/23/2023
Chloromethane	ND	0.011		mg/Kg-dry	1	4/23/2023
Dibromochloromethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,1-Dichloroethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,2-Dichloroethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,1-Dichloroethene	ND	0.0055		mg/Kg-dry	1	4/23/2023
cis-1,2-Dichloroethene	ND	0.0055		mg/Kg-dry	1	4/23/2023
trans-1,2-Dichloroethene	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,2-Dichloropropane	ND	0.0055		mg/Kg-dry	1	4/23/2023
cis-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/23/2023
trans-1,3-Dichloropropene	ND	0.0022		mg/Kg-dry	1	4/23/2023
Ethylbenzene	ND	0.0055		mg/Kg-dry	1	4/23/2023
2-Hexanone	ND	0.022		mg/Kg-dry	1	4/23/2023
4-Methyl-2-pentanone	ND	0.022		mg/Kg-dry	1	4/23/2023
Methylene chloride	ND	0.011		mg/Kg-dry	1	4/23/2023
Methyl tert-butyl ether	ND	0.0055		mg/Kg-dry	1	4/23/2023
Styrene	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,1,2,2-Tetrachloroethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
Tetrachloroethene	ND	0.0055		mg/Kg-dry	1	4/23/2023
Toluene	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,1,1-Trichloroethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
1,1,2-Trichloroethane	ND	0.0055		mg/Kg-dry	1	4/23/2023
Trichloroethene	ND	0.0055		mg/Kg-dry	1	4/23/2023
Vinyl chloride	ND	0.0055		mg/Kg-dry	1	4/23/2023
Xylenes, Total	ND	0.017		mg/Kg-dry	1	4/23/2023
Semivolatile Organic Compounds by GC/MS		SW8270C (SW3550B)		Prep Date: 4/20/2023		Analyst: TEM
Acenaphthene	ND	0.038		mg/Kg-dry	1	4/22/2023
Acenaphthylene	ND	0.038		mg/Kg-dry	1	4/22/2023

Qualifiers:
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 R - RPD outside accepted recovery limits
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 H - Holding time exceeded

STAT Analysis Corporation

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Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-12 (9-12)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 10:45:00 AM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-004

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/20/2023	Analyst: TEM
Anthracene	ND	0.038		mg/Kg-dry	1	4/22/2023
Benz(a)anthracene	ND	0.038		mg/Kg-dry	1	4/22/2023
Benzo(a)pyrene	ND	0.038		mg/Kg-dry	1	4/22/2023
Benzo(b)fluoranthene	ND	0.038		mg/Kg-dry	1	4/22/2023
Benzo(g,h,i)perylene	ND	0.038		mg/Kg-dry	1	4/22/2023
Benzo(k)fluoranthene	ND	0.038		mg/Kg-dry	1	4/22/2023
Chrysene	ND	0.038		mg/Kg-dry	1	4/22/2023
Dibenz(a,h)anthracene	ND	0.038		mg/Kg-dry	1	4/22/2023
Fluoranthene	ND	0.038		mg/Kg-dry	1	4/22/2023
Fluorene	ND	0.038		mg/Kg-dry	1	4/22/2023
Indeno(1,2,3-cd)pyrene	ND	0.038		mg/Kg-dry	1	4/22/2023
Naphthalene	ND	0.038		mg/Kg-dry	1	4/22/2023
Phenanthrene	0.045	0.038		mg/Kg-dry	1	4/22/2023
Pyrene	ND	0.038		mg/Kg-dry	1	4/22/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/19/2023	Analyst: MDS
Arsenic	9.5	1.0		mg/Kg-dry	10	4/24/2023
Barium	41	1.0		mg/Kg-dry	10	4/24/2023
Cadmium	ND	0.51		mg/Kg-dry	10	4/24/2023
Chromium	17	1.0		mg/Kg-dry	10	4/24/2023
Lead	14	0.51		mg/Kg-dry	10	4/24/2023
Selenium	ND	1.0		mg/Kg-dry	10	4/24/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/24/2023
Mercury	SW7471B				Prep Date: 4/17/2023	Analyst: SH
Mercury	ND	0.020		mg/Kg-dry	1	4/18/2023
pH (25 °C)	SW9045C				Prep Date: 4/20/2023	Analyst: BAS
pH	9.73			pH Units	1	4/20/2023
Percent Moisture	D2974				Prep Date: 4/21/2023	Analyst: BAS
Percent Moisture	13.9	0.2	*	wt%	1	4/24/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
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Date Reported: April 27, 2023

ANALYTICAL RESULTS

Date Printed: April 27, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-8 (3-6)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 12:25:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-006

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	SW6020A (SW3050B)			Prep Date: 4/19/2023		Analyst: MDS
Arsenic	7.9	1.1		mg/Kg-dry	10	4/24/2023
Barium	200	1.1		mg/Kg-dry	10	4/24/2023
Cadmium	0.75	0.55		mg/Kg-dry	10	4/24/2023
Chromium	20	1.1		mg/Kg-dry	10	4/24/2023
Lead	240	0.55		mg/Kg-dry	10	4/24/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/24/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/24/2023
Mercury	SW7471B			Prep Date: 4/17/2023		Analyst: SH
Mercury	0.29	0.023		mg/Kg-dry	1	4/18/2023
pH (25 °C)	SW9045C			Prep Date: 4/20/2023		Analyst: BAS
pH	7.85			pH Units	1	4/20/2023
Percent Moisture	D2974			Prep Date: 4/21/2023		Analyst: BAS
Percent Moisture	20.2	0.2	*	wt%	1	4/24/2023

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

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Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: April 27, 2023

ANALYTICAL RESULTS

Date Printed: April 27, 2023

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-8 (6-9)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 12:35:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-007

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	SW6020A (SW3050B)			Prep Date: 4/24/2023		Analyst: MDS
Arsenic	7.7	1.1		mg/Kg-dry	10	4/25/2023
Barium	280	1.1		mg/Kg-dry	10	4/25/2023
Cadmium	1.1	0.55		mg/Kg-dry	10	4/25/2023
Chromium	25	1.1		mg/Kg-dry	10	4/25/2023
Lead	210	0.55		mg/Kg-dry	10	4/25/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/25/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/25/2023
Mercury	SW7471B			Prep Date: 4/24/2023		Analyst: SH
Mercury	0.11	0.021		mg/Kg-dry	1	4/25/2023
pH (25 °C)	SW9045C			Prep Date: 4/24/2023		Analyst: BAS
pH	7.88			pH Units	1	4/24/2023
Percent Moisture	D2974			Prep Date: 4/24/2023		Analyst: BAS
Percent Moisture	18.8	0.2	*	wt%	1	4/25/2023

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

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Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (16-20)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 2:40:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-010

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		SW5035/8260B		Prep Date: 4/21/2023		Analyst: ERP
Acetone	ND	0.070		mg/Kg-dry	1	4/24/2023
Benzene	ND	0.0047		mg/Kg-dry	1	4/24/2023
Bromodichloromethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
Bromoform	ND	0.0047		mg/Kg-dry	1	4/24/2023
Bromomethane	ND	0.0093		mg/Kg-dry	1	4/24/2023
2-Butanone	ND	0.070		mg/Kg-dry	1	4/24/2023
Carbon disulfide	ND	0.047		mg/Kg-dry	1	4/24/2023
Carbon tetrachloride	ND	0.0047		mg/Kg-dry	1	4/24/2023
Chlorobenzene	ND	0.0047		mg/Kg-dry	1	4/24/2023
Chloroethane	ND	0.0093		mg/Kg-dry	1	4/24/2023
Chloroform	ND	0.0047		mg/Kg-dry	1	4/24/2023
Chloromethane	ND	0.0093		mg/Kg-dry	1	4/24/2023
Dibromochloromethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,1-Dichloroethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,2-Dichloroethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,1-Dichloroethene	ND	0.0047		mg/Kg-dry	1	4/24/2023
cis-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	4/24/2023
trans-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,2-Dichloropropane	ND	0.0047		mg/Kg-dry	1	4/24/2023
cis-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	4/24/2023
trans-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	4/24/2023
Ethylbenzene	ND	0.0047		mg/Kg-dry	1	4/24/2023
2-Hexanone	ND	0.019		mg/Kg-dry	1	4/24/2023
4-Methyl-2-pentanone	ND	0.019		mg/Kg-dry	1	4/24/2023
Methylene chloride	ND	0.0093		mg/Kg-dry	1	4/24/2023
Methyl tert-butyl ether	ND	0.0047		mg/Kg-dry	1	4/24/2023
Styrene	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,1,2,2-Tetrachloroethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
Tetrachloroethene	ND	0.0047		mg/Kg-dry	1	4/24/2023
Toluene	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,1,1-Trichloroethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
1,1,2-Trichloroethane	ND	0.0047		mg/Kg-dry	1	4/24/2023
Trichloroethene	ND	0.0047		mg/Kg-dry	1	4/24/2023
Vinyl chloride	ND	0.0047		mg/Kg-dry	1	4/24/2023
Xylenes, Total	ND	0.014		mg/Kg-dry	1	4/24/2023
Semivolatile Organic Compounds by GC/MS		SW8270C (SW3550B)		Prep Date: 4/20/2023		Analyst: TEM
Acenaphthene	ND	0.037		mg/Kg-dry	1	4/24/2023
Acenaphthylene	ND	0.037		mg/Kg-dry	1	4/24/2023

Qualifiers:
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Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-11 (16-20)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 2:40:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-010

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/20/2023	Analyst: TEM
Anthracene	ND	0.037		mg/Kg-dry	1	4/24/2023
Benz(a)anthracene	ND	0.037		mg/Kg-dry	1	4/24/2023
Benzo(a)pyrene	ND	0.037		mg/Kg-dry	1	4/24/2023
Benzo(b)fluoranthene	ND	0.037		mg/Kg-dry	1	4/24/2023
Benzo(g,h,i)perylene	ND	0.037		mg/Kg-dry	1	4/24/2023
Benzo(k)fluoranthene	ND	0.037		mg/Kg-dry	1	4/24/2023
Chrysene	ND	0.037		mg/Kg-dry	1	4/24/2023
Dibenz(a,h)anthracene	ND	0.037		mg/Kg-dry	1	4/24/2023
Fluoranthene	ND	0.037		mg/Kg-dry	1	4/24/2023
Fluorene	ND	0.037		mg/Kg-dry	1	4/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.037		mg/Kg-dry	1	4/24/2023
Naphthalene	ND	0.037		mg/Kg-dry	1	4/24/2023
Phenanthrene	ND	0.037		mg/Kg-dry	1	4/24/2023
Pyrene	ND	0.037		mg/Kg-dry	1	4/24/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/19/2023	Analyst: MDS
Arsenic	6.8	1.1		mg/Kg-dry	10	4/24/2023
Barium	47	1.1		mg/Kg-dry	10	4/24/2023
Cadmium	ND	0.53		mg/Kg-dry	10	4/24/2023
Chromium	18	1.1		mg/Kg-dry	10	4/24/2023
Lead	12	0.53		mg/Kg-dry	10	4/24/2023
Selenium	ND	1.1		mg/Kg-dry	10	4/24/2023
Silver	ND	1.1	*	mg/Kg-dry	10	4/24/2023
Mercury	SW7471B				Prep Date: 4/17/2023	Analyst: SH
Mercury	ND	0.021		mg/Kg-dry	1	4/18/2023
pH (25 °C)	SW9045C				Prep Date: 4/20/2023	Analyst: BAS
pH	8.59			pH Units	1	4/20/2023
Percent Moisture	D2974				Prep Date: 4/21/2023	Analyst: BAS
Percent Moisture	13.0	0.2	*	wt%	1	4/24/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
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 B - Analyte detected in the associated Method Blank
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 * - Non-accredited parameter

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 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

Date Reported: April 27, 2023

Date Printed: April 27, 2023

ANALYTICAL RESULTS

Client: Brecheisen Engineering, Inc.

Client Sample ID: B-6 (9-12)

Work Order: 23040534 Revision 0

Collection Date: 4/14/2023 3:25:00 PM

Project: 20-AISEHS-0001, 11201-19 S. Michigan Ave., Chi

Matrix: Soil

Lab ID: 23040534-013

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW5035/8260B				Prep Date: 4/21/2023	Analyst: CBG
Benzene	ND	0.0048		mg/Kg-dry	1	4/23/2023
Ethylbenzene	ND	0.0048		mg/Kg-dry	1	4/23/2023
Toluene	ND	0.0048		mg/Kg-dry	1	4/23/2023
Xylenes, Total	ND	0.014		mg/Kg-dry	1	4/23/2023
Semivolatile Organic Compounds by GC/MS	SW8270C (SW3550B)				Prep Date: 4/20/2023	Analyst: DM
Acenaphthene	ND	0.038		mg/Kg-dry	1	4/24/2023
Acenaphthylene	ND	0.038		mg/Kg-dry	1	4/24/2023
Anthracene	ND	0.038		mg/Kg-dry	1	4/24/2023
Benz(a)anthracene	ND	0.038		mg/Kg-dry	1	4/24/2023
Benzo(a)pyrene	ND	0.038		mg/Kg-dry	1	4/24/2023
Benzo(b)fluoranthene	ND	0.038		mg/Kg-dry	1	4/24/2023
Benzo(g,h,i)perylene	ND	0.038		mg/Kg-dry	1	4/24/2023
Benzo(k)fluoranthene	ND	0.038		mg/Kg-dry	1	4/24/2023
Chrysene	ND	0.038		mg/Kg-dry	1	4/24/2023
Dibenz(a,h)anthracene	ND	0.038		mg/Kg-dry	1	4/24/2023
Fluoranthene	ND	0.038		mg/Kg-dry	1	4/24/2023
Fluorene	ND	0.038		mg/Kg-dry	1	4/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.038		mg/Kg-dry	1	4/24/2023
Naphthalene	ND	0.038		mg/Kg-dry	1	4/24/2023
Phenanthrene	ND	0.038		mg/Kg-dry	1	4/24/2023
Pyrene	ND	0.038		mg/Kg-dry	1	4/24/2023
Metals by ICP/MS	SW6020A (SW3050B)				Prep Date: 4/19/2023	Analyst: MDS
Arsenic	12	1.0		mg/Kg-dry	10	4/24/2023
Barium	25	1.0		mg/Kg-dry	10	4/24/2023
Cadmium	ND	0.52		mg/Kg-dry	10	4/24/2023
Chromium	20	1.0		mg/Kg-dry	10	4/24/2023
Lead	17	0.52		mg/Kg-dry	10	4/24/2023
Selenium	1.0	1.0		mg/Kg-dry	10	4/24/2023
Silver	ND	1.0	*	mg/Kg-dry	10	4/24/2023
Mercury	SW7471B				Prep Date: 4/17/2023	Analyst: SH
Mercury	ND	0.020		mg/Kg-dry	1	4/18/2023
pH (25 °C)	SW9045C				Prep Date: 4/20/2023	Analyst: BAS
pH	8.12			pH Units	1	4/20/2023
Percent Moisture	D2974				Prep Date: 4/21/2023	Analyst: BAS
Percent Moisture	15.6	0.2	*	wt%	1	4/24/2023

Qualifiers:
 ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time
 * - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H - Holding time exceeded

Company: Brechen Engineering, Inc. Client Tracking No.:
 Project Number: 20-APSEHS-0001
 Project Name: 11201-19 S. Michigan Ave.
 Project Location: Chicago IL 60628
 Sampler(s): Tom Brechen
 Report To: Tom Brechen Phone: 777-334-3944
 Fax: 844-731-6259
 e-mail: tom@brecheneng.com

QC Level:	1	2	3	4	Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers
					B-10 (12-16)	4/14/23	8:30	S		✓	A	1
					B-10 (16-20)	4/14/23	8:40	S		✓	A	1
					B-10 (20-24)	4/14/23	8:45	S		✓	F	4
					B-12 (9-12)	4/14/23	10:45	S		✓	F	4
					B-8 (0-3)	4/14/23	12:20	S		✓	A	1
					B-8 (3-6)	4/14/23	12:25	S		✓	F	4
					B-8 (6-9)	4/14/23	12:35	S		✓	A	1
					B-8 (9-12)	4/14/23	12:50	S		✓	A	1
					B-11 (12-16)	4/14/23	14:35	S		✓	A	1
					B-11 (16-20)	4/14/23	14:40	S		✓	F	4
					B-11 (20-24)	4/14/23	14:50	S		✓	F	4
					B-6 (6-9)	4/14/23	15:15	S		✓	A	1
					B-6 (9-12)	4/14/23	15:25	S		✓	F	4
					B-6 (12-16)	4/14/23	15:40	S		✓	F	4

Quote No.:	P.O. No.:	Turn Around Time (Days):	Results Needed:	Additional Information:	Lab No.:
		1 2 3 4 (5-7) 10	4 / 21 / 23 am/pm		001
					002
					003
					004
					005
					006
					007
					008
					009
					010
					011
					012
					013
					014

Additional Information: REDA matrix / PH
BTEX
PNH
VOCs

Relinquished by: (Signature) Thomas A. Brechen Date/Time: 4-14-23 17:25
 Received by: (Signature) MA Date/Time: 4/14/2023 17:25
 Relinquished by: (Signature)
 Received by: (Signature)
 Relinquished by: (Signature)
 Received by: (Signature)

Comments: Detection Limits must meet MDLs specified in TPO.
 Preservation Code: A = None B = HNO₃ C = NaOH
 D = H₂SO₄ E = HCl F = 5035/EnCore G = Other

Laboratory Work Order No.: 23040534
 Received on Ice: Yes No
 Temperature: 2.2 °C

Sample Receipt Checklist

Client Name **BRECHEISEN**

Date and Time Received: **4/14/2023 5:25:00 PM**

Work Order Number **23040534**

Received by: **MRH**

Checklist completed by: *MRH* 4-14-2023
Signature Date

Reviewed by: *MRH* 4/18/2023
Initials Date

Matrix: _____ Carrier name Client Delivered

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels/containers? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container or Temp Blank temperature in compliance? Yes No Temperature **2.2 °C**
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Samples pH checked? Yes No Checked by: _____
- Water - Samples properly preserved? Yes No pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

APPENDIX F

Groundwater Analytical Results



GRACE ANALYTICAL LAB, INC.

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IL ELAP / NELAC Accreditation # 100246

April 27, 2023

Tom Brecheisen
Brecheisen Engineering, Inc.
1700 N. North Park Ave, S-B
Chicago, IL 60614

Project ID: 20-AISEHS-0001-S.Michigan
Grace Analytical Job ID: 3042002

The above referenced project was analyzed as directed on the enclosed Chain of Custody record. Analyses were performed in accordance with requirements of 35 IAC 186(Accreditation #100246) and within holding time. Quality control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference.

Request for duplications or reproductions of these analytical reports must be made in writing to GAL and signed by an authorized agent. The analytical results relate only to the samples analyzed.

GAL seeks your feedback, both positive and negative, on our performance. Please contact us for a copy of our feedback form or submit your comments to us at feedback@gracelabinc.com.

Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (708) 449-9449 or e-mail tim@gracelabinc.com.

Sincerely,

Tim Dombai
Laboratory Director
Grace Analytical Lab, Inc.





GRACE ANALYTICAL LAB, INC.

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IL ELAP / NELAC Accreditation # 100246

Brecheisen Engineering, Inc.
1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TMW-1	3042002-01	Water	04/20/23 07:00	04/20/23 12:15
TMW-2	3042002-02	Water	04/20/23 07:30	04/20/23 12:15
TMW-3	3042002-03	Water	04/20/23 08:00	04/20/23 12:15

CASE NARRATIVES



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Brecheisen Engineering, Inc.
1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-1

Lab Sample ID: 3042002-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Volatile Organic Compounds (GC/MS)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,1,1-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromo-3-chloropropane (DBCP)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloropropane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Butanone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Hexanone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Acetone	ND	100	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Benzene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromodichloromethane	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromoform	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromomethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon disulfide	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon Tetrachloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chlorobenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroform	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Dibromochloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Ethylbenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl Isobutyl Ketone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methylene Chloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl-tert-Butyl Ether	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Styrene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Tetrachloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Toluene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Trichloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Vinyl chloride	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Xylenes, total	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	



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Brecheisen Engineering, Inc.
1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-1

Lab Sample ID: 3042002-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
Acenaphthene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Acenaphthylene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Anthracene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) anthracene	ND	0.10	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) pyrene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (b) fluoranthene	ND	0.18	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (g,h,i) perylene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (k) fluoranthene	ND	0.17	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Chrysene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Dibenz (a,h) anthracene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluoranthene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluorene	ND	2.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Naphthalene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Phenanthrene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Pyrene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	

First Environmental Laboratories Inc.

Total Mercury

Mercury	ND	0.0005	mg/L	1	04/20/23	04/25/23	7470A	
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Total Metals

Arsenic	ND	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Barium	0.028	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Cadmium	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Chromium	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Lead	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Selenium	ND	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Silver	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	



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1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-2

Lab Sample ID: 3042002-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Volatile Organic Compounds (GC/MS)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,1,1-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromo-3-chloropropane (DBCP)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloropropane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Butanone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Hexanone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Acetone	ND	100	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Benzene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromodichloromethane	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromoform	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromomethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon disulfide	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon Tetrachloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chlorobenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroform	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Dibromochloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Ethylbenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl Isobutyl Ketone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methylene Chloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl-tert-Butyl Ether	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Styrene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Tetrachloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Toluene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Trichloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Vinyl chloride	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Xylenes, total	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	



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1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-2

Lab Sample ID: 3042002-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
Acenaphthene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Acenaphthylene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Anthracene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) anthracene	ND	0.10	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) pyrene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (b) fluoranthene	ND	0.18	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (g,h,i) perylene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (k) fluoranthene	ND	0.17	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Chrysene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Dibenz (a,h) anthracene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluoranthene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluorene	ND	2.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Naphthalene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Phenanthrene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Pyrene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	

First Environmental Laboratories Inc.

Total Mercury

Mercury	ND	0.0005	mg/L	1	04/20/23	04/25/23	7470A	
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Total Metals

Arsenic	ND	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Barium	0.101	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Cadmium	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Chromium	0.040	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Lead	0.300	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Selenium	ND	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Silver	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	



GRACE ANALYTICAL LAB, INC.

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IL ELAP / NELAC Accreditation # 100246

Brecheisen Engineering, Inc.
1700 N. North Park Ave, S-B
Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-3

Lab Sample ID: 3042002-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Volatile Organic Compounds (GC/MS)

1,1,1-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1,2-Trichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,1-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromo-3-chloropropane (DBCP)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dibromoethane (EDB)	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
1,2-Dichloropropane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Butanone	10	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
2-Hexanone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Acetone	ND	100	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Benzene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromodichloromethane	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromoform	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Bromomethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon disulfide	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Carbon Tetrachloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chlorobenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloroform	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Chloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
cis-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Dibromochloromethane	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Ethylbenzene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl Isobutyl Ketone	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methylene Chloride	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Methyl-tert-Butyl Ether	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Styrene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Tetrachloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Toluene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,2-Dichloroethylene	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	
trans-1,3-Dichloropropylene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Trichloroethene	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Vinyl chloride	ND	2	ug/L	1	04/24/23	04/24/23	EPA 8260C	
Xylenes, total	ND	5	ug/L	1	04/24/23	04/24/23	EPA 8260C	



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Chicago IL, 60614

Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Client Sample ID: TMW-3

Lab Sample ID: 3042002-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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Grace Analytical Lab, Inc.

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
Acenaphthene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Acenaphthylene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Anthracene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) anthracene	ND	0.10	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (a) pyrene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (b) fluoranthene	ND	0.18	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (g,h,i) perylene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Benzo (k) fluoranthene	ND	0.17	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Chrysene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Dibenz (a,h) anthracene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluoranthene	ND	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Fluorene	ND	2.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.30	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Naphthalene	ND	1.00	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Phenanthrene	ND	0.50	ug/L	1	04/24/23	04/24/23	EPA 8270D	
Pyrene	0.28	0.20	ug/L	1	04/24/23	04/24/23	EPA 8270D	

First Environmental Laboratories Inc.

Total Mercury

Mercury	ND	0.0005	mg/L	1	04/20/23	04/25/23	7470A	
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Total Metals

Arsenic	ND	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Barium	0.277	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Cadmium	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Chromium	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Lead	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	
Selenium	0.017	0.01	mg/L	1	04/26/23	04/27/23	6010C	
Silver	ND	0.005	mg/L	1	04/26/23	04/27/23	6010C	



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Project Name: 11201-19 S. Michigan
Project Number: 20-AISEHS-0001-S.Michigan
Project Manager: Tom Brecheisen

SN: 2023427165819
Reported By: TD
04/27/23 16:58

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

Grace Analytical lab, inc.

5300-B McDermott Dr. Berkeley, IL 60163 . Tel. (708) 449-9449 . Fax (708) 449-3663

SAMPLE/COOLER RECEIPT FORM

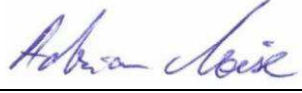
GAL JOB ID#: 3042002

Client Name: Brecheisen Engineering, Inc.

Cooler Received/Opened: 4/20/2023 at 12:15

Project ID: 20-AISEHS-0001-S. Michigan

Signed by:



Log-In Personnel Signature

- | | Yes | No | NA |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Temperature of Cooler when triaged: <u>3.8 C</u> | | | |
| 2. Were custody seals on outside of cooler?... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Were custody seals on containers intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If YES: Were the seals intact, signed, and dated correctly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Were Chain of Custody form inside cooler? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Were Chain of Custody form properly filled out (ink, signed, etc)?. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Did you sign the Chain of Custody form in the appropriate place? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Was there packing material used | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If YES: <input type="checkbox"/> Bubblewrap <input type="checkbox"/> Peanuts <input type="checkbox"/> Vermiculite <input type="checkbox"/> Other <input type="checkbox"/> None | | | |
| 8. Cooling process: <input checked="" type="checkbox"/> Ice <input type="checkbox"/> Icepack <input type="checkbox"/> Ice(direct contact) <input type="checkbox"/> Dry ice <input type="checkbox"/> other <input type="checkbox"/> None | | | |
| 9. Did all containers arrive in good condition (unbroken)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Were all container labels complete (ID #, data, signed, preserv., etc | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Did all container labels and tags agree with Chain of Custody form | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Were correct containers used for the analysis requested | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. a. Were Water VOA vials received | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Was there any observable head space present in any VOA vial | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14. Was sufficient amount of sample sent in each container | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Were correct preservatives used | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If not, record _____ | | | |
| 16. Was residual chlorine present | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 17. Indicate the Airbill Tracking Number and Name of Courier below:
<input type="checkbox"/> Fed-Ex <input type="checkbox"/> UPS <input type="checkbox"/> Velocity <input type="checkbox"/> Airborne <input type="checkbox"/> Route <input type="checkbox"/> Misc. <input checked="" type="checkbox"/> Hand delivered <input type="checkbox"/> Picked Up | | | |
| 18. If a Non-Conformance exists, record reason: _____ | | | |