

### LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

# Former Pleviak Elementary School Property 304 East Grand Avenue Lake Villa, Illinois

### Prepared for:

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## **TABLE OF CONTENTS**

1.0	EXECUTIVE SUMMARY		
2.0	INTRODU	JCTION	4
3.0	LIMITED	PHASE II ENVIRONMENTAL SITE ASSESSMENT	7
3.1 3.2	CURRE	NT/FUTURE SITE OPERATIONS	7
4.0	TRUE NO	ORTH SITE INVESTIGATION ACTIVITIES	9
	DESCRI METHO 1 SOIL SA 2 GROUN 3 SOIL GA	E UTILITY LOCATE	9 9 10
4.5		CTIVITY DOCUMENTATION	
5.0	DATA CO	DLLECTION QUALITY ASSURANCE	16
5.2. 5.2.	GENER  1 EQUIPM  2 SAMPLE  3 SAMPLE	PUALITY OBJECTIVES	16 16 17
6.0	DATA EV	ALUATION AND ENDANGERMENT ASSESSMENT	19
6.1 6.2 6.3	GROUN	NALYTICAL DATA EVALUATION DWATER ANALYTICAL DATA EVALUATION AS ANALYTICAL DATA EVALUATION	19
7.0	FINDING	S AND CONCLUSIONS	22
FIGU	IRES		
Fig Fig	ure 1 ure 2 ure 3 ure 4	Site Location Map Site and Surrounding Land Use Map Phase I ESA Recognized Environmental Conditions Map Site Investigation Map	
TAB	LES		
	ble 1 ble 2	Summary of Soil Analytical Results – Volatile Organic Compounds (VOCs) Summary of Soil Analytical Results – Benzene, Toluene, Ethylbenzene, and Xyle (BTEX)	enes
	ble 3 ble 4	Summary of Soil Analytical Results – Polynuclear Aromatics Hydrocarbons (PNA Summary of Soil Analytical Results – RCRA Metals (Total Concentrations)	√s)



Table 5	Summary of Groundwater Analytical Results – Volatile Organic Compounds (VOCs)
Table 6	Summary of Groundwater Analytical Results – Benzene, Toluene, Ethylbenzene, and
	Xylenes (BTEX)
Table 7	Summary of Groundwater Analytical Results – Polynuclear Aromatics Hydrocarbons
	(PNAs)
Table 8	Summary of Groundwater Analytical Results – RCRA Metals (Total Concentrations)
Table 9	Summary of Soil Gas Analytical Results – Volatile Chemicals (VCs)

#### **APPENDICES**

Appendix A Soil Boring Logs

Appendix B Laboratory Analytical Reports

Appendix C Photograph Log



#### 1.0 EXECUTIVE SUMMARY

True North Consultants, Inc. (True North) has prepared this summary report for the Village of Lake Villa (Village) to document the findings of a limited Phase II Environmental Site Assessment (ESA) performed at the former Pleviak Elementary School property located at 304 East Grand Avenue in Lake Villa, Lake County, Illinois (Site) as part of the environmental due diligence process. The Site location and approximate boundaries are depicted on Figures 1 and 2.

The intent of these limited investigation activities was to evaluate the Site for potential presence of environmental impact associated with the *recognized environmental conditions* (RECs) identified during the Phase I ESA prepared by True North in April 2024 for the Site. The Phase I ESA identified five RECs associated with the subject Site, which generally included a former bus garage and former filling station on the northern portion of the property, and open LUST incident on the southern portion of the property, a filling station and drycleaner on the east adjoining property, and an open LUST incident on the southeast adjoining property. Based on the Phase I ESA findings, which are further detailed in Section 2.0, True North was requested to perform a subsurface investigation at the Site to evaluate subsurface conditions with respect to the identified RECs. At the request of the Village, the subject limited Phase II ESA excluded evaluation of the former filling station parcel and associated LUST incidents which are being evaluated by others for closure through the Illinois EPA LUST Program.

True North mobilized to the Site on May 23, 2024 and advanced a total of seven (7) soil borings and installed three (3) temporary groundwater monitoring wells, and five (5) soil gas probes. The investigation was performed to evaluate soil, groundwater, and soil gas conditions at the Site and determine the potential impact of the identified RECs excluding the on-site historical filling station and LUST area. The soil borings were advanced at strategic locations across the Site to depths of approximately 15 to 25 feet below ground surface. Boring spacing, depth, and location were determined based on current Site conditions and findings of the Phase I ESA. One representative soil sample was collected for laboratory analyses from each soil boring.

During the investigation, three soil borings were completed as temporary groundwater monitoring wells for the collection of representative grab groundwater samples. The temporary groundwater monitoring well locations were selected based on the subsurface hydrogeologic conditions encountered and observed during drilling as well as the RECs being evaluated. Each well was gauged for the potential presence of groundwater during the investigation. Groundwater accumulated within each temporary monitoring well and a grab sample was collected from each location for laboratory analysis.

Additionally, a total of five soil gas probes were installed to approximately 3-5' feet below ground surface (bgs) for the collection of representative soil gas samples for evaluation of the indoor and outdoor inhalation exposure routes. Soil gas samples were ultimately collected for laboratory analysis from four of the five soil gas probes due to the presence of shallow saturation which precluded sample collection at one of the locations (south of SG-4). The soil gas probe locations were determined based on current Site conditions and findings of the Phase I ESA. A soil gas sample was collected from the four soil gas probe locations for laboratory analyses of volatile



#### chemicals.

The soil, groundwater, and soil gas samples collected during the investigation were analyzed for a strategic combination of Volatile Organic Compounds (VOCs), Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), Volatile Chemicals (VCs), Polynuclear Aromatic Hydrocarbons (PNAs), Resource Conservation and Recovery Act (RCRA) Metals, and pH to assess contaminants of concern generally associated with the identified RECs. The analytical parameters were determined based on the boring/well location with respect to the identified RECs, site conditions, regulatory and industry standards.

Soil, groundwater, and soil gas analytical results were initially compared to the most stringent Tier I Remediation Objectives (ROs) listed in 35 Illinois Administrative Code (IAC) Part 742 "Tiered Approach to Corrective Action Objectives" (742) to provide a conservative evaluation of the investigation results. The laboratory analytical results for the soil, groundwater, and soil gas samples are summarized in tabular format and compared to the Tier I ROs for residential properties (most conservative remediation objectives) in Tables 1 through 9.

Soil analytical results from this investigation indicate that concentrations of VOCs, BTEX, PNAs, and RCRA metals were below the most stringent Tier I Soil Remediation Objectives (SROs) provided in 742. During soil screening activities, elevated PID readings, visual evidence of impact (e.g. staining) and/or odors were not observed at any of the boring locations. The PID readings and field screening observations are identified on the soil borings logs provided in Appendix A.

Grab groundwater samples were collected from the temporary groundwater monitoring wells installed at three locations across the Site selected based on identified RECs and subsurface conditions encountered during drilling. The groundwater analytical results from this investigation indicate that concentrations of VOCs, BTEX, PNAs, and RCRA metals were below the most stringent Class I Tier I GROs provided in 742. The groundwater sample results identified during the course of the investigation are detailed within Section 6.2 of the subject report.

Soil gas probes were installed across the Site at representative locations based on the identified RECs for collection of soil gas samples. Analytical results from the investigation did not identify any exceedances of the most stringent Tier I SROs within the collected soil gas samples. The soil gas results identified during the course of the investigation are detailed within Section 6.3 of the subject report.

In summary, the soil, soil gas, and groundwater results from this investigation did not identify any exceedances of most stringent Tier I ROs provided in 742. The RECs identified in the Phase I ESA have been evaluated during the course of the subject limited Phase II ESA. The subject limited Phase II included evaluation of soil, soil gas, and groundwater conditions at the Site with respect to the identified RECs excluding the on-site historical filling station and LUST area. Based on the investigation results, impact associated with the evaluated RECs has not been identified at the Site and further investigation regarding these RECs is not currently necessary. It is True North's understanding that closure of the on-site LUST incidents associated is being pursued by others and that NFR Letter(s) will ultimately be obtained through the Illinois EPA's LUST Program.



The intent of this limited investigation was to provide environmental due diligence documentation to the Village of Lake Villa. The findings and conclusions of this report are based on the seven (7) soil borings, three (3) temporary groundwater monitoring well, and four (4) soil gas probes that were installed at various representative on-Site locations as detailed within this summary report.

The information provided herein is representative of the existing conditions at the identified boring locations. Varying subsurface conditions, inclusive of soil types, types of contaminants, and concentrations of contaminants, may exist at other locations on-Site.



#### 2.0 INTRODUCTION

True North was retained by the Village of Lake Villa to perform a limited subsurface environmental investigation to assess the RECs and evaluate the environmental status of the Site prior to potential divestment and/or redevelopment. Figure 1 identifies the location of the Site and Figure 2 identifies the surrounding land uses.

A Phase I ESA was performed at the Site by True North in April 2024. The Phase I ESA identified the following RECs in connection with the Site which were evaluated during the subject ESA:

- The 226 Villa Avenue portion of the Subject Property was formerly improved with the bus garage that utilized a 1,000-gallon gasoline underground storage tank (UST) located on its south side. In September 1990, Leaking Underground Storage Tank (LUST) No. 902773 was reported due to impacts observed along a watermain beneath Villa Avenue. Remedial actions included excavation of approximately 9,300-cubic yards of soil from the bus garage property, along the watermain and utility corridors, and from beneath Villa Avenue. Quarterly groundwater monitoring was performed between 1993 and 1994. Fourth quarter groundwater monitoring results indicated that benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations were consistently below remediation objectives applicable at the time. The Illinois Environmental Protection Agency (IEPA) issued a No Further Remediation letter for the LUST incident on November 16, 1995. Based on the time period of incident closure prior to current regulatory framework requiring evaluation of the indoor inhalation exposure pathway, LUST No. 902773 is considered a recognized environmental condition and vapor encroachment condition to the Subject Property.
- The 304 East Grand Avenue portion of the Subject Property is currently improved with the Pleviak Elementary School. The school operated a 5,000-gallon heating oil UST that was removed in January 1992. During the UST removal activities, it was noted that residual sludges entered the excavation when the UST was removed and LUST No. 920123 was assigned to the incident. No subsequent investigations or reports were identified for the release. The IEPA issued a citation letter in April 2021 stating the status of remediation was unknown and to date, the incident has not been issued a No Further Remediation letter. Based on review of available building plans obtained during the site reconnaissance, the heating oil UST was likely located adjacent to the boiler room on the northeast side of the addition built circa 1953. A second addition was constructed circa 1994 on the northeast side of the school and likely was constructed over the former UST location. Based on the unknown remediation status, absence of additional investigations and/or reports, and lack of regulatory closure by the IEPA, LUST No. 920123 is considered a recognized environmental condition to the Subject Property.
- ➤ The east adjoining property, addressed as 400 East Grand Avenue, has operated as a filling station since at least the mid-1950s. The building was expanded several times



between 1980 and 1994 to include additional commercial tenants, one of which is an active drycleaner business. The drycleaner business is located approximately 250 feet east of the Subject Property boundary. No information pertaining to the original UST system at the filling station was identified. The current UST system was installed in the 1990s and is not associated with reported releases. The system was last tested in 2022 with testing results expiring in 2025. Based on the duration of filling station and drycleaning operations, close proximity, absence of information pertaining to previous UST systems, and relative age of the current UST system, the east adjoining property is considered a recognized environmental condition to the Subject Property.

The southeast adjoining Routes 132 and 83 right-of-ways was associated with a gasoline release reported by IDOT in 2011 during new water main work and assigned LUST No. 20110725. The release was attributed to a 1,000-gallon gasoline UST that had been taken out of service prior to 1974. It was reported that gross contamination was encountered. To date, the LUST incident has not been issued a No Further Remediation letter by the IEPA; however, in September 2011, the IEPA issued a letter stating that since the UST was taken out of service prior to 1974 and the Illinois Office of the State Fire Marshal (OSFM) had not issued an order for removal, the owner/operator was not required to perform corrective action for the LUST incident. Based on the close proximity, absence of additional investigations and/or reports, and documented impacts within the adjoining right-of-ways, LUST No. 20110725 is considered a recognized environmental condition and vapor encroachment condition to the Subject Property.

The Phase I ESA identified one additional REC in connection with the Site as described below. This REC was excluded from evaluation during the subject Limited Phase II ESA at the request of the Village based on the status within the LUST Program and current on-going pursuit of closure through that regulatory program.

The 108 North Route 83 portion of the Subject Property was formerly improved with a filling station from at least the 1920s through 2009. A subsurface investigation conducted in 1999 identified petroleum impacts and LUST No. 991559 was reported. The UST system was removed on May 26, 2009 and LUST No. 20090562 was reported during removal activities. Approximately 3,200-cubic yards of impacted soil were removed in 2012 and additional soil borings were advanced for delineation of BTEX contamination. Numerous subsurface investigations have been conducted between 2009 and 2021. Soil beneath the Route 83 right-of-way contains exceedances above site-specific Tier 2 objectives. The environmental consulted requested a Highway Authority Agreement with the Illinois Department of Transportation (IDOT) for Route 83 during the Corrective Action Completion Report which was denied by the IEPA. A Corrective Action Plan was submitted to the IEPA in 2021 which proposed utilizing engineered barriers, a Highway Authority Agreement, and worker caution notice to obtain a No Further Remediation letter. The IEPA requested modifications and clarifications to the Corrective Action Plan in November 2022.



The environmental consultant responded in March 2023 and included additional delineation soil results for xylenes as well as details regarding R26 modeling and hydraulic conductivity equations. To date, the IEPA has not issued No Further Remediation letters for the 1999 or 2009 incidents which currently appear to be undergoing investigation concurrently. Based on the duration of filling station operations, absence of subsurface investigations and/or reports since 2023, and lack of regulatory closure, LUST Nos. 991559 and 20090562 are considered *recognized environmental conditions* to the Subject Property.

Figure 3 identifies locations and information pertinent to the above referenced RECs. Based on the Phase I ESA findings, the Village of Lake Villa requested that True North conduct a subsurface investigation at the Site to assess subsurface conditions in relation to the identified RECs excluding the on-site historical filling station LUST parcel.



#### 3.0 LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

#### 3.1 Site Location and Legal Description

The Site subject to this limited Phase II ESA, the former Pleviak Elementary School property, consists of an approximate 5.4-acre tract of land addressed as 304 East Grand Avenue in Lake Villa, Illinois. The Site is identified as a portion of parcel numbers 0233306016, 0233306017, 0233306018, 0233306035, 0233306034, 0233306033, 0233306032, 0233308024, 0233308025, 0233308023, 0233308027, and 0233308026. The Subject Property is currently occupied by the Pleviak School Kindergarten and adjoining vacant land.

A brief legal description of the Site was obtained during the Phase I ESA as follows:

LOTS 33 & 34 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST 1/4 OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS

#### AND

LOT 30 & 32 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST 1/4 OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS

#### AND

LOT 31 IN BLOCK 2 IN FOWLER'S SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST ¼ OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS

#### AND

LOTS 28 & 29 IN BLOCK 2, LOTS 1-4, A PART OF LOT 5, LOTS 26, 27 & 28 AND OUTLOT "A" ALL IN BLOCK 3 IN FOWLER'S SUBDIVISION OF A PART OF THE ORIGINAL PLAT OF LAKE CITY (NOW LAKE VILLA) IN THE SOUTHWEST 1/4 OF SECTION 33, TOWNSHIP 46 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, ILLINOIS

A Site location map is presented in Figure 1 of this report. The vicinity surrounding the Site can be characterized as commercial and residential land uses which are depicted on Figure 2.

#### 3.2 Current/Future Site Operations



The 5.40-acre tract of land is currently occupied by Pleviak Kindergarten building and associated school grounds with some adjoining vacant land. It is True North's understanding that the Village of Lake Villa is currently evaluating and considering the Site for potential future redevelopment.



#### 4.0 TRUE NORTH SITE INVESTIGATION ACTIVITIES

#### 4.1 Private Utility Locate

Prior to subsurface activities, JULIE, the "one call" utility locate service, was contacted so that any utilities entering the Site could be identified. A private utility locate and boring clearance was also performed by Lucky Locators prior to commencing drilling activities.

#### 4.2 Description of Sampling Plan

The limited subsurface investigation was performed by True North on May 23, 2024. A Site-specific sampling plan was developed prior to mobilization to ensure that the objectives of the investigation were achieved.

The sampling plan included the installation of soil borings and temporary monitoring wells in the areas where the identified REC could have impacted the Site. During the investigation activities, True North advanced a total of seven (7) soil borings. All seven of the soil borings were advanced via direct push drilling methods to depths of approximately 15 to 25 feet below ground surface to evaluate subsurface conditions. Boring spacing was determined with the intent of increasing the likelihood of impact detection. Three (3) of the soil borings were ultimately completed as temporary groundwater monitoring wells for the collection of grab groundwater samples, as feasible. An additional four (4) soil gas probes were advanced via direct push drilling methods to a depth of 3 to 5 feet below ground surface for collection of grab soil gas samples in accordance with IEPA guidelines. Figure 4 identifies the location of the completed soil borings, temporary groundwater monitoring wells, and soil gas probes.

The following sections describe True North's sampling methodology and field activities.

#### 4.3 Methods of Sampling

#### 4.3.1 Soil Sampling

All limited Phase II ESA sampling procedures were performed according to standards set forth by the Illinois Environmental Protection Agency 35 Illinois Administrative Code (IAC) 742, "Tiered Approach to Corrective Action Objectives (742)," United States Environmental Protection Agency (USEPA) SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," ASTM E1903-19 standard, "Standard for Environmental Site Assessments: Phase II Environmental Site Assessment Process," and Occupational Health & Safety Administration (OSHA) 1910 Standards.

Soil sampling procedures involved the advancement of one soil boring at each proposed location. All downhole equipment was decontaminated between each probe point with distilled water and liquid-nox solution and distilled water rinse. All soil



cuttings were returned to the borehole of origin after limited Phase II ESA activities were completed.

During direct push advancement, soil samples at each soil boring location were collected continuously at two and a half foot intervals. At each interval, the acetate sleeves were opened and a representative soil sample from each interval was immediately placed in a zipper locked, 4-mil plastic bag, with airspace, and allowed to warm to ambient conditions. The soil samples were chosen for field screening and potential laboratory analysis based on visual observations and/or noticeable odors.

The soil samples that were containerized in the plastic bags were screened with a calibrated PID with a 10.6eV lamp to determine the presence of photoionizable vapors that are potentially indicative of the presence of volatile compounds in the soil. Generally, soil samples that registered the highest PID concentration were considered for laboratory analysis. If no positive PID readings were encountered within a soil boring, soil sample locations were based on an appropriate soil sampling depth as determined by field screening activities as well as the associated REC. The depth intervals of selected soil samples were noted during soil screening activities.

Immediately following screening activities, soil samples were collected directly from the sleeve or zip lock bag. Soil boring logs from True North's limited Phase II ESA activities are presented in Appendix A.

Soil samples collected for VOC analyses followed SW846 Method 5035: "Closed-System Purge-and-Trap Extraction for Volatile Organics in Soil and Waste Samples" field preservation protocols. A power handle and syringe were utilized to fill two preweighed sodium bisulfate preserved vials and one pre-weighed methanol preserved vial with five grams of soil. The protocol also requires collection of one additional glass jar with soil for analysis of moisture content utilizing Method 160.3. Dependent upon proposed analyses at a particular sample point, additional sample was containerized as appropriate per laboratory recommendations and analytical method requirements. Additional glass jars were filled with soil for analyses of the following parameters: PNAs, RCRA Metals, and pH.

#### 4.3.2 Groundwater Sampling

A total of three soil borings were completed as temporary, one-inch diameter PVC monitoring wells. One grab groundwater sample was collected from each of the three groundwater wells. Temporary monitoring wells TW-1 and TW-2 were installed to depths of approximately 20 feet below existing ground surface, while temporary monitoring well TW-3 was installed to a depth of approximately 25 feet below existing ground surface. Each well featured ten-foot screen intervals set at the noted depths. Upon collection of the grab groundwater samples, the wells were removed, and the soil borings were sealed by backfilling the hole with soil cuttings and bentonite to the



surface. The surface was subsequently patched to match the corresponding surrounding grade and surface material.

Low-flow sampling techniques were utilized as feasible to collect the grab groundwater sample from the screen point. Low-flow water sampling techniques were completed using a Geopump Series II Peristaltic Pump with dedicated disposable polyethylene (poly) tubing. The pump tubing was lowered into the screen point and set approximately in the middle of the screened interval. The purpose of the tubing placement was to minimize excessive mixing of the stagnant water in the casing above the screen within the screened interval zone, and to minimize re-suspension of solids which collect at the bottom of the well. Generally, the flow rate of the pump is adjusted and monitored in attempt to minimize drawdown of water column in the well. During groundwater sampling activities the volume of groundwater pumped from all three temporary wells was sufficient for the full suite of proposed lab analyses. Grab groundwater samples were collected from the three temporary wells for laboratory analyses of select contaminants of concern.

#### 4.3.3 Soil Gas Sampling

A total of five soil gas probes were advanced to a depth of approximately three to five feet below ground surface and finished as temporary soil gas monitoring wells. The soil gas probes were advanced at strategic locations across the Site to evaluate potential impact from the REC and the inhalation exposure pathways evaluated under 742. The soil gas well installation procedure consisted of advancing a 5-foot direct push probe sample rod lined with an acetate sleeve to 5 feet below ground surface. After advancement to the desired depth, the sampler was removed from the ground creating an approximate 2-inch wide, 5-feet deep borehole.

A six-inch soil gas implant was attached to the end of a ¼-inch internal diameter Teflon tubing. The soil gas implant and tubing were then lowered into the borehole to the desired depth. The depth of the soil gas implant was checked by lowering a standard tape measure tip to the borehole terminus. Teflon tubing above ground was then cut allowing approximately two (2) feet of tubing to remain above ground. An appropriate quantity of filter packing sand was poured into the borehole to surround the Teflon tubing at depth. Bentonite was then backfilled on top of the sand filter pack to ground level to seal the soil gas well from ambient air.

Soil gas samples were collected with summa canisters which collect samples by negative pressure. A total of four soil gas samples (SG-1 through SG-4) were collected; one soil gas probe was observed to contain elevated moisture/saturation and therefore soil gas sample collection was not possible at this location (i.e. south of SG-4). Prior to soil gas sampling, each soil gas well was purged, and the purge gas was screened with a PID. The PID readings are identified on the corresponding soil gas probe log provided in Appendix A. A shut-in test was subsequently performed in accordance with EPA standards and protocols. Sub atmospheric pressure sampling



uses an initially evacuated canister provided by the laboratory to collect gas samples. A hand valve and fixed orifice are attached to the canister prior to sampling to regulate the flow. With this configuration, a grab sample of air from the gas well is drawn into the pre-evacuated summa canister. After the air sample was collected, the canister valve was closed, a cap was installed, and an identification tag was attached to the canister for transport to an accredited laboratory for analysis.

#### 4.4 Analytical Methods

All soil, groundwater, and soil gas samples collected for laboratory analysis were placed in laboratory provided containers, labeled, and placed in a cooler with ice (as appropriate), and logged on a chain of custody form. Soil, groundwater, and soil gas samples were transported under proper chain-of-custody to Sterling Labs (Sterling) located in Des Plaines, Illinois. Sterling is an Environmental Laboratory Accreditation (NELAC) accredited laboratory. A copy of the laboratory NELAC accreditation is presented with the laboratory analytical reports in Appendix B.

The following table identifies the compounds and analysis methods used to determine the concentrations of contaminants-of-concern (COC) potentially present in soil, groundwater, and/or soil gas.

Compound	USEPA Analytical Method Identification	Matrix
Volatile Organic Compounds (VOCs)/Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	5035/8260B	Soil/Groundwater
Polynuclear Aromatic Hydrocarbons (PNAs)	8270C	Soil
RCRA Metals	6010B/7471	Soil/Groundwater
рН	9045C	Soil
Volatile Chemicals (VCs)	TO-15	Soil Gas

#### 4.5 Field Activity Documentation

True North performed limited Phase II ESA activities at the Site on May 23, 2024. The subsurface investigation consisted of advancing a total of seven (7) soil borings to depths ranging between approximately 15 to 25 feet below ground surface, completion of three (3) borings as temporary groundwater monitoring wells, and advancing a total of five (5) soil gas probes to a depth of 3 to 5 feet below ground surface. Four soil gas samples were ultimately collected due to wet surficial conditions at one location which precluded sample collection. The boring, well, and soil gas probe depths and locations were determined based upon



boring location with respect to the identified REC, potential redevelopment, and subsurface hydrogeologic conditions. The following table identifies the location of completed soil borings with respect to identified REC, environmental conditions, and/or soil characterization for potential redevelopment purposes.

Soil Boring Location	Depth (ft) of Soil Boring	Compound or Group of Compounds	Recognized Environmental Condition
SB-1	25	VOCs, PNAs, RCRA Metals, and pH	Evaluation of adjoining LUST incident and historic and current operations identified in Section 2.0
SB-2	20	VOCs, PNAs, RCRA Metals, pH	Evaluation of adjoining LUST incident and historic and current operations identified in Section 2.0
SB-3	25	BTEX and PNAs	Evaluation of on-site heating oil UST and associated LUST incident identified in Section 2.0
SB-4 through SB-	15	VOCs, PNAs, RCRA Metals, and pH	Evaluation of adjoining LUST incident and historic and current operations identified in Section 2.0
SB-7	15	BTEX and PNAs	Evaluation of on-site heating oil UST and LUST incident identified in Section 2.0

Figure 4 identifies the location of the completed soil borings and groundwater temporary monitoring and soil gas wells installed and evaluated during the limited Phase II ESA activities. Appendix C presents representative photographs of the limited Phase II ESA activities.

Field soil identification was used to construct soil boring logs. Surfacing materials identified during True North's limited Phase II ESA activities generally consisted of topsoil and organic matter or asphalt. The surfacing materials were generally underlain by silty clay with fine sand seams encountered at various depths to boring termination depths. Asphalt locations contained some underlying non-native gravel fill material underlain by native soils. The subsurface geologic materials and depths observed at each investigation location are identified and detailed on the boring logs included in Appendix A.



The subsurface conditions were generally observed to be similar across the Site as depicted on the enclosed boring logs. Based on the available historical information and field observations, the soil encountered during the investigation beneath surface fill materials are presumed to be native soils.

Wet conditions were observed at three locations, specifically SB-1 through SB-3, at various depths ranging from approximately 13 to 22 feet below grade. The locations represented by soil borings SB-4 through SB-7 did not exhibit any saturation or conditions indicative of a potential shallow groundwater resource to boring terminus. Based on field observations and the nature of the assessed RECs, soil borings SB-1 through SB-3 were completed as temporary groundwater monitoring wells TW-1 through TW-3, respectively. The following table provides information concerning the temporary groundwater monitoring wells, evaluated parameters and static groundwater depth within each well as measured from existing ground surface.

Well Location	Approximate Depth to Groundwater within the well (feet)	Compound or Group of Compounds	Environmental Condition
TW-1	11.96	VOCs, PNAs, RCRA Metals	Evaluation of adjoining LUST incident and historic and current operations identified in Section 2.0
TW-2	9.02	VOCs, PNAs, RCRA Metals	Evaluation of adjoining LUST incident and historic and current operations identified in Section 2.0
TW-3	13.20	BTEX and PNAs	Evaluation of on-site heating oil UST and associated LUST incident identified in Section 2.0

Considering the observed conditions within the monitoring wells, a shallow groundwater resource appears to exist at the Site which is consistent with the general regional hydrogeologic conditions.

Based on field observations and the nature of the assessed REC, five soil gas probes were advanced with collection of soil gas samples from four locations. Three of the soil gas probes, identified as SG-1 through SG-3 were advanced directly adjacent to borings SB-1 through SB-3, respectively. Soil gas probe identified as SG-4 was advance on the northern extent of the Site. Another soil gas probe advanced south of SG-4 contained elevated moisture/wet conditions and therefore soil gas sampling at this location was not possible. The following table provides information concerning the soil gas probes with respect to identified REC.



Soil Boring Location	Depth (ft) of Soil Gas Probe; Implant Installation Depth	Compound or Group of Compounds	Recognized Environmental Condition
SG-1 through SG-3	4 to 5	Volatile Chemicals	Evaluation of on-site LUST incident, adjoining LUST, and historic and current operations identified in Section 2.0
SG-4	3 to 4	Volatile Chemicals	Evaluation of former on-site bus garage as identified in Section 2.0.

Field indications of impact were not observed at any boring locations. Boring locations did not exhibit odors, staining or elevated PID readings. PID readings and other notable observations are identified on the completed soil boring logs which are presented in Appendix A.

During groundwater sampling activities, no visible or olfactory indications of contamination were observed at the temporary monitoring wells. Temporary well TW-1 exhibited slight turbidity.



#### 5.0 DATA COLLECTION QUALITY ASSURANCE

Data was collected following procedures designed to maximize data quality, quantity, and validity. This included information regarding the organization of objectives, functional activities, and specific sampling and analysis quality assurance (QA) and quality control (QC) procedures. The data is designed to achieve the specific technical and data quality objectives and goals needed to identify, and characterize potential VOC/BTEX, PNA, RCRA Metal, and/or VC contamination at the Site.

The data collected during the limited Phase II ESA activities is being used to meet the project objectives. Sampling and quality control were designed to be consistent with United States Environmental Protection Agency (USEPA) procedures outlined in *Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4*.

#### 5.1 Data Quality Objectives

Data Quality Objectives (DQOs) are quantitative and qualitative statements specifying the quality of the data required to support the decision-making process. DQOs for measurement data are expressed in terms of accuracy, precision, completeness, representativeness, and comparability. DQOs define the degree of the total uncertainty in the data that is acceptable for each specific activity during environmental site assessment activities. The uncertainty includes both sampling error and analytical error. Ideally, the prospect of zero uncertainty is the intent; however, the variables associated with the process (field and laboratory) inherently contribute to uncertainty in the data. It was True North's overall objective to keep the total uncertainty within an acceptable range that would not hinder the intended use of the data. In order to achieve the objective, specific data quality requirements such as detection limits, criteria for accuracy and precision, sample representativeness, data compatibility and data completeness were attempted. The overall objectives and requirements were established such that there was a high degree of confidence in the measurements. The data collected during this assessment is being used to address the following: VOC/BTEX, PNA, RCRA Metal, and/or VCs potentially present or absent in soil, groundwater, and soil gas (quantitatively).

The objectives with respect to the field investigation were to maximize the confidence in the data. To ensure sample representativeness, sample collection was performed in accordance with USEPA recommended procedures for the collection, preservation, and holding times specified in EPA SW-846.

#### 5.2 General Field Procedures

To assure that field data was collected accurately and correctly, specific standard field procedures as outlined in SW-846 were adhered to during each sampling event.

#### 5.2.1 Equipment & Calibration

To ensure that measurements made in the field were performed with properly calibrated instruments, equipment was calibrated prior to each use as described in the Owner's Manual for each instrument. Field equipment was calibrated prior to use and was



maintained in accordance with the manufacturers' specifications. In addition, prior to and after use, each major piece of equipment was cleaned, decontaminated, checked for damage, and repaired as needed.

#### 5.2.2 Sample Handling

After a sample was collected, proper sample handling procedures ensured that the sample remains representative. These procedures included:

- chain of custody;
- · sample identification;
- · sample packaging; and
- proper storage of the sample.

#### 5.2.2.1 Sample Custody

Samples were collected and handled in accordance with standard USEPA chain of custody protocols. The objective of the chain of custody was to maintain an accurate written custody record that traced the possession and handling of the sample from collection through analysis.

Custody is defined if a sample:

- Is in one's actual possession, (or)
- Is in one's view, after being in one's physical possession, (or)
- Is in one's physical possession and then locked away so that no one can tamper with it, (or)
- Is kept in a secured area, restricted to authorized personnel only.

A unique identification number was assigned to each sample collected before it was submitted for shipment to the laboratory. Sample storage and custody was the responsibility of the field personnel. Upon laboratory receipt and analysis of the samples, a copy of the chain of custody form was returned to True North with the laboratory report. The chain of custody form remained with the samples until the sample was discarded.

#### 5.2.2.2 Sample Identification & Packing

A unique designation was used to identify individual samples for each location. Sample identification numbers were identified in the field and were used to identify the sample on the chain of custody form. After labels were checked, sample jars were checked for competency and placed into coolers for return to the laboratory for analysis.

#### 5.2.3 Sample Delivery



Samples were relinquished to laboratory personnel by True North's field personnel after sampling was completed. Upon receipt of shipment, the laboratory inspected each sample jar or container for evidence of tampering. The laboratory sample custodian then removed each sample jar and verified the condition of the sample and containers and compared sample labels to the chain of custody. If any inconsistencies were observed, they were documented on the chain of custody.

#### 5.2.4 Decontamination Protocol

Decontamination protocols were strictly adhered to in order to minimize the potential for cross-contamination between sample locations and contamination of areas off-site.



#### 6.0 DATA EVALUATION AND ENDANGERMENT ASSESSMENT

#### 6.1 Soil Analytical Data Evaluation

Limited Phase II ESA activities were completed by True North on May 23, 2024. A total of seven (7) soil samples were collected and submitted for laboratory analysis of VOCs/BTEX, PNAs, and/or RCRA Metals as part of the limited Phase II investigation activities.

Soil analytical results were compared to the most conservative Tier I Residential SROs provided in 742. Residential SROs were selected to evaluate soil analytical results to represent the most conservative Site conditions. Sampled depths and assessed analytes in each of the collected subsurface soil samples are summarized and compared to their Tier I SROs in Tables 1 through 4. The laboratory analytical reports are presented in Appendix B.

#### Volatile Organic Compounds (VOCs)

Soil analytical results from this investigation indicated that concentrations of VOCs were below the most stringent Tier I SROs provided in 742 in the soil samples collected.

Soil VOC results are summarized in Table 1.

#### Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

Soil analytical results from this investigation indicated that concentrations of BTEX were below the most stringent Tier I SROs provided in 742 in soil samples collected.

Soil BTEX results are summarized in Table 2.

#### Polynuclear Aromatic Hydrocarbons (PNAs)

Soil analytical results from this investigation indicated that concentrations of PNAs were below the most stringent Tier I SROs provided in 742 in soil samples collected.

Soil PNA results are summarized in Table 3.

#### Resource Conservation and Recovery Act (RCRA) Metals

Soil analytical results from this investigation indicated that concentrations of RCRA metals were below the most stringent Tier I SROs provided in 742 in soil samples collected.

Soil RCRA metal results are summarized in Table 4.

#### 6.2 Groundwater Analytical Data Evaluation

Groundwater analytical results were compared to the most conservative Tier I Class I GROs provided in 742. The residential Tier I Class I GROs were selected to evaluate groundwater



analytical results to represent the most conservative Site conditions. The groundwater sample results are summarized and compared to the Tier I GROs for groundwater ingestion and indoor inhalation within Tables 5 through 8. The laboratory analytical reports are presented in Appendix B.

#### Volatile Organic Compounds (VOCs)

Groundwater analytical results from this investigation indicated that concentrations of VOCs were below the most stringent Tier I SROs provided in 742 in the groundwater samples collected.

Groundwater VOC results are summarized in Table 5.

#### Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

Groundwater analytical results from this investigation indicated that concentrations of BTEX were below the most stringent Tier I SROs provided in 742 in the groundwater samples collected.

Groundwater BTEX results are summarized in Table 6.

#### Polynuclear Aromatic Hydrocarbons (PNAs)

Groundwater analytical results from this investigation indicated that concentrations of PNAs were below the most stringent Tier I SROs provided in 742 in the groundwater samples collected.

Groundwater PNA results are summarized in Table 7.

#### Resource Conservation and Recovery Act (RCRA) Metals

Groundwater analytical results from this investigation indicated that concentrations of RCRA metals were below the most stringent Tier I SROs provided in 742 in the groundwater samples collected.

Groundwater RCRA metal results are summarized in Table 8.

#### 6.3 Soil Gas Analytical Data Evaluation

Soil gas analytical results were compared to the most conservative Tier I Soil Gas Remediation Objectives (SGROs) provided in 742. The residential Tier I SGROs were selected to evaluate soil gas analytical results to represent the most conservative Site conditions. The soil gas sample results are summarized and compared to their Tier I SGROs in Table 9. The laboratory analytical reports are presented in Appendix B.

#### Volatile Chemicals (VCs)



Soil gas analytical results from this investigation indicated that concentrations of VCs were below the most stringent Tier 1 SGROs provided in 742.

Soil gas analytical results are summarized in Table 9.



#### 7.0 FINDINGS AND CONCLUSIONS

True North has prepared this summary report for the Village to document the findings of a limited Phase II ESA performed at the former Pleviak Elementary School property located at 304 East Grand Avenue in Lake Villa, Lake County, Illinois (Site) as part of the environmental due diligence process. The Site location and approximate boundaries are depicted on Figures 1 and 2.

The intent of these limited investigation activities was to evaluate the Site for potential presence of environmental impact associated with the RECs identified during the Phase I ESA prepared by True North in April 2024 for the Site. The Phase I ESA identified five RECs associated with the subject Site, which generally included a former bus garage and former filling station on the northern portion of the property, and open LUST incident on the southern portion of the property, a filling station and drycleaner on the east adjoining property, and an open LUST incident on the southeast adjoining property. Based on the Phase I ESA findings, which are further detailed in Section 2.0, True North was requested to perform a subsurface investigation at the Site to evaluate subsurface conditions with respect to the identified RECs. At the request of the Village, the subject limited Phase II ESA excluded evaluation of the former filling station parcel and associated LUST incidents which are being evaluated by others for closure through the Illinois EPA LUST Program.

True North mobilized to the Site on May 23, 2024 and advanced a total of seven (7) soil borings and installed three (3) temporary groundwater monitoring wells, and five (5) soil gas probes. The investigation was performed to evaluate soil, groundwater, and soil gas conditions at the Site and determine the potential impact of the identified RECs excluding the on-site historical filling station and LUST area. The soil borings were advanced at strategic locations across the Site to depths of approximately 15 to 25 feet below ground surface. Boring spacing, depth, and location were determined based on current Site conditions and findings of the Phase I ESA. One representative soil sample was collected for laboratory analyses from each soil boring.

During the investigation, three soil borings were completed as temporary groundwater monitoring wells for the collection of representative grab groundwater samples. The temporary groundwater monitoring well locations were selected based on the subsurface hydrogeologic conditions encountered and observed during drilling as well as the RECs being evaluated. Each well was gauged for the potential presence of groundwater during the investigation. Groundwater accumulated within each temporary monitoring well and a grab sample was collected from each location for laboratory analysis.

Additionally, a total of five soil gas probes were installed to approximately 3-5' feet bgs for the collection of representative soil gas samples for evaluation of the indoor and outdoor inhalation exposure routes. Soil gas samples were ultimately collected for laboratory analysis from four of the five soil gas probes due to the presence of shallow saturation which precluded sample collection at one of the locations (south of SG-4). The soil gas probe locations were determined based on current Site conditions and findings of the Phase I ESA. A soil gas sample was collected from the four soil gas probe locations for laboratory analyses of volatile chemicals.

The soil, groundwater, and soil gas samples collected during the investigation were analyzed for a



strategic combination of VOCs, BTEX, VCs, PNAs, RCRA Metals, and pH to assess contaminants of concern generally associated with the identified RECs. The analytical parameters were determined based on the boring/well location with respect to the identified RECs, site conditions, regulatory and industry standards.

Soil, groundwater, and soil gas analytical results were initially compared to the most stringent Tier I ROs listed in 742 to provide a conservative evaluation of the investigation results. The laboratory analytical results for the soil, groundwater, and soil gas samples are summarized in tabular format and compared to the Tier I ROs for residential properties (most conservative remediation objectives) in Tables 1 through 9.

Soil analytical results from this investigation indicate that concentrations of VOCs, BTEX, PNAs, and RCRA metals were below the most stringent Tier I SROs provided in 742. During soil screening activities, elevated PID readings, visual evidence of impact (e.g. staining) and/or odors were not observed at any of the boring locations. The PID readings and field screening observations are identified on the soil borings logs provided in Appendix A.

Grab groundwater samples were collected from the temporary groundwater monitoring wells installed at three locations across the Site selected based on identified RECs and subsurface conditions encountered during drilling. The groundwater analytical results from this investigation indicate that concentrations of VOCs, BTEX, PNAs, and RCRA metals were below the most stringent Class I Tier I GROs provided in 742. The groundwater sample results identified during the course of the investigation are detailed within Section 6.2 of the subject report.

Soil gas probes were installed across the Site at representative locations based on the identified RECs for collection of soil gas samples. Analytical results from the investigation did not identify any exceedances of the most stringent Tier I SROs within the collected soil gas samples. The soil gas results identified during the course of the investigation are detailed within Section 6.3 of the subject report.

In summary, the soil, soil gas, and groundwater results from this investigation did not identify any exceedances of most stringent Tier I ROs provided in 742. The RECs identified in the Phase I ESA have been evaluated during the course of the subject limited Phase II ESA. The subject limited Phase II included evaluation of soil, soil gas, and groundwater conditions at the Site with respect to the identified RECs excluding the on-site historical filling station and LUST area. Based on the investigation results, impact potentially associated with the evaluated RECs has not been identified at the Site and further investigation regarding these RECs is not currently necessary. It is True North's understanding that closure of the on-site LUST incidents is being pursued by others and that an NFR Letter will ultimately be obtained through the Illinois EPA's LUST Program.

The intent of this limited investigation was to provide environmental due diligence documentation to the Village of Lake Villa. The findings and conclusions of this report are based on the seven (7) soil borings, three (3) temporary groundwater monitoring well, and four (4) soil gas probes that were installed at various representative on-Site locations as detailed within this summary report.

The information provided herein is representative of the existing conditions at the identified boring



locations. Varying subsurface conditions, inclusive of soil types, types of contaminants, and concentrations of contaminants, may exist at other locations on-Site.



# FIGURE 1 Site Location Map





# Subject Property Location Map

Former Pleviak Elementary School 304 East Grand Avenue, Lake Villa, Illinois



## FIGURE 2

# Site and Surrounding Land Use Map





## FIGURE 2

Former Pleviak Elementary School 304 East Grand Avenue, Lake Villa, Illinois



# FIGURE 3

Phase I ESA Recognized Environmental Conditions Map

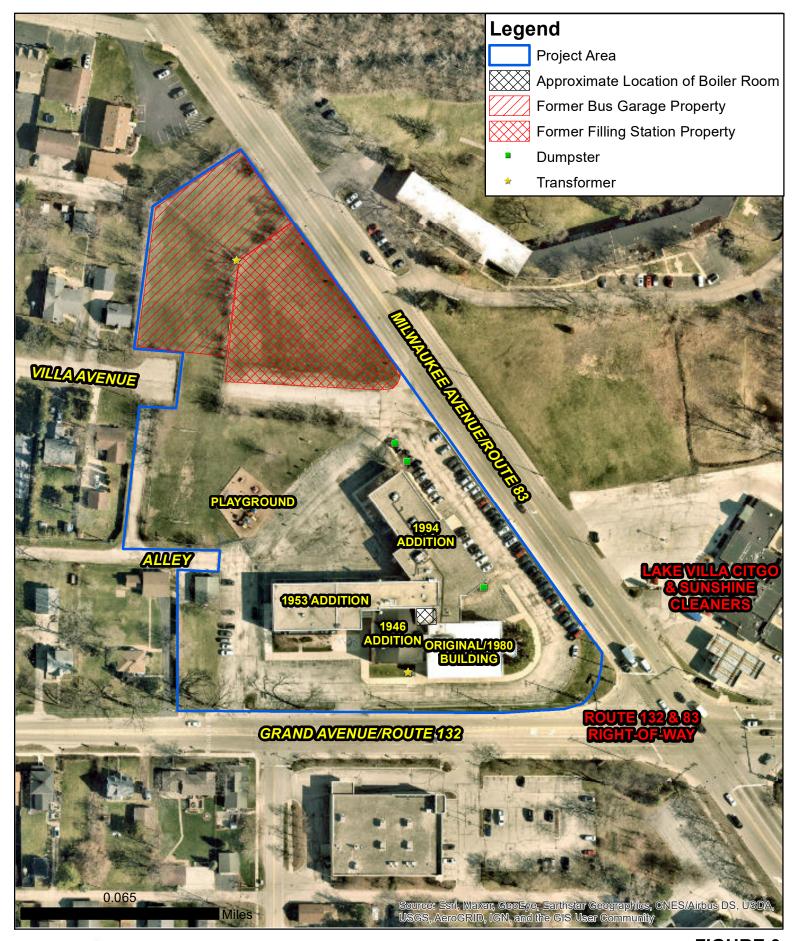


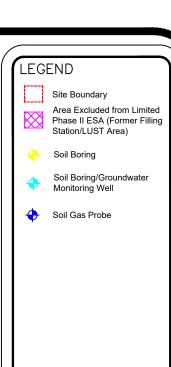


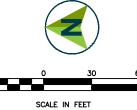
FIGURE 3
Subject Property Detail Map
Former Pleviak Elementary School
304 East Grand Avenue, Lake Villa, Illinois



# FIGURE 4 Site Investigation Map







1" = 60'



Frusted Partner. Leading Environmento Solutions.

SITE NAME

Former Pleviak Elementary School 304 East Grand Avenue Lake Villa, Illinois 60046

Village of Lake Villa 65 Cedar Avenue Lake Villa, Illinois 60046

DRAWING Site Investigation Map		
DRAWN BY SPB	FIGURE	
DATE 06/13/2024	1	
DDO IECT NO	ı <del>4</del>	



# **TABLES**

Soil, Groundwater, and Soil Gas Analytical Results

## TABLE I



# **Summary of Soil Analytical Results**

# Volatile Organic Compounds (VOCs)

**CLIENT:** Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

**PROJECT NUMBER:** T243326

**SAMPLE DATE:** 5/23/2024 LABORATORY: Sterling MATRIX: Soil

# Analytical Method: EPA Method 5035A/8260B

							Sample ID	SB-I	SB-2	SB-4	SB-5	SB-6
	Doolde	maiol Coil Domodicai	on Ohiootiyoo		Construction W	orker Remediation	Sample Date	5/23/2024	5/23/2024	5/23/2024	5/23/2024	5/23/2024
Contaminant of Concern	Reside	ential Soil Remediati	on Objectives		Obje	ectives	PID	0.0	0.0	0.0	0.0	0.0
							Depth	5-7.5'	7.5-10'	7.5-10'	0-2.5'	5-7.5'
	ING <sup>a</sup>	INH <sup>b</sup>	SCI	OG <sup>c</sup> Class II	ING <sup>d</sup>	INH <sup>e</sup>	Soil Type	Silty Clay				
Acetone	70000	100000	25	25	NE	100000		(0.0444	<0.0457	<0.0438	<0.0479	<0.0481
Benzene	12	0.8	0.03	0.17	2300	2.2	_	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Bromodichloromethane	10	3000	0.6	0.6	2000	3000	_	<0.00l27	<0.00131	<0.00125	<0.00I37	<0.00138
Bromoform	81	53	0.8	0.8	16000	140	_	<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
Bromomethane	IIO	10	0.2	1.2	1000	3.9		<0.0127	<0.0131	<0.0I25	<0.0I37	<0.0I38
2-Butanone <sup>(I)</sup>	47000	25000	17	17	120000	730	_	⟨0.0 78	<0.0183	<0.0175	(0.0191	<0.0193
Carbon disulfide	7800	720	32	160	20000	9		<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
Carbon tetrachloride	5	0.3	0.07	0.33	410	0.9	7	<0.0I27	<0.0131	<0.0I25	<0.0I37	<0.0I38
Chlorobenzene	1600	130	ı	6.5	4100	1.3	_	<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
Chloroethane <sup>(I)</sup>	NE	1500	NE	NE	20000	39		<0.00507	<0.00523	<0.00500	<0.00547	<0.00550
Chloroform	100	0.3	0.6	2.9	2000	0.76	_	<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
Chloromethane <sup>(I)</sup>	NE	IIO	NE	NE	NE	5	_	<0.00507	<0.00523	<0.00500	<0.00547	<0.00550
Dibromochloromethane	1600	1300	0.4	0.4	41000	1300		<0.00l27	<0.00131	<0.00125	<0.00I37	<0.00138
I,I-Dichloroethane	7800	1300	23	IIO	200000	130	-	<0.00254	<0.0026I	<0.00125	<0.00I37	<0.00138
I,2-Dichloroethane	7	0.4	0.02	0.1	1400	0.99		<0.00127	<0.00131	<0.00250	<0.00274	<0.00275
I,I-Dichloroethylene	3900	290	0.06	0.3	10000	3	7	<0.00127	<0.00131	<0.00125	<0.00137	<0.00138
cis-I,2-Dichloroethylene	780	1200	0.4	1.1	20000	1200	_	<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
trans-I,2-Dichloroethylene	1600	3100	0.7	3.4	41000	3100	_	<0.00254	<0.0026I	<0.00250	<0.00274	<0.00275
I,2-Dichloropropane	9	15	0.03	0.15	1800	0.5	7	<0.00l27	<0.00131	<0.00125	<0.00I37	<0.00138
cis-I,3-Dichloropropene	6.4	1.1	0.004	0.02	1200	0.39	_	<0.00254	<0.0026l	<0.00250	<0.00274	<0.00275
trans-I,3-Dichloropropene	6.4	1.1	0.004	0.02	1200	0.39	_	<0.00254	<0.0026l	<0.00250	<0.00274	<0.00275
Ethylbenzene	7800	400	13	19	20000	58	_	<0.00507	<0.00523	<0.00500	<0.00547	<0.00550
2-Hexanone <sup>(I)</sup>	390	450	0.16	0.16	1000	47	_	⟨0.0 78	<0.0183	<0.0175	(0.0191	<0.0193
Methyl tertiary-butyl ether	780	8800	0.32	0.32	2000	140	_	<0.00l27	<0.00131	<0.00125	<0.00I37	<0.00138
4-Methyl-2-pentanone (I)	6300	3100	2.5	2.5	160000	340		<0.0178	<0.0I83	<0.0175	(0.0191	<0.0193
Methylene chloride	85	13	0.02	0.2	12000	34		<0.0127	<0.0200	<0.0125	<0.0I37	<0.0I38
Styrene	16000	1500	4	18	41000	430		<0.00507	<0.00523	<0.00500	<0.00547	<0.00550
I,I,2,2-Tetrachloroethane <sup>(I)</sup>	3.2	0.62	0.0035	0.0035	620	1.7		<0.00127	<0.00131	<0.00125	<0.00137	<0.00138
Tetrachloroethylene	12	II	0.06	0.3	2400	28		<0.00254	<0.0026l	<0.00250	<0.00274	<0.00275
Toluene	16000	650	12	29	410000	42		<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
I,I,I-Trichloroethane	NE	1200	2	9.6	NE	1200		<0.00127	<0.00131	<0.00125	<0.00137	<0.00138
I,I,2-Trichloroethane	310	1800	0.02	0.3	8200	1800		<0.00127	<0.00131	<0.00125	<0.00137	<0.00138
Trichloroethylene	58	5	0.06	0.3	1200	12		<0.00127	<0.00131	<0.00125	<0.00137	<0.00138
Vinyl Chloride	0.46	0.28	0.01	0.07	170	1.1		<0.00254	<0.0026l	<0.00250	<0.00274	<0.00275
Xylenes (total)	16000	320	150	150	41000	5.6		<0.0076I	<0.00784	<0.00751	<0.00821	<0.00825

# Notes:

SCOG - Soil Component of the Groundwater Ingestion Exposure Route

ING - Ingestion Value

INH - Inhalation Value

< = Analyte not detected (i.e. less than RL or MDL)</pre>

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted

NE = No remediation objective established by the IEPA for this constituent

denotes compound is a Non-TACO Soil Remediation Objective

<sup>2</sup> denotes compounds that have been identified as an exceedance due to the Acceptable Detection Limit exceeding the regulatory standard

 $^{\rm 3}$  denotes an elevated method detection limit

# **Exposure Route Exceedences:**

<sup>&</sup>lt;sup>a</sup> Ingestion exceedence

<sup>&</sup>lt;sup>b</sup> Inhalation exceedence

<sup>&</sup>lt;sup>c</sup> Soil migration to groundwater exceedence

<sup>&</sup>lt;sup>d</sup> Construction worker ingestion exceedence

<sup>&</sup>lt;sup>e</sup> Construction worker inhalation exceedence <sup>f</sup> C<sub>sat</sub> exceedence





## **Summary of Soil Analytical Results**

## Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)/Methyl-tertiary-butyl-ether (MTBE)

**CLIENT:** Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

**PROJECT NUMBER:** T243326

**SAMPLE DATE:** 5/23/2024

LABORATORY: Sterling

MATRIX: Soil

Analytical Method: EPA Method 5035A/8260B

							Sample ID	SB-3	SB-7		
	Doold	Residential Soil Remediation Objectives			Constructi	on Worker	Sample Date	5/23/2024	5/23/2024		
Contaminant of Concern	Kesid	Residential Soil Remediation Objectives				n Objectives	PID	0.0	0.0		
		ING <sup>a</sup> INH <sup>b</sup> SCOG <sup>c</sup> Class				Depth	2.5-5'	10-12.5'			
	ING <sup>a</sup>			ING <sup>d</sup>	INH <sup>e</sup>	Soil Type	Silty Clay	Silty Clay			
Benzene	12	0.8	0.03	0.17	2300	2.2		<0.00181	<0.00155		
Ethylbenzene	7800	7800 400 13 19	20000	58		<0.00724	<0.00621				
Toluene	16000		410000	42		<0.00181	<0.00155				
Xylenes (total)	16000			41000	5.6		<0.0109	(0.00932			

#### Notes:

SCOG - Soil Component of the Groundwater Ingestion Exposure Route

ING - Ingestion Value

INH - Inhalation Value

< = Analyte not detected (i.e. less than RL or MDL)</pre>

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted

NE = No remediation objective established by the IEPA for this constituent

#### **Exposure Route Exceedences:**

<sup>&</sup>lt;sup>1</sup> denotes compound is a Non-TACO Soil Remediation Objective

<sup>&</sup>lt;sup>2</sup> denotes compounds that have been identified as an exceedance due to the Acceptable Detection Limit exceeding the regulatory standard

<sup>&</sup>lt;sup>3</sup> denotes an elevated method detection limit

<sup>&</sup>lt;sup>a</sup> Ingestion exceedence

b Inhalation exceedence

 $<sup>^{\</sup>mbox{\scriptsize c}}$  Soil migration to groundwater exceedence

<sup>&</sup>lt;sup>d</sup> Construction worker ingestion exceedence

<sup>&</sup>lt;sup>e</sup> Construction worker inhalation exceedence

<sup>&</sup>lt;sup>f</sup> C<sub>sat</sub> exceedence



#### **Summary of Soll Analytical Results**

#### Polynuclear Aromatic Hydrocarbons (PNAs)

CLIENT: Village of Lake Villa

SITE: Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

SAMPLE DATE: 5/23/2024
LABORATORY: Sterling
MATRIX: Soil

Analytical Method: EPA Method 3540C/8270C

	industrial/Commercial Soil Remediation Objectives			Consti	uction	Background		Sample ID	SB-I	SB-2	SB-3	SB-4	SB-5	
Contaminant of Concern			mediation	Remediation		Concentrations for	Updated Background Concentrations	Sample Date	5/23/2024	5/23/2024	5/23/2024	5/23/2024	5/23/2024	
Containment of Concern					Obje	ctives	Metropolitan Statistical	for Chicago Statistical Area	Depth	5-7.5'	7.5-10'	2.5-5'	7.5-10'	0-2.5'
	INGª	INH	SC( Class I	OG <sup>c</sup> Class II	ING⁴	INH*	Areas		Soll Type	Silty Clay				
Acenaphthene	120000	NE	570	2900	120000	NE	0.13	0.94		<0.0172	<0.0176	<0.0194	<0.0172	<0.0171
Acenaphthylene <sup>(I)</sup>	61000	NE	85	420	61000	NE	0.07	0.25		<0.0172	<0.0176	<0.0194	<0.0172	<0.0171
Anthracene	610000	NE	12000	59000	610000	NE	0.4	2.6		<0.0258	<0.0263	(0.0291	<0.0258	<0.0256
Benzo[a]anthracene	8	NE	2	8	170	NE	1.8	II		<0.0258	<0.0263	0.0463	<0.0258	<0.0256
Benzo[b]fluoranthene	8	NE	5	25	170	NE	2.1	13		<0.0258	<0.0263	0.0894	<0.0258	<0.0256
Benzo[k]fluoranthene	78	NE	49	250	1700	NE	1.7	8.1		(0.0344	<0.035I	0.0874	<0.0344	<0.0341
Benzo[g,h,i]perylene <sup>(I)</sup>	61000	NE	27000	130000	61000	NE	1.7	4.4		<0.0344	(0.0351	0.0619	<0.0344	<0.0341
Benzo[a]pyrene	0.8	NE	8	82	17	NE	2.1	II		(0.0900	<0.0900	<0.0900	<0.0900	<0.0900
Chrysene	780	NE	160	800	17000	NE	2.7	II		<0.0172	<0.0176	0.117	<0.0172	<0.0171
Dibenz[a,h]anthracene	0.8	NE	2	7.6	17	NE	0.42	I		<0.0258	<0.0263	(0.0291	<0.0258	<0.0256
Fluoranthene	82000	NE	4300	21000	82000	NE	4.1	28		0.0318	<0.0263	0.258	<0.0258	<0.0256
Fluorene	82000	NE	560	2800	82000	NE	0.18	1.1		<0.0172	<0.0176	<0.0194	<0.0172	<0.0171
Indeno[I,2,3-cd]pyrene	8	NE	14	69	170	NE	1.6	5.8		<0.0258	<0.0263	0.0625	<0.0258	<0.0256
Naphthalene	41000	270	12	18	4100	1.8	0.2	0.26		<0.0258	<0.0263	(0.0291	<0.0258	<0.0256
Phenanthrene <sup>(I)</sup>	61000	NE	210	1100	61000	NE	2.5	15		<0.0258	<0.0263	0.151	<0.0258	<0.0256
Pyrene	61000	NE	4200	21000	61000	NE	3	18		<0.0258	<0.0263	0.195	<0.0258	<0.0256

#### Notes:

SCOG - Soil Component of the Groundwater Ingestion Exposure Route

ING - Ingestion Value

INH - Inhalation Value

< = Analyte not detected (i.e. less than RL or MDL)</p>

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted

 $\ensuremath{\mathsf{NE}}$  = No remediation objective established by the IEPA for this constituent

<sup>1</sup> denotes compound is a Non-TACO Soil Remediation Objective

<sup>2</sup> denotes compounds that have been identified as an exceedance due to the Acceptable Detection Limit exceeding the regulatory standard

#### Exposure Route Exceedences:

<sup>&</sup>lt;sup>3</sup> denotes an elevated method detection limit

a Ingestion exceedence

b Inhalation exceedence

<sup>&</sup>lt;sup>c</sup> Soil migration to groundwater exceedence

<sup>&</sup>lt;sup>d</sup> Construction worker ingestion exceedence

<sup>•</sup> Construction worker inhalation exceedence

C<sub>sat</sub> exceedence

#### TABLE 3 CONT.



#### **Summary of Soil Analytical Results**

#### Polynuclear Aromatic Hydrocarbons (PNAs)

CLIENT: Village of Lake Villa

SITE: Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

SAMPLE DATE: 5/23/2024
LABORATORY: Sterling
MATRIX: Soil

Analytical Method: EPA Method 3540C/8270C

	Industrial/Commercial Soli Remediation Objectives		Constr	uction	Background		Sample ID	SB-6	SB-7				
Contaminant of Concern	Objectives		mediation	Remed		Concentrations for	Updated Background Concentrations	Sample Date	5/23/2024	5/23/2024			
Containment of Concern					Obje	tives	Metropolitan Statistical	for Chicago Statistical Area	Depth	5-7.5'	10-12.5'		
	INGª	INH	SCI Class I	OG <sup>c</sup> Class II	ING <sup>d</sup>	INH*	Areas		Soll Type	Silty Clay	Silty Clay		
Acenaphthene	120000	NE	570	2900	120000	NE	0.13	0.94		<0.0168	<0.0168		
Acenaphthylene <sup>(I)</sup>	61000	NE	85	420	61000	NE	0.07	0.25		<0.0168	<0.0168		
Anthracene	610000	NE	12000	59000	610000	NE	0.4	2.6		<0.0252	<0.0252		
Benzo[a]anthracene	8	NE	2	8	170	NE	1.8	II		<0.0252	<0.0252		
Benzo[b]fluoranthene	8	NE	5	25	170	NE	2.1	13		<0.0252	<0.0252		
Benzo[k]fluoranthene	78	NE	49	250	1700	NE	1.7	8.1		<0.0337	<0.0336		
Benzo[g,h,i]perylene <sup>(I)</sup>	61000	NE	27000	130000	61000	NE	1.7	4.4		<0.0337	<0.0336		
Benzo[a]pyrene	0.8	NE	8	82	17	NE	2.1	II		<0.0900	<0.0900		
Chrysene	780	NE	160	800	17000	NE	2.7	II		<0.0168	<0.0168		
Dibenz[a,h]anthracene	0.8	NE	2	7.6	17	NE	0.42	I		<0.0252	<0.0252		
Fluoranthene	82000	NE	4300	21000	82000	NE	4.1	28		<0.0252	<0.0252		
Fluorene	82000	NE	560	2800	82000	NE	0.18	l.l		<0.0168	<0.0168		
Indeno[I,2,3-cd]pyrene	8	NE	14	69	170	NE	1.6	5.8		<0.0252	<0.0252		
Naphthalene	41000	270	12	18	4100	1.8	0.2	0.26		<0.0252	<0.0252		
Phenanthrene <sup>(I)</sup>	61000	NE	210	1100	61000	NE	2.5	15		<0.0252	<0.0252		
Pyrene	61000	NE	4200	21000	61000	NE	3	18		<0.0252	<0.0252		

#### Notes:

SCOG - Soil Component of the Groundwater Ingestion Exposure Route

ING - Ingestion Value

INH - Inhalation Value

< = Analyte not detected (i.e. less than RL or MDL)</p>

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted

 $\ensuremath{\mathsf{NE}}$  = No remediation objective established by the IEPA for this constituent

<sup>1</sup> denotes compound is a Non-TACO Soil Remediation Objective

<sup>2</sup> denotes compounds that have been identified as an exceedance due to the Acceptable Detection Limit exceeding the regulatory standard

#### Exposure Route Exceedences:

<sup>&</sup>lt;sup>3</sup> denotes an elevated method detection limit

a Ingestion exceedence

b Inhalation exceedence

 $<sup>^{\</sup>mathbf{c}}$  Soil migration to groundwater exceedence

<sup>&</sup>lt;sup>d</sup> Construction worker ingestion exceedence

Construction worker inhalation exceedence

C<sub>sat</sub> exceedence



## **Summary of Soil Analytical Results**

## RCRA Metals (total concentrations)

**CLIENT:** Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

SAMPLE DATE: 5/23/2024
LABORATORY: Sterling

MATRIX: Soil

## Analytical Method: EPA Method 9045C, 3050B/6020,90I0B/90I4,3060/7I96A

						Sample ID	SB-I	SB-2	SB-4	SB-5	SB-6
		Residential So	il Remediation	Construction Wo	Construction Worker Remediation		5/23/2024	5/23/2024	5/23/2024	5/23/2024	5/23/2024
Contaminant of Concern	Counties within MSA Background		ctives	Obje	ctives	рН	7.86	7.06	6.89	7.27	7.33
						Depth	5-7.5'	7.5-10'	7.5-10'	0-2.5'	5-7.5'
		ING <sup>a</sup>	INH⁵	ING°	INH <sup>d</sup>	Soil Type	Silty Clay				
Arsenic	13	13	750	61	25000		5.27	4.74	4.55	5.33	5.39
Barium	IIO	5500	690000	14000	870000		41.2	52.4	47.1	62.3	48.5
Cadmium	0.6	78	1800	200	59000		<0.251	<0.250	<0.232	<0.283	<0.239
Chromium Total	16.2	230	270	4100	690		17.7	20.5	20.3	20.2	19.1
Lead	36	400	NE	700	NE		11.4	12.6	12.1	12.0	12.5
Mercury	0.06	23	10	61	0.1		<0.0545	<0.0599	<0.0576	<0.0597	<0.0598
Selenium	0.48	390	NE	1000	NE		1.02	1.12	1.03	<0.566	0.527
Silver	0.55	390	NE	1000	NE		<0.502	(0.499	(0.463	<0.566	<0.478

Notes:

**ING** - Ingestion Value

INH - Inhalation Value

< = Analyte not detected (i.e. less than RL or MDL)</p>

All data reported in milligrams per kilogram (mg/kg) unless otherwise noted

 $\ensuremath{\mathsf{NE}}$  = No remediation objective established by the IEPA for this constituent

denotes compounds that have been identified as an exceedance due to the Acceptable Detection Limit exceeding the regulatory standard

<sup>2</sup> denotes an elevated method detection limit

#### **Exposure Route Exceedences:**

<sup>&</sup>lt;sup>a</sup> Ingestion exceedence

<sup>&</sup>lt;sup>b</sup> Inhalation exceedence

<sup>&</sup>lt;sup>c</sup> Construction worker ingestion exceedence

<sup>&</sup>lt;sup>d</sup> Construction worker inhalation exceedence

<sup>&</sup>lt;sup>e</sup> pH-adjusted soil component of groundwater ingestion exceedence



# **Summary of Groundwater Analytical Results**

# Volatile Organic Compounds (VOCs)

**CLIENT:** Village of Lake Villa

Former Pleviak Elementary School Property SITE:

T243326 PROJECT NUMBER:

**SAMPLE DATE:** 5/23/2024 LABORATORY: Sterling **MATRIX:** Groundwater

Analytical Method: EPA Method 8260B

						 arytical rictilear 2	
	Class I Groundwater	Residential Indoor	Sample ID	TW-I	TW-2		
Contaminant of Concern	Ingestion Remediation Objectives	Inhalation Remediation Objectives (Diffusion & Advection)	Sample Date	5/23/2024	5/23/2024		
Acetone	6.3	1000000		<0.0700	<0.0700		
Benzene	0.005	0.11		<0.00200	<0.00200		
Bromodichloromethane	0.0002	6700		<0.00200	<0.00200		
Bromoform	0.001	3.1		<0.00400	<0.00400		
Bromomethane	0.0098	1.5		<0.0400	<0.0400		
2-Butanone <sup>(I)</sup>	4.2	10000		<0.0280	<0.0280		
Carbon disulfide	0.7	67		<0.00400	<0.00400		
Carbon tetrachloride	0.005	0.02		<0.0200	<0.0200		
Chlorobenzene	0.1	26		<0.00200	<0.00200		
Chloroethane	NE	NE		<0.00400	<0.00400		
Chloroform	0.0002	0.07		<0.00400	<0.00400		
Chloromethane	NE	NE		<0.00800	<0.00800		
Dibromochloromethane	0.14	2600		<0.00400	<0.00400		
I,I-Dichloroethane	0.7	180		<0.00200	<0.00200		
I,2-Dichloroethane	0.005	0.054		<0.00400	<0.00400		
I,I-Dichloroethylene	0.007	24		<0.00400	<0.00400		
cis-I,2-Dichloroethylene	0.07	3500		<0.00400	<0.00400		
trans-I,2-Dichloroethylene	0.1	16		<0.00400	<0.00400		
I,2-Dichloropropane	0.005	0.12		<0.00400	<0.00400		
cis-I,3-Dichloropropene	0.001	0.14		<0.00400	<0.00400		
trans-I,3-Dichloropropene	0.001	0.14		<0.00800	<0.00800		
Ethylbenzene	0.7	0.37		<0.00400	<0.00400		
2-Hexanone <sup>(I)</sup>	0.035	NE		<0.0280	<0.0280		
Methyl tertiary-butyl ether	0.07	1900		<0.00400	<0.00400		
4-Methyl-2-pentanone <sup>(I)</sup>	0.56	NE		<0.0280	<0.0280		
Methylene chloride	0.005	2.1		<0.0200	<0.0200		
Styrene	0.1	310		<0.00800	<0.00800		
I,I,2,2-Tetrachloroethane <sup>(I)</sup>	0.0043	NE		<0.00400	<0.00400		
Tetrachloroethylene	0.005	0.091		<0.00400	<0.00400		
Toluene	I	530		<0.00400	<0.00400		
I,I,I-Trichloroethane	0.2	1000		<0.00400	<0.00400		
I,I,2-Trichloroethane	0.005	4400		<0.00400	<0.00400		
Trichloroethylene	0.005	0.34		<0.00400	<0.00400		
Vinyl Chloride	0.002	0.028		<0.00400	<0.00400		
Xylenes (total)	10	30		<0.0120	<0.0120		
	•	•			•		

## Notes:

< = Analyte not detected (i.e. less than RL or MDL)</pre>

All data reported in milligrams per liter (mg/L) unless otherwise noted

NE = No remediation objective established by the IEPA for this constituent

# **Exposure Route Exceedances:**

denotes compound is a Non-TACO Groundwater Remediation Objective

<sup>&</sup>lt;sup>2</sup> denotes an elevated method detection limit

<sup>&</sup>lt;sup>a</sup> Class I groundwater exceedance

<sup>&</sup>lt;sup>b</sup> Class II groundwater exceedance

<sup>&</sup>lt;sup>c</sup> Indoor Inhalation exceedance



## **Summary of Groundwater Analytical Results**

## Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)/MTBE

CLIENT: Village of Lake Villa

SITE: Former Pleviak Elementary School Property

LABORATORY: Sterling

SITE: Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

LABORATORY: Sterling

MATRIX: Groundwater

Analytical Method: EPA Method 8260B

						<b>,</b>	
	Class I Groundwater	Residential Indoor Inhalation Remediation	Sample ID	TW-3			
Contaminant of Concern	Ingestion Remediation Objectives	Objectives (Diffusion & Advection)	Sample Date	5/23/2024			
Benzene	0.005	0.11		<0.00200			
Ethylbenzene	0.7	0.37		<0.00500			
Toluene	I	530		<0.00500			
Xylenes (total)	10	30		<0.0100			

#### Notes:

< = Analyte not detected (i.e. less than RL or MDL)</p>

All data reported in milligrams per liter (mg/L) unless otherwise noted

NE = No remediation objective established by the IEPA for this constituent

#### **Exposure Route Exceedances:**

denotes an elevated method detection limit

<sup>&</sup>lt;sup>a</sup> Class I groundwater exceedance

<sup>&</sup>lt;sup>b</sup> Class II groundwater exceedance

<sup>&</sup>lt;sup>c</sup> Indoor Inhalation exceedance



# **Summary of Groundwater Analytical Results**

## Polynuclear Aromatic Hydrocarbons (PNAs)

**CLIENT:** Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

SAMPLE DATE: 5/23/2024
LABORATORY: Sterling

MATRIX: Groundwater

Analytical Method: EPA Method 8270C

	Class I Groundwater	Residential Indoor Inhalation Remediation	Sample ID	TW-I	TW-2	TW-3	
Contaminant of Concern	Ingestion Remediation Objectives	Objectives (Diffusion & Advection)	Sample Date	5/23/2024	5/23/2024	5/23/2024	
Acenaphthene	0.42	NE		<0.000I25	<0.000122	<0.000II7	
Acenaphthylene <sup>(I)</sup>	0.21	NE		<0.000125	<0.000122	<0.000II7	
Anthracene	2.1	NE		<0.000I25	<0.000122	<0.000II7	
Benzo(a)anthracene	0.00013	NE		<0.000125	<0.000122	<0.000II7	
Benzo(b)fluoranthene	0.00018	NE		<0.000417	<0.000406	<0.000392	
Benzo(k)fluoranthene	0.00017	NE		<0.000417	<0.000406	<0.000392	
Benzo(g,h,i)perylene <sup>(1)</sup>	0.21	NE		<0.000417	<0.000406	<0.000392	
Benzo(a)pyrene	0.0002	NE		<0.000417	<0.000406	<0.000392	
Chrysene	0.0015	NE		<0.000125	<0.000122	<0.000II7	
Dibenzo(a,h)anthracene	0.0003	NE		<0.000417	<0.000406	<0.000392	
Fluoranthene	0.28	NE		<0.000209	<0.000203	<0.000196	
Fluorene	0.28	NE		<0.000125	<0.000122	<0.000II7	
Indeno(I,2,3-cd)pyrene	0.00043	NE		<0.000417	<0.000406	<0.000392	
Naphthalene	0.14	0.075		<0.000835	<0.000813	<0.000783	
Phenanthrene <sup>(1)</sup>	0.21	NE		<0.000209	<0.000203	<0.000196	
Pyrene	0.21	NE		<0.000209	<0.000203	<0.000196	

#### Notes:

< = Analyte not detected (i.e. less than RL or MDL)</pre>

All data reported in milligrams per liter (mg/L) unless otherwise noted

NE = No remediation objective established by the IEPA for this constituent

#### **Exposure Route Exceedances:**

denotes compound is a Non-TACO Groundwater Remediation Objective

<sup>&</sup>lt;sup>2</sup> denotes an elevated method detection limit

<sup>&</sup>lt;sup>a</sup> Class I groundwater exceedance

<sup>&</sup>lt;sup>b</sup> Class II groundwater exceedance

<sup>&</sup>lt;sup>c</sup> Indoor Inhalation exceedance



## **Summary of Groundwater Analytical Results**

## **RCRA Metals**

CLIENT: Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

**PROJECT NUMBER:** T243326

SAMPLE DATE: 5/23/2024
LABORATORY: Sterling

**MATRIX:** Groundwater

Analytical Method: EPA Method 6010B/6020A

	Class I Groundwater	Residential Indoor Inhalation Remediation	Sample ID	TW-I	TW-2		
Contaminant of Concern	Ingestion Remediation Objectives	Objectives (Diffusion & Advection)	Sample Date	5/23/2024	5/23/2024		
Arsenic	0.05	NE		<0.0250	<0.0250		
Barium	2	NE		0.319	0.317		
Cadmium	0.005	NE		<0.00250	<0.00250		
Chromium Total	0.1	NE		<0.0250	<0.0250		
Lead	0.0075	NE		<0.00750	<0.00750		
Mercury	0.002	0.053		<0.00040	<0.00040		
Selenium	0.05	NE		<0.0250	<0.0250		
Silver	0.05	NE		<0.00250	<0.00250		

#### Notes:

< = Analyte not detected (i.e. less than RL or MDL)</pre>

All data reported in milligrams per liter (mg/L) unless otherwise noted  $\,$ 

NE = No remediation objective established by the IEPA for this constituent

<sup>1</sup> denotes an elevated method detection limit

#### **Exposure Route Exceedances:**

<sup>&</sup>lt;sup>a</sup> Class I groundwater exceedance

<sup>&</sup>lt;sup>b</sup> Class II groundwater exceedance

<sup>&</sup>lt;sup>c</sup> Indoor Inhalation exceedance



# **Summary of Soil Gas Analytical Results**

# Volatile Chemicals (VCs)

**CLIENT:** Village of Lake Villa

**SITE:** Former Pleviak Elementary School Property

PROJECT NUMBER: T243326

SAMPLE DATE: 05/23/24

LABORATORY: Sterling

MATRIX: Air - Soil Gas

Analytical Method: EPA Method 625/R-96/010b/TO-15 LL

												thod 625/R-96/0	100/10-15 LL
						Indoor Inhalatio	n Exposure Route	Sample ID	SG-I	SG-2	SG-3	SG-4	
	Outdoor Inha	alation Exposure	Route (mg/m³)	Indoor Inhalation for Residentia		for Industria	I/Commercial erties	Sample Date	5/23/2024	5/23/2024	5/23/2024	5/23/2024	
Contaminant of Concern								Depth	4-5'	4-5'	4-5'	3-4'	
	Residential Properties	Industrial Commercial Properties	Construction Worker	Diffusion & Advection (mg/m³)	Diffusion Only (mg/m³)	Diffusion & Advection (mg/m³)	Diffusion Only (mg/m³)	Units	mg/m³	mg/m³	mg/m³	mg/m³	
I,I,I-Trichloroethane	870,000	870,000	89,000	6,600	770,000	41,000	870,000		< 0.0034	< 0.0038	< 0.0035	⟨0.0034	
I,I,2-Trichloroethane	170,000	170,000	170,000	170,000	170,000	170,000	170,000		< 0.0034	< 0.0038	< 0.0035	⟨0.0034	
I,I-Dichloroethane	870,000	1,300,000	90,000	690	81,000	4,200	500,000		⟨0.0026	< 0.0028	< 0.0026	⟨0.0026	
I,I-Dichloroethylene	520,000	820,000	5,300	240	27,000	1,600	160,000		< 0.0025	< 0.0027	< 0.0025	< 0.0025	
I,2,4-Trichlorobenzene	1,000	1,600	IIO	5.4	800	25	4,300		< 0.0047	⟨ 0.005	< 0.0047	< 0.0047	
I,2-Dibromoethane	2.9	5.6	7.9	0.0078	1.1	0.048	7.9		< 0.0048	< 0.0053	⟨ 0.0049	⟨ 0.0049	
I,2-Dichlorobenzene	11,000	11,000	6,700	290	11,000	1,700	11,000		< 0.0038	⟨ 0.004	< 0.0038	< 0.0038	
I,2-Dichloroethane	67	130	180	0.099	10	0.81	76		< 0.0026	< 0.0028	⟨0.0026	< 0.0026	
I,2-Dichloropropane	240	470	110	0.31	36	2.3	260	_	< 0.0029	< 0.0032	⟨0.0029	⟨0.0029	
I,4-Dichlorobenzene	8,400	8,400	6,400	1,200	8,400	6,800	8,400		< 0.0038	⟨ 0.004	< 0.0038	< 0.0038	
p-Dioxane	16	30	42	0.22	15	2.3	IIO		< 0.0057	< 0.0062	< 0.0057	< 0.0057	
2-Butanone (MEK)	380,000	380,000	15,000	6,400	380,000	40,000	380,000		0.013	⟨ 0.005	0.021	0.016	
Acetone	750,000	750,000	750,000	750,000	750,000	750,000	750,000		0.057	< 0.016	0.086	0.13	
Benzene	420	800	1,100	0.37	41	2.8	300		0.010	< 0.0022	0.016	0.011	
Bromodichloromethane	450,000	450,000	450,000	450,000	450,000	450,000	450,000		< 0.0042	⟨ 0.0046	< 0.0043	⟨0.0042	
Bromoform	1,800	3,500	4,900	II	1,800	52	13,000		< 0.016	< 0.018	< 0.016	< 0.016	
Methylbromide	12,000	19,000	2,400	6.9	830	42	5,100		⟨ 0.006	< 0.0067	⟨ 0.0062	⟨ 0.006	
Carbon disulfide	1,500,000	1,500,000	48,000	780	81,000	5,300	500,000		0.011	⟨ 0.002	0.0053	0.0055	
Carbon tetrachloride	290	550	770	0.21	24	I.5	180		< 0.0040	< 0.0043	⟨0.0040	< 0.0040	
Chlorobenzene	36,000	57,000	3,700	69	8,300	420	51,000		< 0.0029	< 0.0032	⟨0.0029	⟨0.0029	
Chloroform	IIO	200	290	0.11	12	0.92	87		⟨ 0.003	< 0.0034	< 0.003I	⟨ 0.003	
cis-I,2-Dichloroethylene	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000		< 0.0025	< 0.0027	< 0.0025	0.0061	
cis-I,3-Dichloropropene	NE	NE	NE	NE	NE	NE	NE		< 0.0029	< 0.003I	⟨0.0029	< 0.0029	
Chlorodibromomethane	57,000	57,000	150	57,000	57,000	57,000	57,000		< 0.0054	⟨ 0.0059	< 0.0054	< 0.0054	
Dichlorodifluoromethane	890,000	1,400,000	92,000	270	32,000	1,700	200,000		0.0031	< 0.0034	< 0.003I	⟨ 0.003	
Ethylbenzene	59,000	59,000	8,500	1.3	150	9.3	1,100		0.0052	< 0.0030	0.0054	< 0.0027	
m&p-Xylene	52,000	52,000	3,100	130	16,000	820	52,000		0.0066	< 0.0060	0.011	0.0080	
Methyl tertiary-butyl ether	1,200,000	1,200,000	23,000	3,700	420,000	24,000	1,200,000		< 0.0023	< 0.0025	< 0.0023	< 0.0023	
Methylene chloride	6,100	12,000	5,100	5.6	590	45	4,400		< 0.022	< 0.024	< 0.022	0.12	
Naphthalene	560	620	5.8	0.11	14	0.75	100		0.0094	< 0.0036	0.011	⟨0.0033	
o-Xylene	41,000	41,000	2,600	120	14,000	790	41,000		0.0034	< 0.0030	0.0029	< 0.0027	
Styrene	34,000	34,000	16,000	1,400	34,000	8,500	34,000		< 0.0027	< 0.0029	< 0.0027	< 0.0027	
Tetrachloroethylene	360	690	970	0.55	66	4	490		0.067	< 0.0047	0.0073	0.012	
Toluene	140,000	140,000	50,000	6,200	140,000	40,000	140,000		0.011	0.023	0.017	0.013	
trans-I,2-Dichloroethylene	120,000	190,000	12,000	85	10,000	510	63,000		< 0.0025	< 0.0027	< 0.0025	< 0.0025	
trans-I,3-Dichloropropene	NE	NE	NE	NE	NE	NE	NE		⟨0.0029	⟨ 0.003	⟨0.0029	⟨0.0029	
Trichloroethene	1,700	3,300	1,500	1.5	180	I2	1,300		⟨0.0034	< 0.0037	< 0.0034	0.0085	
Trichlorofluoromethane	2,100,000	3,400,000	220,000	860	97,000	5,600	600,000		⟨ 0.0035	< 0.0039	< 0.0036	< 0.0035	
Vinyl Acetate	160,000	250,000	1,600	250	28,000	1,600	170,000		< 0.022	< 0.024	< 0.022	< 0.022	
Vinyl Chloride	780	3,000	3,000	0.29	30	4.8	440		< 0.0016	⟨ 0.0018	< 0.0016	< 0.0016	
Xylenes (total)	49,000	49,000	2,900	140	17,000	840	49,000		0.010	⟨0.0090	0.014	< 0.0082	

# Notes:

Soil Gas Remediation Objective Values:
Outdoor Inhalation Exposure Route - 742 Appendix B, Table G
Indoor Inhalation Exposure Route for Diffusion & Advection - 742 Appendix B, Table H
Indoor Inhalation Exposure Route for Diffusion only - 742 Appendix B, Table I

< = Analyte not detected (i.e. less than RL or MDL) or not included in analysis</p>
All data reported in milligrams per cubic meter (mg/m³) unless otherwise noted
NE = No remediation objective established by the IEPA for this constituent

# **Exposure Route Exceedences:**

- <sup>a</sup> Outdoor Inhalation Exposure Route for Residential Properties exceedance
- b Outdoor Inhalation Exposure Route for Commercial/Industrial Properties exceedance
- Outdoor Inhalation Exposure Route for Construction Workers exceedance
   Indoor Inhalation diffusion & advection exceedance for Residential Properties
- Indoor Inhalation diffusion & advection exceedance for Residential Proper
   Indoor Inhalation diffusion only exceedance for Residential Properties
- Indoor Inhalation diffusion only exceedance for Residential Properties
   Indoor Inhalation diffusion & advection exceedance for Industrial/Commercial Properties
- g Indoor Inhalation diffusion only exceedance for Industrial/Commercial Properties



# APPENDIX A Soil Boring Logs



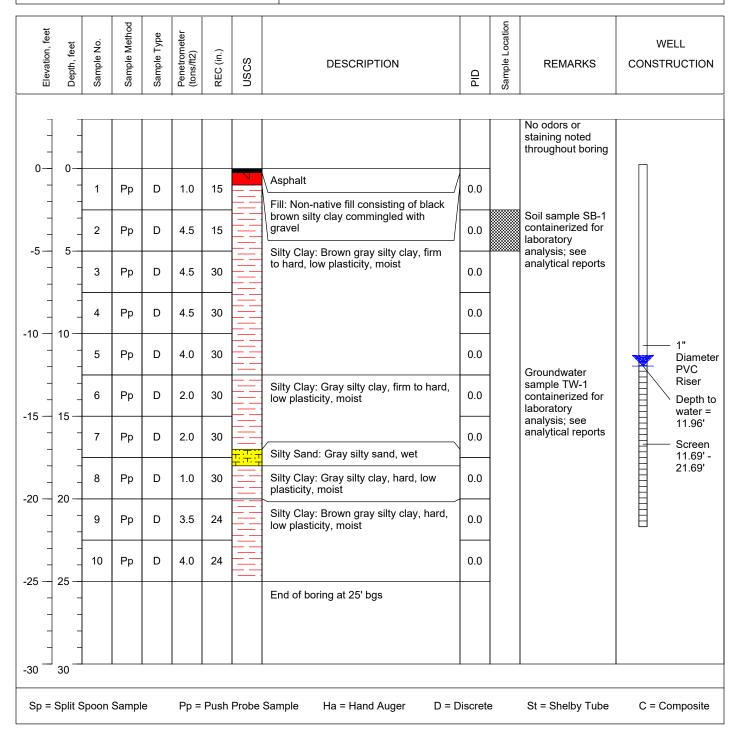
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring SB-1/TW-1

Sheet 1 of 11

BOREHOLE LOCATION: See Site Investigation Figure									
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG							
GROUND SURFACE ELEVATION: -	TOTAL DEPTH OF BOREHOLE: 25'	CHECKED BY: SPB							
GWL DATE: 5/23/24	GWL DEPTH: 11.96'								
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro-Dynamics, LLC								





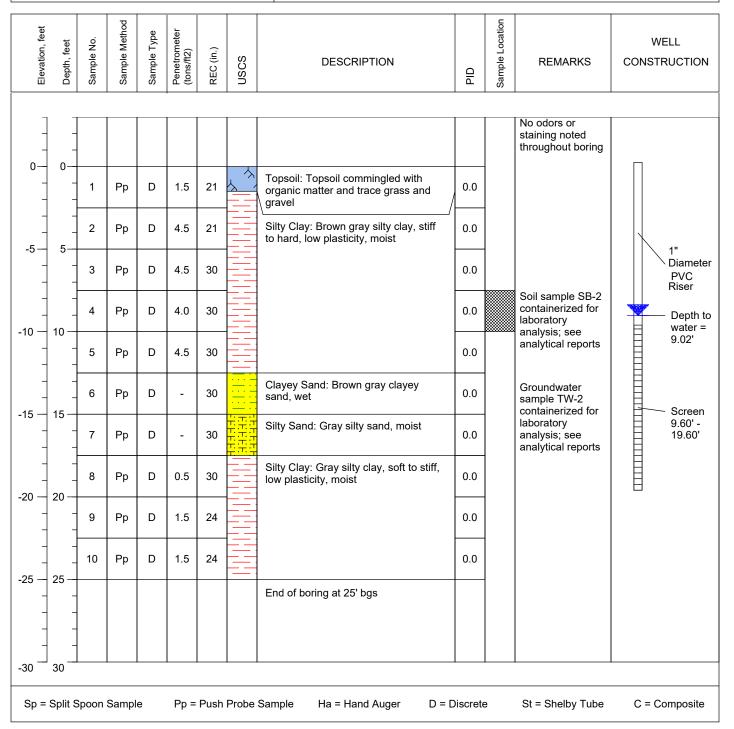
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring SB-2/TW-2

Sheet 2 of 11

BOREHOLE LOCATION: See Site Investigation Figure									
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AM	IG						
GROUND SURFACE ELEVATION: -	TOTAL DEPTH OF BOREHOLE: 25'	CHECKED BY: SPE	В						
GWL DATE: 5/23/24	GWL DEPTH: 9.02'								
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro-Dynamics, LLC								





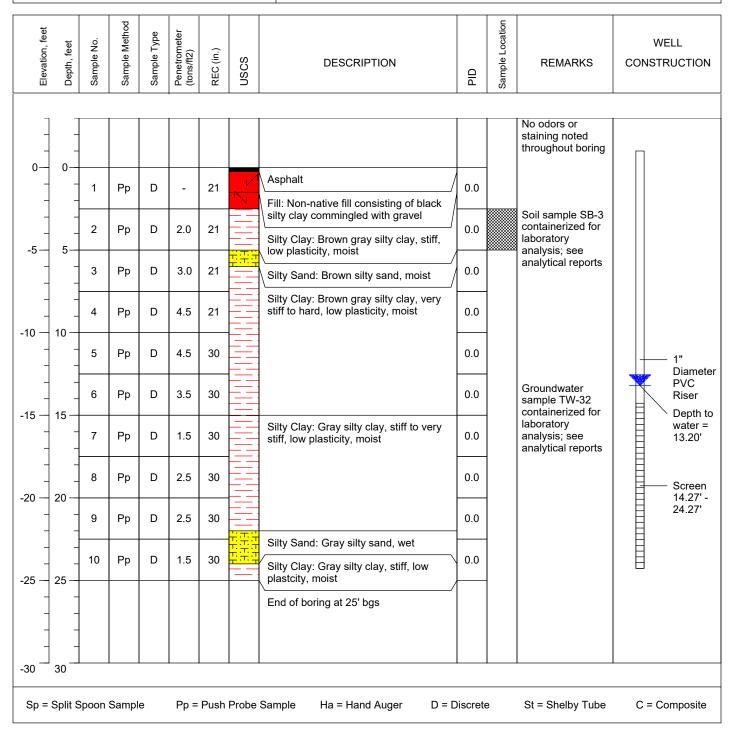
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring SB-3/TW-3

Sheet 3 of 11

BOREHOLE LOCATION: See Site Investigation Figure					
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG			
GROUND SURFACE ELEVATION: -	TOTAL DEPTH OF BOREHOLE: 25'	CHECKED BY: SPB			
GWL DATE: 5/23/24	GWL DEPTH: 13.20'				
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro-Dynamics, LLC				





Project Location: 304 East Grand Avenue

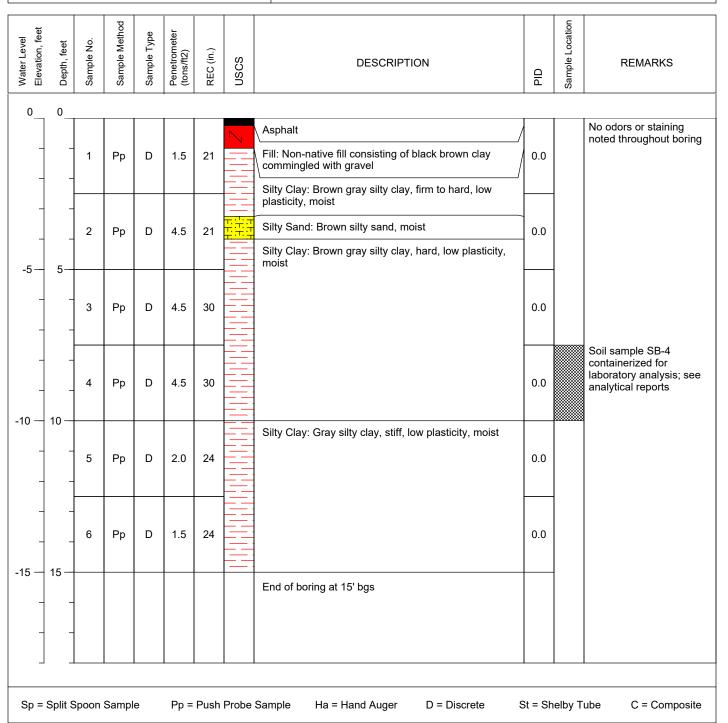
Project Number: T243326

**Log of Boring** 

SB-4

Sheet 4 of 11

BOREHOLE LOCATION: See Site Investigation Fi	gure	
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 15'	CHECKED BY: SPB
GWL DATE :	GWL DEPTH:	
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC	





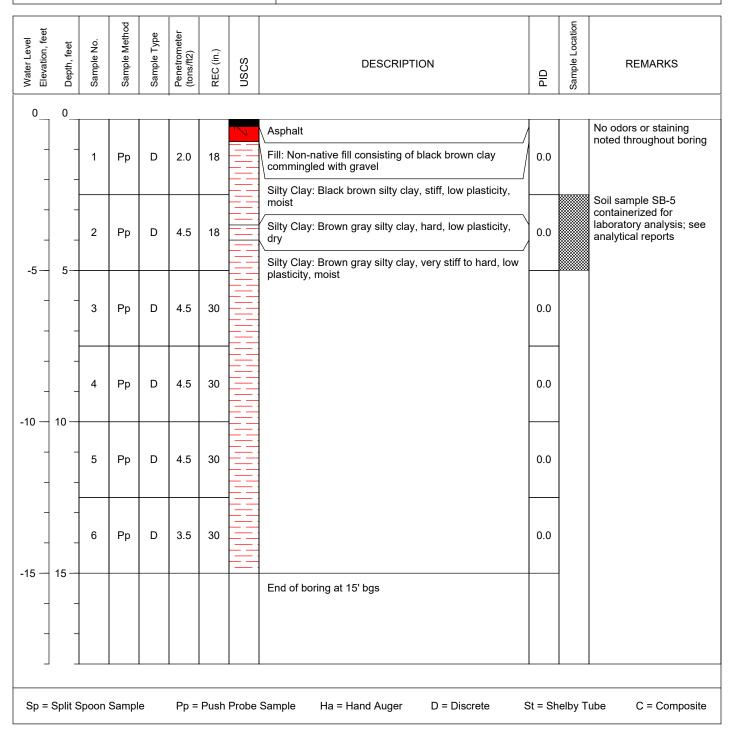
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring

**SB-5** Sheet 5 of 11

BOREHOLE LOCATION: See Site Investigation Fi	gure	
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 15'	CHECKED BY: SPB
GWL DATE :	GWL DEPTH:	
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC	





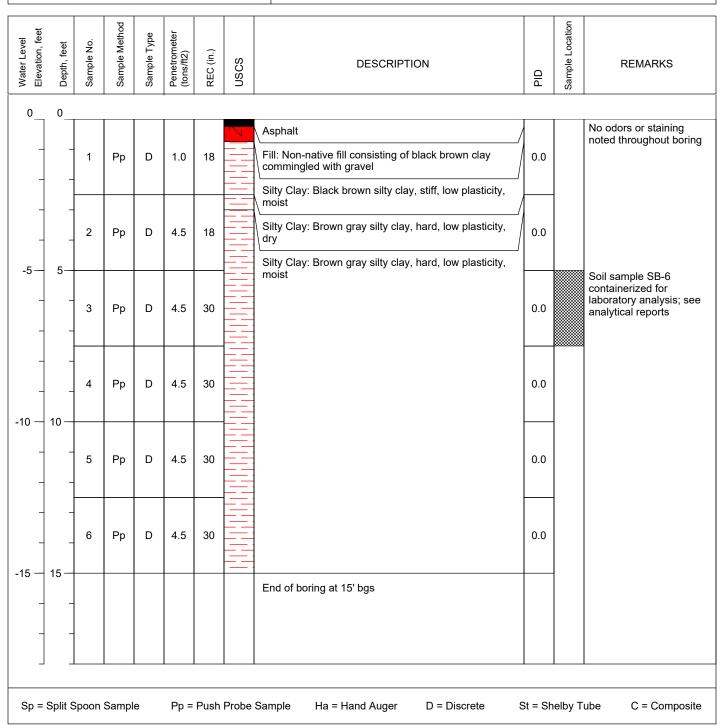
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring

**SB-6** Sheet 6 of 11

BOREHOLE LOCATION: See Site Investigation Fi	gure	
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 15'	CHECKED BY: SPB
GWL DATE:	GWL DEPTH:	
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC	





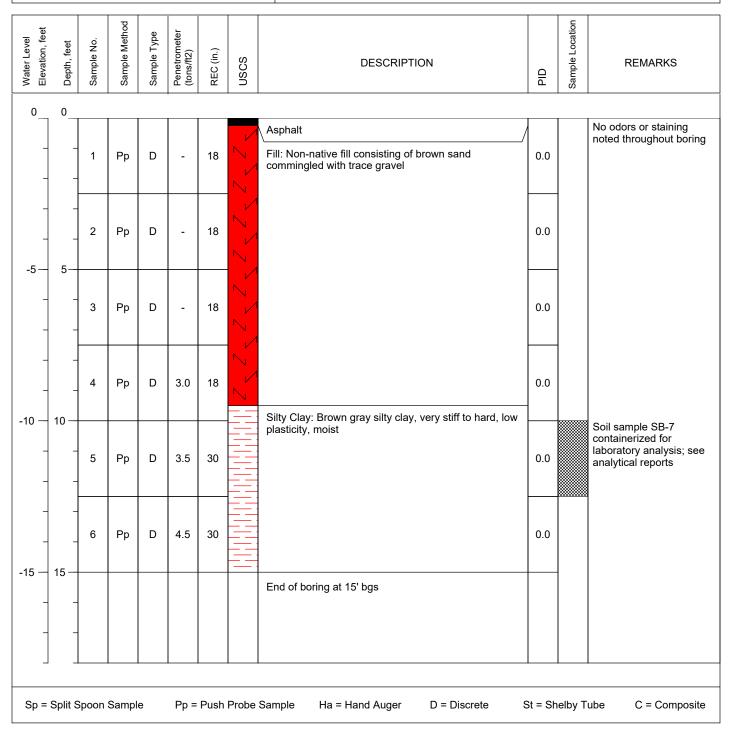
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring SB-7

Sheet 7 of 11

BOREHOLE LOCATION: See Site Investigation Figure					
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG			
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 15'	CHECKED BY: SPB			
GWL DATE:	GWL DEPTH:				
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC				





Project Location: 304 East Grand Avenue

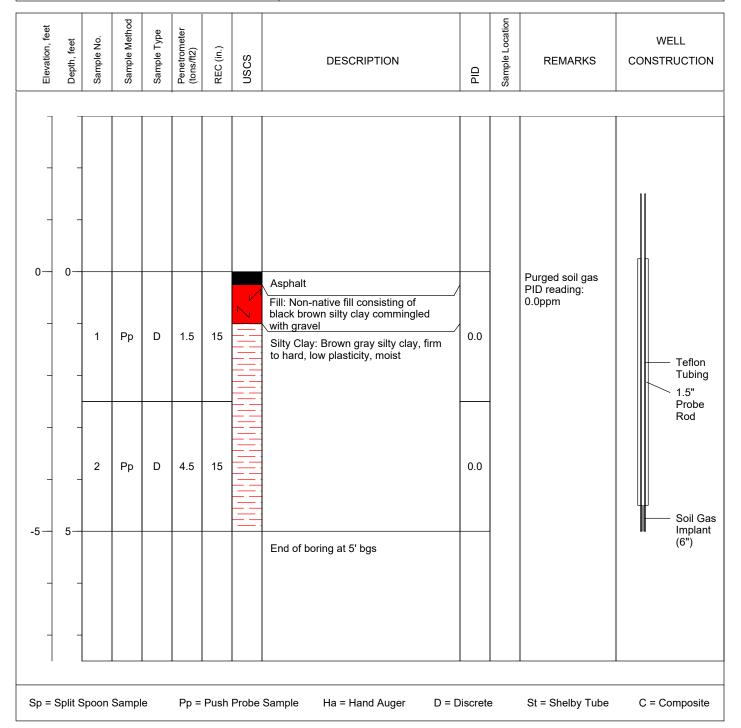
Project Number: T243326

**Log of Boring** 

SG-1

Sheet 8 of 11

BOREHOLE LOCATION: See Site Investigation Figure					
DATE BEGAN: 5/23/24	FIELD GEOLOGIST: AMG				
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 5.0'	CHECKED BY: SPB			
GWL DATE:	GWL DEPTH:				
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC				





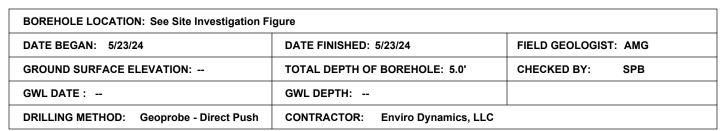
Project Location: 304 East Grand Avenue

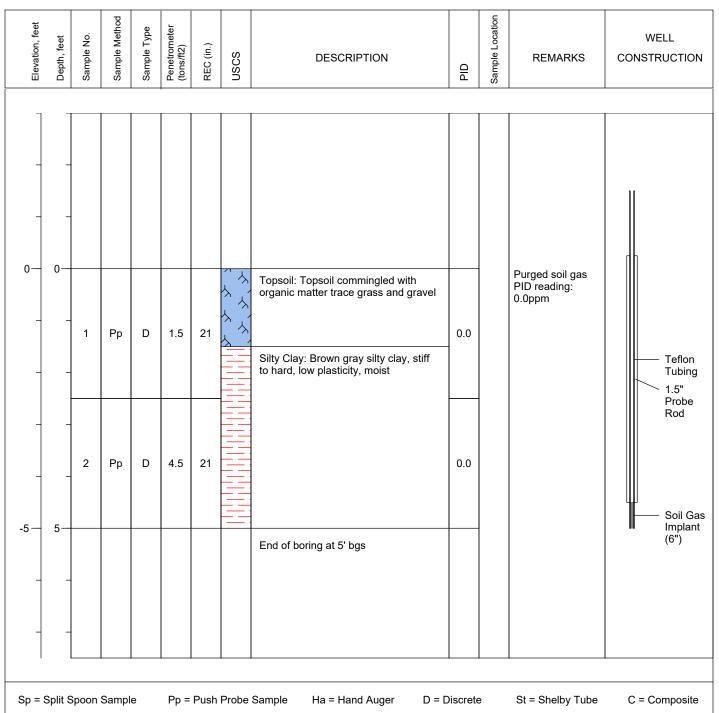
Project Number: T243326

**Log of Boring** 

SG-2

Sheet 9 of 11







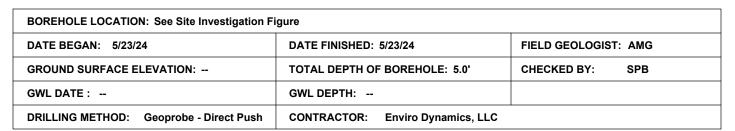
Project Location: 304 East Grand Avenue

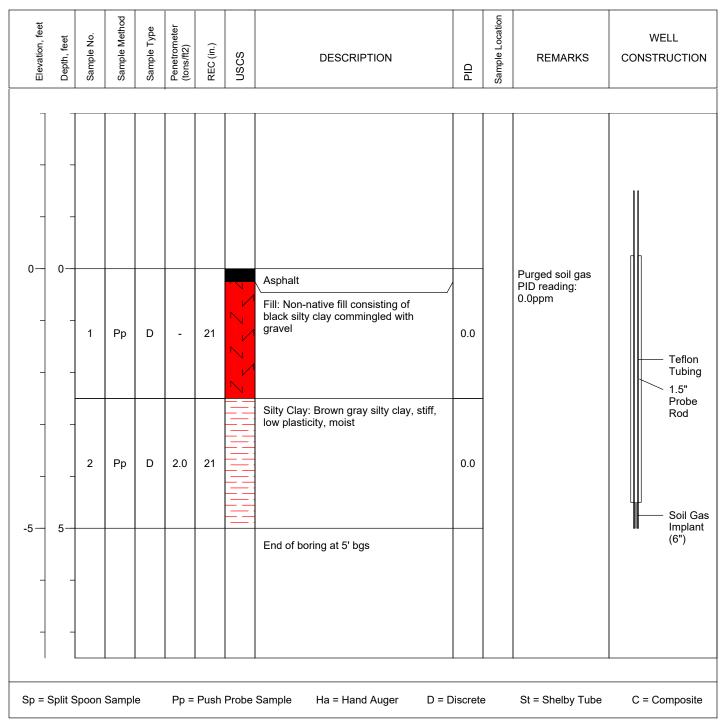
Project Number: T243326

Log of Boring

**SG-3** 

Sheet 10 of 11







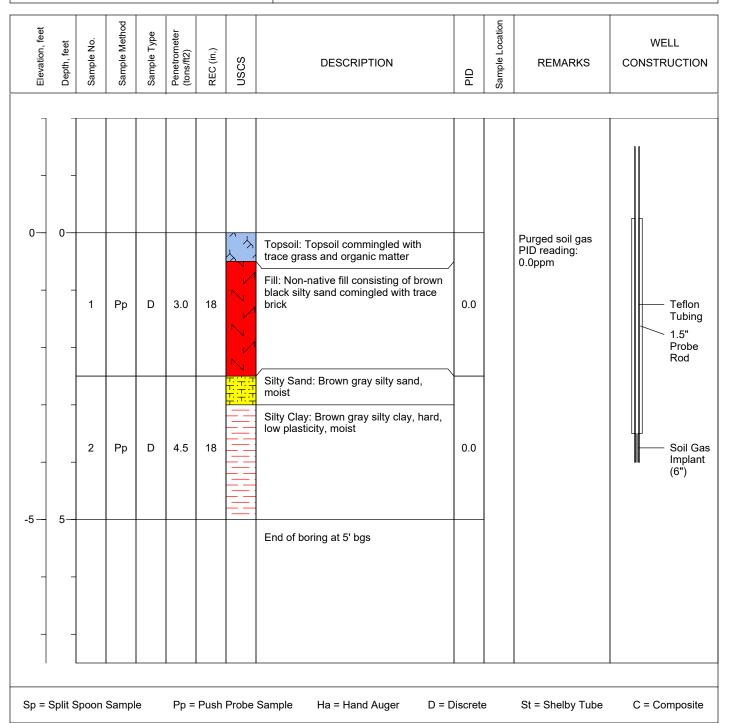
Project Location: 304 East Grand Avenue

Project Number: T243326

Log of Boring

**SG-4** Sheet 11 of 11

BOREHOLE LOCATION: See Site Investigation Fi	gure	
DATE BEGAN: 5/23/24	DATE FINISHED: 5/23/24	FIELD GEOLOGIST: AMG
GROUND SURFACE ELEVATION:	TOTAL DEPTH OF BOREHOLE: 5.0'	CHECKED BY: SPB
GWL DATE :	GWL DEPTH:	
DRILLING METHOD: Geoprobe - Direct Push	CONTRACTOR: Enviro Dynamics, LLC	





# APPENDIX B Laboratory Analytical Reports



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 P 847.967.6666 800.246.0663 F 847.967.6735 www.thesterlinglab.com

June 05, 2024

True North Consultants, Inc. 1000 East Warrenville Road Suite 140 Naperville, IL 60563

Telephone: (630) 717-2880 Fax: (630) 689-5881

Analytical Report for Work Order: O24E0979 Revision 0

RE: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL

Dear True North Consultants, Inc.:

Sterling Labs has received 7 samples for the referenced project on May 28, 2024 15:51. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Pat 186 / TNI 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.

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 (847) 967-6666.

Sincerely,

Justice Kwateng 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. Sterling Labs is not responsible for customer provided information found in the report that is used to calculate final results. 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, Sterling Labs will be under no obligation to support, defend or dicuss the analytical report



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Customer: True North Consultants, Inc.

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL

**Work Order Sample Summary** 

WorkOrder:	O24E0979

Proiect:

Laboratory ID	Sample ID	Tag Number	Collection Date	Date Received
O24E0979-01	SB-1		05/23/24 10:25	05/28/24 15:51
O24E0979-02	SB-2		05/23/24 08:45	05/28/24 15:51
O24E0979-03	SB-3		05/23/24 09:20	05/28/24 15:51
O24E0979-04	SB-4		05/23/24 11:00	05/28/24 15:51
O24E0979-05	SB-5		05/23/24 11:15	05/28/24 15:51
O24E0979-06	SB-6		05/23/24 11:35	05/28/24 15:51
O24E0979-07	SB-7		05/23/24 12:50	05/28/24 15:51



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

**Customer:** True North Consultants, Inc.

Proiect: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL Case Narrative

WorkOrder: O24E0979

Work Order: O24E0979

The samples were received on 5/28/2024 3:51:00 PM. The temperature of the cooler(s) at receipt was:

Cooler:Temp CDefault Cooler4.8

The samples were received in good condition and were properly preserved.

#### **GCMS Volatiles**

#### 8260 VOC

Sample O24E0979-07 had recovery for VOC surrogate 4-Bromofluorobenzene outside of the control limits (141% recovery, QC Limits: 79 - 114%).

The following samples has recovery for VOC internal standard 1,4-Dichlorobenzene-d4 outside of control

limits:

O24E0979-02: 39% recovery (QC Limits: 50 - 200%) O24E0979-04: 39% recovery (QC Limits: 50 - 200%) O24E0979-07: 36% recovery (QC Limits: 50 - 200%)



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Client Sample ID: SB-1

Matrix: Soil

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc.

**Work Order:** O24E0979 **Collection Date:** 05/23/2024 10:25

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

IL

**Lab ID**: O24E0979-01

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds b	y GC/MS SI	W8260B / SW5035		Prep D	Date:	05/29/24 15:24	Analyst: TC1	
ILEPA 100256							-	
Acetone	ND	0.0444		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Benzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromodichloromethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromoform	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromomethane	ND	0.0127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Butanone	ND	0.0178		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon disulfide	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon tetrachloride	ND	0.0127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chlorobenzene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroethane	ND	0.00507		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroform	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloromethane	ND	0.00507		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Dibromochloromethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethane	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloroethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethene	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,2-Dichloroethene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,2-Dichloroethene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloropropane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,3-Dichloropropene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,3-Dichloropropene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Ethylbenzene	ND	0.00507		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Hexanone	ND	0.0178		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
4-Methyl-2-pentanone	ND	0.0178		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methylene chloride	ND	0.0127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methyl tert-butyl ether	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Styrene	ND	0.00507		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2,2-Tetrachloroethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Tetrachloroethene	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Toluene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,1-Trichloroethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2-Trichloroethane	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Trichloroethene	ND	0.00127		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Vinyl chloride	ND	0.00254		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Xylenes, Total	ND	0.00761		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 F 847.967.6735 www.thesterlinglab.com

**Analytical Results** 

Date Reported: 6/5/2024

**Date Printed:** 6/5/2024

True North Consultants, Inc. Client Sample ID: SB-1 **Customer:** 

Work Order: O24E0979 Collection Date: 05/23/2024 10:25 Project:

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

O24E0979-01 (Continued) Lab ID:

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compoun	ds by GC/MSV	V8270D / SW3550		Prep [	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0344		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0344		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	0.0318	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Metals by ICP-MS	SW6020 B / SW3050			Prep Date:		05/31/24 17:48	Analyst: MS6	
ILEPA 100256							-	
Arsenic	5.27	0.502		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Barium	41.2	0.502		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Cadmium	ND	0.251		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Chromium	17.7	0.502		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Lead	11.4	0.251		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Selenium	1.02	0.502		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Silver	ND	0.502		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Mercury by CVAA	SV	V7471B		Prep [	Date:	05/30/24 10:44	Analyst: ER2	
ILEPA 100256								
Mercury	ND	0.0545		mg/Kg dry	1	05/30/2024	B24E1331	S24E0699



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Work Order:

Project:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-1

O24E0979 Collection Date: 05/23/2024 10:25

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

Lab ID: O24E0979-01 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Wet Chemistry	SM	2540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	86.5	0.100	*	% (Percent)	1	05/30/2024	B24E1255	
Wet Chemistry	SW	9045C		Prep D	ate:	05/29/24 17:23	Analyst: <b>EA1</b>	
ILEPA 100256 pH	7.86			pH Units	1	05/29/2024	B24E1307	



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Client Sample ID: SB-2

Matrix: Soil

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc.

**Work Order:** O24E0979 **Collection Date:** 05/23/2024 08:45

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

ΙL

**Lab ID**: O24E0979-02

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds by	GC/MS S	W8260B / SW5035		Prep D	Date:	05/29/24 15:24	Analyst: TC1	
ILEPA 100256								
Acetone	ND	0.0457		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Benzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromodichloromethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromoform	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromomethane	ND	0.0131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Butanone	ND	0.0183		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon disulfide	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon tetrachloride	ND	0.0131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chlorobenzene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroethane	ND	0.00523		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroform	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloromethane	ND	0.00523		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Dibromochloromethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethane	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloroethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethene	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,2-Dichloroethene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,2-Dichloroethene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloropropane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,3-Dichloropropene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,3-Dichloropropene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Ethylbenzene	ND	0.00523		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Hexanone	ND	0.0183		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
4-Methyl-2-pentanone	ND	0.0183		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methylene chloride	ND	0.0200		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methyl tert-butyl ether	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Styrene	ND	0.00523		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2,2-Tetrachloroethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Tetrachloroethene	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Toluene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,1-Trichloroethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2-Trichloroethane	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Trichloroethene	ND	0.00131		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Vinyl chloride	ND	0.00261		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Xylenes, Total	ND	0.00784		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Client Sample ID: SB-2

Matrix: Soil

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc.

**Work Order:** O24E0979 **Collection Date:** 05/23/2024 08:45

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

IL

Lab ID: O24E0979-02 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compo	unds by GC/MSV	V8270D / SW3550		Prep	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0176		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0176		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0351		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0351		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0176		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0176		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0263		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Metals by ICP-MS	SV	V6020 B / SW3050		Prep	Date:	05/31/24 17:48	Analyst: MS6	
ILEPA 100256								
Arsenic	4.74	0.499		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Barium	52.4	0.499		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Cadmium	ND	0.250		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Chromium	20.5	0.499		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Lead	12.6	0.250		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Selenium	1.12	0.499		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Silver	ND	0.499		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Mercury by CVAA	SV	V7471B		Prep	Date:	05/30/24 10:44	Analyst: ER2	
ILEPA 100256								
Mercury	ND	0.0599		mg/Kg dry	1	05/30/2024	B24E1331	S24E0699



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Work Order:

Project:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-2

O24E0979 Collection Date: 05/23/2024 08:45

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

Lab ID: O24E0979-02 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Wet Chemistry	SM2	540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	85.3	0.100	*	% (Percent)	1	05/30/2024	B24E1255	
Wet Chemistry	SW9	0045C		Prep D	ate:	05/29/24 17:23	Analyst: <b>EA1</b>	
ILEPA 100256 pH	7.06			pH Units	1	05/29/2024	B24E1307	



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-3

O24E0979 Collection Date: 05/23/2024 09:20

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

IL

**Lab ID**: O24E0979-03

Work Order:

Project:

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds	by GC/MS SI	W8260B / SW5035		Prep [	Date:	05/29/24 08:09	Analyst: <b>EP1</b>	
ILEPA 100256								
Benzene	ND	0.00181		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Ethylbenzene	ND	0.00724		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Toluene	ND	0.00181		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Xylenes, Total	ND	0.0109		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Semivolatile Organic Compou	unds by GC/MS\	W8270D / SW3550		Prep I	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0194		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0194		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	0.0463	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	0.0894	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	0.0619	0.0389		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	0.0874	0.0389		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	0.117	0.0194		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	0.258	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0194		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	0.0625	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	0.151	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	0.195	0.0291		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Wet Chemistry	SI	M2540G		Prep I	Date:	05/29/24 06:13	Analyst: PP1	
Total Solids	77.1	0.100	*	% (Percent)	1	05/30/2024	B24E1255	



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-4

**Work Order:** O24E0979 **Collection Date:** 05/23/2024 11:00

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

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Project:

**Lab ID**: O24E0979-04

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds by	GC/MS S	W8260B / SW5035		Prep [	Date:	05/29/24 15:24	Analyst: TC1	
ILEPA 100256								
Acetone	ND	0.0438		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Benzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromodichloromethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromoform	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromomethane	ND	0.0125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Butanone	ND	0.0175		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon disulfide	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon tetrachloride	ND	0.0125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chlorobenzene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroethane	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroform	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloromethane	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Dibromochloromethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethane	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloroethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethene	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,2-Dichloroethene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,2-Dichloroethene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloropropane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,3-Dichloropropene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,3-Dichloropropene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Ethylbenzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Hexanone	ND	0.0175		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
4-Methyl-2-pentanone	ND	0.0175		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methylene chloride	ND	0.0125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methyl tert-butyl ether	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Styrene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2,2-Tetrachloroethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Tetrachloroethene	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Toluene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,1-Trichloroethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2-Trichloroethane	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Trichloroethene	ND	0.00125		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Vinyl chloride	ND	0.00250		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Xylenes, Total	ND	0.00751		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680



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**Date Reported:** 6/5/2024

Work Order:

Date Printed: 6/5/2024 Analytical R

Customer: True North Consultants, Inc.

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

ΙL

Lab ID: O24E0979-04 (Continued)

O24E0979

#### **Analytical Results**

Client Sample ID: SB-4

Collection Date: 05/23/2024 11:00

Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compo	unds by GC/MSV	V8270D / SW3550		Prep [	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0344		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0344		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0172		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0258		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Metals by ICP-MS	SW6020 B / SW3050		Prep Date:		05/31/24 17:48	Analyst: MS6		
ILEPA 100256								
Arsenic	4.55	0.463		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Barium	47.1	0.463		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Cadmium	ND	0.232		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Chromium	20.3	0.463		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Lead	12.1	0.232		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Selenium	1.03	0.463		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Silver	ND	0.463		mg/Kg dry	10	06/03/2024	B24E1420	S24F0064
Mercury by CVAA	SV	V7471B		Prep Date:		05/30/24 10:44	Analyst: ER2	
ILEPA 100256								
Mercury	ND	0.0576		mg/Kg dry	1	05/30/2024	B24E1331	S24E0699



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Project:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-4

**Work Order:** O24E0979 **Collection Date:** 05/23/2024 11:00

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

Lab ID: O24E0979-04 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Wet Chemistry	SM	2540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	87.0	0.100	*	% (Percent)	1	05/30/2024	B24E1255	
Wet Chemistry	SW	9045C		Prep D	ate:	05/29/24 17:23	Analyst: <b>EA1</b>	
ILEPA 100256 pH	6.89			pH Units	1	05/29/2024	B24E1307	



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Date Reported: 6/5/2024

Work Order:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-5

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

IL

O24E0979

**Lab ID**: O24E0979-05

DF I	Date Analyze	d Batch	AnaBatch
Matrix:	Soil		
<b>Collection Date:</b>	05/23/2024	11:15	
Chefft Sample ib.	OD-0		

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds	by GC/MS SV	W8260B / SW5035		Prep [	Date:	05/29/24 15:24	Analyst: TC1	
ILEPA 100256								
Acetone	ND	0.0479		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Benzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromodichloromethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromoform	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromomethane	ND	0.0137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Butanone	ND	0.0191		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon disulfide	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon tetrachloride	ND	0.0137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chlorobenzene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroethane	ND	0.00547		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroform	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloromethane	ND	0.00547		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Dibromochloromethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethane	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloroethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethene	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,2-Dichloroethene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,2-Dichloroethene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloropropane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,3-Dichloropropene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,3-Dichloropropene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Ethylbenzene	ND	0.00547		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Hexanone	ND	0.0191		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
4-Methyl-2-pentanone	ND	0.0191		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methylene chloride	ND	0.0137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methyl tert-butyl ether	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Styrene	ND	0.00547		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2,2-Tetrachloroethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Tetrachloroethene	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Toluene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,1-Trichloroethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2-Trichloroethane	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Trichloroethene	ND	0.00137		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Vinyl chloride	ND	0.00274		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Xylenes, Total	ND	0.00821		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680



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Client Sample ID: SB-5

Matrix: Soil

Date Reported: 6/5/2024

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc.

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

IL

Lab ID: O24E0979-05 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compo	ounds by GC/MSV	V8270D / SW3550		Prep	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0171		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0171		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0341		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0341		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0171		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0171		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0256		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Metals by ICP-MS	SV	V6020 B / SW3050		Prep	Date:	06/04/24 11:52	Analyst: MS6	
ILEPA 100256								
Arsenic	5.33	0.566		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Barium	62.3	0.566		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Cadmium	ND	0.283		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Chromium	20.2	0.566		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Lead	12.0	0.283		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Selenium	ND	0.566		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Silver	ND	0.566		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Mercury by CVAA	SV	V7471B		Prep	Date:	05/30/24 10:44	Analyst: ER2	
ILEPA 100256							-	
Mercury	ND	0.0597		mg/Kg dry	1	05/30/2024	B24E1331	S24E0699



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Date Reported: 6/5/2024

Work Order:

Project:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-5

O24E0979 Collection Date: 05/23/2024 11:15

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

Lab ID: O24E0979-05 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Wet Chemistry	SM2	540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	87.0	0.100	*	% (Percent)	1	05/30/2024	B24E1255	
Wet Chemistry	SW9	0045C		Prep D	ate:	05/29/24 17:23	Analyst: <b>EA1</b>	
ILEPA 100256 pH	7.27			pH Units	1	05/29/2024	B24E1307	



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 F 847.967.6735 www.thesterlinglab.com

Client Sample ID: SB-6

Date Reported: 6/5/2024

**Analytical Results Date Printed:** 6/5/2024

True North Consultants, Inc. **Customer:** 

Work Order: O24E0979 Collection Date: 05/23/2024 11:35 Project:

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

O24E0979-06 Lab ID:

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds b	by GC/MS S	W8260B / SW5035		Prep [	Date:	05/29/24 15:24	Analyst: TC1	
ILEPA 100256								
Acetone	ND	0.0481		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Benzene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromodichloromethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromoform	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Bromomethane	ND	0.0138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Butanone	ND	0.0193		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon disulfide	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Carbon tetrachloride	ND	0.0138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chlorobenzene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroethane	ND	0.00550		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloroform	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Chloromethane	ND	0.00550		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Dibromochloromethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethane	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloroethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1-Dichloroethene	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,2-Dichloroethene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,2-Dichloroethene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,2-Dichloropropane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
cis-1,3-Dichloropropene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
trans-1,3-Dichloropropene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Ethylbenzene	ND	0.00550		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
2-Hexanone	ND	0.0193		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
4-Methyl-2-pentanone	ND	0.0193		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methylene chloride	ND	0.0138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Methyl tert-butyl ether	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Styrene	ND	0.00550		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2,2-Tetrachloroethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Tetrachloroethene	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Toluene	ND	0.00500		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,1-Trichloroethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
1,1,2-Trichloroethane	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Trichloroethene	ND	0.00138		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Vinyl chloride	ND	0.00275		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680
Xylenes, Total	ND	0.00825		mg/Kg dry	1	05/29/2024	B24E1293	S24E0680



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 F 847.967.6735 www.thesterlinglab.com

Date Reported: 6/5/2024

**Analytical Results Date Printed:** 6/5/2024

True North Consultants, Inc. Client Sample ID: SB-6 **Customer:** 

Work Order: O24E0979 Collection Date: 05/23/2024 11:35 Project:

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

O24E0979-06 (Continued) Lab ID:

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compo	unds by GC/MSV	W8270D / SW3550		Prep [	Date:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0337		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0337		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Metals by ICP-MS	SV	N6020 B / SW3050		Prep [	Date:	06/04/24 11:52	Analyst: MS6	
ILEPA 100256							•	
Arsenic	5.39	0.478		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Barium	48.5	0.478		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Cadmium	ND	0.239		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Chromium	19.1	0.478		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Lead	12.5	0.239		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Selenium	0.527	0.478		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Silver	ND	0.478		mg/Kg dry	10	06/04/2024	B24F0075	S24F0080
Mercury by CVAA	SV	N7471B		Prep [	Date:	05/30/24 10:44	Analyst: ER2	
ILEPA 100256				•			•	
Mercury	ND	0.0598		mg/Kg dry	1	05/30/2024	B24E1331	S24E0699



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/5/2024

Work Order:

Project:

Date Printed: 6/5/2024 Analytical Results

Customer: True North Consultants, Inc. Client Sample ID: SB-6

O24E0979 Collection Date: 05/23/2024 11:35

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Matrix: Soil

Lab ID: O24E0979-06 (Continued)

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Wet Chemistry	SM2	2540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	87.6	0.100	*	% (Percent)	1	05/30/2024	B24E1255	
Wet Chemistry	SW	9045C		Prep D	ate:	05/29/24 17:23	Analyst: <b>EA1</b>	
pH	7.33			pH Units	1	05/29/2024	B24E1307	



6/5/2024

### - O'Hare Location

509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 F 847.967.6735 www.thesterlinglab.com

Date Reported: 6/5/2024 **Date Printed:** 

True North Consultants, Inc. **Customer:** 

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

O24E0979

Lab ID: O24E0979-07

Work Order:

Analytical	Resu	lts
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Client Sample ID: SB-7

Collection Date: 05/23/2024 12:50 Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds	by GC/MS S	W8260B / SW5035		Prep D	ate:	05/29/24 08:09	Analyst: <b>EP1</b>	
ILEPA 100256								
Benzene	ND	0.00155		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Ethylbenzene	ND	0.00621		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Toluene	ND	0.00155		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Xylenes, Total	ND	0.00932		mg/Kg dry	1	05/29/2024	B24E1348	S24E0703
Semivolatile Organic Compou	unds by GC/MS	W8270D / SW3550		Prep D	ate:	05/30/24 10:00	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Acenaphthylene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(a)pyrene	ND	0.0900		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(b)fluoranthene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(g,h,i)perylene	ND	0.0336		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Benzo(k)fluoranthene	ND	0.0336		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Chrysene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Dibenzo(a,h)anthracene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluoranthene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Fluorene	ND	0.0168		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Indeno(1,2,3-cd)pyrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Naphthalene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Phenanthrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Pyrene	ND	0.0252		mg/Kg dry	1	06/01/2024	B24E1279	S24F0033
Wet Chemistry	SI	M2540G		Prep D	ate:	05/29/24 06:13	Analyst: PP1	
Total Solids	87.7	0.100	*	% (Percent)	1	05/30/2024	B24E1255	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits Qualifiers:

B - Analyte detected in the associated method blank

HT - Sample received past holding time

J1 - Estimated result based on MS/MSD results

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

P - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Q - Quality control issue. Please see case narrative

Sterling info@thesterlinglab.com

509 N. 3rd Ave., Des Plaines, IL 60016 Phone: (800) 246-0663 2242 W. Harrison St., Suite 200, Chicago, IL 60612 Phone: (312) 733-0551

**O24E0979** PM:Justice Kwateng

= = = = = = =

am/pm コーアンの Lab No.: 3-4-E MA-F 1-860 Received on Ice: Yes No ပွ Laboratory Work Order No .: Turn Around Time (Days) Temperature: 4.8 Remarks Results Needed: Quote No.: P.O. No.: True North Consultants, Inc. General and TCL Analysis Preservation Code: A = None B = HNO<sub>3</sub> C = NaOH G = Other $D = H_2SO_4$  E = HCl F = 5035/EnCore $H^d$ × × RCRA Metals Chain of Custody Record Comments: BELX ×  $\Lambda OC^2$ Containers No. of sbrady@consulttruenorth.com S 5/24/24 A,F A,F A,F A,F A,F A,F A,F Client Tracking No.: Preserv × Grab 630-717-2880 Date/Time:5 Date/Time Date/Time: Date/Time: Comp Date/Time: Date/Time: S S S So So S S Matrix Phone: 1250 e-mail: Taken 1100 1115 1135 Time 1025 845 920 Fax: Project Location: 304 E Grand Ave, Lake Villa, IL Date Taken 5/23/24 5/23/24 5/23/24 5/23/24 5/23/24 5/23/24 5/23/24 Client Sample Number/Description: Company: True North Consultants Project Name: Former Pleviak ES Sean Brady A. Graczyk Project Number: T243326 Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Received by: (Signature) Sampler(s): QC Level: Report To: SB-5 SB-6 **SB-2 SB-3** SB-4 SB-1 SB-7

# Sample Receipt Checklist

**Work Order: 024E0979** 

Friday, June 7, 2024 Date Due: True North Consultants, Inc. Project: General and TCL Analysis Client:

5/28/2024 3:51:00PM 5/28/2024 8:18:00PM

Date Logged In: Date Received:

Printed: 5/28/2024 8:21:09PM

Aana K. Patel Alan Slavick Logged In By: Received By:

Default Cooler

Cooler Name:

Cooler temperature at of below 6 degrees Celsius: Yes How were samples received: Courier

The samples were received on 5/28/2024 3:51:00 PM. The temperature of the

Sample Receipt Comments Work Order: 024E0979

cooler(s) at receipt was:

The samples were received in good condition and were properly preserved.

Temp C 4.8

Default Cooler

Cooler:

Chain of Custody present and properly completed: Yes

Turnaround Time is indicated and specified: Yes

Chain of Custody agrees with sample labels: Yes

Proper sample containers received intact: Yes

Samples received within hold time: Yes

Sufficient sample volume: Yes

Containers properly preserved: Yes

Custody seals present: No

Volatile water vials received: No

Samples going out of hold time within 24 hours:

Date:

Reviewed By:



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

June 06, 2024

True North Consultants, Inc. 1000 East Warrenville Road Suite 140 Naperville, IL 60563

Telephone: (630) 717-2880 Fax: (630) 689-5881

Analytical Report for Work Order: O24E0978 Revision 1

RE: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL

Dear True North Consultants, Inc.:

Sterling Labs has received 3 samples for the referenced project on May 28, 2024 15:51. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Pat 186 / TNI 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.

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 (847) 967-6666.

Sincerely,

Justice Kwateng 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. Sterling Labs is not responsible for customer provided information found in the report that is used to calculate final results. 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, Sterling Labs will be under no obligation to support, defend or dicuss the analytical report



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Customer: True North Consultants, Inc.

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL

**Work Order Sample Summary** 

WorkOrder: O24E0978

Proiect:

Laboratory ID	Sample ID	Tag Number	Collection Date	Date Received
O24E0978-01	TW-1		05/23/24 12:00	05/28/24 15:51
O24E0978-02	TW-2		05/23/24 13:50	05/28/24 15:51
O24E0978-03	TW-3		05/23/24 15:35	05/28/24 15:51



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**Customer:** True North Consultants, Inc.

Proiect: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL Case Narrative

WorkOrder: O24E0978

Work Order: O24E0978

The samples were received on 5/28/2024 3:51:00 PM. The temperature of the cooler(s) at receipt was:

Cooler:Temp CDefault Cooler3.6

Samples 02A-B & 03A-B contain larger than 6 mm air bubbles and were not used for analysis.

### **GCMS Semivolatiles**

### 8270 SVOC

O24E0978-02: The surrogate recovery is outside control criteria.

Analyte	Recovery %	LCL	UCL
Nitrobenzene-d5	127	35	114
2-Fluorobiphenyl	138	43	116
2,4,6-Tribromophenol	136	10	123
4-Terphenyl-d14	159	33	141

O24E0978-03: The surrogate recovery of 2-Fluorophenyl is outside control criteria (43%-116%) at 119%.

### **GCMS Volatiles**

### 8260 VOC

B24E1283-BS1 had elevated recoveries for bromomethane and chloroethane above the 130% control limit at 134 and 132% respectively.

B24E1283-BSD1 also had an elevated recovery for bromomethane above the 130% control limit at 133%. Tetrachloroethene recovered below the 70% control limit at 63%.

O24E0978-03 surrogate recovery for 1,2-dichloroethane-d4 was outside of the acceptance range of 86 to 119% at 122%.



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Date Reported: 6/6/2024

**Date Printed:** 6/6/2024

True North Consultants, Inc. **Customer:** O24E0978

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Project:

O24E0978-01 Lab ID:

Work Order:

Client Sample ID: TW-1

**Collection Date:** 05/23/2024 12:00

Matrix: Groundwater

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds by	GC/MS S	W8260B / SW5030			Prep Date:	05/29/24 10:31	Analyst: WH1	
ILEPA 100256								
Acetone	ND	0.0700		mg/L	1	05/29/2024	B24E1283	S24E0705
Benzene	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromodichloromethane	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromoform	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromomethane	ND	0.0400		mg/L	1	05/29/2024	B24E1283	S24E0705
2-Butanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
Carbon disulfide	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Carbon tetrachloride	ND	0.0200		mg/L	1	05/29/2024	B24E1283	S24E0705
Chlorobenzene	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloroform	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloromethane	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
Dibromochloromethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1-Dichloroethane	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
1,2-Dichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
cis-1,2-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
trans-1,2-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,2-Dichloropropane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
cis-1,3-Dichloropropene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
trans-1,3-Dichloropropene	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
Ethylbenzene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
2-Hexanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
4-Methyl-2-pentanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
Methylene chloride	ND	0.0200		mg/L	1	05/29/2024	B24E1283	S24E0705
Methyl tert-butyl ether	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Styrene	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,2,2-Tetrachloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Tetrachloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Toluene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,1-Trichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,2-Trichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Trichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Vinyl chloride	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Xylenes, Total	ND	0.0120		mg/L	1	05/29/2024	B24E1283	S24E0705



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Date Reported: 6/6/2024

**Date Printed:** 6/6/2024

True North Consultants, Inc. **Customer:** 

Work Order: O24E0978

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Project:

O24E0978-01 (Continued) Lab ID:

Anal	vtical	Results

Client Sample ID: TW-1 **Collection Date:** 05/23/2024 12:00

Matrix: Groundwater

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Semivolatile Organic Compour	nds by GC/MS	W8270D / SW3510			Prep Date:	05/29/24 09:25	Analyst: <b>LP</b>	
ILEPA 100256								
Acenaphthene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Acenaphthylene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Anthracene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)anthracene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)pyrene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(b)fluoranthene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(g,h,i)perylene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(k)fluoranthene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Bis(2-chloroethoxy)methane	ND	0.000209		mg/L	1	05/30/2024	B24E1261	S24E0734
2,2'-oxybis(1-chloropropane)	ND	0.000209		mg/L	1	05/30/2024	B24E1261	S24E0734
Chrysene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Dibenzo(a,h)anthracene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Fluoranthene	ND	0.000209		mg/L	1	05/30/2024	B24E1261	S24E0734
Fluorene	ND	0.000125		mg/L	1	05/30/2024	B24E1261	S24E0734
Indeno(1,2,3-cd)pyrene	ND	0.000417		mg/L	1	05/30/2024	B24E1261	S24E0734
Naphthalene	ND	0.000835		mg/L	1	05/30/2024	B24E1261	S24E0734
Phenanthrene	ND	0.000209		mg/L	1	05/30/2024	B24E1261	S24E0734
Pyrene	ND	0.000209		mg/L	1	05/30/2024	B24E1261	S24E0734
Metals by ICP-MS	s	W6020 B / SW3015			Prep Date:	05/29/24 10:28	Analyst: <b>KJ1</b>	
ILEPA 100256								
Arsenic	ND	0.0250		mg/L	5	05/30/2024	B24E1271	S24E0714
Barium	0.319	0.0250		mg/L	5	05/30/2024	B24E1271	S24E0714
Cadmium	ND	0.00250		mg/L	5	05/30/2024	B24E1271	S24E0714
Chromium	ND	0.0250		mg/L	5	05/30/2024	B24E1271	S24E0714
Lead	ND	0.00750		mg/L	5	05/30/2024	B24E1271	S24E0714
Selenium	ND	0.0250		mg/L	5	05/30/2024	B24E1271	S24E0714
Silver	ND	0.00250		mg/L	5	05/30/2024	B24E1271	S24E0714
Mercury by CVAA	s	W7470A			Prep Date:	05/30/24 16:31	Analyst: SAS	
ILEPA 100256 Mercury	ND	0.00040		mg/L	1	05/31/2024	B24E1370	S24E0710



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Date Reported: 6/6/2024

Work Order:

6/6/2024 **Date Printed:** 

True North Consultants, Inc. **Customer:** 

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Project:

O24E0978

O24E0978-02 Lab ID:

### **Analytical Results**

Client Sample ID: TW-2

**Collection Date:** 05/23/2024 13:50

Matrix: Groundwater

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds by	GC/MS S	W8260B / SW5030			Prep Date:	05/29/24 10:31	Analyst: WH1	
ILEPA 100256								
Acetone	ND	0.0700		mg/L	1	05/29/2024	B24E1283	S24E0705
Benzene	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromodichloromethane	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromoform	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Bromomethane	ND	0.0400		mg/L	1	05/29/2024	B24E1283	S24E0705
2-Butanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
Carbon disulfide	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Carbon tetrachloride	ND	0.0200		mg/L	1	05/29/2024	B24E1283	S24E0705
Chlorobenzene	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloroform	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Chloromethane	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
Dibromochloromethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1-Dichloroethane	ND	0.00200		mg/L	1	05/29/2024	B24E1283	S24E0705
1,2-Dichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
cis-1,2-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
trans-1,2-Dichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,2-Dichloropropane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
cis-1,3-Dichloropropene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
trans-1,3-Dichloropropene	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
Ethylbenzene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
2-Hexanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
4-Methyl-2-pentanone	ND	0.0280		mg/L	1	05/29/2024	B24E1283	S24E0705
Methylene chloride	ND	0.0200		mg/L	1	05/29/2024	B24E1283	S24E0705
Methyl tert-butyl ether	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Styrene	ND	0.00800		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,2,2-Tetrachloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Tetrachloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Toluene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,1-Trichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
1,1,2-Trichloroethane	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Trichloroethene	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Vinyl chloride	ND	0.00400		mg/L	1	05/29/2024	B24E1283	S24E0705
Xylenes, Total	ND	0.0120		mg/L	1	05/29/2024	B24E1283	S24E0705



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 www.thesterlinglab.com

Qualifier

Units

Date Reported: 6/6/2024

**Analyses** 

**Analytical Results Date Printed:** 6/6/2024

True North Consultants, Inc. **Customer:** 

Work Order: O24E0978 Collect Project:

RL

T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

Result

O24E0978-02 (Continued) Lab ID:

(	Client Sample ID:	TW-2		
	Collection Date:	05/23/2024 13	3:50	
	Matrix:	Groundwater		
s	DF	Date Analyzed	Batch	AnaBatch
_				
	Prep Date: 0	5/29/24 09:25	Analyst: <b>LP</b>	

Semivolatile Organic Compound	ds by GC/MS	W8270D / SW3510		Prep Date:	05/29/24 09:25	Analyst: <b>LP</b>	
ILEPA 100256							
Acenaphthene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Acenaphthylene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Anthracene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)anthracene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)pyrene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(b)fluoranthene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(g,h,i)perylene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(k)fluoranthene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Bis(2-chloroethoxy)methane	ND	0.000203	mg/L	1	05/30/2024	B24E1261	S24E0734
2,2´-oxybis(1-chloropropane)	ND	0.000203	mg/L	1	05/30/2024	B24E1261	S24E0734
Chrysene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Dibenzo(a,h)anthracene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Fluoranthene	ND	0.000203	mg/L	1	05/30/2024	B24E1261	S24E0734
Fluorene	ND	0.000122	mg/L	1	05/30/2024	B24E1261	S24E0734
Indeno(1,2,3-cd)pyrene	ND	0.000406	mg/L	1	05/30/2024	B24E1261	S24E0734
Naphthalene	ND	0.000813	mg/L	1	05/30/2024	B24E1261	S24E0734
Phenanthrene	ND	0.000203	mg/L	1	05/30/2024	B24E1261	S24E0734
Pyrene	ND	0.000203	mg/L	1	05/30/2024	B24E1261	S24E0734
Metals by ICP-MS	S	W6020 B / SW3015		Prep Date:	05/29/24 10:28	Analyst: <b>KJ1</b>	
ILEPA 100256							
Arsenic	ND	0.0250	mg/L	5	05/30/2024	B24E1271	S24E0714
Barium	0.317	0.0250	mg/L	5	05/30/2024	B24E1271	S24E0714
Cadmium	ND	0.00250	mg/L	5	05/30/2024	B24E1271	S24E0714
Chromium	ND	0.0250	mg/L	5	05/30/2024	B24E1271	S24E0714
Lead	ND	0.00750	mg/L	5	05/30/2024	B24E1271	S24E0714
Selenium	ND	0.0250	mg/L	5	05/30/2024	B24E1271	S24E0714
Silver	ND	0.00250	mg/L	5	05/30/2024	B24E1271	S24E0714
Mercury by CVAA	S	W7470A		Prep Date:	05/30/24 16:31	Analyst: SAS	
ILEPA 100256			_	•		•	
Mercury	ND	0.00040	mg/L	1	05/31/2024	B24E1370	S24E0710



509 N. 3<sup>rd</sup> Avenue Des Plaines, IL 60016-1162 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 **www.thesterlinglab.com** 

Date Reported: 6/6/2024

Date Printed: 6/6/2024 Analytic

Customer: True North Consultants, Inc.

Work Order: O24E0978

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa,

ΙL

**Lab ID:** O24E0978-03

Ar	naıy	ticai	Kesi	JITS

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S24E0734

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S24E0734

S24E0734

S24E0734

S24E0734

Client Sample ID: TW-3

Collection Date: 05/23/2024 15:35

Matrix: Groundwater

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	Batch	AnaBatch
Volatile Organic Compounds by GC/MS SW8260B / SW5030		W8260B / SW5030			Prep Date:	05/29/24 08:57	Analyst: EP1	
ILEPA 100256								
Benzene	ND	0.00200		mg/L	1	05/29/2024	B24E1347	S24E0702
Ethylbenzene	ND	0.00500		mg/L	1	05/29/2024	B24E1347	S24E0702
Toluene	ND	0.00500		mg/L	1	05/29/2024	B24E1347	S24E0702
Xylenes, Total	ND	0.0100		mg/L	1	05/29/2024	B24E1347	S24E0702
Semivolatile Organic Compounds by GC/MSW8270D / SW3510				Prep Date:	05/29/24 09:25	Analyst: <b>LP</b>		
ILEPA 100256								
Acenaphthene	ND	0.000117		mg/L	1	05/30/2024	B24E1261	S24E0734
Acenaphthylene	ND	0.000117		mg/L	1	05/30/2024	B24E1261	S24E0734
Anthracene	ND	0.000117		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)anthracene	ND	0.000117		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(a)pyrene	ND	0.000392		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(b)fluoranthene	ND	0.000392		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(g,h,i)perylene	ND	0.000392		mg/L	1	05/30/2024	B24E1261	S24E0734
Benzo(k)fluoranthene	ND	0.000392		mg/L	1	05/30/2024	B24E1261	S24E0734
Bis(2-chloroethoxy)methane	ND	0.000196		mg/L	1	05/30/2024	B24E1261	S24E0734
2,2'-oxybis(1-chloropropane)	ND	0.000196		mg/L	1	05/30/2024	B24E1261	S24E0734

ND - Not Detected at the Reporting Limit

Qualifiers:

Pyrene

Chrysene

Fluorene

Fluoranthene

Naphthalene

Phenanthrene

Dibenzo(a,h)anthracene

Indeno(1,2,3-cd)pyrene

J - Analyte detected below quantitation limits

B - Analyte detected in the associated method blank

ND

ND

ND

ND

ND

ND

ND

ND

0.000117

0.000392

0.000196

0.000117

0.000392

0.000783

0.000196

0.000196

HT - Sample received past holding time

J1 - Estimated result based on MS/MSD results

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

1

1

1

1

S - Spike Recovery outside accepted recovery limits

P - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

Q - Quality control issue. Please see case narrative

Sterling 2242 W. Harrison St., Suite 24 sterlinglab.com

509 N. 3rd Ave., Des Plaines,

PM:Justice Kwateng O24E0978

733-0551

y Record True North Consultants, Inc.

Page:

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am/pm Lab No.: 024-F 0-180 3-510 10 Received on Ice: Yes X No Laboratory Work Order No.: Turn Around Time (Days): 02460978 Temperature: 3.6 Remarks Results Needed: Quote No.: P.O. No.: Preservation Code: A = None  $B = HNO_3$  C = NaOHG = Other $D = H_2SO_4$  E = HCl F = 5035/EnCoreRCRA Metals X s A N d Comments: BELX  $\Lambda OC^2$ Containers No, of sbrady@consulttruenorth.com General and TCL Analysis Date/Time: Clay 2分 A,B,E A,B,E A,E Preserv × × × Grab 630-717-2880 Date/Time: 9 Date/Time: 5 Date/Time: 🖯 Date/Time: Date/Time Comp GW Q M ďδ Matrix e-mail: Taken 1200 1350 1535 Phone: Time Fax: Date Taken Project Location: 304 E Grand Ave, Lake Villa, IL 5/23/24 5/23/24 5/23/24 Client Sample Number/Description: Company: The North Consultants Project Name: Former Pleviak ES Sean Brady A. Graczyk Project Number: T243326 Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Received by: (Signature) Sampler(s): Report To: QC Level: [W-2 FW-3 **ΓW-1** 

# Sample Receipt Checklist

**Work Order: 024E0978** 

Printed: 5/28/2024 8:24:30PM

True North Consultants, Inc. Client:

Project: General and TCL Analysis

Alan Slavick

5/28/2024 3:51:00PM 5/28/2024 8:22:00PM

Date Logged In:

Date Received:

Friday, June 7, 2024

Date Due:

Aana K. Patel Received By:

Logged In By:

Cooler Name:

Cooler temperature at of below 6 degrees Celsius: Yes How were samples received: Courier

Default Cooler

Chain of Custody present and properly completed: Yes

Turnaround Time is indicated and specified: Yes

Chain of Custody agrees with sample labels: Yes

Samples received within hold time: Yes

Sample 02A-B, 03A-03B contain larger than 6 mm air bubbles and were not used

Temp C

The samples were received on 5/28/2024 3:51:00 PM. The temperature of the

Sample Receipt Comments Work Order: 024E0978

cooler(s) at receipt was:

**Default Cooler** 

Cooler:

for analysis.

Proper sample containers received intact: Yes

Sufficient sample volume: Yes

Containers properly preserved: Yes

Custody seals present: No

· Volatile water vials received: Yes

Vials contain larger than pea sized aire bubbles: Yes

Samples going out of hold time within 24 hours:

Page 10 of 10

Reviewed By:



### 2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com

June 05, 2024

True North Consultants, Inc. 1000 East Warrenville Road Naperville, IL 60563

Telephone: (630) 717-2880 Fax: (630) 689-5881

Analytical Report for Work Order: 24050280 Revision 0

RE: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, IL

Dear True North Consultants, Inc.:

Sterling Labs received 4 samples for the referenced project on 5/28/2024 2:02:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / TNI 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,

Joseph Gusek

Project Manager

1 DR

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. Sterling labs is not responsible for customer provided information found in the report that is used to calculate final results. 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, Sterling Labs will be under no obligation to support, defend or discuss the analytical report.



**Sterling** Date: June 05, 2024

**Customer:** True North Consultants, Inc.

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Work Order Sample Summary

Work Order: 24050280 Revision 0

Lab Sample ID	Customer Sample ID	Tag Number	<b>Collection Date</b>	<b>Date Received</b>
24050280-001A	SG-1		5/23/2024 11:50:00 AM	5/28/2024
24050280-002A	SG-2		5/23/2024 9:35:00 AM	5/28/2024
24050280-003A	SG-3		5/23/2024 10:05:00 AM	5/28/2024
24050280-004A	SG-4		5/23/2024 2:30:00 PM	5/28/2024



**Date:** June 05, 2024

**Customer:** True North Consultants, Inc.

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., Lake Villa, Case Narrative

Work Order: 24050280 Revision 0

TO-15 results that are reported in mg/m³ are calculated based on a temperature of 25°C, atmospheric pressure of 760 mm Hg, and the molecular weight of the analyte.

RPD - Relative Percent Difference

VOC - Volatile Organic Compound SVOC - Semi-Volatile Organic Compound PNA/PAH - Polynuclear Aromatic Hydrocarbon

PCB - Polychlorinated Biphenyls



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**Report Date:** June 05, 2024 **Analytical Results Print Date:** June 05, 2024

Customer Sample ID: SG-1 **Customer:** True North Consultants, Inc.

Work Order: 24050280 Revision 0 Tag Number:

T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 11:50:00 AM **Project:** 

Lab ID: 24050280-001A Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF 1	Date Analyzed
Volatile Organic Compounds in Air by GC/MS ORELAP IL300001	S TO-15			Prep	Date: <b>5/28/2024</b>	Analyst: <b>KWV</b>
1,1,1-Trichloroethane	ND	0.0034		mg/m³	2	6/4/2024
1,1,2-Trichloroethane	ND	0.0034		mg/m³	2	6/4/2024
1,1-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,1-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
1,2,4-Trichlorobenzene	ND	0.0047		mg/m³	2	6/4/2024
1,2-Dibromoethane	ND	0.0048		mg/m³	2	6/4/2024
1,2-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,2-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,2-Dichloropropane	ND	0.0029		mg/m³	2	6/4/2024
1,4-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,4-Dioxane	ND	0.0057		mg/m³	2	6/4/2024
2-Butanone	0.013	0.0047		mg/m³	2	6/4/2024
Acetone	0.057	0.015	*	mg/m³	2	6/4/2024
Benzene	0.010	0.0020		mg/m³	2	6/4/2024
Bromodichloromethane	ND	0.0042		mg/m³	2	6/4/2024
Bromoform	ND	0.016		mg/m³	2	6/4/2024
Bromomethane	ND	0.0061		mg/m³	2	6/4/2024
Carbon disulfide	0.011	0.0020		mg/m³	2	6/4/2024
Carbon tetrachloride	ND	0.0040		mg/m³	2	6/4/2024
Chlorobenzene	ND	0.0029		mg/m³	2	6/4/2024
Chloroform	ND	0.0031		mg/m³	2	6/4/2024
cis-1,2-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
cis-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Dibromochloromethane	ND	0.0054		mg/m³	2	6/4/2024
Dichlorodifluoromethane	0.0031	0.0031		mg/m³	2	6/4/2024
Ethylbenzene	0.0052	0.0027		mg/m³	2	6/4/2024
m,p-Xylene	0.0066	0.0055		mg/m³	2	6/4/2024
Methyl tert-butyl ether	ND	0.0023		mg/m³	2	6/4/2024
Methylene chloride	ND	0.022		mg/m³	2	6/4/2024
Naphthalene	0.0094	0.0033		mg/m³	2	6/4/2024
o-Xylene	0.0034	0.0027		mg/m³	2	6/4/2024
Styrene	ND	0.0027		mg/m³	2	6/4/2024
Tetrachloroethene	0.067	0.0043		mg/m³	2	6/4/2024
Toluene	0.011	0.0024		mg/m³	2	6/4/2024
trans-1,2-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
trans-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Trichloroethene	ND	0.0034		mg/m³	2	6/4/2024
Trichlorofluoromethane	ND	0.0035		mg/m³	2	6/4/2024
Vinyl acetate	ND	0.022		mg/m³	2	6/4/2024
Vinyl chloride	ND	0.0016		mg/m³	2	6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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



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

Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com

**Report Date:** June 05, 2024 **Print Date:** June 05, 2024

Customer: True North Consultants, Inc. Customer Sample ID: SG-1

Work Order: 24050280 Revision 0 Tag Number:

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., La **Collection Date:** 5/23/2024 11:50:00 AM

**Lab ID:** 24050280-001A **Matrix:** Air

Analyses Result RL Qualifier Units DF Date Analyzed

Volatile Organic Compounds in Air by GC/MS TO-15

ORELAP IL300001

Xylenes, Total 0.010 0.0082 mg/m³ 2 6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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

**Analytical Results** 

Analyst: KWV

Prep Date: 5/28/2024

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



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Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com 2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

**Report Date:** June 05, 2024 **Print Date:** June 05, 2024

**Customer Sample ID:** SG-2 **Customer:** True North Consultants, Inc.

Work Order: 24050280 Revision 0 Tag Number:

T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 9:35:00 AM **Project:** 

Lab ID: 24050280-002A Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF 1	Date Analyzed
Volatile Organic Compounds in Air by GC/MS ORELAP IL300001	TO-15			Prep	Date: <b>5/28/2024</b>	Analyst: <b>KWV</b>
1,1,1-Trichloroethane	ND	0.0038		mg/m³	2	6/4/2024
1,1,2-Trichloroethane	ND	0.0038		mg/m³	2	6/4/2024
1,1-Dichloroethane	ND	0.0028		mg/m³	2	6/4/2024
1,1-Dichloroethene	ND	0.0027		mg/m³	2	6/4/2024
1,2,4-Trichlorobenzene	ND	0.0051		mg/m³	2	6/4/2024
1,2-Dibromoethane	ND	0.0053		mg/m³	2	6/4/2024
1,2-Dichlorobenzene	ND	0.0041		mg/m³	2	6/4/2024
1,2-Dichloroethane	ND	0.0028		mg/m³	2	6/4/2024
1,2-Dichloropropane	ND	0.0032		mg/m³	2	6/4/2024
1,4-Dichlorobenzene	ND	0.0041		mg/m³	2	6/4/2024
1,4-Dioxane	ND	0.0062		mg/m³	2	6/4/2024
2-Butanone	ND	0.0051		mg/m³	2	6/4/2024
Acetone	ND	0.016	*	mg/m³	2	6/4/2024
Benzene	ND	0.0022		mg/m³	2	6/4/2024
Bromodichloromethane	ND	0.0046		mg/m³	2	6/4/2024
Bromoform	ND	0.018		mg/m³	2	6/4/2024
Bromomethane	ND	0.0067		mg/m³	2	6/4/2024
Carbon disulfide	ND	0.0021		mg/m³	2	6/4/2024
Carbon tetrachloride	ND	0.0043		mg/m³	2	6/4/2024
Chlorobenzene	ND	0.0032		mg/m³	2	6/4/2024
Chloroform	ND	0.0034		mg/m³	2	6/4/2024
cis-1,2-Dichloroethene	ND	0.0027		mg/m³	2	6/4/2024
cis-1,3-Dichloropropene	ND	0.0031		mg/m³	2	6/4/2024
Dibromochloromethane	ND	0.0059		mg/m³	2	6/4/2024
Dichlorodifluoromethane	ND	0.0034		mg/m³	2	6/4/2024
Ethylbenzene	ND	0.0030		mg/m³	2	6/4/2024
m,p-Xylene	ND	0.0060		mg/m³	2	6/4/2024
Methyl tert-butyl ether	ND	0.0025		mg/m³	2	6/4/2024
Methylene chloride	ND	0.024		mg/m³	2	6/4/2024
Naphthalene	ND	0.0036		mg/m³	2	6/4/2024
o-Xylene	ND	0.0030		mg/m³	2	6/4/2024
Styrene	ND	0.0029		mg/m³	2	6/4/2024
Tetrachloroethene	ND	0.0047		mg/m³	2	6/4/2024
Toluene	0.023	0.0026		mg/m³	2	6/4/2024
trans-1,2-Dichloroethene	ND	0.0027		mg/m³	2	6/4/2024
trans-1,3-Dichloropropene	ND	0.0031		mg/m³	2	6/4/2024
Trichloroethene	ND	0.0037		mg/m³	2	6/4/2024
Trichlorofluoromethane	ND	0.0039		mg/m³	2	6/4/2024
Vinyl acetate	ND	0.024		mg/m³	2	6/4/2024
Vinyl chloride	ND	0.0018		mg/m³	2	6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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

**Analytical Results** 

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



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

Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com

**Report Date:** June 05, 2024 **Print Date:** June 05, 2024

Customer: True North Consultants, Inc. Customer Sample ID: SG-2

Work Order: 24050280 Revision 0 Tag Number:

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 9:35:00 AM

**Lab ID:** 24050280-002A **Matrix:** Air

Analyses Result RL Qualifier Units DF Date Analyzed

Volatile Organic Compounds in Air by GC/MS TO-15

ORELAP IL300001

Xylenes, Total ND 0.0090 mg/m³ 2 6/4/2024

ND - Not Detected at the Reporting Limit

**Qualifiers:** 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

**Analytical Results** 

Analyst: KWV

Prep Date: 5/28/2024

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



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Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com 2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

**Report Date:** June 05, 2024 **Analytical Results Print Date:** June 05, 2024

Customer Sample ID: SG-3 **Customer:** True North Consultants, Inc.

Work Order: 24050280 Revision 0 Tag Number:

T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 10:05:00 AM **Project:** 

Lab ID: 24050280-003A Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF 1	Date Analyzed
Volatile Organic Compounds in Air by GC/MS ORELAP IL300001	S TO-15			Prep	Date: <b>5/28/2024</b>	Analyst: <b>KWV</b>
1,1,1-Trichloroethane	ND	0.0035		mg/m³	2	6/4/2024
1,1,2-Trichloroethane	ND	0.0035		mg/m³	2	6/4/2024
1,1-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,1-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
1,2,4-Trichlorobenzene	ND	0.0047		mg/m³	2	6/4/2024
1,2-Dibromoethane	ND	0.0049		mg/m³	2	6/4/2024
1,2-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,2-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,2-Dichloropropane	ND	0.0029		mg/m³	2	6/4/2024
1,4-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,4-Dioxane	ND	0.0057		mg/m³	2	6/4/2024
2-Butanone	0.021	0.0047		mg/m³	2	6/4/2024
Acetone	0.086	0.015	*	mg/m³	2	6/4/2024
Benzene	0.016	0.0020		mg/m³	2	6/4/2024
Bromodichloromethane	ND	0.0043		mg/m³	2	6/4/2024
Bromoform	ND	0.016		mg/m³	2	6/4/2024
Bromomethane	ND	0.0062		mg/m³	2	6/4/2024
Carbon disulfide	0.0053	0.0020		mg/m³	2	6/4/2024
Carbon tetrachloride	ND	0.0040		mg/m³	2	6/4/2024
Chlorobenzene	ND	0.0029		mg/m³	2	6/4/2024
Chloroform	ND	0.0031		mg/m³	2	6/4/2024
cis-1,2-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
cis-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Dibromochloromethane	ND	0.0054		mg/m³	2	6/4/2024
Dichlorodifluoromethane	ND	0.0031		mg/m³	2	6/4/2024
Ethylbenzene	0.0054	0.0028		mg/m³	2	6/4/2024
m,p-Xylene	0.011	0.0055		mg/m³	2	6/4/2024
Methyl tert-butyl ether	ND	0.0023		mg/m³	2	6/4/2024
Methylene chloride	ND	0.022		mg/m³	2	6/4/2024
Naphthalene	0.011	0.0033		mg/m³	2	6/4/2024
o-Xylene	0.0029	0.0028		mg/m³	2	6/4/2024
Styrene	ND	0.0027		mg/m³	2	6/4/2024
Tetrachloroethene	0.0073	0.0043		mg/m³	2	6/4/2024
Toluene	0.017	0.0024		mg/m³	2	6/4/2024
trans-1,2-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
trans-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Trichloroethene	ND	0.0034		mg/m³	2	6/4/2024
Trichlorofluoromethane	ND	0.0036		mg/m³	2	6/4/2024
Vinyl acetate	ND	0.022		mg/m³	2	6/4/2024
Vinyl chloride	ND	0.0016		mg/m³	2	6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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



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

Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com

**Report Date:** June 05, 2024 **Print Date:** June 05, 2024

Prep Date: 5/28/2024

**Analytical Results** 

Analyst: KWV

Customer: True North Consultants, Inc. Customer Sample ID: SG-3

Work Order: 24050280 Revision 0 Tag Number:

**Project:** T243326, Former Pleviak ES, 304 E. Grand Ave., La **Collection Date:** 5/23/2024 10:05:00 AM

**Lab ID:** 24050280-003A **Matrix:** Air

Analyses Result RL Qualifier Units DF Date Analyzed

Volatile Organic Compounds in Air by GC/MS TO-15

ORELAP IL300001

Xylenes, Total 0.014 0.0083 mg/m³ 2 6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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



**Sterling**2242 West Harrison St., Suite 200, Cincugo, 22
Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com 2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

**Report Date:** June 05, 2024 **Analytical Results Print Date:** June 05, 2024

Customer Sample ID: SG-4 **Customer:** True North Consultants, Inc.

Work Order: 24050280 Revision 0 Tag Number:

T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 2:30:00 PM **Project:** 

Lab ID: 24050280-004A Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF 1	Date Analyzed
Volatile Organic Compounds in Air by GC/MS ORELAP IL300001	S TO-15			Prep	Date: <b>5/28/2024</b>	Analyst: <b>KWV</b>
1,1,1-Trichloroethane	ND	0.0034		mg/m³	2	6/4/2024
1,1,2-Trichloroethane	ND	0.0034		mg/m³	2	6/4/2024
1,1-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,1-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
1,2,4-Trichlorobenzene	ND	0.0047		mg/m³	2	6/4/2024
1,2-Dibromoethane	ND	0.0049		mg/m³	2	6/4/2024
1,2-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,2-Dichloroethane	ND	0.0026		mg/m³	2	6/4/2024
1,2-Dichloropropane	ND	0.0029		mg/m³	2	6/4/2024
1,4-Dichlorobenzene	ND	0.0038		mg/m³	2	6/4/2024
1,4-Dioxane	ND	0.0057		mg/m³	2	6/4/2024
2-Butanone	0.016	0.0047		mg/m³	2	6/4/2024
Acetone	0.13	0.015	*	mg/m³	2	6/4/2024
Benzene	0.011	0.0020		mg/m³	2	6/4/2024
Bromodichloromethane	ND	0.0042		mg/m³	2	6/4/2024
Bromoform	ND	0.016		mg/m³	2	6/4/2024
Bromomethane	ND	0.0061		mg/m³	2	6/4/2024
Carbon disulfide	0.0055	0.0020		mg/m³	2	6/4/2024
Carbon tetrachloride	ND	0.0040		mg/m³	2	6/4/2024
Chlorobenzene	ND	0.0029		mg/m³	2	6/4/2024
Chloroform	ND	0.0031		mg/m³	2	6/4/2024
cis-1,2-Dichloroethene	0.0061	0.0025		mg/m³	2	6/4/2024
cis-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Dibromochloromethane	ND	0.0054		mg/m³	2	6/4/2024
Dichlorodifluoromethane	ND	0.0031		mg/m³	2	6/4/2024
Ethylbenzene	ND	0.0027		mg/m³	2	6/4/2024
m,p-Xylene	0.0080	0.0055		mg/m³	2	6/4/2024
Methyl tert-butyl ether	ND	0.0023		mg/m³	2	6/4/2024
Methylene chloride	0.12	0.022		mg/m³	2	6/4/2024
Naphthalene	ND	0.0033		mg/m³	2	6/4/2024
o-Xylene	ND	0.0027		mg/m³	2	6/4/2024
Styrene	ND	0.0027		mg/m³	2	6/4/2024
Tetrachloroethene	0.012	0.0043		mg/m³	2	6/4/2024
Toluene	0.013	0.0024		mg/m³	2	6/4/2024
trans-1,2-Dichloroethene	ND	0.0025		mg/m³	2	6/4/2024
trans-1,3-Dichloropropene	ND	0.0029		mg/m³	2	6/4/2024
Trichloroethene	0.0085	0.0034		mg/m³	2	6/4/2024
Trichlorofluoromethane	ND	0.0035		mg/m³	2	6/4/2024
Vinyl acetate	ND	0.022		mg/m³	2	6/4/2024
Vinyl chloride	ND	0.0016		mg/m³	2	6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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



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

Tel: (312) 733-0551 Fax: (312) 733-2386 Info@TheSterlingLab.com

**Report Date:** June 05, 2024 **Print Date:** June 05, 2024

Customer: True North Consultants, Inc. Customer Sample ID: SG-4

Work Order: 24050280 Revision 0 Tag Number:

Project: T243326, Former Pleviak ES, 304 E. Grand Ave., La Collection Date: 5/23/2024 2:30:00 PM

**Lab ID:** 24050280-004A **Matrix:** Air

Analyses Result RL Qualifier Units DF Date Analyzed

Volatile Organic Compounds in Air by GC/MS TO-15

ORELAP IL300001

Xylenes, Total ND 0.0082 mg/m³ 2 6/4/2024

ND - Not Detected at the Reporting Limit

Qualifiers: 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

**Analytical Results** 

Analyst: KWV

Prep Date: 5/28/2024

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sterling info@thesterlinglab.com 509 N. 3rd Ave., Des Plaines, IL 60016 Phone: (800) 246-0663

Received on Ice: Yes No X Lab No.: 500 200 P00 Temperature, And of BOL 082050HZ Laboratory Work Order No.: Turn Around Time (Days): Remarks Results Needed: Can # 15028 Can # 15041 Can # 11090 Can # 11094 Quote No.: P.O. No.: **Preservation Code:** A = None B = HNO<sub>3</sub> C = NaOH $D = H_2SO_4$  E = HCl F = 5035/EnCore G = OtherChain of Custody Record Jomments: CO-15 × ×  $\bowtie$ Containers Date/Time**5/2** 9/24 14.02 No. of sbrady@consulttruenorth.com Date/Time 5 DAR / 1/11. Date/Time: 5/24/24 Client Tracking No .: ⋖ Preserv Grab 630-717-2880 Date/Time: 5 Date/Time: Date/Time: Comp. AIR AIR AIR AIR Matrix Phone: e-mail: 1005 Time Taken 1150 1430 935 Fax: Project Location: 304 E Grand Ave, Lake Villa, IL Date Taken 5/23/24 5/23/24 5/23/24 5/23/24 Client Sample Number/Description: Company: True North Consultants Project Name: Former Pleviak ES Sean Brady A. Graczyk 2 X Project Number: T243326 Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Received by: (Signature) QC Level: 1 Sampler(s): Report To: SG-2 SG-3 SG-4 SG-1 Page 12 of 13

am/pm

10



# Sample Receipt Checklist

Customer: TRUE NORTH		Date and Tim	e Received:	5/28/2024 2:02:00 PM
Work Order Number 24050280		Received by:	JJG	
Checklist completed by: 5/ Signature Date	28/24	Reviewed by:	Initials	5/29/24 Date
Matrix: Carrier name	STAT Analysis			
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 🗌	Temperatu	re Ambient °C
Water - VOA vials have zero headspace? No VOA vials subm	nitted	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:				
Customer / Person Date contacted: contacted:		Contac	cted by:	
Response:				

# STATE OF ILLINOIS

# **ENVIRONMENTAL PROTECTION AGENCY NELAP - RECOGNIZED**

# **ENVIRONMENTAL LABORATORY ACCREDITATION**

is hereby granted to

Sterling Labs 2242 West Harrison Street Chicago, IL 60612 **NELAP ACCREDITED** 

Accreditation Number #100445



According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Primary Accrediting Authority: Illinois

Millie Rose Supervisor

Environmental Laboratory Accreditation Program

Certificate No: 1004452023-11

Expiration Date: 9/30/2024 Issued On: 10/12/2023

MillicRose

## State of Illinois

# **Environmental Protection Agency**

# Awards the Certificate of Approval to:

Sterling Labs 2242 West Harrison Street Chicago, IL 60612

The Illinois Environmental Laboratory Accreditation Program encourages all clients and data users to verify the most current scope of accreditation for Sterling Labs.

Certificate No.: 1004452023-11	Primary AB
Field of Testing /Matrix: CWA (Non Potable Water)	
Method EPA 1664A Rev: 1	
Oil & Grease	IL
Method EPA 200.8 Rev: 5.4	<del>-</del>
Aluminum	IL
Antimony	IL
Arsenic	IL
Barium	IL
Beryllium	IL
Cadmium	IL
Chromium	IL
Cobalt	 IL
Copper	 IL
Iron	ïL
Lead	IL
Manganese	IL
Molybdenum	IL
Nickel	IL
Selenium	IL
Silver	IL
Thallium	IL
Tin	IL
Vanadium	IL
Zinc	IL
Method EPA 245.1 Rev: 3	
Mercury	IL
Method EPA 410.4 Rev: 2	
Chemical oxygen demand	IL
	IL.
Method EPA 420.4 Rev: 1	
Total phenolics	IL
Method EPA 608	
4,4'-DDD	IL
4,4'-DDE	IL
4,4'-DDT	IL 
Aldrin	IL 
alpha-BHC (alpha-Hexachlorocyclohexane)	IL 
Aroclor-1016 (PCB-1016)	IL 
Aroclor-1248 (PCB-1248)	IL 
Aroclor-1254 (PCB-1254)	IL

**Primary AB** Certificate No.: 1004452023-11 Field of Testing /Matrix: CWA (Non Potable Water) Aroclor-1260 (PCB-1260) IL beta-BHC (beta-Hexachlorocyclohexane) IL Chlordane (tech.)(N.O.S.) IL delta-BHC IL Dieldrin IL IL Endosulfan I Endosulfan II IL IL Endosulfan sulfate IL Endrin Endrin aldehyde IL gamma-BHC (Lindane, gamma-Hexachlorocyclohexane) IL Heptachlor IL Heptachlor epoxide IL Methoxychlor IL Toxaphene (Chlorinated camphene) IL Method EPA 624 IL 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane IL 1,1,2-Trichloroethane IL 1,1-Dichloroethane IL 1,1-Dichloroethylene IL 1,2-Dichlorobenzene (o-Dichlorobenzene) IL IL 1,2-Dichloroethane (Ethylene dichloride) IL 1,2-Dichloropropane 1,3-Dichlorobenzene IL 1,4-Dichlorobenzene IL 2-Chloroethyl vinyl ether IL Acrolein (Propenal) IL Acrylonitrile IL Benzene IL Bromodichloromethane IL Bromoform IL Carbon tetrachloride IL Chlorobenzene IL Chlorodibromomethane IL Chloroethane (Ethyl chloride) IL Chloroform IL cis-1,3-Dichloropropene IL Ethylbenzene IL Methyl bromide (Bromomethane) IL Methyl chloride (Chloromethane) IL Methyl tert-butyl ether (MTBE) IL Methylene chloride (Dichloromethane) IL Tetrachloroethylene (Perchloroethylene) IL Toluene IL trans-1,2-Dichloroethylene IL trans-1,3-Dichloropropylene IL Trichloroethene (Trichloroethylene) IL Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) IL Vinyl chloride IL Xylene (total) IL

**Primary AB** 

effilicate No.: 1004452023-11	
d of Testing /Matrix: CWA (Non Potable Water)	
hod EPA 625	
1,2,4-Trichlorobenzene	IL
1,2-Dichlorobenzene (o-Dichlorobenzene)	IL
1,3-Dichlorobenzene	IL
1,4-Dichlorobenzene	IL
2,2'-Oxybis(1-chloropropane), bis(2-Chloro-1-methylethyl)ether	IL
2,4,5-Trichlorophenol	IL
2,4,6-Trichlorophenol	IL
2,4-Dichlorophenol	IL
2,4-Dimethylphenol	IL
2,4-Dinitrophenol	IL
2,4-Dinitrotoluene (2,4-DNT)	IL
2,6-Dinitrotoluene (2,6-DNT)	IL
2-Chloronaphthalene	IL
2-Chlorophenol	IL
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	IL
2-Nitrophenol	IL
3,3'-Dichlorobenzidine	IL
4-Bromophenyl phenyl ether	IL
4-Chloro-3-methylphenol	IL
4-Chlorophenyl phenylether	IL
4-Nitrophenol	IL
Acenaphthene	IL
Acenaphthylene	IL
Anthracene	IL
Benzidine	IL
Benzo(a)anthracene	IL
Benzo(a)pyrene	IL
Benzo(b)fluoranthene	IL
Benzo(g,h,i)perylene	IL
bis(2-Chloroethoxy)methane	IL
bis(2-Chloroethyl) ether	IL
bis(2-Ethylhexyl) phthalate (DEHP)	IL
Butyl benzyl phthalate	IL
Chrysene	IL
Dibenz(a,h) anthracene	IL
Diethyl phthalate	IL
Dimethyl phthalate	IL
Di-n-butyl phthalate	IL
Di-n-octyl phthalate	IL
Fluoranthene	IL
Fluorene	IL
Hexachlorobenzene	IL
Hexachlorobutadiene	IL
Hexachlorocyclopentadiene	IL
Hexachloroethane	IL
Indeno(1,2,3-cd) pyrene	IL
Isophorone	IL
Naphthalene	IL
Nitrobenzene	IL
APP P O I I	IL
n-Nitrosodimethylamine	IL.

Certificate No.: 1004452023-11	Primary AB
Field of Testing /Matrix: CWA (Non Potable Water)	
n-Nitrosodiphenylamine	IL
Pentachlorophenol	IL
Phenanthrene	IL
Phenol	IL 
Pyrene	IL
Method SM 2310 B-1997	
Acidity, as CaCO3	IL
Method SM 2320 B-1997	
Alkalinity as CaCO3	IL
Method SM 2540 B Rev: 20th ED	
Residue-total	IL
Method SM 2540 C-1997	
Residue-filterable (TDS)	IL
Method SM 2540 D-1997	
Residue-nonfilterable (TSS)	IL
Method SM 2540 E-1997	
Residue-volatile	IL
Method SM 2540 F-1997	
Residue-settleable	IL
Method SM 3500-Cr B-2009	
Chromium VI	IL
Method SM 4500-CI G-2000	
Total residual chlorine	IL
Method SM 4500-CN E-1999	
Cyanide	IL
Method SM 4500-H+ B-2000	
рН	IL
Method SM 4500-NH3 G-1997	
Ammonia	IL
Method SM 4500-NO3 F-2000	
Nitrate	IL
Nitrate as N	IL
Nitrate plus Nitrite as N	IL
Method SM 4500-P E-1999	
Orthophosphate as P	IL
Phosphorus	IL
Method SM 5210 B-2001	
Biochemical oxygen demand	IL

Certificate No.: 1004452023-11 Primary AB

Field of Testing /Matrix: CWA (Solid & Hazardous Material)	
Method EPA 1664A Rev: 1	
Oil & Grease	IL
	IL.
Method EPA 200.8 Rev: 5.4	11
Aluminum	IL IL
Antimony Arsenic	IL IL
Barium	IL IL
Beryllium	IL IL
Boron	IL
Cadmium	IL
Chromium	IL
Cobalt	IL
Copper	IL
Iron	IL
Lead	IL
Manganese	IL
Molybdenum	IL
Nickel	IL
Selenium	IL
Silver	IL
Thallium	IL
Tin	IL
Vanadium	IL
Zinc	IL
Method EPA 245.1 Rev: 3	
Mercury	IL
•	12
Method EPA 410.4 Rev: 2	11
Chemical oxygen demand	IL
Method EPA 420.4 Rev: 1	
Total phenolics	IL
Method SM 3500-Cr B-2009	
Chromium VI	IL
Method SM 4500-NO3 F-2000	
Nitrate	IL
Method SM 5210 B-2001	
Biochemical oxygen demand	IL
Carbonaceous BOD, CBOD	IL
Ca. 25. a55040 BOD, ODOD	· <b>-</b>

IL

IL

IL

beta-BHC (beta-Hexachlorocyclohexane)

Chlordane (tech.)(N.O.S.)

delta-BHC

**Primary AB** Certificate No.: 1004452023-11 Field of Testing /Matrix: RCRA (Non Potable Water) Dieldrin IL Endosulfan I IL Endosulfan II IL Endosulfan sulfate IL **Endrin** IL Endrin aldehyde IL Endrin ketone IL IL gamma-BHC (Lindane, gamma-Hexachlorocyclohexane) IL gamma-Chlordane Heptachlor IL Heptachlor epoxide IL Methoxychlor IL Toxaphene (Chlorinated camphene) IL Method EPA 8081B Rev: 2 4,4'-DDD IL 4,4'-DDE IL 4,4'-DDT IL Aldrin IL alpha-BHC (alpha-Hexachlorocyclohexane) IL alpha-Chlordane, cis-Chlordane IL beta-BHC (beta-Hexachlorocyclohexane) IL Chlordane (tech.)(N.O.S.) IL IL delta-BHC Dieldrin IL Endosulfan I IL Endosulfan II IL Endosulfan sulfate IL **Endrin** IL Endrin aldehyde IL IL Endrin ketone gamma-BHC (Lindane, gamma-Hexachlorocyclohexane) IL gamma-Chlordane IL Heptachlor IL IL Heptachlor epoxide IL Methoxychlor Toxaphene (Chlorinated camphene) IL Method EPA 8082 Rev: 0 Aroclor-1016 (PCB-1016) IL Aroclor-1248 (PCB-1248) IL Aroclor-1254 (PCB-1254) IL Aroclor-1260 (PCB-1260) IL Method EPA 8082A Aroclor-1016 (PCB-1016) IL Aroclor-1248 (PCB-1248) IL Aroclor-1254 (PCB-1254) IL Aroclor-1260 (PCB-1260) IL Method EPA 8260B 1,1,1,2-Tetrachloroethane IL 1,1,1-Trichloroethane IL 1,1,2,2-Tetrachloroethane IL

IL

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Certificate No.: 1004452023-11 Primary AB

eld of Testing /Matrix: RCRA (Non Potable Water)	
1,1,2-Trichloroethane	IL
1,1-Dichloroethane	IL
1,1-Dichloroethylene	IL
1,1-Dichloropropene	IL
1,2,3-Trichlorobenzene	IL
1,2,3-Trichloropropane	IL
1,2,4-Trichlorobenzene	IL
1,2,4-Trimethylbenzene	IL
1,2-Dibromo-3-chloropropane (DBCP)	IL
1,2-Dibromoethane (EDB, Ethylene dibromide)	IL
1,2-Dichlorobenzene (o-Dichlorobenzene)	IL
1,2-Dichloroethane (Ethylene dichloride)	IL
1,2-Dichloropropane	IL
1,3,5-Trimethylbenzene	IL
1,3-Dichlorobenzene	IL
1,3-Dichloropropane	IL
1,4-Dichlorobenzene	IL
1,4-Dioxane (1,4- Diethyleneoxide)	iL
2,2-Dichloropropane	iL
2-Butanone (Methyl ethyl ketone, MEK)	iL
2-Chloroethyl vinyl ether	iL
2-Chlorotoluene	iL
2-Hexanone	iL
2-Nitropropane	IL
4-Chlorotoluene	IL
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	iL
4-Methyl-2-pentanone (MIBK)	iL
Acetone	iL
Acrolein (Propenal)	iL
Acrylonitrile	iL
Benzene	iL
Bromobenzene	iL
Bromochloromethane	iL
Bromodichloromethane	iL
Bromoform	iL
Carbon disulfide	IL
Carbon tetrachloride	iL
Chlorobenzene	iL
Chlorodibromomethane	iL
Chloroethane (Ethyl chloride)	iL
Chloroform	iL
cis-1,2-Dichloroethylene	IL
cis-1,3-Dichloropropene	IL
Dibromomethane (Methylene bromide)	IL
Dichlorodifluoromethane (Freon-12)	iL
Diethyl ether	IL
Ethyl acetate	IL
Ethylbenzene	IL
Hexachlorobutadiene	IL
Iodomethane (Methyl iodide)	IL
Isobutyl alcohol (2-Methyl-1-propanol)	IL
Isopropyl alcohol (2-Propanol, Isopropanol)	IL

Field of Testing /Matrix: RCRA (Non Potable Water)	
Isopropylbenzene	IL
m+p-xylene	IL
Methyl bromide (Bromomethane)	IL
Methyl chloride (Chloromethane)	IL
Methyl tert-butyl ether (MTBE)	IL
Methylene chloride (Dichloromethane)	IL
m-Xylene	IL
Naphthalene	IL
n-Butyl alcohol (1-Butanol, n-Butanol)	IL
n-Butylbenzene	IL
o-Xylene	IL
p-Xylene	IL
sec-Butylbenzene	IL
Styrene	IL
tert-Butylbenzene	IL
Tetrachloroethylene (Perchloroethylene)	IL
Tetrahydrofuran (THF)	IL
Toluene	IL
trans-1,2-Dichloroethylene	IL
trans-1,3-Dichloropropylene	IL
Trichloroethene (Trichloroethylene)	IL
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	IL
Vinyl acetate	IL
Vinyl chloride	IL
Xylene (total)	IL
Method EPA 8260C	
1,1,1,2-Tetrachloroethane	IL
1,1,1-Trichloroethane	IL
1,1,2,2-Tetrachloroethane	IL
1,1,2-Trichloroethane	IL
1,1-Dichloroethane	IL
1,1-Dichloroethylene	IL
1,1-Dichloropropene	IL
1,2,3-Trichlorobenzene	IL
1,2,3-Trichloropropane	IL
1,2,4-Trichlorobenzene	IL
1,2,4-Trimethylbenzene	IL
1,2-Dibromo-3-chloropropane (DBCP)	IL
1,2-Dibromoethane (EDB, Ethylene dibromide)	IL
1,2-Dishornoetrane (EDB, Ethylene dishornide) 1,2-Dishlorobenzene (o-Dishlorobenzene)	IL
1,2-Dichlorogenzene (o-Dichlorogenzene) 1,2-Dichloroethane (Ethylene dichloride)	IL
1,2-Dichloropropane	IL
1,3,5-Trimethylbenzene	IL
1,3-Dichloro-2-propanol	IL IL
·	IL IL
1,3-Dichlorobenzene 1,3-Dichloropropane	IL IL
·	IL
1,4-Dichlorobenzene	
1,4-Dioxane (1,4- Diethyleneoxide)	IL II
2,2-Dichloropropane	IL II
2-Butanone (Methyl ethyl ketone, MEK)	IL "
2-Chloroethyl vinyl ether	IL "
2-Chlorotoluene	IL

Fiel	d of Testing /Matrix: RCRA (Non Potable Water)	
	2-Hexanone	IL
	2-Nitropropane	IL
	4-Chlorotoluene	IL
	4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	IL
	4-Methyl-2-pentanone (MIBK)	IL
	Acetone	IL
	Acrolein (Propenal)	IL
	Acrylonitrile	IL
	Benzene	IL
	Bromobenzene	IL
	Bromochloromethane	IL
	Bromodichloromethane	IL
	Bromoform	IL
	Carbon disulfide	IL
	Carbon tetrachloride	IL
	Chlorobenzene	IL
	Chlorodibromomethane	IL
	Chloroethane (Ethyl chloride)	IL
	Chloroform	IL
	cis-1,2-Dichloroethylene	IL
	cis-1,3-Dichloropropene	IL
	Dibromomethane (Methylene bromide)	IL
	Dichlorodifluoromethane (Freon-12)	IL
	Diethyl ether	IL
	Ethyl acetate	IL
	Ethylbenzene	IL
	Hexachlorobutadiene	IL
	Iodomethane (Methyl iodide)	IL
	Isobutyl alcohol (2-Methyl-1-propanol)	IL
	Isopropyl alcohol (2-Propanol, Isopropanol)	IL
	Isopropylbenzene	IL
	m+p-xylene	IL IL
	Methyl bromide (Bromomethane)	IL
	Methyl chloride (Chloromethane)	IL
	Methyl tert-butyl ether (MTBE)	IL
	Methylene chloride (Dichloromethane)	IL
	m-Xylene	IL
	Naphthalene	IL
		IL
	n-Butyl alcohol (1-Butanol, n-Butanol)	IL IL
	n-Butylbenzene	
	o-Xylene	IL II
	p-Xylene	IL II
	sec-Butylbenzene	IL 
	Styrene	IL 
	tert-Butylbenzene	IL 
	Tetrachloroethylene (Perchloroethylene)	IL ''
	Toluene	IL ''
	trans-1,2-Dichloroethylene	IL 
	trans-1,3-Dichloropropylene	IL 
	Trichloroethene (Trichloroethylene)	IL 
	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	IL 
	Vinyl acetate	IL

Certificate No.: 1004452023-11	Primary AB
Field of Testing /Matrix: RCRA (Non Potable Water)	
Vinyl chloride	IL
Xylene (total)	IL
Method EPA 8270C Rev: 3	
1,2,4-Trichlorobenzene	IL
1,2-Dichlorobenzene (o-Dichlorobenzene)	IL
1,2-Diphenylhydrazine	IL
1,3-Dichlorobenzene	IL
1,4-Dichlorobenzene	IL
1,4-Dinitrobenzene	IL
1-Methylnaphthalene	IL
2,4,5-Trichlorophenol	IL
2,4,6-Trichlorophenol	IL
2,4-Dichlorophenol	IL
2,4-Dimethylphenol	IL
2,4-Dinitrophenol	IL
2,4-Dinitrotoluene (2,4-DNT)	IL
2,6-Dinitrotoluene (2,6-DNT)	IL
2-Chloronaphthalene	IL
2-Chlorophenol	IL
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	IL
2-Methylnaphthalene	IL
2-Methylphenol (o-Cresol)	IL
2-Nitroaniline	IL
2-Nitrophenol	IL
3,3'-Dichlorobenzidine	IL
3-Methylphenol (m-Cresol)	IL
3-Nitroaniline	IL
4-Bromophenyl phenyl ether	IL
4-Chloro-3-methylphenol	IL
4-Chloroaniline	IL
4-Chlorophenyl phenylether	IL 
4-Methylphenol (p-Cresol)	IL 
4-Nitroaniline	IL "
4-Nitrophenol	IL "
Acenaphthene	IL "
Acenaphthylene Aniline	IL IL
Anthracene	IL IL
Benzidine	IL
Benzo(a)anthracene	IL
Benzo(a)pyrene	IL
Benzo(b)fluoranthene	IL
Benzo(g,h,i)perylene	IL
Benzoic acid	IL
Benzyl alcohol	IL
bis(2-Chloroethoxy)methane	IL
bis(2-Chloroethyl) ether	IL
bis(2-Ethylhexyl) phthalate (DEHP)	IL
Butyl benzyl phthalate	IL
Carbazole	IL
Chrysene	IL
Dibenz(a,h) anthracene	IL
Dogg 12 of 25	

**Primary AB** Certificate No.: 1004452023-11 RCRA (Non Potable Water) Field of Testing /Matrix: Dibenzofuran IL Diethyl phthalate IL Dimethyl phthalate IL Di-n-butyl phthalate IL Di-n-octyl phthalate IL Diphenylamine IL IL Fluoranthene Fluorene IL Hexachlorobenzene IL Hexachlorobutadiene IL Hexachlorocyclopentadiene IL Hexachloroethane IL Indeno(1,2,3-cd) pyrene IL Isophorone IL Naphthalene IL Nitrobenzene IL IL n-Nitrosodimethylamine n-Nitrosodi-n-propylamine IL n-Nitrosodiphenylamine IL Pentachlorophenol IL Phenanthrene IL Phenol IL IL Pyrene **Pyridine** IL Method EPA 8270D 1,2,4-Trichlorobenzene IL 1,2-Dichlorobenzene (o-Dichlorobenzene) IL 1,2-Diphenylhydrazine IL 1,3-Dichlorobenzene IL 1,4-Dichlorobenzene IL 1,4-Dinitrobenzene IL 1-Methylnaphthalene IL 2,4,5-Trichlorophenol IL IL 2,4,6-Trichlorophenol IL 2,4-Dichlorophenol 2,4-Dimethylphenol IL 2,4-Dinitrophenol IL 2,4-Dinitrotoluene (2,4-DNT) IL 2,6-Dinitrotoluene (2,6-DNT) IL 2-Chloronaphthalene IL 2-Chlorophenol IL 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) IL 2-Methylnaphthalene IL 2-Methylphenol (o-Cresol) IL 2-Nitroaniline IL 2-Nitrophenol IL 3,3'-Dichlorobenzidine IL 3-Methylphenol (m-Cresol) IL 3-Nitroaniline IL 4-Bromophenyl phenyl ether IL 4-Chloro-3-methylphenol IL

4-Chloroaniline

IL

**Primary AB** Certificate No.: 1004452023-11 Field of Testing /Matrix: RCRA (Non Potable Water) 4-Chlorophenyl phenylether IL 4-Methylphenol (p-Cresol) IL 4-Nitroaniline IL 4-Nitrophenol IL Acenaphthene IL Acenaphthylene IL IL Aniline Anthracene IL Benzidine IL Benzo(a)anthracene IL Benzo(a)pyrene IL Benzo(b)fluoranthene IL Benzo(g,h,i)perylene IL Benzoic acid IL IL Benzyl alcohol bis(2-Chloroethoxy)methane IL bis(2-Chloroethyl) ether IL IL bis(2-Ethylhexyl) phthalate (DEHP) Butyl benzyl phthalate IL Carbazole IL Chrysene IL Dibenz(a,h) anthracene IL Dibenzofuran IL IL Diethyl phthalate Dimethyl phthalate IL Di-n-butyl phthalate IL Di-n-octyl phthalate IL Diphenylamine IL Fluoranthene IL Fluorene IL Hexachlorobenzene IL Hexachlorobutadiene IL Hexachlorocyclopentadiene IL Hexachloroethane IL Indeno(1,2,3-cd) pyrene IL Isophorone IL IL Naphthalene Nitrobenzene IL n-Nitrosodimethylamine IL n-Nitrosodi-n-propylamine IL n-Nitrosodiphenylamine IL Pentachlorophenol IL Phenanthrene IL Phenol IL Pyrene IL Pyridine IL Method EPA 8321B 2,4,5-T IL 2,4-D IL 2,4-DB IL

Dalapon Dicamba IL

IL

Certificate No.: 1004452023-11	Primary AB
Field of Testing /Matrix: RCRA (Non Potable Water)	
Dichloroprop (Dichlorprop)	IL
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	IL
MCPA	IL
MCPP	IL
Silvex (2,4,5-TP)	IL
Method EPA 9012A Rev: 1	
Cyanide	IL
Method EPA 9012B	
Cyanide	IL
Method EPA 9040B Rev: 2	
рН	IL
Method EPA 9040C	
рН	IL
Method EPA 9066 Rev: 0	
Total phenolics	IL
Method EPA 9095A	
Paint Filter Test	IL
Method EPA 9095B	
Paint Filter Test	IL

Certificate No.: 1004452023-11 Primary AB

Certificate No.: 1004452023-11	
Field of Testing /Matrix: RCRA (Solid & Hazardous Material)	
Method EPA 1010A	
Ignitability	IL
Method EPA 1311 Rev: 0	
Toxicity Characteristic Leaching Procedure (TCLP)	IL
Method EPA 1312 Rev: 0	
Synthetic Precipitation Leaching Procedure (SPLP)	IL
Method EPA 6020A Rev: 1	IL.
Aluminum	IL
Antimony	IL
Arsenic	IL
Barium	IL
Beryllium	IL
Boron	IL
Cadmium	IL
Calcium	IL
Chromium	IL
Cobalt	IL
Copper	IL
lron	IL 
Lead	IL "
Magnesium	IL IL
Manganese Molybdenum	IL IL
Nickel	IL
Potassium	IL
Selenium	IL
Silver	IL
Sodium	IL
Thallium	IL
Vanadium	IL
Zinc	IL
Method EPA 7000B	
Lead	IL
Method EPA 7196A Rev: 1	
Chromium VI	IL
Method EPA 7471B	
Mercury	IL
Method EPA 8015B Rev: 2	
Diesel range organics (DRO)	IL
Ethylene glycol	IL
Gasoline range organics (GRO)	IL
Method EPA 8015C	
Diesel range organics (DRO)	IL
Gasoline range organics (GRO)	IL
Method EPA 8081A Rev: 1	
4,4'-DDD	IL
4,4'-DDE	IL
4,4'-DDT	IL
Aldrin	IL

**Primary AB** Certificate No.: 1004452023-11 RCRA (Solid & Hazardous Material) Field of Testing /Matrix: alpha-BHC (alpha-Hexachlorocyclohexane) IL alpha-Chlordane, cis-Chlordane IL beta-BHC (beta-Hexachlorocyclohexane) IL Chlordane (tech.)(N.O.S.) IL delta-BHC IL Dieldrin IL IL Endosulfan I IL Endosulfan II Endosulfan sulfate IL Endrin IL Endrin aldehyde IL Endrin ketone IL gamma-BHC (Lindane, gamma-Hexachlorocyclohexane) IL gamma-Chlordane IL Heptachlor IL Heptachlor epoxide IL IL Methoxychlor IL Toxaphene (Chlorinated camphene) Method EPA 8081B Rev: 2 4,4'-DDD IL 4,4'-DDE IL 4,4'-DDT IL IL Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) IL alpha-Chlordane, cis-Chlordane IL beta-BHC (beta-Hexachlorocyclohexane) IL Chlordane (tech.)(N.O.S.) IL delta-BHC IL Dieldrin IL Endosulfan I IL Endosulfan II IL Endosulfan sulfate IL Endrin IL Endrin aldehyde IL Endrin ketone IL gamma-BHC (Lindane, gamma-Hexachlorocyclohexane) IL gamma-Chlordane IL Heptachlor IL Heptachlor epoxide IL Methoxychlor IL Toxaphene (Chlorinated camphene) IL Method EPA 8082 Rev: 0 Aroclor-1016 (PCB-1016) IL Aroclor-1221 (PCB-1221) IL Aroclor-1232 (PCB-1232) IL Aroclor-1242 (PCB-1242) IL Aroclor-1248 (PCB-1248) IL Aroclor-1254 (PCB-1254) IL Aroclor-1260 (PCB-1260) IL Method EPA 8082A Aroclor-1016 (PCB-1016) IL

rtificate No.: 1004452023-11	Primary
d of Testing /Matrix: RCRA (Solid & Hazardous Material)	
Aroclor-1221 (PCB-1221)	IL
Aroclor-1232 (PCB-1232)	IL
Aroclor-1242 (PCB-1242)	IL
Aroclor-1248 (PCB-1248)	IL
Aroclor-1254 (PCB-1254)	IL
Aroclor-1260 (PCB-1260)	IL
nod EPA 8260B	
1,1,1,2-Tetrachloroethane	IL
1,1,1-Trichloroethane	IL
1,1,2,2-Tetrachloroethane	iL
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	IL
1,1,2-Trichloroethane	iL
1,1-Dichloroethane	iL
1,1-Dichloroethylene	IL
1,1-Dichloropropene	IL
1,2,3-Trichlorobenzene	IL
1,2,3-Trichloropropane	IL
1,2,4-Trichlorobenzene	IL
1,2,4-Trimethylbenzene	IL
1,2-Dibromo-3-chloropropane (DBCP)	IL
1,2-Dibromoethane (EDB, Ethylene dibromide)	IL
1,2-Dishornoetriane (EDB, Ethylene dishornide) 1,2-Dishlorobenzene (o-Dishlorobenzene)	IL
1,2-Dichloroethane (Ethylene dichloride)	IL
1,2-Dichloropropane	IL
1,3,5-Trimethylbenzene	IL
1,3-Dichlorobenzene	IL
1,3-Dichloropropane	IL
1,4-Dichlorobenzene	IL
1,4-Dioxane (1,4- Diethyleneoxide)	IL "
2,2-Dichloropropane	IL "
2-Butanone (Methyl ethyl ketone, MEK)	IL "
2-Chloroethyl vinyl ether	IL "
2-Chlorotoluene	IL "
2-Hexanone	IL "
2-Nitropropane	IL "
4-Chlorotoluene	IL 
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	IL 
4-Methyl-2-pentanone (MIBK)	IL 
Acetone	IL 
Acrolein (Propenal)	IL 
Acrylonitrile	IL 
Benzene	IL
Bromobenzene	IL
Bromochloromethane	IL
Bromodichloromethane	IL
Bromoform	IL
Carbon disulfide	IL
Carbon tetrachloride	IL
Chlorobenzene	IL
Chlorodibromomethane	IL
Chloroethane (Ethyl chloride)	IL
Chloroform	IL

**Primary AB** Certificate No.: 1004452023-11 Field of Testing /Matrix: RCRA (Solid & Hazardous Material) cis-1,2-Dichloroethylene IL cis-1,3-Dichloropropene IL Dibromomethane (Methylene bromide) IL Dichlorodifluoromethane (Freon-12) IL Diethyl ether IL Ethyl acetate IL Ethylbenzene IL IL Hexachlorobutadiene Iodomethane (Methyl iodide) IL Isobutyl alcohol (2-Methyl-1-propanol) IL Isopropyl alcohol (2-Propanol, Isopropanol) IL Isopropylbenzene IL m+p-xylene IL Methyl bromide (Bromomethane) IL Methyl chloride (Chloromethane) IL Methyl tert-butyl ether (MTBE) IL IL Methylene chloride (Dichloromethane) IL m-Xylene Naphthalene IL n-Butyl alcohol (1-Butanol, n-Butanol) IL n-Butylbenzene IL o-Xylene IL p-Xylene IL sec-Butylbenzene IL Styrene IL tert-Butylbenzene IL Tetrachloroethylene (Perchloroethylene) IL Tetrahydrofuran (THF) IL Toluene IL trans-1,2-Dichloroethylene IL trans-1,3-Dichloropropylene IL Trichloroethene (Trichloroethylene) IL Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) IL Vinyl acetate IL Vinyl chloride IL Xylene (total) IL Method EPA 8260C 1,1,1,2-Tetrachloroethane IL 1,1,1-Trichloroethane IL 1,1,2,2-Tetrachloroethane IL 1,1,2-Trichloroethane IL IL 1,1-Dichloroethane IL 1,1-Dichloroethylene 1,1-Dichloropropene IL 1,2,3-Trichlorobenzene IL 1,2,3-Trichloropropane IL 1,2,4-Trichlorobenzene IL1,2,4-Trimethylbenzene IL 1,2-Dibromo-3-chloropropane (DBCP) IL 1,2-Dibromoethane (EDB, Ethylene dibromide) IL IL 1,2-Dichlorobenzene (o-Dichlorobenzene)

1,2-Dichloroethane (Ethylene dichloride)

IL

Certificate No.: 1004452023-11 Primary AB

Field of Testing /Matrix: RCRA (Solid & Hazardous Material)	
1,2-Dichloropropane	IL
1,3,5-Trimethylbenzene	IL
1,3-Dichloro-2-propanol	IL
1,3-Dichlorobenzene	IL
1,3-Dichloropropane	IL
1,4-Dichlorobenzene	IL
1,4-Dioxane (1,4- Diethyleneoxide)	IL
2,2-Dichloropropane	IL
2-Butanone (Methyl ethyl ketone, MEK)	IL
2-Chloroethyl vinyl ether	IL
2-Chlorotoluene	IL
2-Hexanone	IL
2-Nitropropane	IL
4-Chlorotoluene	IL
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	IL
4-Methyl-2-pentanone (MIBK)	IL
Acetone	IL
Acrolein (Propenal)	IL
Acrylonitrile	IL
Benzene	IL
Bromobenzene	IL
Bromochloromethane	IL
Bromodichloromethane	IL
Bromoform	IL
Carbon disulfide	IL
Carbon tetrachloride	IL
Chlorobenzene	IL
Chlorodibromomethane	IL
Chloroethane (Ethyl chloride)	IL
Chloroform	IL
cis-1,2-Dichloroethylene	IL
cis-1,3-Dichloropropene	IL
Dibromomethane (Methylene bromide)	IL
Dichlorodifluoromethane (Freon-12)	IL
Diethyl ether	IL
Ethyl acetate	IL
Ethylbenzene	IL
Hexachlorobutadiene	IL
Iodomethane (Methyl iodide)	IL
Isobutyl alcohol (2-Methyl-1-propanol)	IL
Isopropyl alcohol (2-Propanol, Isopropanol)	IL
Isopropylbenzene	IL
m+p-xylene	IL
Methyl bromide (Bromomethane)	IL
Methyl chloride (Chloromethane)	IL
Methyl tert-butyl ether (MTBE)	IL
Methylene chloride (Dichloromethane)	IL
m-Xylene	IL
Naphthalene	IL
n-Butyl alcohol (1-Butanol, n-Butanol)	IL
n-Butylbenzene	IL
o-Xylene	IL IL
о-жуюна	IL

Certificate No.: 1004452023-11

Field of Testing /Matrix: RCRA (Solid & Hazardous Material)	
p-Xylene	IL
sec-Butylbenzene	IL
Styrene	IL
tert-Butylbenzene	IL
Tetrachloroethylene (Perchloroethylene)	IL
Toluene	IL
trans-1,2-Dichloroethylene	IL
trans-1,3-Dichloropropylene	IL
Trichloroethene (Trichloroethylene)	IL
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	IL
Vinyl acetate	IL
Vinyl chloride	IL
Xylene (total)	IL
Method EPA 8270C Rev: 3	
1,2,4-Trichlorobenzene	IL
1,2-Dichlorobenzene (o-Dichlorobenzene)	IL
1,2-Diphenylhydrazine	IL
1,3-Dichlorobenzene	IL
1,4-Dichlorobenzene	IL
1,4-Dinitrobenzene	IL
1-Methylnaphthalene	IL
2,4,5-Trichlorophenol	IL
2,4,6-Trichlorophenol	IL
2,4-Dichlorophenol	IL
2,4-Dimethylphenol	IL
2,4-Dinitrophenol	IL
2,4-Dinitrotoluene (2,4-DNT)	IL
2,6-Dinitrotoluene (2,6-DNT)	IL
2-Chloronaphthalene	IL
2-Chlorophenol	IL
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	IL
2-Methylnaphthalene	IL
2-Methylphenol (o-Cresol)	IL
2-Nitroaniline	IL
2-Nitrophenol	IL
3,3'-Dichlorobenzidine	IL
3-Methylphenol (m-Cresol)	IL
3-Nitroaniline	IL
4-Bromophenyl phenyl ether	IL
4-Chloro-3-methylphenol	IL
4-Chloroaniline	IL
4-Chlorophenyl phenylether	IL
4-Methylphenol (p-Cresol)	IL
4-Nitroaniline	IL
4-Nitrophenol	IL 
Acenaphthene	IL
Acenaphthylene	IL 
Aniline	IL 
Anthracene	IL 
Benzidine	IL 
Benzo(a)anthracene	IL "
Benzo(a)pyrene	IL
11000 111 0+ 115	

**Primary AB** Certificate No.: 1004452023-11 RCRA (Solid & Hazardous Material) Field of Testing /Matrix: Benzo(b)fluoranthene IL Benzo(g,h,i)perylene IL Benzo(k)fluoranthene IL Benzoic acid IL Benzyl alcohol IL bis(2-Chloroethoxy)methane IL IL bis(2-Chloroethyl) ether bis(2-Ethylhexyl) phthalate (DEHP) IL Butyl benzyl phthalate IL Carbazole IL Chrysene IL Dibenz(a,h) anthracene IL Dibenzofuran IL Diethyl phthalate IL Dimethyl phthalate IL Di-n-butyl phthalate IL Di-n-octyl phthalate IL Diphenylamine IL Fluoranthene IL Fluorene IL Hexachlorobenzene IL Hexachlorobutadiene IL Hexachlorocyclopentadiene IL Hexachloroethane IL Indeno(1,2,3-cd) pyrene IL Isophorone IL Naphthalene IL Nitrobenzene IL n-Nitrosodimethylamine IL n-Nitrosodi-n-propylamine IL n-Nitrosodiphenylamine IL Pentachlorophenol IL Phenanthrene IL Phenol IL IL Pyrene Pyridine IL Method EPA 8270D 1.2.4-Trichlorobenzene IL 1,2-Dichlorobenzene (o-Dichlorobenzene) IL 1,2-Diphenylhydrazine IL 1,3-Dichlorobenzene IL IL 1,4-Dichlorobenzene 1,4-Dinitrobenzene IL 1-Methylnaphthalene IL 2,4,5-Trichlorophenol IL

IL

IL

IL

IL

IL

IL

IL

2,4,6-Trichlorophenol

2,4-Dichlorophenol

2,4-Dimethylphenol

2-Chloronaphthalene

2,4-Dinitrotoluene (2,4-DNT)

2,6-Dinitrotoluene (2,6-DNT)

2,4-Dinitrophenol

**Primary AB** Certificate No.: 1004452023-11 RCRA (Solid & Hazardous Material) Field of Testing /Matrix: 2-Chlorophenol IL 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol) IL 2-Methylnaphthalene IL 2-Methylphenol (o-Cresol) IL 2-Nitroaniline IL 2-Nitrophenol IL IL 3,3'-Dichlorobenzidine 3-Methylphenol (m-Cresol) IL 3-Nitroaniline IL 4-Bromophenyl phenyl ether IL 4-Chloro-3-methylphenol IL 4-Chloroaniline IL 4-Chlorophenyl phenylether IL 4-Methylphenol (p-Cresol) IL 4-Nitroaniline IL 4-Nitrophenol IL IL Acenaphthene Acenaphthylene IL Aniline IL Anthracene IL Benzidine IL Benzo(a)anthracene IL Benzo(a)pyrene IL Benzo(b)fluoranthene IL Benzo(g,h,i)perylene IL Benzo(k)fluoranthene IL Benzoic acid IL Benzyl alcohol IL bis(2-Chloroethoxy)methane IL bis(2-Chloroethyl) ether IL bis(2-Ethylhexyl) phthalate (DEHP) IL Butyl benzyl phthalate IL Carbazole IL Chrysene IL Dibenz(a,h) anthracene IL Dibenzofuran IL IL Diethyl phthalate Dimethyl phthalate IL Di-n-butyl phthalate IL Di-n-octyl phthalate IL Diphenylamine IL Fluoranthene IL Fluorene IL IL Hexachlorobenzene Hexachlorobutadiene IL Hexachlorocyclopentadiene IL Hexachloroethane IL Indeno(1,2,3-cd) pyrene IL

IL

IL

IL

IL

Isophorone

Naphthalene

Nitrobenzene

n-Nitrosodimethylamine

**Primary AB** Certificate No.: 1004452023-11 Field of Testing /Matrix: RCRA (Solid & Hazardous Material) n-Nitrosodi-n-propylamine IL n-Nitrosodiphenylamine IL Pentachlorophenol IL Phenanthrene IL Phenol IL Pyrene IL IL Pyridine Method EPA 8321B IL 2,4,5-T 2,4-D IL 2,4-DB IL Dalapon IL Dicamba IL Dichloroprop (Dichlorprop) IL Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP) IL IL **MCPA MCPP** IL Silvex (2,4,5-TP) IL Method EPA 9012A Rev: 1 IL Cyanide Method EPA 9012B IL Cyanide Method EPA 9045C Rev: 3 IL рΗ Method EPA 9045D IL pН Method EPA 9066 Rev: 0 Total phenolics IL Method EPA 9095A Paint Filter Test IL Method EPA 9095B Paint Filter Test IL

Certificate No.: 1004452023-11	Primary AB
Field of Testing /Matrix: SDWA (Potable Water)	
Method EPA 200.8 Rev: 5.4	
Aluminum	IL
Antimony	IL
Arsenic	IL
Barium	IL
Beryllium	IL
Cadmium	IL
Chromium	IL
Copper	IL
Lead	IL
Manganese	IL
Molybdenum	IL
Nickel	IL
Selenium	IL
Silver	IL
Thallium	IL
Vanadium	IL
Zinc	IL



### **Environmental Laboratory Accreditation Program**



**NELAP** Recognized

#### Sterling Labs IL300001

2242 West Harrison Street

Chicago, IL 60612

IS GRANTED APPROVAL BY ORELAP UNDER THE 2016 TNI STANDARDS, TO PERFORM ANALYSES ON ENVIRONMENTAL SAMPLES IN MATRICES AS LISTED BELOW:

Air

**Drinking Water** 

Non-Potable Water Solids & Chem. Waste

**Tissue** 

Chemistry

AND AS RECORDED IN THE LIST OF APPROVED ANALYTES, METHODS, ANALYTICAL TECHNIQUES, AND FIELDS OF TESTING ISSUED CONCURRENTLY WITH THIS CERTIFICATE AND REVISED AS NECESSARY.

ACCREDITED STATUS DEPENDS ON SUCCESSFUL ONGOING PARTICIPATION IN THE PROGRAM AND CONTINUED COMPLIANCE WITH THE STANDARDS.

CUSTOMERS ARE URGED TO VERIFY THE LABORATORY'S CURRENT ACCREDITATION STATUS IN OREGON.

Oregon State Public Health Laboratory ORELAP Program Manager 7202 NE Evergreen Parkway, Suite 100 Hillsboro, OR 97124

**EFFECTIVE DATE: 06/06/2024** 

EXPIRATION DATE: 06/05/2025

Certificate No : IL300001 - 016



## Environmental Laboratory Accreditation Program ORELAP Fields of Accreditation



Sterling Labs 2242 West Harrison Street Chicago, IL 60612 ORELAP ID: IL300001 EPA CODE: IL00086 Certificate: IL300001 - 016

Issue Date: 6/6/2024 Expiration Date: 6/5/2025

MATRIX	Reference	Analyte Code	Analyte	Revision	Rev. Date	Method Code	Description
Air					•		
	40 CFR Part 50 Appendix J				FR	10000507	Reference Method for the Determination of Particulate Matter as PM10 in the Atmosphere
		3950	Particulates <10 um				·
	EPA 3C		A R. R. R. R.		RBA	10247708	Fixed Gasses by GC/TCD
		3755	Carbon dioxide	ECC	- All		
		4926	Methane	EUC	10		
		1843	Nitrogen		CAR	169	
		3895	Oxygen		~//	1.	
	EPA IO-3.1	7		1 /		10246001	SPM - Selection, Preparation, Extraction
		8031	Extraction/Preparation				la la
		9822	Extraction/Preparation			60	10
	/9//	3915	Particulates			100	100
	EPA IO-3.2				1999	10246205	SPM - Metals in Ambient Air by AAS
	and a	1075	Lead				The state of the s
	EPA IO-3.5				1999	10246603	SPM - Metals in Ambient Air by ICP/MS
		1005	Antimony				ici /ilic
		1010	Arsenic				
		1015	Barium				
		1020	Beryllium				
		1030	Cadmium				
		1040	Chromium				
		1050	Cobalt				
		1055	Copper				//2/
		1070	Iron			0	1/2/
		1075	Lead				
		1090	Manganese				
		1100	Molybdenum		-110	6	
		1105	Nickel	A-PI	M.		
		1140	Selenium	AIIC	MARK		
		1150	Silver				
		1165	Thallium				
		1175	Tin				
		1180	Titanium				
		1185	Vanadium				
		1190	Zinc				



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Issue Date: 6/6/2024 Expiration Date: 6/5/2025

MATRIX	Reference	Analyte Code	Analyte	Revision	Rev. Date	Method Code	Description
Air	EPA TO-13A				1999	10248405	Polycyclic Aromatic Hydrocarbons
		6380	1-Methylnaphthalene				in Ambient Air by GC/MS
		6385	2-Methylnaphthalene				
		5500	Acenaphthene				
		5505	Acenaphthylene				
		5555	Anthracene				
		5575	Benzo(a)anthracene		and a		
		5580	Benzo(a)pyrene		10		
		5590	Benzo(g,h,i)perylene		GA	169	
		5600	Benzo(k)fluoranthene			100	
		5585	Benzo[b]fluoranthene				
		5855	Chrysene			1	
		5895	Dibenz(a,h) anthracene				
		5905	Dibenzofuran			1.	
		6265	Fluoranthene			- 5	
		6270	Fluorene			_	
		6315	Indeno(1,2,3-cd) pyrene				
		5005	Naphthalene				
		6615	Phenanthrene				
		6665	Pyrene				
	EPA TO-14A				1999	10248609	Volatile Organic Compounds with SUMMA canister and GC/MS
		5185	1,1,1-Trichloro-2,2,2- trifluoroethane (Freon 113a)				
		5160	1,1,1-Trichloroethane				
		5110	1,1,2,2-Tetrachloroethane			/ 4	
		5165	1,1,2-Trichloroethane			-	1/6/
		4630	1,1-Dichloroethane				1/2/
		4640	1,1-Dichloroethylene		4	N	
		5155	1,2,4-Trichlorobenzene				
		5210	1,2,4-Trimethylbenzene		-11/0		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)	ATIC	W.	1	
		4695	1,2-Dichloro-1,1,2,2- tetrafluoroethane (Freon-114)	4110	-444		
		4610	1,2-Dichlorobenzene				
		4635	1,2-Dichloroethane (Ethylene dichloride)				
		4655	1,2-Dichloropropane				
		5215	1,3,5-Trimethylbenzene				
		9318	1,3-Butadiene				



## Environmental Laboratory Accreditation Program ORELAP Fields of Accreditation



Sterling Labs 2242 West Harrison Street Chicago, IL 60612 ORELAP ID: IL300001 EPA CODE: IL00086 Certificate: IL300001 - 016

Issue Date: 6/6/2024 Expiration Date: 6/5/2025

MATRIX	Reference	Analyte Code	Analyte	Revision	Rev. Date	Method Code	Description
Air	EPA TO-14A	1			1999	10248609	Volatile Organic Compounds with
		4645	1.2 Diablarahanzana				SUMMA canister and GC/MS
		4615 4620	1,3-Dichlorobenzene				
		4735	1,4-Dichlorobenzene				
		4735	1,4-Dioxane (1,4- Diethyleneoxide)				
		4836	1-Propene (Propylene)				
		4410	2-Butanone (Methyl ethyl ketone, MEK)	CC	GA		
		4860	2-Hexanone (MBK)		16		
		6385	2-Methylnaphthalene		VA	1. 8	
		4542	4-Ethyltoluene		-		
		4995	4-Methyl-2-pentanone (MIBK)				
		4375	Benzene			1	1 1/2
		5635	Benzyl chloride			4	10
		4395	Bromodichloromethane			100	10
		4400	Bromoform			-	
		4450	Carbon disulfide				
		4455	Carbon tetrachloride				
		4475	Chlorobenzene				
		4575	Chlorodibromomethane				
		4485	Chloroethane (Ethyl chloride)				
		4505	Chloroform				
		4645	cis-1,2-Dichloroethylene				
		4680	cis-1,3-Dichloropropene				
		4555	Cyclohexane				
		4625	Dichlorodifluoromethane (Freon 12)			1	
		4755	Ethyl acetate				
		4765	Ethylbenzene				
		4835	Hexachlorobutadiene				
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)		118	1	
		5240	m+p-xylene		MIN -		
		4950	Methyl bromide (Bromomethane	e)	1		
		4960	Methyl chloride (Chloromethane		-683		
		5000	Methyl tert-butyl ether (MTBE)	REEL			
		4975	Methylene chloride (Dichloromethane)				
		4825	n-Heptane				
		4855	n-Hexane				
		5005	Naphthalene				



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Issue Date: 6/6/2024 Expiration Date: 6/5/2025

MATRIX	Reference	Analyte Code	Analyte	Revision	Rev. Date	Method Code	Description
Air	EPA TO-14A			1	1999	10248609	Volatile Organic Compounds with
		5050	V 1				SUMMA canister and GC/MS
		5250	o-Xylene				
		5100	Styrene				
		5115	Tetrachloroethylene (Perchloroethylene)				
		5120	Tetrahydrofuran (THF)				
		5140	Toluene				
		4700	trans-1,2-Dichloroethylene		10.		
		4685	trans-1,3-Dichloropropylene	-	UA	A (0)	
		5170	Trichloroethene (Trichloroethylene)		GA	11.	
		5175	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)			7	E
		5225	Vinyl acetate			60	1/4
		5235	Vinyl acctate Vinyl chloride			100	10
		5260	Xylene (total)			-	
	EPA TO-15	3200	Aylerie (total)		1999	10248803	VOCs collected in Canisters by
		5185	1,1,1-Trichloro-2,2,2- trifluoroethane (Freon 113a)				GC/MS
		5160	1,1,1-Trichloroethane				
		5110	1,1,2,2-Tetrachloroethane				
		5165	1,1,2-Trichloroethane				
		4630	1,1-Dichloroethane				
		4640	1,1-Dichloroethylene				
		5155	1,2,4-Trichlorobenzene			1/4	
		5210	1,2,4-Trimethylbenzene			- 4	
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)			0	1/5/
		4695	1,2-Dichloro-1,1,2,2- tetrafluoroethane (Freon-114)			OY	
		4610	1,2-Dichlorobenzene		-110		
		4635	1,2-Dichloroethane (Ethylene dichloride)	TIC	M.	707	
		4655	1,2-Dichloropropane	1110	-		
		5215	1,3,5-Trimethylbenzene				
		9318					
		4615	1,3-Dichlorobenzene				
		4620	1,4-Dichlorobenzene				
		4735	1,4-Dioxane (1,4- Diethyleneoxide)				



## Environmental Laboratory Accreditation Program ORELAP Fields of Accreditation



Sterling Labs 2242 West Harrison Street Chicago, IL 60612 ORELAP ID: IL300001 EPA CODE: IL00086 Certificate: IL300001 - 016

Issue Date: 6/6/2024 Expiration Date: 6/5/2025

MATRIX	Reference	Analyte Code	Analyte	Revision	Rev. Date	Method Code	Description
Air	EPA TO-15				1999	10248803	VOCs collected in Canisters by
		4836	1-Propene (Propylene)				GC/MS
		4410	2-Butanone (Methyl ethyl				
		4410	ketone, MEK)				
		4538	2-Ethyltoluene				
		4860	2-Hexanone (MBK)				
		4542	4-Ethyltoluene		GA		
		4995	4-Methyl-2-pentanone (MIBK)		10.		
		4375	Benzene	-	UN	A (0)	
		5635	Benzyl chloride				
		4395	Bromodichloromethane				
		4400	Bromoform				
		4450	Carbon disulfide				
		4455	Carbon tetrachloride			1	7 6
		4475	Chlorobenzene			7	
		4575	Chlorodibromomethane			_	The state of the s
		4485	Chloroethane (Ethyl chloride)				
		4505	Chloroform				
		4645	cis-1,2-Dichloroethylene				
		4680	cis-1,3-Dichloropropene				
		4555	Cyclohexane				
		4625	Dichlorodifluoromethane (Freon 12)	<b> -</b>			
		4755	Ethyl acetate				
		4765	Ethylbenzene				
		4835	Hexachlorobutadiene			1	
		4895	Isopropyl alcohol (2-Propanol, Isopropanol)				13
		5240	m+p-xylene			~	
		4950	Methyl bromide (Bromomethane	e)			
		4960	Methyl chloride (Chloromethane	<del>)</del> )	. 0		
		5000	Methyl tert-butyl ether (MTBE)		NIV	150/	
		4975	Methylene chloride (Dichloromethane)	ITIC	114		
		4825	n-Heptane				
		4855	n-Hexane				
		5005	Naphthalene				
		5250	o-Xylene				
		5100	Styrene				
		5115	Tetrachloroethylene (Perchloroethylene)				



## Environmental Laboratory Accreditation Program ORELAP Fields of Accreditation



Sterling Labs 2242 West Harrison Street Chicago, IL 60612 ORELAP ID: IL300001 EPA CODE: IL00086 Certificate: IL300001 - 016

Issue Date: 6/6/2024 Expiration Date: 6/5/2025

PA TO-15	5120 5140 4700 4685 5170 5175 5225 5235 5260	Tetrahydrofuran (THF) Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropylene Trichloroethene (Trichloroethylene) Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride Xylene (total)	CC	1999	10248803	VOCs collected in Canisters by GC/MS
	5140 4700 4685 5170 5175 5225 5235	Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropylene Trichloroethene (Trichloroethylene) Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride	CC	GN	The state of the s	
	4700 4685 5170 5175 5225 5235	trans-1,2-Dichloroethylene trans-1,3-Dichloropropylene Trichloroethene (Trichloroethylene) Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride	CC	GN	TE	
	4685 5170 5175 5225 5235	trans-1,3-Dichloropropylene Trichloroethene (Trichloroethylene) Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride	CC	GN	Are	
	5170 5175 5225 5235	Trichloroethene (Trichloroethylene)  Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)  Vinyl acetate  Vinyl chloride	CC	GN	The state of the s	
	5175 5225 5235	(Trichloroethylene) Trichlorofluoromethane (Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride	CC	GN	Tre	
	5225 5235	(Fluorotrichloromethane, Freon 11) Vinyl acetate Vinyl chloride		GN	TE	
	5235	Vinyl acetate Vinyl chloride		7/	A.	
	5235	Vinyl chloride			Fr	
					F	
	5260	Xylene (total)			10	5
	R	CREDITA	TIC	NB	00	
		Rental	PCCREDITA	TI PCCREDITATION	DITATION	TINI A TON BOD



# APPENDIX C Photograph Log





#I: View of Lucky Locators on-site to mark out utility clearance.



#2: View of utility marks for SB-3/TW-3.



#3: View of Enviro Dynamics advancing SB-5.



#4: View of SG-I in place prior to collecting the sample.



#5: View of Enviro Dynamics advancing SB-7.



#6: View of sample collection set up for TW-I.

DATE: MAY 2024 PROJECT NUMBER: T243326





#7: View of SB-3/TW-3 backfilled to grade with bentonite and asphalt patching.



#8: View of SB-4 backfilled to grade with bentonite and asphalt patching.

PROJECT NUMBER: T243326 DATE: MAY 2024