NR 716 Workplan

Martin's One Hour Dry Cleaner
1025 East Green Bay Street, Shawano, Wisconsin
BRRTS #02-59-231063

Prepared for:

Arlene Martin
229 East 5th Street
Shawano, Wisconsin
54166

October 1, 2020

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BRRTS #02-59-231063

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V2.4

Contents

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1.0 Executive Summary

This document presents the work plan of proposed NR716 site investigation activities for Martin's One Hour Dry Cleaners located at 1025 East Green Bay Street, Shawano, Wisconsin. The property is occupied by an operating dry cleaner and an accompanying parking lot along East Green Bay Street. The site was identified as the source of a chlorinated solvent release after chlorinated volatile organic compounds (CVOCs) (i.e., tetrachloroethene [PCE], trichloroethene[TCE], and cis-1,2 Dichloroethene [cis-1,2-DCE]) were detected in groundwater sampled from a monitoring well installed on the property during an environmental investigation at an adjacent gas station in January 1999. Subsequent site investigation to assess the CVOC contamination has not adequately addressed the degree or extent of CVOC contamination in groundwater or soil, nor has the vapor intrusion pathway been assessed.

This work plan outlines the additional environmental investigation to:

- Evaluate the degree and extent of CVOC contamination in groundwater and soil.
- Assess the vapor intrusion pathway on-site and neighboring properties.

Workplan activities for the site will include:

- Advancement of four direct-push probes for soil sample collection.
- Installation of two 2-inch diameter monitoring wells and three piezometers for groundwater collection.
- Installation of six sub-slab vapor pins, two vapor pins each will be installed and sampled in the 1025 East Green Bay Street property, 1017 East Green Bay Street property, and 1024 5th Street property. Vapor sampling will be conducted to assess the vapor intrusion pathway.
- Assess sanitary sewer lines for volatile organic vapors on the 1025 East Green Bay Street property, the 1017 East Green Bay Street property, and the 1024 5th Street property. This assessment will be used to evaluate if the sanitary sewer is a conduit for vapor migration.
- Proper disposal of Investigative Derived Waste (IDW).

Results of site investigation activities will be presented to the client and the WDNR in a report and recommendations for additional work as deemed necessary.

2.0 Introduction

This work plan outlines objectives and justification for additional investigation of CVOC at Martin's One Hour Dry Cleaner, 1025 East Green Bay Street, Shawano, Wisconsin, 54166 (site). The work plan outlines the objective, scope, and describes the rationale of the proposed assessment. Changes required in the procedures described in this work plan due to site conditions or other constraints will be properly documented in the report of this phase of investigation activities.

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2.1 Site Address and Location

The site consists of a single parcel that encompasses 0.25 acres in the Southeast ¼ of the Southeast ¼ of Section 30, Township 27 North, Range 16 East, in the City of Shawano, Shawano County, Wisconsin. The elevation of the site is approximately 814 ft above mean sea level (Appendix A Figure 1). Martin's One Hour Dry Cleaners occupies the site. A coin laundry operates in the southwest corner of the building,

and dry-cleaning processes are performed in the rest of the building. The site is identified by the address 1025 East Green Bay Street, Shawano, Wisconsin, 54166. A vacant lot, formerly occupied by a Clark Oil gas station (BRRTS No. 03-59-186613), is located east of the site. Apartment complexes border the site to the north, and Flamingo's Family Restaurant adjoins the property to the west. A layout of the site and surrounding area is shown in Appendix A Figure 2.

2.2 Responsible Party and Project Consultant

Role	Contact Title	Contact Address	Contact Email/Phone
Owner/Client	Arlene Martin, owner Martin's One Hour Dry Cleaners	229 E. 5th Street Apt 3, Shawano, WI, 54166	amandpm@frontiernet.net 715-252-7645
Consultant	William Honea, Project Manager Ayres Associates, Inc.	3376 Packerland Dr, Ashwaubenon, WI 54115	HoneaW@ayresassociates.com 715-834-3161

3.0 Project Background

Chlorinated volatile organic compound (CVOC) contamination was discovered in groundwater beneath the dry cleaner site in 1999, during an investigation of a petroleum release at the adjacent Clark Oil Station #118 (Appendix A Figure 2). As part of the investigation at the Clark Oil Station #118, a monitoring well (MW10) was installed on the Martin's One Hour Dry Cleaners site (Appendix A Figure 3). Concentrations of PCE, TCE, and cis-1,2-DCE were detected in MW10 greater than the Chapter NR140, Wisconsin Administrative Code (Wis. Adm. Code) enforcement standards (ES). In September 1999, the Wisconsin Department of Natural Resources (WDNR) requested an investigation be completed to evaluate the extent of CVOC contamination attributed to the operation of Martin's One Hour Dry Cleaner.

In 2001, Graef, Anhalt, Schloemer & Associates, Inc. (GAS) began a site investigation that included installing four Geoprobe ® soil borings (GP1 through GP4) and the collection of groundwater samples from each boring. In addition, groundwater elevations were collected from existing monitoring wells MW1, MW2, MW3, MW5, and MW7 installed for the Clark Oil Station #118 site investigation.

On June 11, 2003, GAS submitted a Site Investigation Workplan to the WDNR recommending additional investigation and a proposed cost for the work. On June 16, 2003, the WDNR approved the work plan and costs. Between 2003 and 2009, there were various project delays in implementing additional investigative work. On October 11, 2010, Martin's Dry Cleaners retained Robert E. Lee & Associates, Inc., (REL) to complete WDNR-approved investigation work.

From December 2011 through July 2012, five additional soil borings (B12 through B16) were advanced to evaluate the extent of CVOCs in soil and groundwater at the site. Three of the borings were converted to groundwater monitoring wells, and a piezometer (MW12, MW13, and PZ14) and two rounds of groundwater samples were collected from the site monitoring points during February and July 2012.

Based on the results of the soil and groundwater sampling, additional site investigation was necessary to define and characterize the extent of the CVOCs in groundwater. On December 12, 2012, REL submitted a Site Investigation Results Update report to the WDNR and presented a scope of work with a cost estimate for the installation of four shallow soil borings and four groundwater monitoring wells, two rounds of groundwater sampling, and a desktop analysis of the potential for vapor intrusion in nearby buildings. The proposed scope of work and costs were approved by the WDNR on June 24, 2013 (Change Order #2), with modifications. The modifications included the installation of a down gradient piezometer.

In 2014, REL contracted with Midwest Engineering Services (MES) to advance eight soil borings (B17 through B24) using a hollow stem auger. Soil samples were collected from 2 to 4 feet bgs, and above the apparent water table from borings B17 through B23 were submitted to Synergy Environmental Lab (WDNR Certification #445037560) for analysis of volatile organic compounds (VOCs). Upon completion of soil sampling, Borings B18, B19, B20, B23, and B24 were completed as monitoring wells MW18, MW19, MW20, MW24, and piezometer PZ23, respectively. Between March and November of 2014, groundwater samples were collected from each piezometer and boring and surveyed for vertical elevation. On June 26, 2015, REL submitted a site investigation work plan to the WDNR. Funding issues and WDNR proposed modifications to the scope of work delayed site investigation activities between 2015 and 2020. On July 10, 2020, the WDNR issued a letter to the site owner requiring a revised site investigation work plan to be submitted for approval and subsequent evidence of work plan implementation.

3.1 Scope of Work Objectives

The purpose of this work plan is to outline procedures for further investigation of the documented CVOC contamination at Martin's One Hour Dry Cleaner site. This includes:

- Assessing the degree and extent of CVOCs in soil and groundwater.
- Assessing the vapor intrusion pathway at Martins One Hour Drycleaners, and the adjacent Flamingos Family Restaurant, and apartments at 1024 5th St.
- Assessing sanitary sewers as possible conduits for volatile organic vapor migration.

4.0 Initial Evaluation

4.1 Past Assessment Results

Between 2001 and 2014, GAS and REL conducted various rounds of soil and groundwater sampling at the site. Results of sampling indicate PCE impacted soil along the northern and southern perimeters of Martins One Hour Dry Cleaner building and elevated VOCs in groundwater on-site and off-site to the north.

The most recent groundwater sampling results from July 2014 indicate PCE, TCE, cis-1,2-DCE, and vinyl chloride, are present in excess of the Chapter NR140, Wis. Adm. Code ES in monitoring wells MW10, MW12, MW18, MW20, and Piezometer PZ23. The greatest total CVOCs concentrations during July 2014 were detected in MW12, which is located just north of the dry cleaner building.

In addition, concentrations of petroleum volatile organic compounds (PVOCs) greater than NR140 ES are present in MW19. This monitoring well is located north, and downgradient of the closed Clark Oil Station #118 LUST site (BRRTS#03-59-186613), indicating PVOC contamination is associated with the petroleum release on the Clark Oil Station. The groundwater laboratory analytical results are summarized in Table 4 of REL's 2015 site investigation results update.

4.2 Regional Geology and Hydrogeology

The site is underlain by fine to medium-grained sands with some silt deposited by glacial lake Oshkosh. The bedrock beneath the unconsolidated deposits is mapped as Proterozoic granite of the Wolf River batholith. Depth to bedrock is estimated to be greater than 100 feet below the land surface. Groundwater level measurements collected during previous assessment activities indicate that the water table ranges between 5.5 and 7 feet bgs. Groundwater levels collected on July 31, 2014, indicated a northerly groundwater flow direction with an average hydraulic gradient of 0.004 feet per year and estimated groundwater flow velocity of 1.38 feet per year.

5.0 Sampling Objectives and Rationale

The purpose of the sampling program is to characterize the nature and extent of contamination at the site. This requires obtaining the necessary information regarding the type, distribution, and concentration of chemical contaminants present, as well as site-specific hydrogeologic and other environmental conditions that may affect potential contaminant migration. This information will be used to evaluate the potential health and environmental risks posed by the contaminants identified as they relate to site redevelopment. The information will also be used to evaluate remedial technologies and alternatives that are appropriate for site conditions if required. To evaluate the potential threat to human health and the environment, the following overall site characterization issues will be addressed:

- Define the local geology, including the origin, texture, thickness, and distribution of the unconsolidated deposits
- Determine the local hydrogeologic conditions including depth to groundwater, and groundwater flow directions and gradients
- Determine the type and distribution of contaminants of concern in the soil, groundwater, and vapor
- Evaluate potential contaminant pathways and the potential for migration in soil, groundwater, and vapor
- Determine the type and distribution of unconsolidated deposits
- Evaluate groundwater quality
- Evaluate the vapor intrusion pathway

5.1 Assessment Tasks

Tasks to be performed to meet the assessment's objectives include advancing soil borings and soil sampling, installing groundwater monitoring wells, installing sub-slab vapor pins, sampling sanitary sewer vapor, laboratory analysis of soil, groundwater, and vapor, and an evaluation of the data collected.

The number of probes, borings, wells, and vapor pins included in the sampling and analysis plan is summarized in Table 1. The locations of the proposed borings and wells are shown in Figure 4. The exact location of these soil probes and borings are contingent on the location of underground utilities, site accessibility, and safety of field personnel.

5.2 Permitting

Permit and land access agreements may be required to install and sample soil borings, monitoring wells, and vapor pins on private property or city rights-of-way. As necessary, Ayres Associates will work with property owners to obtain the required permits and resolve site access issues.

5.3 Soil Assessment

Soil Sampling

A total of five soil probes will be advanced during this assessment. Two probes will be advanced to a depth of 10 feet bgs using direct push techniques (DPT). Three probes at the location of a proposed water table well/piezometer nest will be advanced to a depth of 40 feet bgs. Borings advanced for the

installation of monitoring wells and piezometers at the same locations as the soil probes will be drilled with hollow stem augers. Proposed probe locations are illustrated in Appendix A Figure 4.

Soil samples will be continuously collected during probing activities. All samples will be described according to the Unified Soil Classification System (USCS) and screened in the field for volatile organic vapors using a photoionization detector (PID). Each soil sample collected during this investigation will be analyzed for volatile organic compounds (VOC).

All soil samples submitted for laboratory analysis will be obtained from the unsaturated zone. The soil sample with the highest field screening reading at each boring or sampling location will be selected for laboratory analysis. If field screening results at a sampling location are not above the background, a sample from each borehole or sampling location will be selected based on the following:

- Obvious discoloration or other visible signs of contamination.
- If no visible signs of contamination are evident, a sample from the top five feet will be selected for laboratory analysis to evaluate direct contact threat.

Borehole Abandonment

Each borehole advanced during this assessment, and not converted into a monitoring well, will be properly abandoned. All boreholes requiring abandonment will be abandoned in accordance with Chapter NR 141 Wisconsin Administrative Code. Bentonite chips no greater than 3/8-inch diameter will be used to seal all boreholes. Borehole abandonment will be appropriately documented using a Well/Borehole Abandonment Form.

5.4 Groundwater Assessment

Well/Piezometer Installation

Two shallow monitoring wells and three nested piezometers will be installed in borings advanced below the water table. The shallow monitoring wells will be installed at a depth of approximately 15 feet below the ground surface, depending on the depth to groundwater. The depth of the top of the screen of the nested piezometer will be installed approximately 20 feet below the bottom of the adjacent shallow well screen. The bottom of the piezometer screen will be installed at an estimated depth of 40 feet bgs. The purpose of the shallow monitoring wells is to evaluate groundwater flow and potential contaminant transport at the water table. The piezometers will be used to evaluate groundwater flow at depth, vertical gradients, and contaminant transport below the water table.

Water table wells and piezometers will be constructed of 2-inch inside diameter (ID) schedule 40 PVC riser and screen. Shallow monitoring wells will be constructed with a 10-foot length of 0.010-inch slot PVC screen. The piezometer will be constructed with a 5-foot length of 0.010-inch slot PVC screen. Monitoring wells and piezometer will be installed following Ayres Associates' standard operating procedure SOP #110 and NR 141 Wisconsin Administrative Code. The monitoring well will be installed per Wisconsin Administrative Code NR 141.

Monitoring well casing and screen will be inserted in the boreholes after the target depth is reached. A sand filter pack (#45-#55) will be installed around the well screen and will extend approximately 2 feet above the top of the screen. A filter pack seal will be placed above the sand filter pack. The seal will consist of 2 feet of fine-grained sand placed above the filter pack. Granular or chipped bentonite will be placed above the seal to a depth of approximately 4 inches below the ground surface. The remaining annular space will be filled with native soil. Protective steel casings with locking caps will be installed over the well. Water table well construction details will be documented on WDNR Monitoring Well Construction Form 4400-113A.

Well Development

Monitoring wells will be developed after construction to remove fine-grained materials from within the well screen and filter pack. Wells will be developed in accordance with Wisconsin Administrative Code NR 141. The wells will be developed by over pumping with a purge pump until purge water remains clear. Logs of all well development procedures will be maintained. Purge water will be drummed pending laboratory analysis for proper disposal. Well development procedures will be documented on WDNR Monitoring Well Development Form 4400-113B.

Monitoring Well Survey

Monitoring wells will be surveyed to determine their elevations and horizontal locations. At each monitoring well, the elevations of the top of the well casing will be surveyed to the nearest 0.01-foot. Ground surface elevation will be surveyed to the nearest 0.1-foot. Horizontal locations will be surveyed with respect to site features such as building corners, other site wells, and borings. GPS coordinates for the monitoring wells and soil borings will be obtained with a hand-held device.

Groundwater Samples

A 0.25-inch diameter high-density polyethylene (HDPE) tube will be inserted into the well and attached to a peristaltic pump. One round of groundwater samples will be collected from each of the 13 water table wells, and six piezometers at the site and analyzed for volatile organic compounds (VOC).

Before sample collection, water levels will be obtained from each of the monitoring well and piezometer. Groundwater samples will be collected using a peristaltic pump and low flow sampling techniques. Each monitoring well will be equipped with high-density polyethylene (HDPE) dedicated tubing. The tubing will be inserted into the well, so the pump intake is coincident with the middle of the well screen. Care will be taken to minimize disturbance of the water column and sediments that may be present at the bottom of the well. The pump discharge line will be connected to the flow-through cell for monitoring water quality indicator parameters. The controller will be adjusted to an initial pumping rate of 1-liter/minute (L/min) until the line and pump are purged. The pumping rate will then be decreased to approximately 0.1 L/min to 0.5 L/min, depending on the geologic formation's permeability.

Groundwater samples collected during this investigation will be analyzed for volatile organic compounds (VOC).

Sub-slab Vapor and Sanitary Sewer Vapor Assessment

Assessment of the vapor migration pathway will be conducted inside the buildings on Martin's Dry Cleaners, 1025 East Green Bay Street, Flamingo's Family Restaurant, 1017 East Green Bay Road, and the apartments located at 1024 5th Street. Two Vapor Pins^{TM} will be installed below the building slab on the lowest level of each building to evaluate the possible presence of VOC sub-slab vapors. One round of sub-slab vapor samples will be collected following WDNR's July 2014 *Sub-Slab Vapor Sampling Procedures* guidance document RR-986. Prior to sampling, the Summa canister will be vacuum checked, and the sampling apparatus leaked tested. The Summa canister's vacuum will be checked to verify the initial reading is greater than 25 inches of Hg. The sampling apparatus will be tested to confirm a tight seal in the concrete. Soil vapor samples will be collected in a Summa canister fitted with a controller to limit vapor flow to 200 mL/min. The sub-slab vapor samples will be submitted for laboratory analysis of volatile organic compounds (VOC) in accordance with EPA method TO-15.

In addition to sub-slab vapor sampling at the three properties, VOC vapors in sanitary sewer service lines on each property will be assessed. A vapor sample will be collected from inside the sewer pipe through either a manhole or a clean out on the property. An appropriate length of tubing will be will inserted inside the manhole or cleanout so that the end of the tubing is within approximately one foot of the surface of

fluid inside the pipe. One grab sanitary sewer sample will be collected from each property using a Summa canister with a sampling period of approximately 30 seconds. Each vapor sample will be analyzed VOC per EPA method TO-15.

6.0 Schedule

It is anticipated that the commencement of activities outlined in this work plan could commence within 14 days after WDNR approval of this work plan. Reporting of investigation activities is anticipated within 30 days after completion of field activities.

7.0 Data Analysis and Evaluation

Data obtained from this environmental assessment will be analyzed by a sub-contracted laboratory and interpreted by Ayres Associates. Soil sample results will be compared to the applicable soil standards presented in WDNR Residual Contaminant Level (RCL) tables. The applicable cleanup standards for groundwater (non-drinking water) in Wisconsin include Wisconsin Administrative Code NR 140, Groundwater Quality Standards. Vapor results will be compared to Vapor Risk Screening Levels (VRSLs) calculated from Vapor Action Levels (VALs) published in the November 2017 EPA Regional Screening Level (RSL) tables for indoor air. Results will be compared to values calculated for residential buildings.

8.0 Reporting

A draft report summarizing the findings of the site will be submitted to Arlene Martin for review and comment. The report will include a description of site conditions, subsurface geology, results, and interpretation of the laboratory analytical data. A final report will be prepared following the review of the draft report. Reporting activities will include completion and submission of required reports and forms to all applicable state and local agencies (e.g., boring abandonment forms).

9.0 Investigation Derived Waste

The drilling and sampling activities performed during this assessment are expected to generate solid and liquid “waste.” The anticipated waste types and management procedures for each activity are summarized below:

- Drilling/ Monitoring Well Installation – Solid wastes consisting of wastepaper, plastic, well casing, protective clothing, and drill cuttings may be generated during drilling and well installation activities. All solid wastes exclusive of the drill cuttings will be bagged and disposed of as solid wastes in a Subtitle D municipal landfill.

  Soil cuttings generated during drilling and sampling procedures will be contained in 55-gallon DOT drums and left on-site for subsequent disposal.

- Well Development/Groundwater Sampling – Solid wastes generated during well development and groundwater sampling activities may include tubing and filters, bailer rope, plastic and paper, and disposable protective clothing. All solid wastes generated during these field activities will be bagged and disposed of as solid wastes in a Subtitle D municipal landfill.

Liquid waste generated during these activities will include well development water and purge water. Water obtained from each well installed during this assessment will be collected in 55-gallon DOT drums and left on-site for subsequent disposal.

All 55-gallon drums containing solid or liquid wastes will be stored in a single secured location on WIANG-owned property within the project boundaries. Solids and liquids will be contained in separate drums. Each drum will be secured and properly labeled as to location, waste type, date, and other pertinent information.

10.0 Laboratory Program

Ayres Associates will submit all samples to a Wisconsin certified laboratory for analytical testing. Samples will be collected in laboratory supplied containers, placed on ice, and shipped to the laboratory under property chain-of-custody procedures.

11.0 References

American Society for Testing and Materials (ASTM). November 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E1527-13. Philadelphia: ASTM.

American Society for Testing and Materials (ASTM). July 2011. Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, E1903-11. Philadelphia: ASTM.

All Appropriate Inquiries Rule: Reporting Requirements and Suggestions on Report Content, USEPA, February 2014, EPA 560-F-14-003.

City of Shawano. 2019. 2019 Annual Drinking Water Quality Report.

Robert E. Lee & Associates, Inc. June 2015. Supplemental Site Investigation Results (Third Stage) for Martin's Dry Cleaners, 1025 East Green Bay Street, Shawano, Wisconsin; BRRTS #02-59-231063.

United States Geological Survey. March 2016. National Wetlands Inventory (NWI)-Wetlands Mapper.

Wisconsin Geological and Natural History Survey. 2007. Preliminary Quaternary geologic map of the northern Fox River Lowland, Wisconsin.

Appendix A
Figures

Source: USGS 7.5-Minute Series Topographic Quadrangle, Shawano, Wisconsin, 2018

DR.BY T. Shupert CHK.BY C. Kubicki DATE SEPTEMBER 2020	NR716 WORK PLAN 1025 E. GREEN BAY, STREET SHAWANO, WISCONSIN	AYRES Eau Claire, Wisconsin	LOCATION MAP	FIGURE NO. 1

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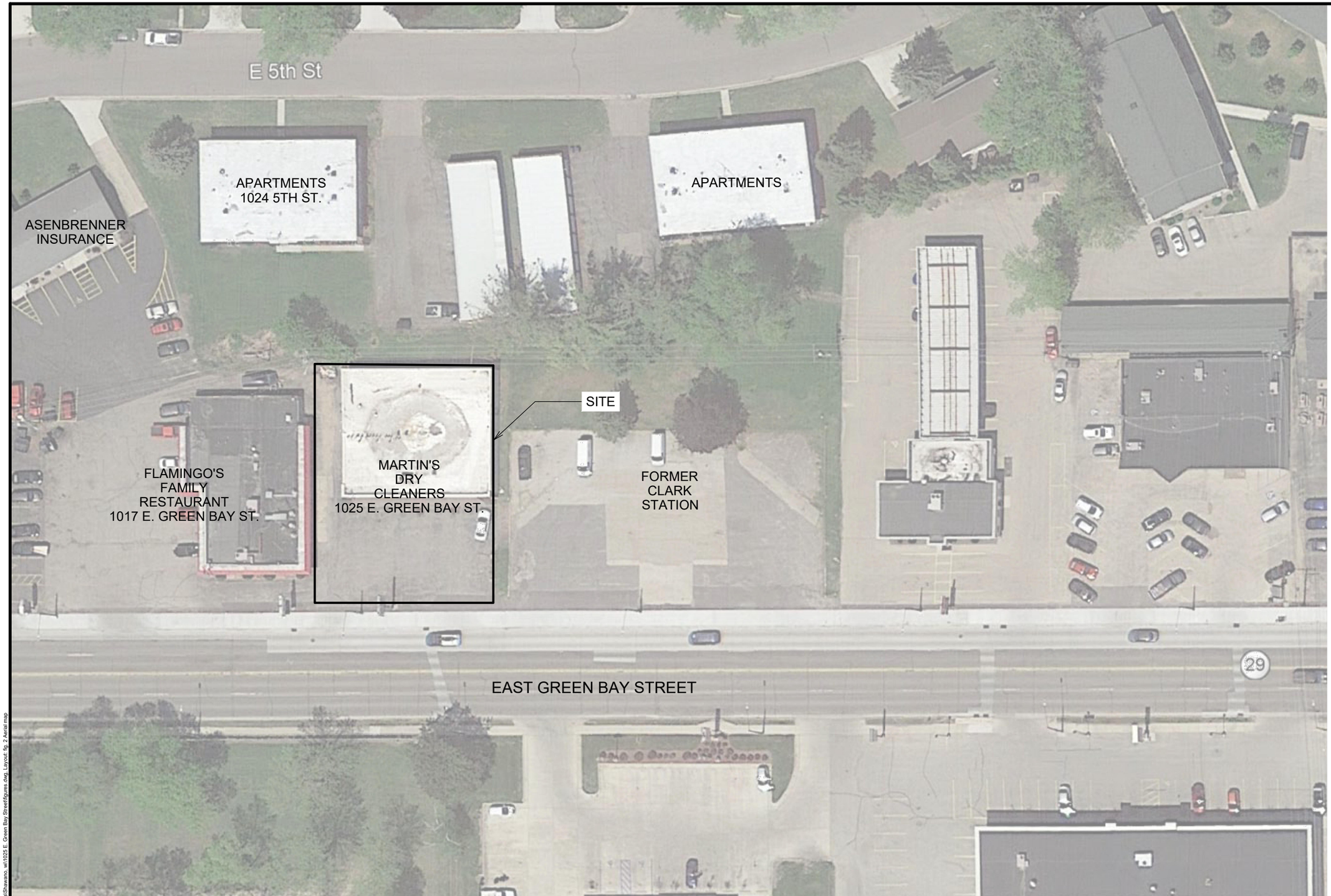

NORTH

0 25 50
FEET

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V:\ENVCADE\nr_sites\Shawano_wi\1025 E. Green Bay Street\figures.dwg, Layout: fig. 2 Aerial map

DES BY C. KUBICKI	BOOK NO						NR 716 WORK PLAN 1025 E. GREEN BAY, STREET SHAWANO, WISCONSIN	AYRES Eau Claire, Wisconsin	AERIAL MAP	FIGURE NO. 2
DR BY T. SHUPERT	PROJ NO 51-0462.00									
CHK BY T. GAIECK	DATE SEPTEMBER 2020	NO	DATE	REVISION	NO	DATE	REVISION			

E 5th St

APARTMENTS
1024 5TH ST.

APARTMENTS

ASENBRENNER
INSURANCE

B-18/MW-18

B-19/MW-19

MW-24

PZ-23

B-16

MW-12

GP-2

B-15

TW-2

TW-1

SITE

B-6/MW-1

MARTIN'S
DRY
CLEANERS
1025 E. GREEN BAY ST.

B-20/MW-20

FLAMINGO'S
FAMILY
RESTAURANT
1017 E. GREEN BAY ST.

B-8/MW-8

B-5/MW-5

B-9

B-12

B-14/MW-6

B-21

GP-1

B-17

FORMER
CLARK
STATION

B-22

B-13/MW-10

GP-3

MW-11

B-4/MW-4

B-10

B-3/MW-3

B-2/MW-2

29

EAST GREEN BAY STREET

GP-4

B-14

PZ-14

B-11/MW-9

B-7/MW-7

NORTH

0 25 50
FEET

LEGEND

- GP-1 — SOIL BORING
- MW-12 — MONITORING WELL WELL
- B-6/MW-1 — ABANDONED MONITORING/TEMP WELL
- PZ-14 — PIEZOMETER

DES BY C. KUBICKI	BOOK NO						NR 716 WORK PLAN 1025 E. GREEN BAY, STREET SHAWANO, WISCONSIN	AYRES Eau Claire, Wisconsin	SOIL BORING AND MONITORING WELLS	FIGURE NO. 3
DR BY T. SHUPERT	PROJ NO 51-0462.00									
CHK BY T. GAIECK	DATE SEPTEMBER 2020	NO	DATE	REVISION	NO	DATE	REVISION			

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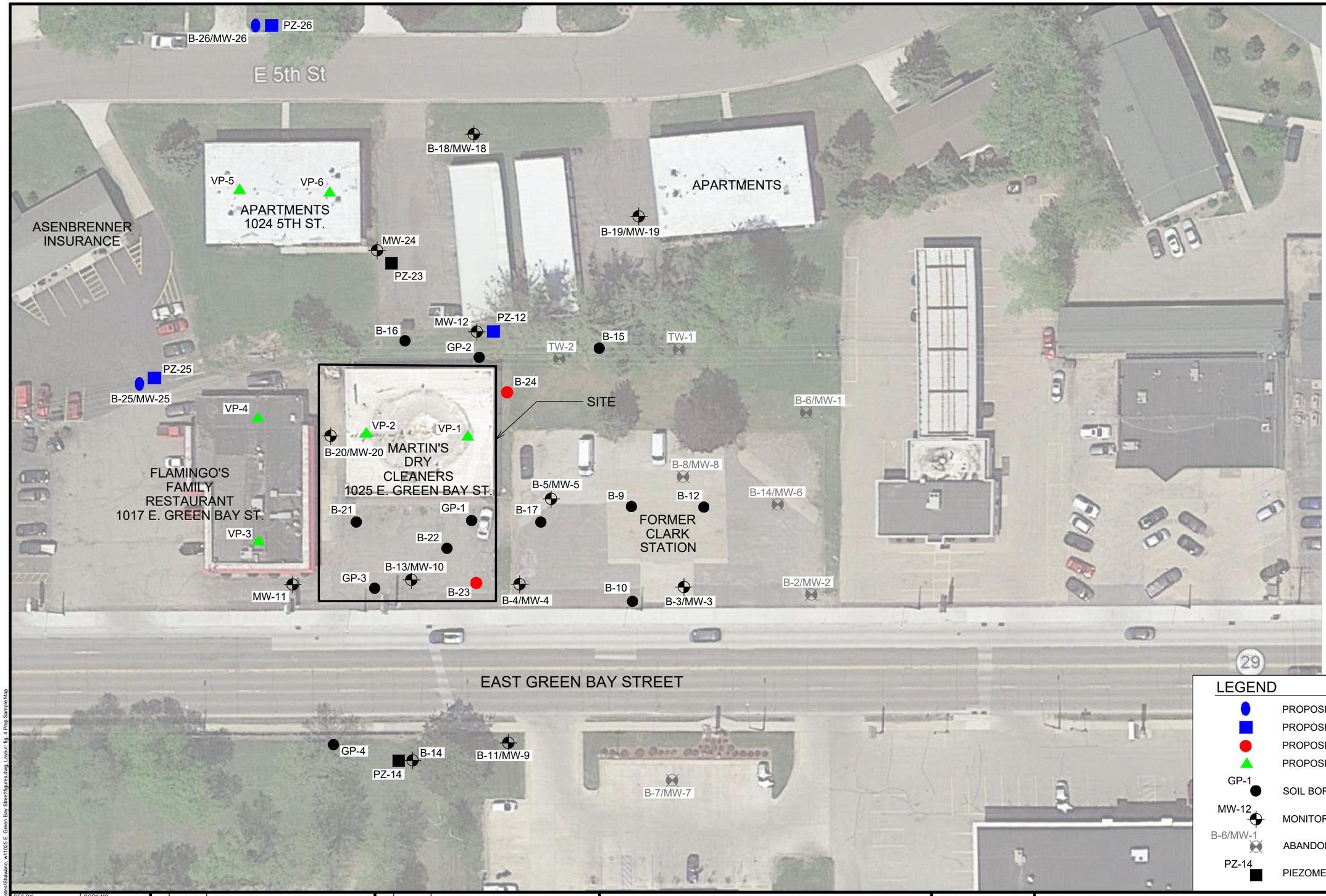
V:\ENVCAD\Env_sites\Shawano, wi\1025 E. Green Bay Street\figures.dwg, Layout: fig. 3 Sample Map



LEGEND

- PROPOSED MONITORING WELL
- PROPOSED PIEZOMETER
- PROPOSED SOIL BORING
- PROPOSED VAPOR PINS
- GP-1 — SOIL BORING
- MW-12 — MONITORING WELL WELL
- B-6/MW-1 — ABANDONED MONITORING/TEMP WELL
- PZ-14 — PIEZOMETER

DES BY C. KUBICKI	BOOK NO					NR 716 WORK PLAN 1025 E. GREEN BAY, STREET SHAWANO, WISCONSIN	AYRES Eau Claire, Wisconsin	PROPOSED SAMPLE MAP	FIGURE NO. 4
DR BY T. SHUPERT	PROJ NO 51-0462.00								
CHK BY T. GAIECK	DATE SEPTEMBER 2020	NO	DATE	REVISION	NO DATE REVISION				

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Appendix B

Tables

Table 1 Summary of Proposed Sampling Locations and Analysis

Location	No. Probes/Borings & Wells /Depth	No. Samples / Analysis Performed	Soil Sample Depths (ft)
Martin's Dry Cleaners **1025 E. Green Bay Street**	2 sub-slab vapor pins VP-1, VP-2 1 sanitary sewer vapor sample 1 soil probe-10' B-23 1 piezometer-40' PZ-12	3 vapor-VOC 1 soil-VOC 4 GW-VOC MW-10, MW-12 PZ-12, MW-20	<4 ft from ground
Asenbrenner Insurance **1002 5th Street**	1 water table well-15' MW-25 1 piezometer-40' PZ-25	1 soil- VOC 2 GW – VOC MW-25, PZ-25	<4 ft from ground
5th St. R/W	1 water table well – 15' 1 piezometer – 40' MW-26/PZ-26	1 soil-VOC 2 GW-VOC MW-26, PZ-26	<4 ft from ground
Flamingo's Family Restaurant **1017 E. Green Bay St**	2 sub-slab vapor pins 1 sanitary sewer vapor sample	3 vapor-VOC 1 GW-VOC MW-11	NA

Table 1 Summary of Proposed Sampling Locations and Analysis

Location	**No. Probes/Borings & Wells /Depth**	**No. Samples / Analysis Performed**	**Soil Sample Depths (ft)**
Apartments 1024 5th St.	2 sub-slab vapor pins 1 sanitary sewer vapor sample	3 vapor-VOC 3 GW-VOC MW-18, MW-24, PZ-23	NA
Former Clark Station	1 soil probe-10' B-24	1 soil-VOC 4 GW-VOC MW-3, MW-4, MW-5	<4 ft from ground
South of E. Green Bay St	NA	3 GW-VOC MW-9, MW-14, PZ-14	

Table 2
Sample Bottles, Preservatives, and Holding Times

Matrix	Analytes	Bottles	Preservatives	Holding Time
Soil	VOC Percent solids	1 x 60 mL tared glass jar 1 x 4 oz. plastic cup	MeOH, Cool to 4^{o} C Unpreserved	14 days 7 days
Groundwater	VOC	3 x 40 mL glass vials	1:1 HCL to pH<2, cool	14 days