June 2, 2022

Trevor Bannister
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, Wisconsin 53711

**Re: Closure Sampling Plan**
**Former Day One Former Wear**
**3939 Lien Road, Madison, Wisconsin**
**BRRTS#: 02-13-564044**

Dear Mr. Bannister:

EnviroForensics, LLC (EnviroForensics) is pleased to provide the enclosed Response Action Completion Report (the Report) for the Former Day One Formal Wear site located at 3939 Lien Road in Madison, Wisconsin. We prepared the Report as a replacement of the Closure Sampling Plan, dated July 30, 2021, with a Technical Assistance Fee since we requested that the WDNR not provide the requested feedback until additional actions were implemented. An electronic version of the Report has been uploaded to the RR Program document submittal portal. Per WDNR guidance, the requirement to submit a paper copy of the Report is currently suspended. On behalf of Marc, Inc, the property owner, EnviroForensics is requesting a formal review of the Response Action Completion Report, and written response to the closure request. Additionally, we are requesting a variance from the NR 716 Site Investigation Reporting requirement as there is no further investigation or remediation proposed and all site data is included in the Report. The technical assistance review fee of $700 was previously submitted to the southeast region program associate in 2021.

Sincerely,
**EnviroForensics, LLC**

Rob Hoverman, PG
*Senior Project Manager*

*Copy: Suzanne Hanson, Marc, Inc.*

EnviroForensics, LLC
N16 W23390 Stone Ridge Drive, Suite G
Waukesha, WI 53188
Phone: 262-290-4001 • Fax 317.972.7875

# RESPONSE ACTION COMPLETION REPORT

**FORMER DAY ONE FORMAL WEAR, INC.**
3939 LIEN ROAD
MADISON, WISCONSIN
WDNR BRRTS No: 02-13-564044

June 2, 2022

Prepared For:

**SUZANNE HANSON**
**MARC, INC.**
901 POST ROAD
MADISON, WISCONSIN 53713
Prepared By:

**ENVIROFORENSICS, LLC**
N16 W23390 STONERIDGE DRIVE, SUITE G
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**HYDROGEOLOGIST CERTIFICATION**

"I, Rob Hoverman, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712. 03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

_____ 6/2/2022

Rob Hoverman, P. G. Date

Document Reference: Response Action Completion Report
Former Day-One Formal Wear, Inc.
3939 Lien Rd, Madison, Wisconsin
June 2, 2022

## 1.0 INTRODUCTION

On behalf of MARC, Inc, EnviroForensics, LLC (EnviroForensics) has prepared this Response Action Completion Report to document the nature and extent of contamination and remedial action at the Former Day One Formal Wear located at 3939 Lien Road in Madison, Wisconsin (the Site). **Figure 1** shows the location of the Site.

### 1.1 Site Location and Information

Former Day One Formal Wear, Inc.
PLSS: NE 1/4 of the NW 1/4 of Sec 33, T08N, R10E, Dane County
X Coordinate (WTM91): 575626
Y Coordinate (WTM91): 294425
Parcel ID: 081033209158
Area = 0.93 Acres

### 1.2 Site and Surrounding Area Description

The Site is situated on the east side of Madison in an area of mixed commercial and industrial properties. The Site has a single-story metal and brick building presumably constructed in 1971. A church currently occupies the Site and includes offices, a kitchen, a small common area, restrooms, maintenances/utility rooms, and a sanctuary with no full-time staff. The building and asphalt parking areas cover almost the entire Site with a minimal grass strip on the east, south, and west property boundaries.

Lien Road borders the Site to the north, followed by a park, a City of Madison fire station to the east, a parking lot to the south, and an Aldi grocery store to the west. The topography in the immediate area of the Site is generally flat but sloping slightly to the south. **Figure 2** shows the Site layout and surrounding areas.

### 1.3 Physical Setting

The surface topography generally slopes downward from east to west. The ground surface elevation is approximately 875 feet above mean sea level (amsl). The geology of the area consists of an upper sand and gravel aquifer overlying the shallow Trempealeau sandstone at approximately 785 feet amsl. The Trempealeau is underlain by the Tunnel City sandstone formation at approximately 700 feet amsl. Specific groundwater conditions are discussed further in Section 2.1.

## 2.0 BACKGROUND AND INVESTIGATION SCOPING

### 2.1 Discovery and Investigation Summary

Investigation activities identified the dry-cleaning solvent tetrachloroethene (PCE) and its breakdown of chlorinated volatile organic compounds (CVOCs) at the MARC-East site during sampling conducted in preparation for a property transfer/ redevelopment. A review of information related to the past uses of the property identified a tenant that performed dry cleaning at the Site. Day One Formal Wear occupied the building from 1981 through 1989. The US EPA listed Day One Formal Wear as a small quantity hazardous waste generator. Unaware of the former hazardous material activities conducted at the Site, MARC purchased the property in 1989. Sampling conducted at the Site confirms the presence of CVOCs at levels exceeding WDNR standards in the soil, groundwater, and sub-slab vapor.

**Soil**

Soil samples were collected at twelve locations at the Site. Data collected to date indicate the soil contamination is located primarily beneath the building at the Site. Soil contamination was identified in soils as shallow as one foot below the floor slab of the building to as deep as 19.5 feet. However, the deeper samples would be considered saturated and not representative of soil contaminant mass. Generally, PCE concentrations in soil exceed WDNR groundwater pathway residual contaminant levels RCLs. The extent of soil contamination is generally characterized. The sandy substrate would direct contaminants downward rather than dispersing horizontally. **Table 1** presents the soil analytical data, and **Figure 2** illustrates the extent of soil contamination. The modified cross-section from Seymour Environmental Services, Inc. (Seymour) in **Appendix A** and **Figure 2** shows that the soil contamination is generally limited to the soil below the Site building. Other detections in the soil outside the building footprint likely represent smear zone adsorption and not the source area.

**Groundwater**

The initial groundwater samples were collected from borings installed for geotechnical purposes and detected (CVOCs) in soil and groundwater. Seymour subsequently installed seven Geoprobe™ borings to collect groundwater samples from the water table aquifer. The borings were distributed across the property. Data from the temporary borings indicated that the water table aquifer across the entire Site was contaminated with PCE and, to a lesser degree, its degradation products trichloroethene (TCE) and cis 1,2-dichloroethene (**Figure 2**). The highest contaminant levels identified in the water table aquifer are located at the northeastern corner of the building. The investigation did not identify any dense non-aqueous phase liquid (DNAPL)

at the Site. As shown on **Figure 3**, groundwater generally flows to the northwest toward Madison Well #15.

Seymour installed five (5) NR141-compliant monitoring wells at the Site. These wells include three (3) water table wells and two (2) piezometers. **Figure 2** presents the locations, **Table 2** provides construction details, and **Table 3** presents groundwater level measurements.

Analytical data from monitoring well samples show CVOCs are widespread in the shallow groundwater at the Site. No other VOCS were identified in the groundwater at significant concentrations. Groundwater contamination exceeding NR140 standards is present within the water table aquifer (~15-30 feet bgs) across the Site but is only above the PAL in MW-1 on the downgradient side of the Site. However, data from the piezometers shows a downward vertical migration of the contaminants within the aquifer. PZ-1, screened at a depth of 55-60 feet below ground surface (bgs), shows elevated concentrations of CVOCs. The contaminant concentrations decline from 55 to 101 feet bgs, as shown on the cross-section in **Appendix A**. PCE is present in the groundwater at PZ-2, but the concentration is below the NR140 enforcement standard. **Table 4** summarizes the groundwater analytical results.

Data from the monitoring wells confirms that groundwater at the Site is contaminated at concentrations above WDNR regulatory levels. The extent of contamination originating from the Former Day One Formal Wear Site is defined by PCE detected in Madison Well #15, approximately 875 feet directly downgradient. Madison Well #15 has detections of PCE along with other VOCs and PFAS unrelated to dry cleaning solvents. A memorandum prepared on behalf of the City of Madison[1], identified the former Day One Formal Wear as the likeliest source of the PCE. The following Section 2.2 provides further details on Madison Well #15. The contaminant concentrations in the groundwater on Site do not appear to be increasing based on data collected from the water table monitoring wells during the sampling events.

Groundwater sampling occurred quarterly during 2020 to monitor groundwater flow direction and concentrations in MW-3 to cost effectively monitor changes in the plume that may have been affected by the recent shut down of Madison Well #15. Previously, groundwater flow at the Site was directly towards Well #15 to the northwest.

[1] AECOM, May 18, 2012, Technical Memorandum- Results of PCE Contaminant Source Inventory Unit Well 15, 3500 East Washington Ave, Madison, Wisconsin.

**Vapor**

On November 10, 2015, Seymour installed six probes in the building for sub-slab vapor sampling. The probe distribution around the building provided an overall picture of the vapor levels beneath the slab. At each location, a hole was drilled through the concrete slab to a depth of ~10 inches. The concrete slab at the Site ranged from 4-4. 5 inches thick and was underlain by 3/4 "thick closed-cell foam. Each sampling point consisted of a stainless steel and Teflon probe sealed with hydraulic cement. **Figure 4** presents the sub-slab sampling locations. During the sub-slab vapor point installation, Seymour collected a sample of the underlying soil for VOC analysis. PCE was detected in 3 of the 4 soil samples; no other analytes were detected. PCE concentrations ranged from 115 to 484 µg/kg. These levels exceed the groundwater protection RCL. The highest PCE concentration was present in the soil sample collected from the center of the building in the northern part of the warehouse. **Table 1** presents the soil analytical data, which is included in and the areal extent of PCE identified in the soil under the building as shown on **Figure 2**.

Vapor sample analysis indicates that the sub-slab vapors contain dry cleaning chemicals. PCE was present in all six of the sub-slab vapor samples collected. PCE concentrations ranged from 2,206 to 351,656 µg/$m^3$; the sub-slab screening level for smaller commercial buildings is 5,800 µg/$m^3$. The highest PCE levels noted were in the north-central part of the warehouse area and near the bathrooms. Post remedial sampling and results are discussed in Section 2.3.

To evaluate the potential for off-site vapor risk to adjoining properties, a vapor sample collected from the head space of MW-2. The sample contained PCE at 909 µg/m3, which is well below the Soil Gas Vapor Risk Screening Level for commercial properties.

In December 2021 and February 2022, EnviroForensics implemented vapor intrusion assessments at two (2) adjacent properties to confirm potential vapor risk. A third vapor screening assessment was also conducted on Site to demonstrate the effectiveness of remedial action and no further need for vapor mitigation. Two (2) paired sub-slab vapor and indoor samples were collected from the adjacent City of Madison Fire Department located at 3945 Lien Road. There were no detections above laboratory detection limits. Three sub-slab vapor and paired indoor air samples were collected at the Aldi located at 3925 Lien Road. Results from both sampling events were non-detect for target dry cleaning compounds.

Sewer vapor sampling was performed in the manhole located in the utility right of way on the south side of the Site building to achieve recommendations outlined in NR649: *Guidance for Documenting the Investigation of Human-made Preferential Pathways Including Utility*

*Corridors*. The sewer vapor sample was non-detect for all target compounds. **Table 5** summarizes the results of the vapor analyses. **Figure 4** shows the sub-slab vapor sample locations and results. **Appendix B** presents the laboratory report not previously submitted.

## 2.2 Potential Receptors

The nearest surface water body is the Starkweather Creek, approximately one half-mile south of the Site. Given its upgradient location and the apparent diving plume, Starkweather Creek is not a likely receptor.

The Site is located within the zone of contribution for Madison municipal water supply well #15. Compliance sampling conducted by the City of Madison shows that PCE and TCE are present in the groundwater produced from that well. The source of the TCE is unknown, while PCE appears to originate from the Former Day One Formal Wear release. The City of Madison discovered PCE in the groundwater in 1987. Since that time, periodic sampling of the water from the well shows that the PCE level has risen to approximately 3.5 µg/l. In June 2013, Madison installed a well head treatment system at Madison Well #15. The treatment system used a packed tower air stripper to remove the PCE and TCE from the groundwater prior to distribution through the city water-supply system. Despite the City of Madison discontinuing operation of Well #15 in March 2019, groundwater flow is still to the northwest directly toward the Well #15 after three years. It is reasonable to assume a northwesterly direction is also the native flow direction. The Madison Well #15 represents the extent of potential groundwater contamination due to the diving nature of the PCE plume and the location of the well with respect to the groundwater plume.

The City of Madison recently released a Feasibility Study intended to remove PFAS from Well #15[2]. The proposed treatment plan would also remove VOCs including CVOCs from the Site. Recent news articles[3] indicate the City of Madison intends to fast-track the treatment plan with a no-bid contract to design and install the remedial system at Well #15 and resume water production upon completion.

[2]https://www.cityofmadison.com/water/documents/2021_Well_15_Feasiblity_Study_PFAS_Removal_Report_Final.pdf

[3] https://madison.com/news/local/govt-and-politics/madison-mayor-proposes-425-000-no-bid-contract-for-pfas-treatment-system/article_e0ed12c5-c79a-5925-a60b-8180187c91e4.html?utm_source=madison.com&utm_campaign=%2Fnewsletter-templates%2Fnews-alert&utm_medium=PostUp&utm_content=689c0ab7e1016fd2ab64895ebf3d0f04549391de

The Well Construction Information System Well Construction Information System (wi. gov) maintained by WDNR was accessed to search for potable water wells within ¼ mile of the Site. The WDNR identified five (5) well construction reports from the 1940s. One was located at or near the location of Madison Well #15 for the Sunny Side School which is no longer present. The remaining wells were for residential properties, which have since been redeveloped as commercial property. The City of Madison currently supplies all of Madison, including that property, with potable water. Given the age of the well records, redevelopment, and publicly supplied water, the wells identified in the search are not likely receptors.

## 2.3 Remedial Action

Under the direction of Seymour, Zander Solutions installed a vapor mitigation system on February 29, 2016. A total of eight (8) extraction points were installed with four (4) fill samples collected for CVOC analysis. The extraction points were divided into four (4) subsets, with a separate blower for each leg. Startup testing confirmed that the system produced negative pressure across the entire building slab.

EnviroForensics installed a soil vapor extraction (SVE) system, which the WDNR previously approved to address subsurface contamination resulting from the PCE release. The primary objective of SVE is to remove contaminant mass from unsaturated soil. SVE may provide the additional benefit of vapor intrusion mitigation at the Site building during operation. As such, the previously installed sub-slab depressurization system (SSDS) was shut down but left in place as backup should the SVE system require prolonged downtime for repairs. **Table 6** provides a summary of the mass removal during the SVE operation.

EnviroForensics shut down the SVE system because the extraction rates showed it was no longer cost effective to operate, and the effluent concentrations were well below vapor risk screening criteria. Once the SVE shut down occurred, select sub-slab vapor samples from previous locations with the highest concentrations were collected during the 3$^{rd}$ and 4$^{th}$ of 2020 quarter from SS-5 and SS-3 respectively, corresponding with groundwater sampling from MW-3. To further demonstrated the effectiveness of the remedial action. Additionally, samples from SS-3 and SS-5 were paired with indoor air samples during sampling events in 2021. All sub-slab and indoor air results for December 2021 were below the laboratory detection limits demonstrating effective remediation and elimination of the potential vapor risk at the Site.

Post-remedial sub-slab vapor sample results showed the vapor concentrations were reduced by the remedial action and did not appear to pose a continued vapor intrusion risk. **Table 5** presents the vapor analytical data.

## 2.4 Environmental Media Potentially Affected

As shown on **Figure 2** and the modified cross-section in **Appendix B**, the soil contamination is generally limited to the soil below the Site building. Other detections in soil outside of the building footprint likely represent smear zone adsorption and not the source area.

Groundwater has been affected in the shallow sand and gravel aquifer as well as deeper sandstone aquifer. Groundwater is generally encountered at 18 to 20 feet in the central and northern extent of the Site. Due to slight topographic changes and constructed loading dock areas, groundwater at the southern MW-3 has been observed from 13-15 feet.

Prior to remediation, PCE was detected in sub-slab vapor above the vapor risk screening levels due to the presence of PCE in soil. However, the PCE concentrations in the soil samples from fill below the building slab were relatively low, with a maximum of 4.2 milligrams per kilogram (mg/kg). Upon completion of the remedial action, CVOC concentrations in vapor decreased to below the small commercial and residential vapor risk screening levels.

## 2.5 Emerging Contaminants

Per Wis Admin. Code § NR 716.07 and Wis. Admin. Code § NR 716.09, site investigation scoping and work plans should include evaluating potential emerging contaminants that were historically or are presently produced, used, handled, or stored at a site. Most notably, emerging contaminants include 1,4-dioxane and per- and poly-fluorinated alkyl substances (PFAS). The evaluation includes any available information on the use of any products containing these chemicals in any services process; the duration of the suspected chemical product use; the type of chemical contained in the product; and any areas of a site where products containing these chemicals may have been used, stored, managed, or discarded.

According to documents prepared by the U.S. Environmental Protection Agency, several State Regulatory Agencies, the Department of Defense, and various other sources of toxic chemical information, dioxane is typically used by industry as a catalytic solvent during the manufacturing of adhesives, resins, oils, waxes, pharmaceuticals, and certain plastics and rubbers. It is also used to stabilize chlorinated hydrocarbons when being transported in

aluminum containers. 1-4, dioxane is also a known byproduct of polyethylene terephthalate (PET) plastic production.

PFAS are nearly ubiquitous in the environment and occur in many everyday products such as Teflon® coatings, fast food wrappers, popcorn bags, stain and water repellents, some cosmetics, some insect repellents, and some sunscreen products, to name a few. In the 1940s, the manufacturing of these products incorporated PFAS due to their inherent hydrophobic (water repellent) and non-stick properties. PFAS are also components of fire-fighting foams.

The Site is believed to have been constructed in 1971. It operated as a dry cleaner from 1981 to 1989. MARC purchased the Site in 1989. PCE was utilized as the solvent for the cleaning process. There is little documentation, but our understanding of similar sites and from the size of the facility, that the dry cleaner served institutional clients, i.e., hospitals and hotels, and formal wear rather than clients seeking cleaning of leather or waterproofing.

From 1981 through 1989, the Site operated as a dry-cleaning business with no history of manufacturing and no reason to suspect 1,4-dioxane would have been used, stored, or discarded at the site. The emerging contaminant 1,4-dioxane is decidedly not associated with the historically used products, handled, and stored at the Site.

The dry-cleaning industry has been identified as a potential contributor to PFAS contamination because of suspected PFAS accumulation in dry cleaning waste. Our research of waterproofing/ stain repellent products used at other dry cleaner sites indicates that many of the commonly used products did not contain PFAS compounds.

Madison Fire Station #8 (3945 Lien Road) adjoins the Site to the east. Per the City of Madison webpage, all Madison fire stations discontinued their use of PFAS after December 13, 2019[4]. According to Assistant Fire Chief Scott Bavery, the adjacent Fire Station #8 recently removed two (2) five-gallon buckets and a truck-mounted holding tank of PFAS-laden firefighting foam from the property. The City of Madison has implemented multiple studies to identify transport and sources of PFAS within Well #15. A recent modeling effort appears to identify the Fire Station as a likely source of PFAS in Well #15. [5]

According to the Environmental Protection Agency (EPA) site for Enforcement and Compliance History Online (ECHO), Tenki-Plex is a manufacturer of coated papers and packaging and likely used PFAS in the manufacturing processes to create these products. Located at 4141 Lien Road

[4] https://www.cityofmadison.com/news/madison-fire-makes-switch-to-pfas-free-foam
[5] https://www.cityofmadison.com/water/water-quality/water-quality-testing/perfluorinated-compounds/pfas-at-well-15

and 1513 Parkside Dr, the nearest processing area is less than 500 feet southeast of the site which is upgradient to the Site and Madison Well #15.

According to the City of Madison 2019 PFAS testing results, Madison Well #15 contained the highest concentration of PFAS compounds. The compounds identified include PFBS, PFPeA, PFPE, PFHxA, PFHxS, and PFHpA, most of which are primarily found as components of firefighting foam and food-grade paper coatings or the breakdown products of either source. This would indicate the sources of the Madison Well #15 PFAS contamination are not from the former dry-cleaning operations at Day One Formal Wear.

Considering the Site history and limited operations, a release of PFAS to the subsurface is extremely unlikely from the dry-cleaning operations. Additionally, there are significant indications and lines of evidence that the sources with direct use of PFAS are present and have adversely affected the environment, specifically Madison Well #15. Therefore, we conclude that no further evaluation or sampling assessments related to emerging contaminants are warranted.

## 3.0 CONCLUSION

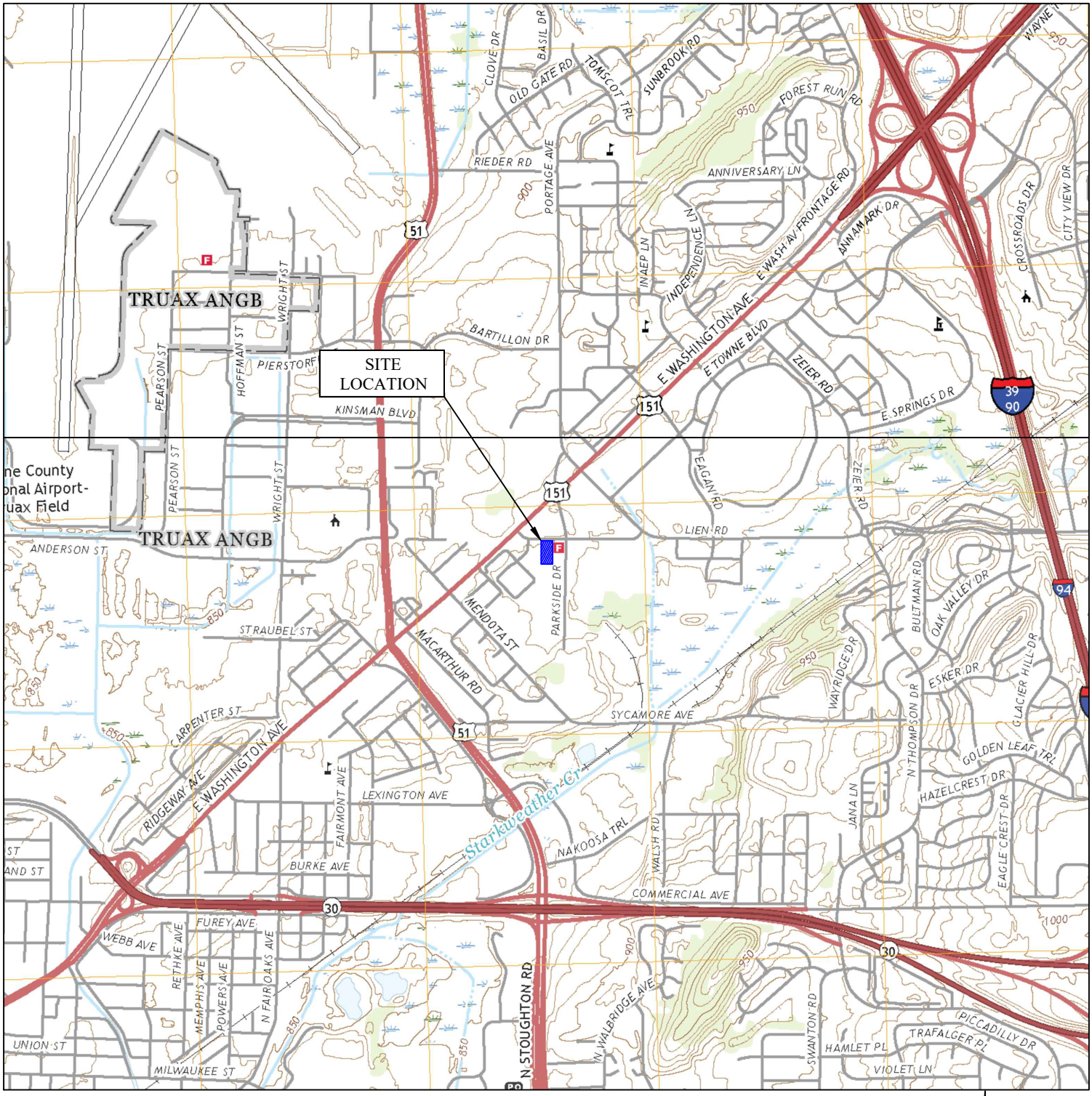
Site investigation and remediation has occurred at the Site to the extent possible to address environmental conditions associated with the Former Day One Formal Wear PCE release. Actions implanted to date include:

- Soil and groundwater investigation;
- Groundwater monitoring;
- On-Site vapor pathway exposure assessment and mitigation;
- Off-Site vapor pathway evaluation;
- Source remediation by soil vapor extraction; and
- Post-remedial vapor pathway confirmation evaluation.

Previous WDNR feedback indicated that further investigation was required. This was due to lack of off-Site vapor intrusion assessment and uncertainties regarding native groundwater flow patterns after discontinued operation of Madison Well #15. Due to the multiple bedrock aquifers present at the site, we estimate the implementation cost for further site investigation at approximately $90,000 per delineation location for the necessary piezometers required to screen small sub-sets of the vertical plume. This is not financially feasible, with the only potential receptor being Madison Well #15. The City of Madison is currently fast-tracking the design and installation of a treatment system for Well #15. Once the City of Madison rehabilitates Well #15 and installs the treatment system, there will be no further need for investigation or remediation as the well will capture the entirety of the Former Day One Formal Wear groundwater plume. A capture zone map for Well #15 is provided in **Appendix B.**

The current owner, Madison Area Rehabilitation Centers, Inc. (MARC), is a 501(c)(3) nonprofit organization that obtained the Site in 1989 before the implementation of all appropriate inquiries and processes to screen properties with potential environmental liabilities. MARC provides Day Services, Production Services, and Employment Services to adults with disabilities and never operated a dry cleaner or possessed or controlled dry cleaning solvents. MARC addressed vapor intrusion exposure and remediated the soil plume below its building despite the financial hardship. The soil source previously found at MARC's property has been remediated to the extent possible. Further remediation of the groundwater plume will be achieved by the Madison Well #15 treatment system described in Section 2.5. No vapor intrusion or direct contact exposure is found at the site or adjoining properties. Therefore, EnviroForensics recommends a Site closure with groundwater use and commercial use restrictions.

**FIGURES**




Scale 1:24,000

1 1/2 0 1 Mile

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

N

Source: US Geological Survey, De Forest, Wisconsin, 7.5 Minute Series, 2018
Source: US Geological Survey, Madison East, Wisconsin, 7.5 Minute Series, 2018

| No. | Date | Revision | Approved |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

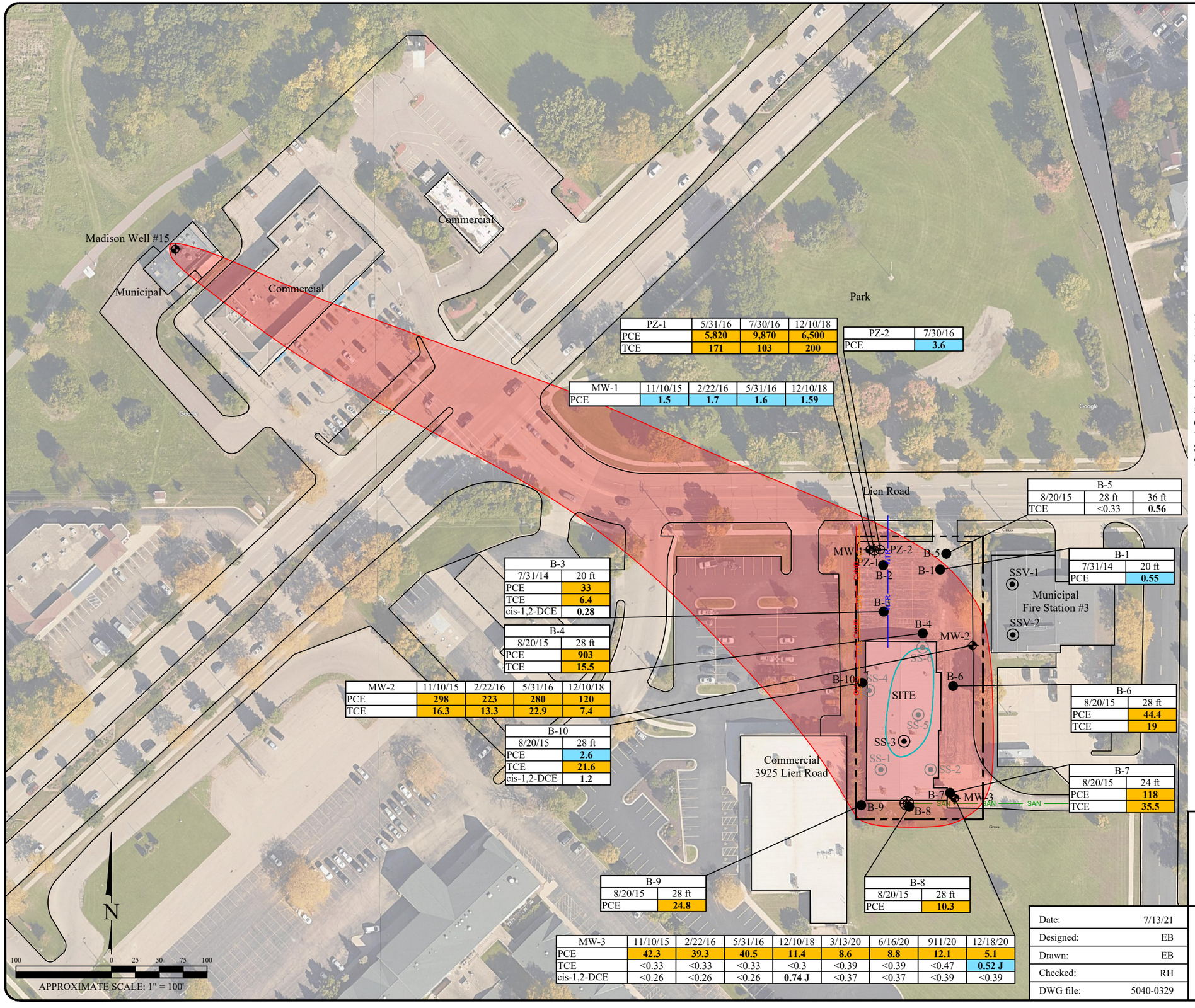
| | |
|---|---|
| Date: | 7/13/21 |
| Designed: | EB |
| Drawn: | EB |
| Checked: | RH |
| DWG file: | 5040-0328 |

SITE TOPOGRAPHIC MAP

MARC East Property
3939 Lien Road
Madison, Wisconsin

Figure 1

Project 5040




| PZ-1 | 5/31/16 | 7/30/16 | 12/10/18 |
|---|---|---|---|
| PCE | **5,820** | **9,870** | **6,500** |
| TCE | **171** | **103** | **200** |

| PZ-2 | 7/30/16 |
|---|---|
| PCE | **3.6** |

| MW-1 | 11/10/15 | 2/22/16 | 5/31/16 | 12/10/18 |
|---|---|---|---|---|
| PCE | **1.5** | **1.7** | **1.6** | **1.59** |

| B-5 | | |
|---|---|---|
| 8/20/15 | 28 ft | 36 ft |
| TCE | <0.33 | **0.56** |

| B-3 | |
|---|---|
| 7/31/14 | 20 ft |
| PCE | **33** |
| TCE | **6.4** |
| cis-1,2-DCE | **0.28** |

| B-1 | |
|---|---|
| 7/31/14 | 20 ft |
| PCE | **0.55** |

| B-4 | |
|---|---|
| 8/20/15 | 28 ft |
| PCE | **903** |
| TCE | **15.5** |

| MW-2 | 11/10/15 | 2/22/16 | 5/31/16 | 12/10/18 |
|---|---|---|---|---|
| PCE | **298** | **223** | **280** | **120** |
| TCE | **16.3** | **13.3** | **22.9** | **7.4** |

| B-6 | |
|---|---|
| 8/20/15 | 28 ft |
| PCE | **44.4** |
| TCE | **19** |

| B-10 | |
|---|---|
| 8/20/15 | 28 ft |
| PCE | **2.6** |
| TCE | **21.6** |
| cis-1,2-DCE | **1.2** |

| B-7 | |
|---|---|
| 8/20/15 | 24 ft |
| PCE | **118** |
| TCE | **35.5** |

| B-9 | |
|---|---|
| 8/20/15 | 28 ft |
| PCE | **24.8** |

| B-8 | |
|---|---|
| 8/20/15 | 28 ft |
| PCE | **10.3** |

| MW-3 | 11/10/15 | 2/22/16 | 5/31/16 | 12/10/18 | 3/13/20 | 6/16/20 | 911/20 | 12/18/20 |
|---|---|---|---|---|---|---|---|---|
| PCE | **42.3** | **39.3** | **40.5** | **11.4** | **8.6** | **8.8** | **12.1** | **5.1** |
| TCE | <0.33 | <0.33 | <0.33 | <0.3 | <0.39 | <0.39 | <0.47 | **0.52 J** |
| cis-1,2-DCE | <0.26 | <0.26 | <0.26 | **0.74 J** | <0.37 | <0.37 | <0.39 | <0.39 |

# Legend

- Property boundary
- Underground gas utility line
- Underground water utility line
- Underground sanitary utility line
- Over head electrical utility line
- Manhole
- B-1 — Soil boring
- MW-1 — Monitoring well
- PZ-1 — Piezometer well
- SS-1 — Sub-slab sample (By Others)
- SS-3 — Sub-slab sample

| Analyte | Public Health Preventive Action Limit | Public Health Enforcement Standard |
|---|---|---|
| PCE | **0.5** | **5** |
| TCE | **0.5** | **5** |
| cis-1,2-DCE | **7** | **70** |

Note:

1. Bolded and orange shaded values exceed the Public Health Enforcement Standard
2. Bolded and blue shaded values exceed the Public Health Preventive Action Limit
3. Bolded values are above detection limits
4. J = Analyte concentration less that laboratory detection limits
5. Samples analyzed using EPA SW-846 Method 8260
6. All results reported in units of micrograms per liter (µg/L)
7. PCE = Tetrachloroethene
8. TCE = Trichloroethene
9. cis-1,2-DCE = cis-1,2-Dichloroethene

- Extent of groundwater contamination
- Extent of PCE soil contamination

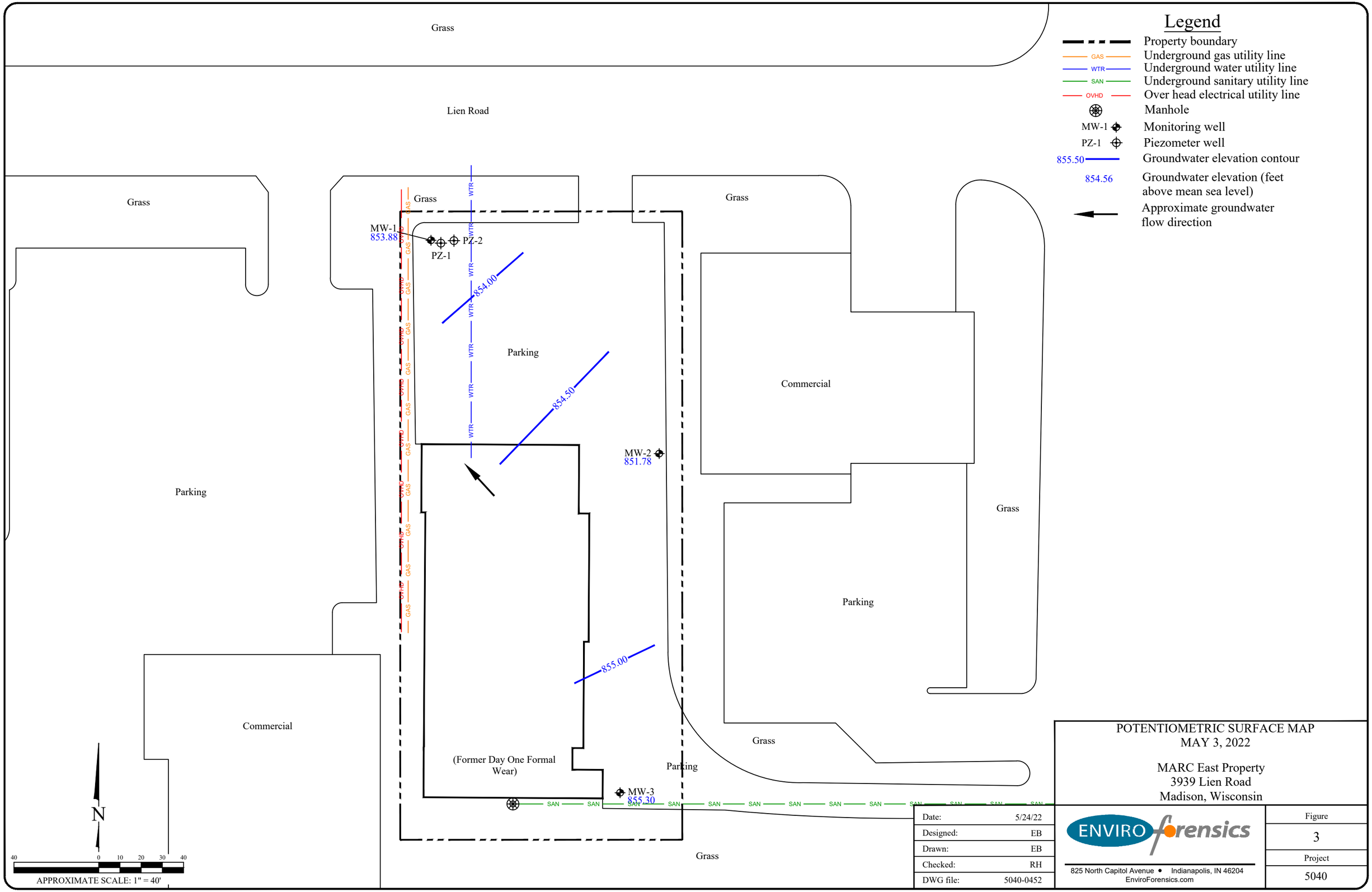
## EXTENT OF CONTAMINATION

Former Day One Formal Wear
3939 Lien Road
Madison, Wisconsin

| | |
|---|---|
| Date: | 7/13/21 |
| Designed: | EB |
| Drawn: | EB |
| Checked: | RH |
| DWG file: | 5040-0329 |

ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

| Figure |
|---|
| 2 |
| Project |
| 5040 |




## Legend

- Property boundary
- Underground gas utility line
- Underground water utility line
- Underground sanitary utility line
- Over head electrical utility line
- Manhole
- MW-1 — Monitoring well
- PZ-1 — Piezometer well
- 855.50 — Groundwater elevation contour
- 854.56 — Groundwater elevation (feet above mean sea level)
- Approximate groundwater flow direction

# POTENTIOMETRIC SURFACE MAP
MAY 3, 2022

MARC East Property
3939 Lien Road
Madison, Wisconsin

| | |
|---|---|
| Date: | 5/24/22 |
| Designed: | EB |
| Drawn: | EB |
| Checked: | RH |
| DWG file: | 5040-0452 |

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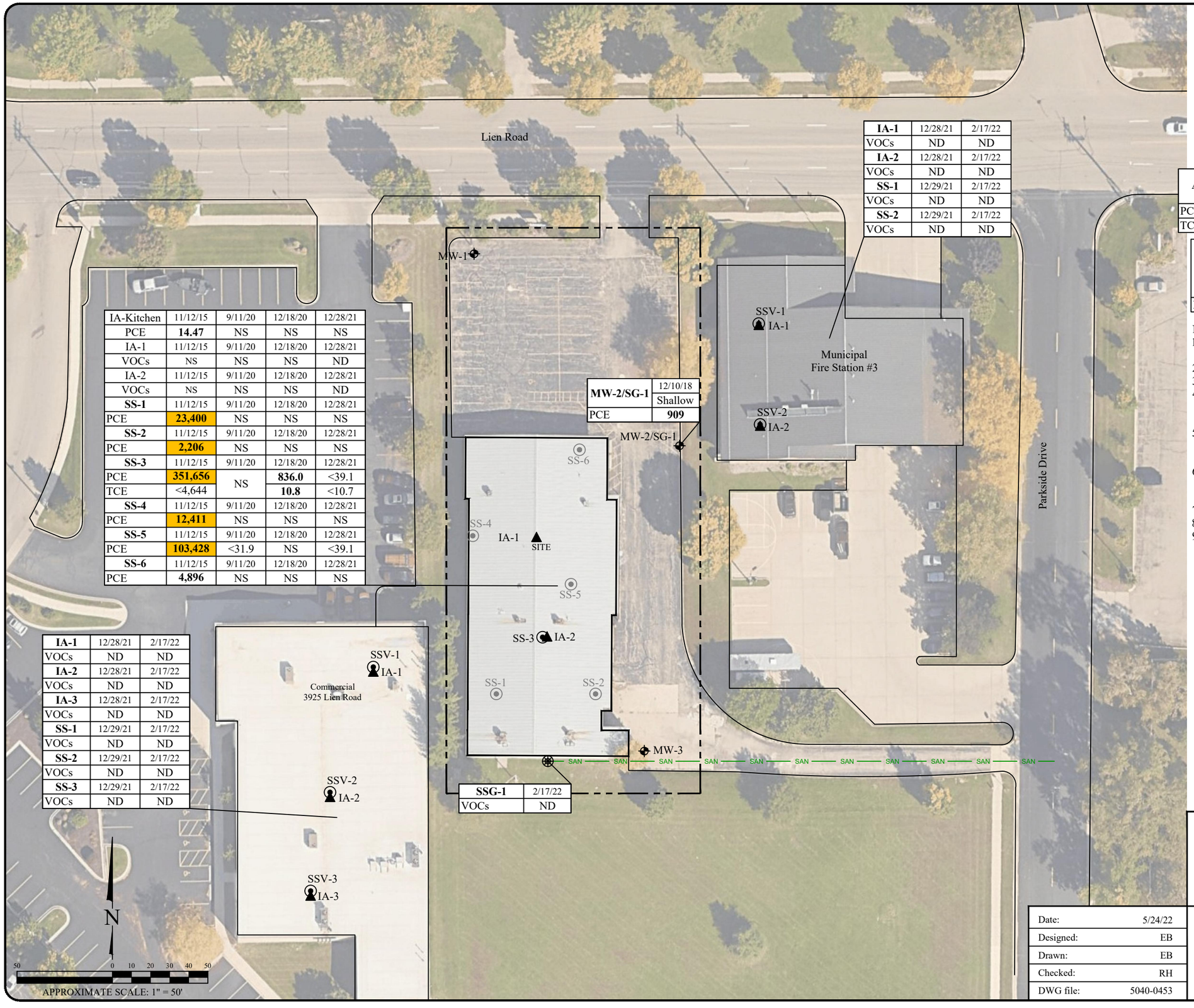
| | |
|---|---|
| Figure | 3 |
| Project | 5040 |




| IA-Kitchen | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
|---|---|---|---|---|
| PCE | **14.47** | NS | NS | NS |
| IA-1 | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| VOCs | NS | NS | NS | ND |
| IA-2 | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| VOCs | NS | NS | NS | ND |
| **SS-1** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **23,400** | NS | NS | NS |
| **SS-2** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **2,206** | NS | NS | NS |
| **SS-3** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **351,656** | NS | **836.0** | <39.1 |
| TCE | <4,644 | | **10.8** | <10.7 |
| **SS-4** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **12,411** | NS | NS | NS |
| **SS-5** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **103,428** | <31.9 | NS | <39.1 |
| **SS-6** | 11/12/15 | 9/11/20 | 12/18/20 | 12/28/21 |
| PCE | **4,896** | NS | NS | NS |

| **IA-1** | 12/28/21 | 2/17/22 |
|---|---|---|
| VOCs | ND | ND |
| **IA-2** | 12/28/21 | 2/17/22 |
| VOCs | ND | ND |
| **SS-1** | 12/29/21 | 2/17/22 |
| VOCs | ND | ND |
| **SS-2** | 12/29/21 | 2/17/22 |
| VOCs | ND | ND |

| **MW-2/SG-1** | 12/10/18 |
|---|---|
| | Shallow |
| PCE | **909** |

| **IA-1** | 12/28/21 | 2/17/22 |
|---|---|---|
| VOCs | ND | ND |
| **IA-2** | 12/28/21 | 2/17/22 |
| VOCs | ND | ND |
| **IA-3** | 12/28/21 | 2/17/22 |
| VOCs | ND | ND |
| **SS-1** | 12/29/21 | 2/17/22 |
| VOCs | ND | ND |
| **SS-2** | 12/29/21 | 2/17/22 |
| VOCs | ND | ND |
| **SS-3** | 12/29/21 | 2/17/22 |
| VOCs | ND | ND |

| **SSG-1** | 2/17/22 |
|---|---|
| VOCs | ND |

## Legend

- Property boundary
- SAN — Underground sanitary utility line
- Manhole (SSG-1 sample location)
- IA-1 ▲ Indoor air sample
- MW-1 ⌖ Monitoring well
- SS-1 ◉ Sub-slab sample (By Others)
- SS-3 ◉ Sub-slab sample

| **Analytes** | Commercial Sub-Slab Vapor Screening Level | Residential Sub-Slab Vapor Screening Level | Commercial Indoor Air Screening Level | Residential Indoor Air Screening Level |
|---|---|---|---|---|
| PCE | **1,800** | **420** | **180** | **42** |
| TCE | **88** | **21** | **8.8** | **2.1** |

| **Analytes** | Commercial Soil Gas Screening Level | Sanitary Sewer Gas Screening Level |
|---|---|---|
| | Shallow | |
| PCE | **18,000** | **6,000** |

Notes:

1. Bold, orange shaded concentrations exceed the applicable commercial screening level
2. Bold concentrations exceed laboratory reporting limits
3. Results reported in micrograms per meter cubed = µg/m$^3$
4. The vapor risk screening levels for small commercial structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance
5. The vapor risk screening levels for residential structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance
6. The Vapor Risk Screening Levels are based on U.S. E.P.A.'s Regional Screening Levels (RSL's) for non-residential indoor air with an attenuation factor of 0.01 for soil gas below large commercial buildings
7. PCE = Tetrachloroethene
8. TCE = Trichloroethene
9. NS = Not sampled

# VAPOR INTRUSION ASSESSMENT MAP

Former Day One Formal Wear
3939 Lien Road
Madison, Wisconsin

| | |
|---|---|
| Date: | 5/24/22 |
| Designed: | EB |
| Drawn: | EB |
| Checked: | RH |
| DWG file: | 5040-0453 |

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Figure 4

Project 5040

**TABLES**

# TABLE 1
## SOIL ANALYTICAL DATA
MARC East (Former Day One Formal Wear)
Madison, Wisconsin

| Boring Identification | Sample Depth (feet bgs) | Sample Date | Tetrachloroethene | Trichloroethene | cis-1,2-Dichloroethene | trans-1,2-Dichloroethene | Vinyl Chloride |
|---|---|---|---|---|---|---|---|
| | | | Chlorinated VOCs (µg/kg) | | | | |
| **Residual Contaminant Level - Industrial** | | | **145,000** | **8,410** | **2,340,000** | **1,850,000** | **2,080** |
| **Residual Contaminant Level - Non-Industrial** | | | **33,000** | **1,300** | **156,000** | **1,560,000** | **67** |
| **Residual Contaminant Level - Soil to Groundwater** | | | **4.5** | **3.6** | **41** | **62.6** | **0.1** |
| B-1 | 19.5 | 7/31/2014 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| B-2 | 19.5 | 7/31/2014 | **30.7** | <25.0 | <25.0 | <25.0 | <25.0 |
| B-3 | 3.5 | 7/31/2014 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| B-4 | 3 | 8/20/2015 | <25.0 | <25.0 | <25.0 | <25.0 | <46.4 |
| MW-1 | 17 | 10/20/2015 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| MW-2 | 3-5 | 10/20/2015 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| | 8-10 | | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| MW-3 | 1-3 | 10/20/2015 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| | 4-6 | | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| | 8-10 | | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| SS-1 | 1.2 | 11/10/2015 | <25.0 | <25.0 | <25.0 | <25.0 | <46.4 |
| SS-3 | 1.2 | | **484** | <25.0 | <25.0 | <25.0 | <46.4 |
| SS-5 | 1.2 | | **149** | <25.0 | <25.0 | <25.0 | <46.4 |
| SS-6 | 1.2 | | **115** | <25.0 | <25.0 | <25.0 | <46.4 |
| VE-1 | 5 | 12/1/2016 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| | 10 | | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 |
| | 15 | | **112** | <25.0 | <25.0 | <25.0 | <25.0 |
| | 20 | | **389** | **35.7** | <25.0 | <25.0 | <25.0 |

**Notes**

WDNR Residual Contaminant Levels (RCLs) were calculated according to the procedures described in WDNR

Samples analyzed using EPA SW-846 Method 8260

**Bolded** values exceed laboratory detection levels

**Bolded** and **orange shaded** values exceed the Industrial Residual Contaminat Level

**Bolded** and **green shaded** values exceed the Non-Industrial Residual Contminant Level

**Bolded** and **blue shaded** values exceed the Soil to Groundwater Residual Contaminant Level

µg/kg = micrograms per kilogram

bgs = below ground surface

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentr

ND = Compound not detected above the laboratory method detection limit

NE = Not established

VOCs = Volatile Organic Compounds

* = Laboratory detection of p-Isopropyltoluene below applicable criteria

** = Saturated soil sample not applicable for comparison to residual contaminant levels

Samples/constiuents not shown are below laboratory reporting limits

**TABLE 2**

Well Construction Details

MARC East (Former Day One Formal Wear)

Madison, Wisconsin

| Well ID | Date Installed | Firm | Well Diameter (inches) | TOC Elevation (feet AMSL) | Ground Elevation (feet AMSL) | Top Screen Elevation (feet AMSL) | Bottom Screen Elevation (feet AMSL) | Screened Interval (feet bgs) | | | Total Depth (feet bgs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 10/20/2015 | Seymour | 2 | 873.15 | 873.41 | 858.5 | 843.5 | 14.65 | - | 29.65 | 29.65 |
| MW-2 | 10/20/2015 | Seymour | 2 | 870.92 | 871.17 | 857.97 | 842.97 | 12.95 | - | 27.95 | 27.95 |
| MW-3 | 10/20/2015 | Seymour | 2 | 868.32 | 868.61 | 858.27 | 843.27 | 10.05 | - | 25.05 | 25.05 |
| PZ-1 | 5/26/2016 | Seymour | 2 | 873.06 | 873.37 | 817.32 | 812.32 | 55 | - | 60 | 60.74 |
| PZ-2 | 7/19/2016 | Seymour | 2 | 872.82 | 873.26 | 772.82 | 767.82 | 100 | - | 105 | 105 |

# TABLE 3

## Groundwater Elevation Data

MARC East (Former Day One Formal Wear)
Madison, Wisconsin

| Well ID | Consultant | Date | Top Screen Elevation (feet AMSL) | Bottom Screen Elevation (feet AMSL) | TOC Elevation (feet AMSL) | DTW (feet below TOC) | Groundwater Elevation (feet AMSL) |
|---|---|---|---|---|---|---|---|
| MW-1 | Seymour | 11/10/2015 | 858.5 | 843.5 | 873.15 | 21.26 | 851.89 |
| | Seymour | 2/22/2016 | 858.5 | 843.5 | 873.15 | 20.03 | 853.12 |
| | Seymour | 5/31/2016 | 858.5 | 843.5 | 873.15 | 20.00 | 853.15 |
| | EnviroForensics | 12/10/2018 | 858.5 | 843.5 | 873.15 | 18.33 | 854.82 |
| | EnviroForensics | 3/13/2020 | 858.5 | 843.5 | 873.15 | 18.53 | 854.62 |
| | EnviroForensics | 6/19/2020 | 858.5 | 843.5 | 873.15 | 17.58 | 855.57 |
| | EnviroForensics | 6/19/2020 | 858.5 | 843.5 | 873.15 | 17.58 | 855.57 |
| | EnviroForensics | 12/18/2020 | 858.5 | 843.5 | 873.15 | 19.17 | 853.98 |
| | EnviroForensics | 5/3/2022 | 858.5 | 846.5 | 873.15 | 19.27 | 853.88 |
| MW-2 | Seymour | 11/10/2015 | 858.0 | 843.0 | 870.92 | 18.27 | 852.65 |
| | Seymour | 2/22/2016 | 858.0 | 843.0 | 870.92 | 17.25 | 853.67 |
| | Seymour | 5/31/2016 | 858.0 | 843.0 | 870.92 | 16.79 | 854.13 |
| | EnviroForensics | 12/10/2018 | 858.0 | 843.0 | 870.92 | 15.47 | 855.45 |
| | EnviroForensics | 3/13/2020 | 858.0 | 843.0 | 870.92 | 15.20 | 855.72 |
| | EnviroForensics | 6/19/2020 | 858.0 | 843.0 | 870.92 | 14.61 | 856.31 |
| | EnviroForensics | 12/18/2020 | 858.0 | 843.0 | 870.92 | 16.32 | 854.60 |
| | EnviroForensics | 5/3/2022 | 858.0 | 843.0 | 870.92 | 16.14 | 854.78 |
| MW-3 | Seymour | 11/10/2015 | 858.3 | 843.3 | 868.32 | 14.81 | 853.51 |
| | Seymour | 2/22/2016 | 858.3 | 843.3 | 868.32 | 13.98 | 854.34 |
| | Seymour | 5/31/2016 | 858.3 | 843.3 | 868.32 | 13.03 | 855.29 |
| | EnviroForensics | 12/10/2018 | 858.3 | 843.3 | 868.32 | 11.89 | 856.43 |
| | EnviroForensics | 3/13/2020 | 858.3 | 843.3 | 868.32 | 12.35 | 855.97 |
| | EnviroForensics | 6/19/2020 | 858.3 | 843.3 | 868.32 | 11.09 | 857.23 |
| | EnviroForensics | 12/18/2020 | 858.3 | 843.3 | 868.32 | 13.01 | 855.31 |
| | EnviroForensics | 5/3/2022 | 858.3 | 843.3 | 868.32 | 13.02 | 855.30 |
| PZ-1 | Seymour | 5/31/2016 | 813.3 | 808.3 | 873.06 | 19.75 | 853.31 |
| | Seymour | 7/30/2016 | 813.3 | 808.3 | 873.06 | 20.25 | 852.81 |
| | EnviroForensics | 12/10/2018 | 813.3 | 808.3 | 873.06 | 18.11 | 854.95 |
| | EnviroForensics | 3/13/2020 | 813.3 | 808.3 | 873.06 | 18.23 | 854.83 |
| | EnviroForensics | 6/19/2020 | 813.3 | 808.3 | 873.06 | 17.25 | 855.81 |
| | EnviroForensics | 5/3/2022 | 813.3 | 808.3 | 873.06 | 19.07 | 853.99 |
| PZ-2 | Seymour | 7/30/2016 | 772.8 | 767.8 | 872.82 | 19.98 | 852.84 |
| | EnviroForensics | 12/10/2018 | 772.8 | 767.8 | 872.82 | 17.62 | 855.20 |
| | EnviroForensics | 3/13/2020 | 772.8 | 767.8 | 872.82 | NA | -- |
| | EnviroForensics | 6/19/2020 | 772.8 | 767.8 | 872.82 | 16.62 | 856.20 |
| | EnviroForensics | 5/3/2022 | 772.8 | 767.8 | 872.82 | 18.59 | 854.23 |

**Notes:**

AMSL = Above Mean Sea Level

TOC = Top of Casing

NA = Not accessible

# TABLE 4

## Groundwater Analytical Results

MARC East (Former Day One Formal Wear)

Madison, Wisconsin

| Monitoring Well | Depth | Sample Date | Tetrachloroethene | Trichloroethene | cis-1,2-Dichloroethene | trans-1,2-Dichloroethene | Vinyl Chloride |
|---|---|---|---|---|---|---|---|
| **Public Health Enforcement Standard** | | | **5** | **5** | **70** | **100** | **0.2** |
| **Public Health Preventive Action Limit** | | | **0.5** | **0.5** | **7** | **20** | **0.02** |
| B-1 | 20 | 7/31/2014 | **0.55** | <0.33 | <0.26 | <0.26 | <0.18 |
| B-3 | 20 | 7/31/2014 | **33** | **6.4** | 0.28 | 0.54 | <0.18 |
| B-4 | 28 | 8/20/2015 | **903** | **15.5** | <2.6 | <2.6 | <1.8 |
| B-5 | 28 | 8/20/2015 | <0.50 | <0.33 | <0.26 | <0.26 | <0.18 |
| B-5 | 36 | 8/20/2015 | <0.50 | **0.56** | <0.26 | <0.26 | <0.18 |
| B-6 | 28 | 8/20/2015 | **44.4** | **19** | <0.26 | <0.26 | <0.18 |
| B-7 | 24 | 8/20/2015 | **118** | **35.5** | <0.26 | <0.26 | <0.18 |
| B-8 | 28 | 8/20/2015 | **10.3** | <0.33 | <0.26 | <0.26 | <0.18 |
| B-9 | 28 | 8/20/2015 | **24.8** | <0.33 | <0.26 | <0.26 | <0.18 |
| B-10 | 28 | 8/20/2015 | **2.6** | **21.6** | 1.2 | <0.26 | <0.18 |
| MW-1 | 14.65-29.65 | 11/10/2015 | **1.5** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 2/22/2016 | **1.7** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 5/31/2016 | **1.6** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 12/10/2018 | **1.59** | <0.30 | <0.37 | <0.34 | <0.20 |
| MW-2 | 12.95-27.95 | 11/10/2015 | **298** | **16.3** | <0.64 | <0.64 | <0.44 |
| | | 2/22/2016 | **223** | **13.3** | <0.64 | <0.64 | <0.44 |
| | | 5/31/2016 | **280** | **22.9** | <0.64 | <0.64 | <0.44 |
| | | 12/10/2018 | **120** | **7.4** | <0.37 | <0.34 | <0.20 |
| MW-3 | 10.05-25.05 | 11/10/2015 | **42.3** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 2/22/2016 | **39.3** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 5/31/2016 | **40.5** | <0.33 | <0.26 | <0.26 | <0.18 |
| | | 12/10/2018 | **11.4** | <0.3 | **0.74 J** | <0.34 | <0.20 |
| | | 3/13/2020 | **8.6** | <0.39 | <0.37 | <0.47 | <0.20 |
| | | 6/19/2020 | **8.8** | <0.39 | <0.37 | <0.47 | <0.20 |
| | | 9/11/2020 | **12.1** | <0.47 | <0.39 | <0.37 | <0.20 |
| | | 12/18/2020 | **5.1** | **0.52 J** | <0.39 | <0.37 | <0.2 |
| PZ-1 | 55-60 | 5/31/2016 | **5820** | **171** | <25.6 | <25.7 | <17.6 |
| | | 7/30/2016 | **9870** | **103** | <25.6 | <25.7 | <17.6 |
| | | 12/10/2018 | **6500** | **200** | <18.5 | <17 | <10 |
| PZ-2 | 100-105 | 7/30/2016 | **3.6** | <0.33 | <0.26 | <0.26 | <0.18 |

**Notes:**

Samples analyzed using EPA SW-846 Method 8260

All concentrations reported in µg/L

**Bolded** and orange shaded values are above Public Health Enforcement Standards

**Bolded** and blue shaded values are above Public Health Preventive Action Limits

J= Concentration detected between the laboratory Reporting Limit and the Method Detection Limit

**Table 5**
Sub-slab Vapor Results
MARC East (Former Day One Formal Wear)
Madison, Wisconsin

| Address | Sample Identification | Date Sampled | Tetrachloroethene | Trichloroethene | cis-1,2-Dichloroethene | trans-1,2-Dichloroethene | Vinyl Chloride |
|---|---|---|---|---|---|---|---|
| **INDOOR/ OUTDOOR AIR** | | | | | | | |
| **Residential Vapor Action Limit[2]** | | | **42** | **2.1** | **NE** | **NE** | **1.7** |
| **Small Commercial Vapor Action Limit[1]** | | | **180** | **8.8** | **NE** | **NE** | **28** |
| 3925 Lien Road | IA-1 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | | 02/17/22 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | IA-2 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | | 02/17/22 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | IA-3 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | | 02/17/22 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| 3945 Lien Road | IA-1 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | | 02/17/22 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | IA-2 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | | 02/17/22 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| 3939 Lien Road | Indoor - Kitchen | 11/12/15 | **14.47** | <0.464 | <0.342 | <0.342 | <.0.220 |
| | Outdoor | 11/12/15 | <0.586 | <0.464 | <0.342 | <0.342 | <0.220 |
| | IA-1 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| | IA-2 | 12/28/21 | <3.19 | <1.07 | <19.8 | <39.6 | <1.28 |
| **SUB-SLAB VAPOR** | | | | | | | |
| **Residential Vapor Risk Screening Level [2]** | | | **1,400** | **70** | **NE** | **NE** | **57** |
| **Small Commercial Vapor Risk Screening Level** | | | **6,000** | **290** | **NE** | **NE** | **930** |
| 3939 Lien Road | SS-1 | 11/12/15 | **23,444** | <464.4 | <34.26 | <342.65 | <220.88 |
| | SS-2 | 11/12/15 | **2,206** | <23.49 | <17.33 | <17.33 | <11.17 |
| | SS-3 | 11/12/15 | **351,656** | <4,644 | <3,426 | <3,426 | <2,208 |
| | | 12/18/20 | **836.0** | **10.8** | <19.8 | <39.6 | <1.28 |
| | SS-3 | 12/28/21 | <39.1 | <10.7 | <198 | <396 | <12.8 |
| | SS-4 | 11/12/15 | **12,411** | <2,349 | <1,733 | <1,733 | <1,117 |
| | SS-5 | 11/12/15 | **103,428** | <2,349 | <1,733 | <1,733 | <1,117 |
| | | 09/11/20 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | SS-5 | 12/28/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | SS-6 | 11/12/15 | **4,896** | <23.49 | <17.33 | <17.33 | <11.17 |
| 3925 Lien Road | SSV-1 | 12/29/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | | 02/17/22 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | SSV-2 | 12/29/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | | 02/17/22 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | SSV-3 | 12/29/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | | 02/17/22 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| 3945 Lien Road | SSV-1 | 12/29/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | | 02/17/22 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | SSV-2 | 12/29/21 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| | | 02/17/22 | <31.9 | <10.7 | <198 | <396 | <12.8 |
| **Soil Gas Vapor Risk Screening Level [1]** | | | **18,000** | **880** | **NE** | **NE** | **2,800** |
| | 5040-SG-MW-2 | 12/10/2018 | **909** | <10.7 | <198 | <396 | <12.8 |
| **Sanitary Sewer Gas** | | | **6,000** | **290** | **NE** | **NE** | **930** |
| | 5040-SSG-1 | 2/17/2022 | <31.9 | <10.7 | <198 | <396 | <12.8 |

**Notes:**

[1] The vapor risk screeing levels for small commercial structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance

[2] The vapor risk screeing levels for residential structures are calculated in accordance with the procedures described in WDNR Publication RR-800 and subsequent guidance

Samples analyzed according to EPA Method TO-15

All concentrations reported in units in micrograms per cubic meter = µg/m3

Only detected compounds are listed

**Bolded** values are above method detection limits

**Bolded** and **blue shaded** values exceed the residential Vapor Risk Screening Level

**Bolded** and **orange shaded** values exceed the small commercial Vapor Risk Screening Level

NE = Not Established

IA = Indoor Air

**APPENDIX A**

**EnvisionAir**
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Mr. Rob Hoverman
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

March 1, 2022

EnvisionAir Project Number: 2022-139
Client Project Name: 5040 - Marc

Dear Mr. Hoverman,

Please find the attached analytical report for the samples received February 23, 2022. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

David Norris
Project Manager
EnvisionAir, LLC

**EnvisionAir**
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Indianapolis, IN 46239
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Fax: 317-351-0882
www.envision-air.com

**Client Name:** ENVIROFORENSICS

**Project ID:** 5040 - MARC

**Client Project Manager:** ROB HOVERMAN

**EnvisionAir Project Number:** 2022-139

## Sample Summary

*Canister Pressure / Vacuum*

| Laboratory Sample Number: | Sample Description: | Matrix: | START Date Collected: | START Time Collected: | End Date Collected: | End Time Collected: | Date Received: | Time Received | Initial Field (in. Hg) | Final Field (in. Hg) | Lab Received (in. Hg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22-753 | 5040*-SSG-1 | A | 2/17/22 | 12:17 | 2/17/22 | 12:21 | 2/23/22 | 11:45 | -28 | -5 | -5 |

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www.envision-air.com

**Client Name:** ENVIROFORENSICS

**Project ID:** 5040 - MARC

**Client Project Manager:** ROB HOVERMAN

**EnvisionAir Project Number:** 2022-139

**Analytical Method:** TO-15
**Analytical Batch:** 022522AIR

**Client Sample ID:** 5040-SSG-1

**EnvisionAir Sample Number:** 22-753
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 2/17/22 12:17
**Sample Collection END Date/Time:** 2/17/22 12:21
**Sample Received Date/Time:** 2/23/22 11:45

| Compounds | Sample Results ug/m³ | Reporting Limit ug/m³ | Flag |
|---|---|---|---|
| cis-1,2-Dichloroethene | < 198 | 198 | |
| Tetrachloroethene | < 31.9 | 31.9 | |
| trans-1,2-Dichloroethene | < 396 | 396 | |
| Trichloroethene | < 10.7 | 10.7 | |
| Vinyl Chloride | < 12.8 | 12.8 | |
| 4-bromofluorobenzene (surrogate) | 96% | | |
| Analysis Date/Time: | 2-27-22/00:24 | | |
| Analyst Initials | tjg | | |

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*Analytical Report*

## TO-15 Quality Control Data

**EnvisionAir Batch Number:** 022522AIR

| Method Blank (MB): | MB Results (ppbv) | Reporting Limit (ppbv) | Flags |
|---|---|---|---|
| cis-1,2-Dichloroethene | < 5 | 5 | |
| Tetrachloroethene | < 0.47 | 0.47 | |
| trans-1,2-Dichloroethene | < 10 | 10 | |
| Trichlorethene | < 0.2 | 0.2 | |
| Vinyl Chloride | < 0.5 | 0.5 | |
| 4-bromofluorobenzene (surrogate) | 97% | | |
| Analysis Date/Time: | 2-26-22/11:11 | | |
| Analyst Initials | tjg | | |

| LCS/LCSD | LCS Results (ppbv) | LCSD Results (ppbv) | LCS/D Conc(ppbv) | LCS Rec. | LCSD Rec. | RPD | Flag |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 9.56 | 10.7 | 10 | 96% | 107% | 11.3% | |
| trans-1,2-Dichloroethene | 9.84 | 9.57 | 10 | 98% | 96% | 2.8% | |
| cis-1,2-Dichloroethene | 10.6 | 10.6 | 10 | 106% | 106% | 0.0% | |
| Trichloroethene | 10.2 | 9.6 | 10 | 102% | 96% | 6.1% | |
| Tetrachloroethene | 9.66 | 10 | 10 | 97% | 100% | 3.5% | |
| 4-bromofluorobenzene (surrogate) | 100% | 100% | | | | | |
| Analysis Date/Time: | 2-26-22/09:44 | 2-26-22/10:32 | | | | | |
| Analyst Initials | tjg | tjg | | | | | |

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| Flag Number | Comments |
|---|---|

EnvisionAir Proj# 2022-139 Page 1 of 1

# CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

| | |
|---|---|
| Client: EnviroForensics | P.O. Number: 2022-00910 |
| Report Address: rhaverman@enviroforensics.com | Project Name or Number: MDARC 5040 |
| Report To: Rob Haverman | Sampled by: R Brown |
| Phone: 262-290-4001 | QA/QC Required: (circle if applicable) Level III Level IV |
| Invoice Address: accounts-payable@enviroforensics.com | Reporting Units needed: (circle) ug/m³ mg/m³ PPBV PPMV |
| Desired TAT: (Please Circle One) 1 day 2 days 3 days Std (5 bus. days) | Media type: 1LC = 1 Liter Canister; 6LC = 6 Liter Canister; TB = Tedlar Bag; TD = Thermal Desorption Tube |

**REQUESTED PARAMETERS**

TO-15 Full List

TO-15 Short List (Specify in notes)

ENVISIONAIR

www.envision-air.com

**Sampling Type:**
Soil-Gas: ☒
Sub-Slab: ☐
Indoor-Air: ☐

*Canister Pressure / Vacuum*

| Air Sample ID | Media Type (see code above) | Coll. Date (Grab/Comp Start) | Coll. Time (Grab/Comp Start) | Coll. Date (Comp. End) | Coll. Time (Comp. End) | | | | | Canister Serial # | Flow Controller Serial # | Initial Field (in. Hg) | Final Field (in. Hg) | Lab Received (in. Hg) | EnvisionAir Sample Number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5040-SSG-1 | 1LC | 2-17-22 | 1217 | 2-17-22 | 1221 | | X | | | 84137 | 0062 | -28 | -5 | -5 | 22.753 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
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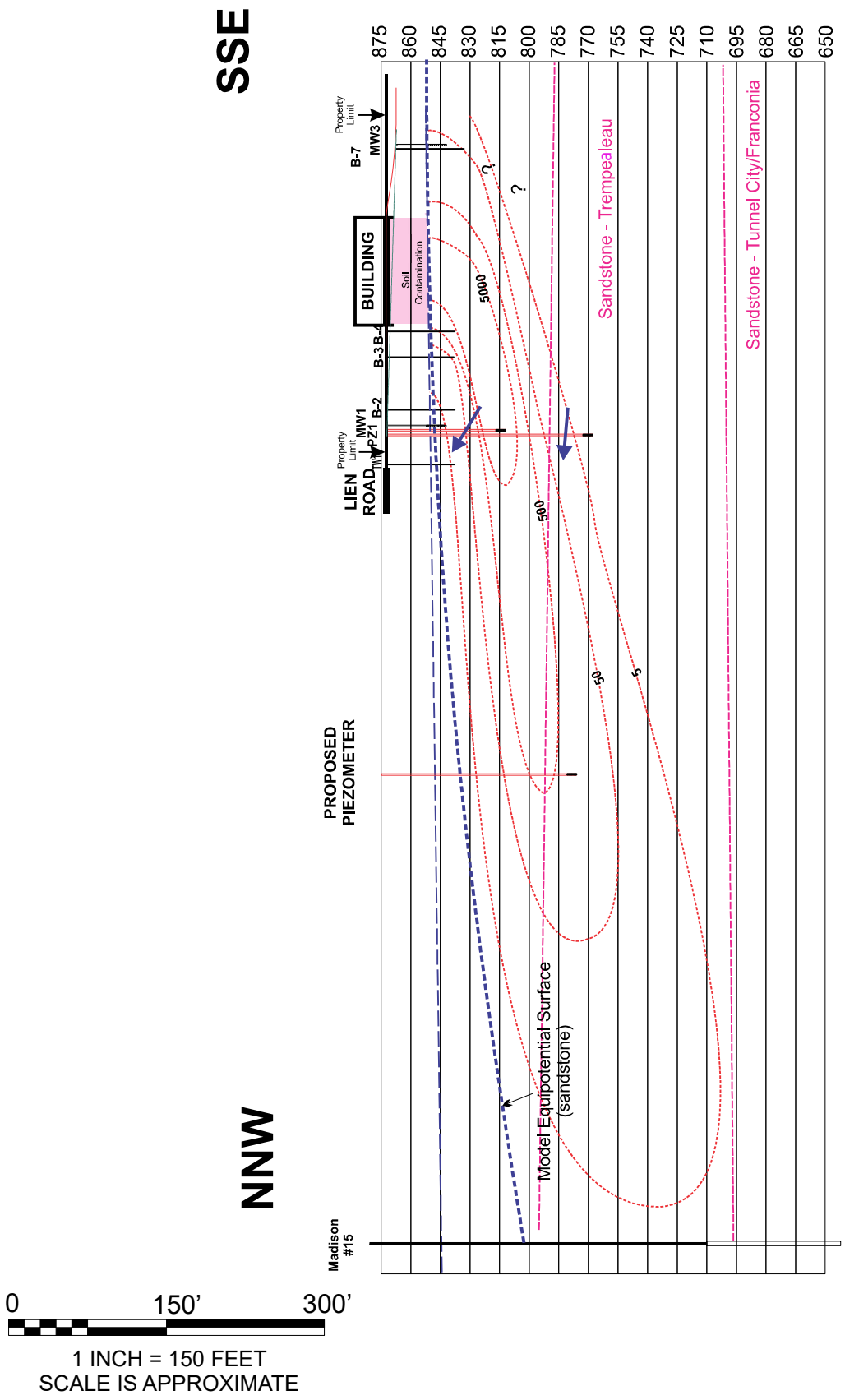
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

Comments:
Short List: PCE, TCE, cDCE, tDCE, VC

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| | 2-18-22 | 1630 | FedEx | 2-18-22 | 1630 |
| | | | Houston | 2.23.22 | 1145 |

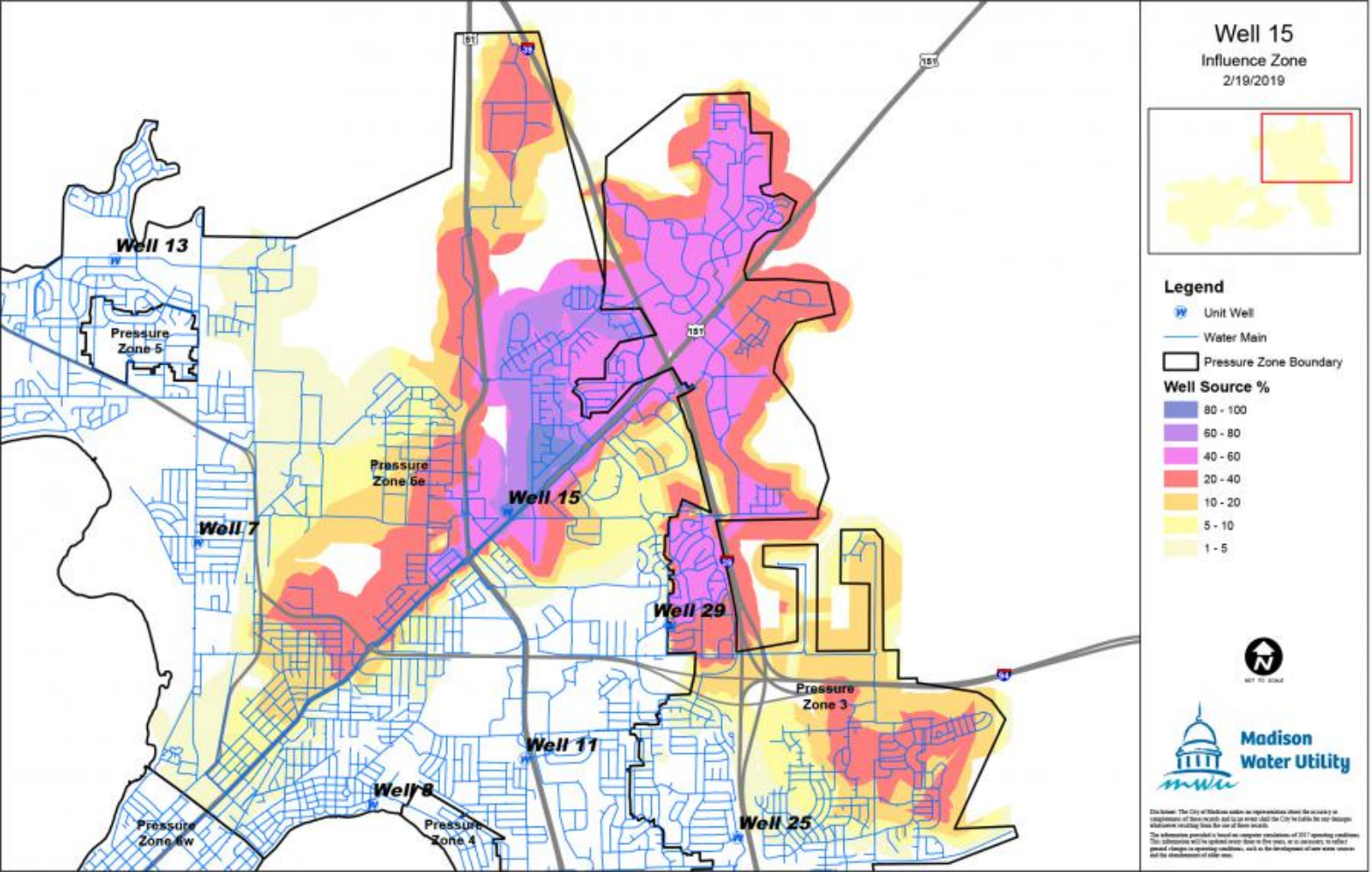
**APPENDIX B**




CROSS-SECTION / IDENTIFIED CONTAMINATION
MARC EAST PROPERTY
3939 Lien Road
Madison, Wisconsin

FIGURE
4

**APPENDIX C**


Well 15
Influence Zone
2/19/2019
Legend
Unit Well
Water Main
Pressure Zone Boundary
Well Source %
80 - 100
60 - 80
40 - 60
20 - 40
10 - 20
5 - 10
1 - 5
Well 13
Pressure Zone 5
Pressure Zone 6e
Well 15
Well 7
Well 29
Pressure Zone 3
Well 11
Well 8
Pressure Zone 6w
Pressure Zone 4
Well 25
Madison Water Utility