C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

12 Raymond Avenue, Poughkeepsie, New York 12603
845.454.4400 www.ctmale.com

April 28, 2023

Mr. Matthew Hubicki
Project Manager, Remedial Bureau C
NYSDEC, Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

*Re: Periodic Review Report and IC/EC Certification - January 30, 2022 to January 30, 2023*
*USAI Lighting Facility Brownfield Cleanup Program (BCP) Site*
*1116/1126 River Road, Town of New Windsor, New York*
*BCP Site ID: C336087; C.T. Male Project No.: 14.4337*

Dear Mr. Hubicki:

On behalf of BDL LLC, C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture & Geology, D.P.C. (C.T. Male) presents this Periodic Review Report (PRR) for the USAI Lighting Facility (USAI Facility) BCP Site (the "Site") in New Windsor, New York. The PRR was prepared in accordance with NYSDEC-approved Site Management Plan (SMP) dated November 2016 and the NYSDEC's PRR General Guidance. This PRR covers monitoring and sampling activities from January 30, 2022 to January 30, 2023.

## ***Executive Summary***

BDL, LLC entered into a Brownfield Cleanup Agreement with NYSDEC in December 2014 to remediate the 11.4-acre Site located at 1116/1126 River Road in the Town of New Windsor, Orange County. Soils and groundwater at the Site were impacted with petroleum products, based on former industrial uses, one of which was a Major Oil Storage Facility (MOSF) on the southern portion of the Site.

The remedy for the Site was based on Industrial/Commercial Use incorporating engineering and institutional controls consistent with Track 4 cleanup levels promulgated at 6 NYCRR 375-3.8(e)(4). The Site remedy consisted of localized excavation of grossly contaminated soils in conjunction with site development, placement of a Surface Cover System (asphalt, concrete or vegetated soil), installation of VI mitigation measures, and implementation of the SMP. The SMP was approved in November 2016 and the COC was issued in December 2016.

Residual petroleum contamination remains in on-site groundwater. Only four (4) exceedances of PAHs and low-level detections of SVOC (below standard/guidance) have been documented from 2018-2023. No exceedances VOCs have been documented from 2018-2023. A slight sheen was observed in the purged water of monitoring well MW-2. No sheen was observed in remaining wells sampled.

It is our opinion that laboratory and field data support the conclusion that a significant reduction in groundwater contamination has been achieved as a result of the remedial action as prior to the remedial action free-phase petroleum product and VOCs exceedances were documented in on-site wells. The Site is currently used for commercial/industrial purposes and groundwater is not currently used at the Site. Groundwater use restrictions are part of the measures used to be protective of human health and the environment.

No exceedances of AGVs for methylene chloride, PCE, and TCE have been documented in indoor air post remediation (2017 – 2023). Following comparison of sub-slab soil vapor and indoor ambient air concentrations in 2022 and 2023 to the values in the NYSDOH matrices, the "No further action" was the applicable response for PCE, TCE, cis-1,2-DCE, 1,1,1-TCA, 1,1-DCE, carbon tetrachloride, methylene chloride, and vinyl chloride. Indoor air concentrations below applicable thresholds coupled with VI mitigation measures in good conditions are measures protective of human health and the environment.

Based on the information provided in this PRR, C.T. Male would like to petition the Department to:

- Reduce the sampling frequency for groundwater monitoring from annually to biennially (i.e., every other year) with the next sampling event in 2025, and

- Eliminate the requirement of VOC sampling in groundwater.

These requests are supported by the absence of VOC exceedances post-remediation. Furthermore, based on the trend analysis, generally SVOC concentrations appear to be decreasing post-remediation, with exception of MW-2. However, no exceedances in MW-2 have been reported since 2019. Only one (1) exceedance of an SVOC (Indeno [1,2,3-cd]pyrene) in March 2019 has been documented at this location (0.01 ug/L, standard 0.002 ug/L).

Based on the review of the compliance monitoring results, inclusive of groundwater, soil vapor and ambient air sampling, for this reporting period, the remedial program is effective at protecting human health and the environment.

***Site Overview***

BDL, LLC entered into a Brownfield Cleanup Agreement with NYSDEC in December 2014 to remediate a property identified in the Orange County Assessors' Office with Tax ID: 9-1-97.1. The 11.4-acre Site is located at 1116/1126 River Road in the Town of New Windsor, Orange County. The Site consists of those portions of the parcel that are above the mean high-water level of the Hudson River. A Site Location Map depicting the property boundaries presented in Attachment A, Figure 1.

The northern portion of the property, located at 1126 River Road, contains an active LED light manufacturing plant and warehouse/distribution facility. The building occupies approximately 2.5 acres with associated parking lot and roadways occupying approximately 6 acres. The southern portion of the property, located at 1116 River Road, contains a parking lot, grass-covered areas and a stormwater structure (pond). The Site is bounded by railroad tracks to the east, River Road to the west, a soil reclamation facility to the south and a MOSF to the north. The Hudson River is located further east of the Site. In addition, there is a small pond / wet area in the north-central portion of the Site that is hydrologically connected to the Hudson River and fluctuates with the tides.

Past Site uses include light assembly and manufacturing, distribution / warehousing and petroleum bulk storage. In 1913, the northern portion of the Site was used as a brick works and manufacturer of rail equipment. In 1957, the northern portion of the Site became part of the Mastic Tile Corporation, and the southern part of the Site became the Affron MOSF (NYSDEC MOSF No. 3-1380). By the late 1960s, the northern portion of the Site was occupied by Ruberoid Floor Tile Division. The southern portion of the Site continued to operate as a MOSF until the mid-1990s, at which time it had seven (7) bulk fuel oil storage tanks.

Evidence of impacts to soil, sediment, surface water, groundwater, soil gas and indoor air were identified across the entire Site. Two (2) spills were reported on the Site:

1. Spill No. 9903745 was opened on April 30, 1999, in relation to the removal and remediation of two (2) 1,000-gallon underground storage tanks formerly situated on the southern portion of the Site. These were used for storage of fuel oil and

diesel. Approximately 133 tons of soil was removed, and the spill was subsequently closed on December 10, 2009.

2. Spill No. 0913553 was opened on March 23, 2010 for the purpose of investigating groundwater conditions across the Site. The results of a groundwater investigation revealed petroleum contamination in soils and groundwater above applicable standards. Additionally, free-phase petroleum product was documented in monitoring wells in the northern and southern portions of the Site. This spill was subsequently closed on September 1, 2016, following the completion of remedial activities.

The remedy for the Site was based on Industrial/Commercial Use incorporating engineering and institutional controls consistent with Track 4 cleanup levels promulgated at 6 NYCRR 375-3.8(e)(4). As detailed in the December 2016 FER, the Site remedy consisted of localized excavation of grossly contaminated soils in conjunction with site development, placement of a Surface Cover System (asphalt, concrete or vegetated soil), installation of VI mitigation measures, and implementation of the SMP. The SMP was approved in November 2016 and the COC was issued in December 2016.

At the time the COC was issued and with the Department's approval, various elements of the VI mitigation measures at the USAI Facility were still in progress, as allowed by NYSDEC. These elements included:

- Installation of a passive sub-slab depressurization system (SSDS) in Area 8; and,

- Installation of a vapor barrier and new concrete slab, elements of the passive SSDS, in Areas 4 and 7.

A passive SSDS was installed in Area 8 in accordance with the FER in March 2018. Renovation work in Area 8 commenced in December 2021 and was finalized in the Summer of 2022. Modifications to the passive SSDS were documented by C.T. Male in several site visits and are presented in this PRR (See Section "Operation & Maintenance Plan Compliance Report"). Area 8 was re-occupied by office workers in July 2022 with a passive SSDS in general conformance with the FER and SMP.

The remaining portions of the slab and vapor barrier in Area 4 were completed by the Fall of 2021. Corrective measures to finalize the concrete slab and vapor barrier and

modify the passive SSDS in this area were documented in C.T. Male's Corrective Measures Work Plan Implementation Letter, dated October 2021. Renovation work in Area 4 commenced in Summer 2021 and was finalized in the December of 2021. Area 8 was re-occupied by office workers in early 2022 with a passive SSDS in general conformance with the FER and SMP.

Renovation plans for Area 7 were modified in 2019 and 2020. On December 19, 2019, C.T. Male petitioned NYSDEC on behalf of the client to waive the requirement for an SSDS in Area 7 as this area is anticipated to be open to the atmosphere with no renovation work to be conducted at this time.

As of the date of this Letter, the interior renovation work at the USAI Facility is complete.

***Evaluate Remedy Performance, Effectiveness and Protectiveness***

The Site remedy consisted of localized excavation of grossly contaminated soils in conjunction with site development, placement of a Surface Cover System (asphalt, concrete or vegetated soil), installation of VI mitigation measures, and implementation of the SMP. Based on the information contained in this PRR, the following assessment of the remedy is provided:

- Grossly contaminated soils as well as soils above commercial SCOs were removed from the Site, eliminating, to the extent practical, the source of petroleum contamination. This action limits the potential for Site users to become in contact with contaminated soils as these have been removed.

- The Surface Cover System employed at the Site prevents Site users to become in contact with potentially contaminated soils. The Surface Cover System (asphalt, concrete or vegetated soil) remains in good condition and is protective of human health and the environment. See Section "Operation & Maintenance Plan Compliance Report".

- The VI mitigation measures present at the Site prevent the migration of potentially contaminated soil vapors into the building interior through the use of barriers and/or venting systems (passive SSDS). The VI mitigation measures remain in good condition, and therefore continue to mitigate potential impacts to the public health. See Section "Operation & Maintenance Plan Compliance Report".

- Residual petroleum contamination remains in on-site groundwater. Only four (4) exceedances of PAHs and low-level detections of SVOC (below standard/guidance) have been documented from 2018-2023. No exceedances VOCs have been documented from 2018-2023. A slight sheen was observed in the purged water of monitoring well MW-2. No sheen was observed in remaining wells sampled.

  It is our opinion that laboratory and field data support the conclusion that a significant reduction in groundwater contamination has been achieved as a result of the remedial action as prior to the remedial action free-phase petroleum product and VOCs exceedances were documented in on-site wells. The Site is currently used for commercial/industrial purposes and groundwater is not currently used at the Site. Groundwater use restrictions are part of the measures used to be protective of human health and the environment.

- No exceedances of AGVs for methylene chloride, PCE, and TCE have been documented in indoor air post remediation (2017 – 2023). Following comparison of sub-slab soil vapor and indoor ambient air concentrations in 2022 and 2023 to the values in the NYSDOH matrices, the "No further action" was the applicable response for PCE, TCE, cis-1,2-DCE, 1,1,1-TCA, 1,1-DCE, carbon tetrachloride, methylene chloride, and vinyl chloride. See Section "Monitoring Plan Compliance Report". Indoor air concentrations below applicable thresholds coupled with VI mitigation measures in good conditions are measures protective of human health and the environment.

***IC/EC Plan Compliance Report***

The Institutional Controls (ICs) for the USAI Facility are summarized as follows:

1. Track 4 Commercial and Industrial Uses are allowed. The Controlled property may not be used for a higher use and the engineering controls may not be extinguished without NYSDEC approval.

2. All future soil disturbance activities below 1 foot cover and new construction are conducted in accordance with the approved SMP, and Excavation Work Plan.

3. The use of the groundwater underlying the Site is prohibited without treatment as determined by the NYSDOH or Orange County DOH.

4. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any.

The Engineering Controls (ECs) for the USAI Facility are summarized as follows:

1. A passive vapor mitigation system will be operated, maintained, monitored as required by the approved SMP.

2. A site cover system, of at least 1 foot, will be maintained as required by the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer which must be inspected, certified and maintained as required in the NYSDEC-approved SMP.

4. Periodic monitoring of groundwater from downgradient wells.

The ICs and ECs remain applicable and are required for the Site. Deficiencies in the ECs for the Site were not identified during this reporting period. A completed IC/EC Certification Form is provided as Attachment B.

***Monitoring Plan Compliance Report***

Monitoring requirements consist of on annual site-wide inspections and post-remediation media monitoring. The site-wide inspection documents the integrity of the Surface Cover System and the VI mitigation measures. Two (2) site-wide inspections were conducted on December 16, 2022 and March 30, 2023 in accordance with the SMP. The observations and finding of the annual site-wide inspections are presented in the "Operation & Maintenance Plan Compliance Report" section (below) of this PRR.

The post remediation media monitoring consists of groundwater and soil vapor/air sampling and laboratory analysis. Post-remediation media monitoring was performed in accordance with the SMP and is described below.

***2023 Groundwater Sampling and Analytical Results***

Four (4) monitoring wells, MW-1, MW-2, MW-3R and MW-4R, are sampled annually under the SMP. These wells were sampled on January 13, 2023. MW-1, MW-2 and MW-3R are situated from south to north, respectively, along the southeastern border of the Site. MW-4R is situated immediately south of and adjacent to Area 6A (stock room) of the building. A monitoring well location maps is presented in Attachment A, Figure 2.

Prior to sampling at least one purge volume of water (three times the static well volume) was removed, using dedicated plastic tubing and a peristaltic pump, before groundwater samples were collected. Petroleum-type and a slight sheen were noted in the purged water from monitoring well MW-02. No evidence of contamination was noted in remaining wells. Photoionization Detector (PID) readings were not documented above ambient background levels (0.0 parts per million) in the head space of the well sampled.

Laboratory results for all compounds detected in water are compared to NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values (AWQS), provided in Technical and Operational Guidance Series 1.1.1. Groundwater samples were analyzed for volatile organic compounds (VOCs) using USEPA Method 8260, and semi-volatile organic compounds (SVOCs) using USEPA Method 8270 by Alpha Analytical, Inc. (Alpha), a NYS ELAP certified laboratory (Lab ID: 11148).

*VOCs*

No exceedances of VOCs were detected during this reporting period. Non-detect results were reported for two (2) VOC compounds, 1,2-Dibromo-3-chloropropane and 1,2-Dibromoethane, for which the method detection limit (MDL) was above the NYSDEC's guidance levels. Remaining results were non-detect.

*SVOCs*

One (1) exceedance of Benzo(a)anthracene (0.02 ug/L, guidance level 0.002 ug/L) and one (1) exceedance of Benzo(b)fluoranthene (0.02 ug/L, guidance level 0.002 ug/L) were detected in monitoring well MW-03R. No other exceedances were reported. Five (5)

SVOCs were detected below their respective NYSDEC AWQS guidance levels in monitoring wells MW-2, MW-03R, and MW-04R. One (1) VOC (Dibenzofuran, 1.6 ug/L) was detected in monitoring well MW-2 with a guidance level not established (NE). Remaining results were non-detect.

Non-detect results were reported for eight (8) SVOCs for which the MDL was above the NYSDEC's guidance levels. Remaining results were non-detect.

The analytical results summary table and analytical reports for the samples collected in 2023 are presented in Attachments C and D, respectively.

***Groundwater Data Trend Analysis***

A trend analysis of total VOCs and total SVOCs was performed utilizing the post-remediation groundwater data available to date (2018 – 2023). Trends are depicted in graphical form and are presented in Attachment E. The following observations are provided based on the trend analysis:

- MW-1: Reported concentrations of total VOCs (ranging from 5.8 ug/L to non-detect) and total SVOCs (ranging from 0.45 ug/L to non-detect) have decreased over time. No exceedances of VOCs or SVOCs have been documented at this location post-remediation.

- MW-2: Reported concentrations of total VOCs (ranging from 7.7 ug/L to non-detect) have decreased over time while reported concentrations of total SVOCs (ranging from 0.16 ug/L to 10.03 ug/L) have increased. No exceedances of VOCs have been documented at this location post-remediation. Only one (1) exceedance of an SVOC (Indeno [1,2,3-cd]pyrene) in March 2019 has been documented at this location (0.01 ug/L, standard 0.002 ug/L). No other exceedances of SVOCs have been documented at this location post-remediation.

- MW-3R: Reported concentrations of total VOCs (ranging from 8.56 ug/L to non-detect) and total SVOCs (ranging from 24.55 ug/L to 0.34 ug/L) have decreased over time. No exceedances of VOCs have been documented at this location post-remediation. Only two (2) exceedances of SVOCs (Benzo[a]anthracene and Benzo[b]fluoranthene) in January 2023 have been documented at this location (0.02 ug/L for both compounds, standard 0.002 ug/L for both compounds). No

other exceedances of SVOCs have been documented at this location post-remediation.

- MW-4R: Reported concentrations of total VOCs (ranging from 7.5 ug/L to non-detect) and total SVOCs (ranging from 0.16 ug/L to non-detect) have generally decreased over time. No exceedances of VOCs have been documented at this location post-remediation. Only one (1) exceedance of an SVOC (Benzo[a]pyrene) in February 2020 has been documented at this location (0.06 ug/L, guidance non-detect). No other exceedances of SVOCs have been documented at this location post-remediation.

Only detected VOCs and SVOCs concentrations were included in the trend analysis for groundwater. Tentatively identified compounds (TICs) information was not reported in the groundwater laboratory results and therefore it was not included in the trend analysis.

Residual petroleum contamination remains in on-site groundwater. Only four (4) exceedances of PAHs and low-level detections of SVOC (below standard/guidance) have been documented from 2018-2023. No exceedances VOCs have been documented from 2018-2023. A slight sheen was observed in the purged water of monitoring well MW-2. No sheen was observed in remaining wells sampled.

It is our opinion that laboratory and field data support the conclusion that a significant reduction in groundwater contamination has been achieved as a result of the remedial action as prior to the remedial action free-phase petroleum product and VOCs exceedances were documented in on-site wells. The Site is currently used for commercial/industrial purposes and groundwater is not currently used at the Site. Groundwater use restrictions are part of the measures used to be protective of human health and the environment.

***2023 Soil Vapor and Air Quality Sampling and Analytical Results***

Four (4) sub-slab soil vapor sampling points, VI-1 to VI-4, are to be sampled under the SMP. Sampling has been conducted annually during the heating season. Sub-slab soil vapor sampling point VI-5 was installed in 2018 to assess VI in the 2-story building (Area 8). Five (5) sub-slab soil vapor (VI-1 to VI-5), four (4) concurrent indoor air (IA-1 to IA-4), and one (1) outdoor ambient air (OA-1) samples were collected throughout or adjacent

to the USAI Facility on January 12, 2023. A map depicting sampling locations is presented in Attachment A, Figure 3.

Soil vapor and indoor air samples are denoted with prefixes "VI" and "IA", respectively. Outdoor air analytical results serve as background concentrations and are denoted with prefixes "OA". A table indicating soil vapor samples and concurrent indoor air samples per area and area use is presented below.

**Table A: Soil Vapor/Air Sample Locations**

| Area/Designation (per map) | Soil Vapor Sample ID | Indoor Air (IA) Sample ID | Area Use | Comments |
|---|---|---|---|---|
| Area 2 | VI-3 | IA-3 | Offices | |
| Area 3A | VI-1<br>VI-2 | IA-2 | Production/Assembly Area | |
| Area 4 | VI-4 | IA-1 | Offices and Storage Space | Renovation Area. Vapor Pin® Installed. |
| Area 8 | VI-5 | IA-4 | Offices | Renovation Area. Vapor Pin® Installed. |

A Soil Vapor Intrusion – Structure Sampling Building Questionnaire was completed for the sampling event to identify Site conditions, chemical products present and other factors at the Site that may interfere with the sampling. A copy of building questionnaire is included in Attachment F.

Sub-slab vapor ports in Area 4 (VI-4) and Area 8 (VI-5) were replaced in 2022 as these were removed during the renovation work. The construction of the sub-slab vapor ports was performed in accordance with the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) with updates (SVI Guidance) and Standard Operating Procedure Installation and Extraction of the FLX-VPTM VAPOR PIN® Sampling Device.

The location of the 2022 installed soil vapor sampling ports was determined based on previously installed sampling port locations removed during renovation activities.

Samples were collected in accordance with sampling procedures outlined in the SVI Guidance. Sample intakes for the soil vapor sampling ports were installed at a maximum depth of two (2) inches below the invert of the floor slab of the building. Non-reactive high-density polyethylene (HDPE) sample tubing was attached to the vapor pin probe and vapor sampling ports throughout the facility, the tubing and sample enclosure were sealed with clay to prevent mixing of ambient air and soil vapor, and subsequently attached to an 8-hour flow regulator and a 6-liter laboratory certified Summa® canister for sample collection. Helium tracer gas was used for leak testing the enclosure at each sub-slab sampling location to ensure that ambient air was not infiltrating. Helium concentrations were analyzed in the field using Radio Detection MGD-2002 Helium Leak Detector. No tracer gas was detected in the tubing of the vapor probes in the 2023 sampling event thereby documenting adequate seal. Prior to the commencement of sampling, two (2) to three (3) volumes of air were purged from the sampling apparatus. Sample logs are provided as Attachment G. The samples were analyzed for total VOCs per EPA Method TO-15 by Alpha.

Air guideline values (AGVs) have been established in the New York State Department of Health's (NYSDOH's) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (GESVI, October 2006) and subsequent guidance memoranda for methylene chloride (60 µg/m3), perchloroethylene (PCE) (30 µg/m3) and trichloroethylene (TCE) (2 µg/m3). No other AGVs have been established by NYSDOH for VOCs.

Decision matrices utilizing indoor and soil vapor concentrations were developed to evaluate the potential for soil vapor intrusion for eight (8) compounds. These compounds are carbon tetrachloride, 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), methylene chloride, tetrachloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), and vinyl chloride. No decision matrices have been developed for petroleum-compounds.

No exceedances of AGVs for methylene chloride, PCE, and TCE were documented in indoor air in 2023. Following comparison of sub-slab soil vapor and indoor ambient air concentrations in 2023 to the values in the NYSDOH matrices, the "No further action" was the applicable response for PCE, TCE, cis-1,2-DCE, 1,1,1-TCA, 1,1-DCE, carbon tetrachloride, methylene chloride, and vinyl chloride.

Elevated concentrations of Ethanol (peak of 2,200 ug/$m^3$ at IA-1) and Isopropanol (peak of 225 ug/$m^3$ at IA-2) were detected in the indoor air throughout the facility. The relative elevated concentrations of indoor air when compared to soil vapor concentrations are likely indicative of an on-site indoor air source and not the result of sub-slab vapor migration into the USAI Facility. Indoor air concentrations of Ethanol and Isopropanol are consistent with previous sampling events and likely the results manufacturing activities at the facility.

The analytical results summary table and analytical reports for the samples collected in 2023 are presented in Attachments C and D, respectively.

***Soil Vapor and Ambient Air Data Trend Analysis***

A trend analysis for chlorinated solvents was performed utilizing the post-remediation soil vapor, indoor and outdoor air data available to date (2018 – 2023). Trends are depicted in graphical form and are presented in Attachment E. The following observations are provided based on the trend analysis:

- Outdoor Area:
    - OA-1: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly.
- Area 2 - Office space in the Production Area, in the western-central portion of the building:
    - VI-3: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly, with exception of 1,1,1-TCA and PCE. 1,1,1-TCA (ranging from 328 ug/$m^3$ to 32.4 ug/$m^3$) and PCE (ranging from 868 ug/$m^3$ to 260 ug/$m^3$) concentrations have decreased over time.
    - IA-3: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly.

- Comparison of chlorinated solvents concentrations in soil vapor and indoor air utilizing the applicable NYSDOH matrix triggered "No further action" in the January 2023 sampling event.

- Historically, in March and April 2019 comparison of cis-1,2-DCE concentrations in soil vapor and indoor air utilizing the applicable NYSDOH matrix triggered the "Identify source(s) and resample or mitigate". Upon removal of potential indoor air sources, no concentrations triggering actions above "No further action" when compared to the applicable NYSDOH matrix were reported in June 2019 and February 2020, and subsequent sampling events (2022 and 2023). Furthermore, a review of the soil vapor data for VI-3 indicates that cis-1,2-DCE is not present at levels indicative of a soil vapor source beneath the building slab. This event was further discussed in the 2020-2021 PRR.

- Area 3A - Production Area in the central portion of the building:

  - VI-1: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly, with exception of TCE and 1,1,1-TCA. TCE concentrations (ranging from 2.09 ug/$m^3$ to 19.2 ug/$m^3$) have increased over time. 1,1,1-TCA concentrations (ranging from 22.8 ug/$m^3$ to 4.03 ug/$m^3$) have decreased over time.

  - VI-2: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly, with exception of PCE and methylene chloride. Methylene chloride concentrations (ranging from non-detect to 4.65 ug/$m^3$) have increased over time. PCE concentrations have decreased over time (ranging from 4.38 ug/$m^3$ to 1.28 ug/$m^3$).

  - IA-2: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly.

  - Comparison of chlorinated solvents concentrations in soil vapor and indoor air utilizing the applicable NYSDOH matrix triggered "No further action" in the January 2023 sampling event.

- Area 4 (Office and storage area, located in the southernmost portion of the facility):

  - No samples were collected in Area 4 in 2019 and 2020 at the discretion of the Department as the Department indicated that samples should not be collected while the portion of the slab remained open. Samples were collected in March 2022 and January 2023 following the installation of the concrete slab and completion of the renovation work.

  - VI-4: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly with exception of PCE. PCE concentrations (ranging from non-detect to 3.66 ug/$m^3$) have increased over time.

  - IA-1: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly.

  - Comparison of chlorinated solvents concentrations in soil vapor and indoor air utilizing the applicable NYSDOH matrix triggered "No further action" in the January 2023 sampling event.

- Area 8 (2-story office building, located in the southernmost portion of the facility):

  - No samples were collected in Area 8 in 2022 as the area was undergoing renovation. Samples were collected in January 2023.

  - VI-5: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly, with exception of PCE and TCE. PCE (ranging from 3.1 ug/$m^3$ to non-detect ug/$m^3$) and TCE concentrations (ranging from 3.94 ug/$m^3$ to non-detect ug/$m^3$) have decreased over time.

  - IA-4: Generally, reported concentrations of chlorinated VOCs have not fluctuated significantly.

  - Comparison of chlorinated solvents concentrations in soil vapor and indoor air utilizing the applicable NYSDOH matrix triggered "No further action" in previous sampling events.

No exceedances of AGVs for methylene chloride, PCE, and TCE have been documented in indoor air post remediation (2017 – 2023). Following comparison of sub-slab soil vapor and indoor ambient air concentrations in 2022 and 2023 to the values in the NYSDOH matrices, the "No further action" was the applicable response for PCE, TCE, cis-1,2-DCE, 1,1,1-TCA, 1,1-DCE, carbon tetrachloride, methylene chloride, and vinyl chloride. Indoor air concentrations below applicable thresholds coupled with VI mitigation measures in good conditions are measures protective of human health and the environment.

***Operation & Maintenance Plan Compliance Report***

The operation and maintenance (O&M) plan for the Surface Cover System consist of the maintenance and periodic inspections. The Surface Cover System is comprised of the following: 12 inches of clean soil (south side of Site), existing soil (north side of the Site), asphalt pavement, concrete covered, sidewalks, and/or concrete building slabs. The integrity of the concrete building slab was also assessed to determine the condition of the VI mitigation measures pertaining to the slab (i.e., sealing of cracks, etc.).

Observations of the Surface Cover System were conducted on December 16, 2022 and March 30, 2023. No deficiencies related to the Surface Cover System were identified. The Site Management Inspection Form is included in Attachment H.

There is no O&M plan for the passive SSDS given the nature of a passive system (i.e., no mechanical components). However, a Vapor Intrusion Mitigation Measures Assessment Form was completed for the entire on-site building and is included as Attachment H. No deficiencies in the VI mitigation measures were identified.

***Renovation Work in Area 8 (2-story office building)***

Renovation work in Area 8 commenced in December 2021 and was finalized in the Summer of 2022. Area 8 was the main office space for the USAI facility prior to the renovation work and will continue to be used as the main office space post renovation. The passive SSDS in this area (installed in 2018) was modified to accommodate the modified internal configuration of Area 8. C.T. Male provided oversight of the SSDS modifications through periodic site visits and review of contractor drawings. Site visits were performed on:

- February 7, 2022 – Field identification of suction points area and pipe routing location prior to construction. Review of plans between iSER Consulting (construction management firm) & C.T. Male.
- February 10, 2022 – Observation of construction of suction points and piping.
- March 21, 2022 – Oversight of limited excavation performed by contractor for entrance footings. Community Air Monitoring Plan (CAMP) implemented.
- April 28, 2022 – Installation of sub-slab monitoring points (Vapor Pin®) by Core Down Drilling under the oversight of C.T. Male.

The SSDS was modified as follows:

- Relocation of three (3) suction points (SPs) in the general vicinity of the three (3) former SPs (within 5-10 feet).
- Relocation of the discharge point at the roof level.

Pipe diameters and materials remained consistent with the previous SSDS configuration (2" and 3" diameter Schedule 40 PVC piping). A schematic drawing of the modified SSDS in Area 8 is provided as Attachment I. Photographs of the renovation work, inclusive of the SSDS modification and limited excavation, is provided in Attachment J. In addition to the modification to the SSDS, replacement sub-slab monitoring points were installed in 2022 for Area 8 and Area 4.

Limited excavation was performed near the exterior of the southwestern portion of the facility to install footings for a new awning for the main entrance. The dimension of the two (2) limited excavation areas was approximately 3 feet by 7 feet by 2.5 feet (depth). The excavated material (2-5 cubic yards) remains on-site awaiting off-site disposal and/or reintroduction under the cover system. The small stockpile of generated material is underlaid and covered with plastic. Dust monitoring data generated during the implementation of the CAMP on March 21, 2023 is presented as Attachment J. Following renovation activities, Area 8 was re-occupied by office workers in July 2022 with a passive SSDS in general conformance with the FER and SMP.

***Overall PRR Conclusions and Recommendations***

The following conclusions and recommendations relative to compliance with the SMP are provided:

1. Groundwater Use Restriction: Requirements were met during the reporting period.

2. Land Use Restriction: Requirements were met during the reporting period.

3. Site Management Plan: Requirements were met during the reporting period.

4. Monitoring Plan: Requirements were met during the reporting period. Monitoring of VI shall continue on an annual basis, with the next VI sampling event early in the 2024 heating season.

   C.T. Male would like to petition the Department to reduce the sampling frequency for groundwater monitoring from annually to biennially (i.e., every other year) with the next sampling event in 2025. In addition, we would like to petition the Department to eliminate the requirement of VOC sampling as no exceedances of VOCs have been reported post-remediation. Based on the trend analysis, generally SVOC concentrations appear to be decreasing post-remediation, with exception of MW-2. However, no exceedances in MW-2 have been reported since 2019. Only one (1) exceedance of an SVOC (Indeno [1,2,3-cd]pyrene) in March 2019 has been documented at this location (0.01 ug/L, standard 0.002 ug/L).

5. IC/EC Plan: Requirements were met during the reporting period.

6. Surface Cover System: Requirements were met during the reporting period. Any future disturbance shall be implemented in accordance with the SMP.

7. VI Mitigation Measures: Requirements were met during the reporting period.

8. Based on C.T. Male's evaluation of the components of the SMP, the remedy is achieving the remedial objectives for the Site.

9. The frequency of the submittal of the PRR should not be changed at this time.

10. Site management shall be continued.

***Green Remediation Evaluation***

According to Section 6.2 of the SMP, green remediation evaluations completed during site management shall be reported in the PRR. Included as Attachments H is the completed "Summary of Green Remediation Metrics for Site Management" form.

***Certifications***

For each institutional or engineering control identified for the Site, I certify, to the best of my knowledge, that the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering controls employed at this Site are unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

A completed IC/EC Inspection Form is included in this Report as Attachments B.

To the best of my knowledge, I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Rosaura Andújar-McNeil, of C.T. Male Associates at 12 Raymond Avenue, Poughkeepsie, New York, 12603 am certifying on behalf of BDL, LLC, the Owner/Remedial Party for the Site.

Sincerely,
C.T. MALE ASSOCIATES

Rosaura Andújar-McNeil, P.E.
Project Environmental Engineer

Attachments:

| | |
|---|---|
| Attachment A: | Figures |
| Attachment B: | NYSDEC EC/IC Certification Form |
| Attachment C: | Tables – 2023 and Historical Data |
| Attachment D: | 2023 Laboratory Results |
| Attachment E: | Trend Analyses |
| Attachment F: | SVI – Structure Sampling Building Questionnaire |
| Attachment G: | Soil Vapor/Air Sampling Logs |
| Attachment H: | Forms |
| Attachment I: | SSDS Schematic – Area 8 |
| Attachment J: | Renovation Documentation |

ec: Frank DiLauro, USAI
Mike Griffin, USAI
Kevin Goggin, iSER Consulting
Sue Sullivan, iSER Consulting
Sara Bogardus, NYSDOH
James D. McIver, P.G., C.T. Male

# Attachment A: Figures


**MAP REFERENCE**
Orange County Parcel Access
Date accessed: 2/4/2021

N

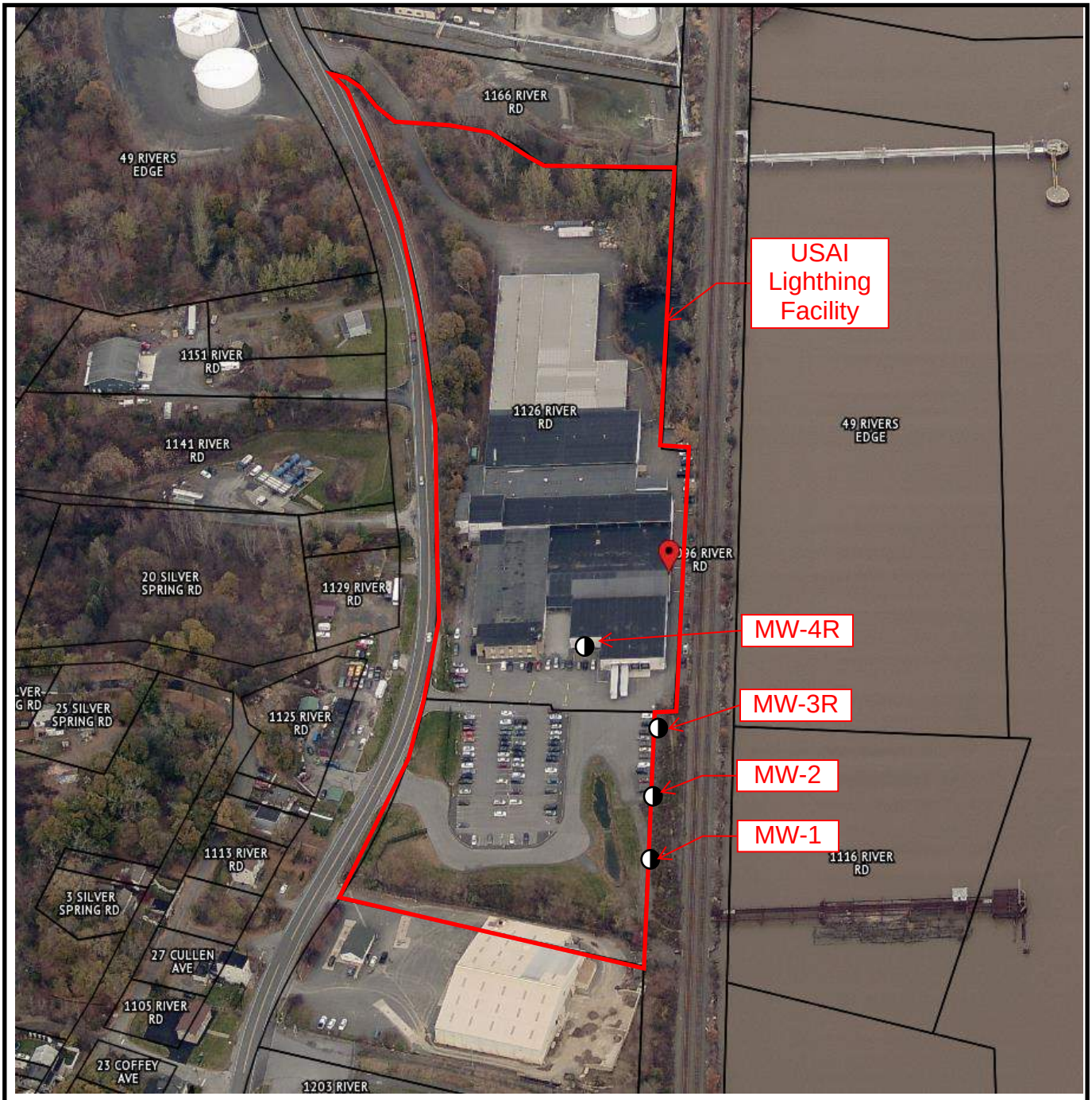
C.T.MALE ASSOCIATES
ENGINEERING, SURVEYING, ARCHITECTURE
LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE
LATHAM, NY 12110

# FIGURE 1 - SITE LOCATION MAP

**USAI LIGHTING FACILITY**
**1126 RIVER ROAD**

| TOWN OF NEW WINDSOR | ORANGE COUNTY, NY |
|---|---|
| **SCALE: NTS** | The locations and features depicted on this map are approximate and do not represent an actual survey. |
| **DRAFTER: RAM** | |
| **PROJECT No: 14.4337** | |




**MAP REFERENCE**
Orange County Parcel Access
Date accessed: 2/4/2021

**Legend:**

◑ Monitoring Wells Sampled as Per SMP

N

C.T.MALE ASSOCIATES
ENGINEERING, SURVEYING, ARCHITECTURE
LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE
LATHAM, NY 12110

# FIGURE 2 - MONITORING WELLS LOCATION MAP

**USAI LIGHTING FACILITY**
**1126 RIVER ROAD**

| TOWN OF NEW WINDSOR | ORANGE COUNTY, NY |
|---|---|

**SCALE: NTS**
**DRAFTER: RAM**
**PROJECT No: 14.4337**

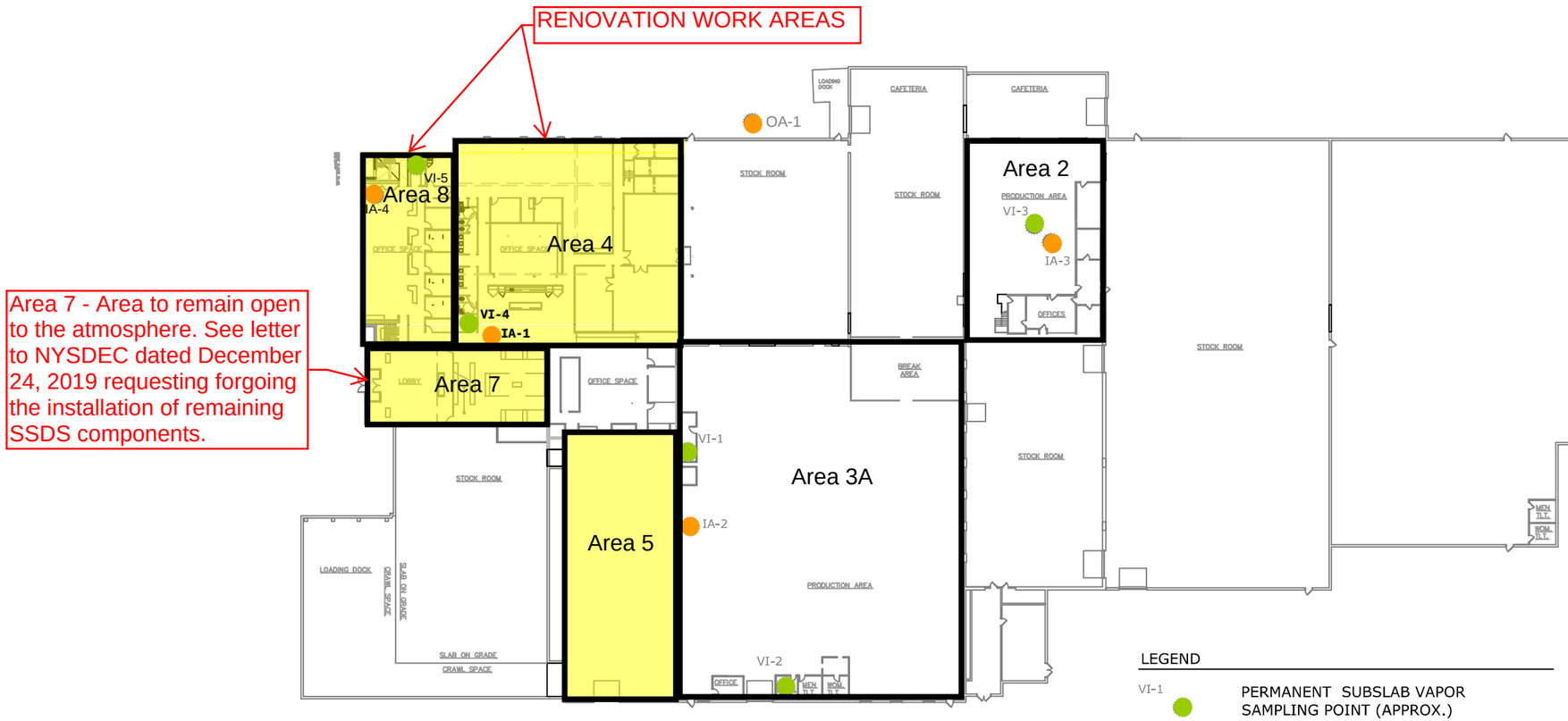
The locations and features depicted on this map are approximate and do not represent an actual survey.

XREFS: NONE

PROJECT NUMBER: 14.4337

CAD DWG. FILE NAME: K:\Projects\14433?\Env\Drawings and Maps\VI Perm Sampling Map.dwg

CAD DWG. FILE NAME: VI Perm Sampling Map.dwg




LEGEND

| | |
|---|---|
| VI-1 | PERMANENT SUBSLAB VAPOR SAMPLING POINT (APPROX.) |
| IA-1 | TEMPORARY INDOOR AIR SAMPLING POINT |
| OA-1 | TEMPORARY OUTDOOR AIR SAMPLING POINT |
| | AREAS WITH PASSIVE SSDS |

**NOTE**: VI MITIGATION MEASURES FOR ALL AREAS DEPICTED IN RECORD DRAWING "BUILDING VAPOR MITITGATION INTRUSION MEASURES", WM-1 BY FELLENZER ENGINEERING (DATED 11/23/16, REVISED 12/2/2016) AND CONSTRUCTION COMPLETION REPORT FOR SSDS IN 2-STORY OFFICE BUILDING BY C.T. MALE (DATED MARCH 29, 2018).

NOTE:
THE LOCATIONS AND FEATURES DEPICTED IN THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY BY C.T. MALE.

MAP REFERENCE:
BUILDING FLOOR PLAN PROVIDED BY FELLENZER ENGINEERING LLP OF MIDDLETOWN, NY.

| DATE | | REVISIONS RECORD/DESCRIPTION | DRAFTED | CHECK | APPR. |
|---|---|---|---|---|---|
| 3/29/19 | 1 | Sampling locations modified | RAM | | |
| 4/13/20 | 2 | SSDS loc. and other areas/shading | RAM | | |
| 1/27/21 | 3 | ECs deficiencies per 1/25/2021 visit | RAM | | |
| | 4 | | | | |
| | 5 | | | | |
| | 6 | | | | |
| | 7 | | | | |
| | 8 | | | | |
| | 9 | | | | |



DESIGNED :
DRAFTED : J.MARX
CHECKED : J.MCIVER
PROJ. NO : 14.4337
SCALE : NOT TO SCALE
DATE : MAY 2, 2017

# REVISED VAPOR INTRUSION SAMPLING LOCATIONS

## USAI LIGHTING FACILITY
## 1126 RIVER ROAD

TOWN OF NEW WINDSOR — ORANGE COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1

DWG. NO: 17-288

# Attachment B: NYSDEC EC/IC Certification Form

**Enclosure 2**
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**Site Management Periodic Review Report Notice**
**Institutional and Engineering Controls Certification Form**

**Site Details** **Box 1**

**Site No. C336087**

**Site Name USAI Lighting Facility**

Site Address: 1126 RIVER ROAD Zip Code: 12553
City/Town: New Windsor
County: Orange
Site Acreage: 11.400

Reporting Period: January 30, 2022 to January 30, 2023

| | YES | NO |
|---|---|---|
| 1. Is the information above correct? | X | ☐ |
| If NO, include handwritten above or on a separate sheet. | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | ☐ | X |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | ☐ | X |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | X | ☐ |
| **If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 5. Is the site currently undergoing development? | ☐ | X |

**Box 2**

| | YES | NO |
|---|---|---|
| 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial | X | ☐ |
| 7. Are all ICs in place and functioning as designed? | X | ☐ |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative Date

| | Box 2A | |
|---|---|---|
| | YES | NO |
| 8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? | ☐ | ☒ |
| **If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years) | ☒ | ☐ |
| **If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.** | | |

**SITE NO. C336087** **Box 3**

**Description of Institutional Controls**

| Parcel | Owner | Institutional Control |
|---|---|---|
| **9-1-96.1** | BDL, LLC | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br>Building Use Restriction<br>Monitoring Plan<br>Site Management Plan<br>IC/EC Plan |

The institutional controls present at the Controlled Property (USAI Lighting Facility BCP C336087 Site) are as follows:

1. Track 4 Commercial and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or restricted residential use, and the engineering controls may not be extinguished without NYSDEC approval, and amending or discontinuing the approved 2016 Site Management Plan (SMP) and the 2016 environmental easement.

2. All future soil disturbance activities below 1 foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and Excavation Work Plan.

3. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or Orange County DOH.

4. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 22nd following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., passive SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

| | | |
|---|---|---|
| **9-1-97** | BDL, LLC | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br>Building Use Restriction<br>Monitoring Plan<br>Site Management Plan<br>IC/EC Plan |

The institutional controls present at the Controlled Property (USAI Lighting Facility BCP C336087 Site) are as follows:

1. Track 4 Commercial and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or restricted residential use, and the engineering controls may not be extinguished without NYSDEC approval, and amending or discontinuing the approved 2016 Site Management Plan (SMP) and the 2016 environmental easement.

2. All future soil disturbance activities below 1 foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and Excavation Work Plan.

3. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or

Orange County DOH.

4. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 22nd following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., passive SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

**Box 4**

**Description of Engineering Controls**

| Parcel | Engineering Control |
|---|---|
| **9-1-96.1** | Vapor Mitigation<br>Cover System |

The engineering controls installed at the Controlled Property (USAI Lighting BCP C336087 Site) are as follows:

1. A passive vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 1 foot, will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. Periodic monitoring of groundwater from downgradient wells.

| | |
|---|---|
| **9-1-97** | Vapor Mitigation<br>Cover System |

The engineering controls installed at the Controlled Property (USAI Lighting BCP C336087 Site) are as follows:

1. A passive vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 1 foot, will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. Periodic monitoring of groundwater from downgradient wells.

**Box 5**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

| YES | NO |
|---|---|
| ☒ | ☐ |

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

| YES | NO |
|---|---|
| ☒ | ☐ |

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

**IC CERTIFICATIONS**
**SITE NO. C336087**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Frank Di Lauro
Senior Vice President
Operations (print name) at 1126 River Road, New Windsor, NY (print business address),

am certifying as Owner Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

4/25/23
Date

**EC CERTIFICATIONS**

**Box 7**

**Qualified Environmental Professional Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Rosaura Andujar-McNeil, P at E. 12 Raymond Ave., Poughkeepsie, NY,
print name print business address

am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)


| Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date |
|---|---|---|
| | | 4/25/2023 |

# Attachment C: Tables – 2023 and Historical Data

C.T. MALE ASSOCIATES

# TABLE 1: GROUNDWATER RESULTS - JANUARY 2023
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | FD01-20230113 | | | | MW-01-20230113 | | | | MW-02-20230113 | | | | MW-03-20230113 | | | | MW-04-20230113 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L2302270-05 | | | | L2302270-01 | | | | L2302270-02 | | | | L2302270-03 | | | | L2302270-04 | | | |
| | | COLLECTION DATE: | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | |
| | | SAMPLE MATRIX: | WATER | | | | WATER | | | | WATER | | | | WATER | | | | WATER | | | |
| | | NY-AWQS | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL |
| **VOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 5 | ND | | 0.5 | 0.17 | ND | | 0.5 | 0.17 | ND | | 1 | 0.33 | ND | | 0.5 | 0.17 | ND | | 0.5 | 0.17 |
| 1,1,2-Trichloroethane | 79-00-5 | 1 | ND | | 1.5 | 0.5 | ND | | 1.5 | 0.5 | ND | | 3 | 1 | ND | | 1.5 | 0.5 | ND | | 1.5 | 0.5 |
| 1,1-Dichloroethane | 75-34-3 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,1-Dichloroethene | 75-35-4 | 5 | ND | | 0.5 | 0.17 | ND | | 0.5 | 0.17 | ND | | 1 | 0.34 | ND | | 0.5 | 0.17 | ND | | 0.5 | 0.17 |
| 1,2,3-Trichlorobenzene | 87-61-6 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.04 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,2-Dibromoethane | 106-93-4 | 0.0006 | ND | | 2 | 0.65 | ND | | 2 | 0.65 | ND | | 4 | 1.3 | ND | | 2 | 0.65 | ND | | 2 | 0.65 |
| 1,2-Dichlorobenzene | 95-50-1 | 3 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,2-Dichloroethane | 107-06-2 | 0.6 | ND | | 0.5 | 0.13 | ND | | 0.5 | 0.13 | ND | | 1 | 0.26 | ND | | 0.5 | 0.13 | ND | | 0.5 | 0.13 |
| 1,2-Dichloropropane | 78-87-5 | 1 | ND | | 1 | 0.14 | ND | | 1 | 0.14 | ND | | 2 | 0.27 | ND | | 1 | 0.14 | ND | | 1 | 0.14 |
| 1,3-Dichlorobenzene | 541-73-1 | 3 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,4-Dichlorobenzene | 106-46-7 | 3 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| 1,4-Dioxane | 123-91-1 | | ND | | 250 | 61 | ND | | 250 | 61 | ND | | 500 | 120 | ND | | 250 | 61 | ND | | 250 | 61 |
| 2-Butanone | 78-93-3 | 50 | ND | | 5 | 1.9 | ND | | 5 | 1.9 | ND | | 10 | 3.9 | ND | | 5 | 1.9 | ND | | 5 | 1.9 |
| 2-Hexanone | 591-78-6 | 50 | ND | | 5 | 1 | ND | | 5 | 1 | ND | | 10 | 2 | ND | | 5 | 1 | ND | | 5 | 1 |
| 4-Methyl-2-pentanone | 108-10-1 | | ND | | 5 | 1 | ND | | 5 | 1 | ND | | 10 | 2 | ND | | 5 | 1 | ND | | 5 | 1 |
| Acetone | 67-64-1 | 50 | ND | | 5 | 1.5 | ND | | 5 | 1.5 | ND | | 10 | 2.9 | ND | | 5 | 1.5 | ND | | 5 | 1.5 |
| Benzene | 71-43-2 | 1 | ND | | 0.5 | 0.16 | ND | | 0.5 | 0.16 | ND | | 1 | 0.32 | ND | | 0.5 | 0.16 | ND | | 0.5 | 0.16 |
| Bromochloromethane | 74-97-5 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Bromodichloromethane | 75-27-4 | 50 | ND | | 0.5 | 0.19 | ND | | 0.5 | 0.19 | ND | | 1 | 0.38 | ND | | 0.5 | 0.19 | ND | | 0.5 | 0.19 |
| Bromoform | 75-25-2 | 50 | ND | | 2 | 0.65 | ND | | 2 | 0.65 | ND | | 4 | 1.3 | ND | | 2 | 0.65 | ND | | 2 | 0.65 |
| Bromomethane | 74-83-9 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Carbon disulfide | 75-15-0 | 60 | ND | | 5 | 1 | ND | | 5 | 1 | ND | | 10 | 2 | ND | | 5 | 1 | ND | | 5 | 1 |
| Carbon tetrachloride | 56-23-5 | 5 | ND | | 0.5 | 0.13 | ND | | 0.5 | 0.13 | ND | | 1 | 0.27 | ND | | 0.5 | 0.13 | ND | | 0.5 | 0.13 |
| Chlorobenzene | 108-90-7 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Chloroethane | 75-00-3 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Chloroform | 67-66-3 | 7 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Chloromethane | 74-87-3 | | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| cis-1,2-Dichloroethene | 156-59-2 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.4 | ND | | 0.5 | 0.14 | ND | | 0.5 | 0.14 | ND | | 1 | 0.29 | ND | | 0.5 | 0.14 | ND | | 0.5 | 0.14 |
| Cyclohexane | 110-82-7 | | ND | | 10 | 0.27 | ND | | 10 | 0.27 | ND | | 20 | 0.54 | ND | | 10 | 0.27 | ND | | 10 | 0.27 |
| Dibromochloromethane | 124-48-1 | 50 | ND | | 0.5 | 0.15 | ND | | 0.5 | 0.15 | ND | | 1 | 0.3 | ND | | 0.5 | 0.15 | ND | | 0.5 | 0.15 |
| Dichlorodifluoromethane | 75-71-8 | 5 | ND | | 5 | 1 | ND | | 5 | 1 | ND | | 10 | 2 | ND | | 5 | 1 | ND | | 5 | 1 |
| Ethylbenzene | 100-41-4 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Freon-113 | 76-13-1 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Isopropylbenzene | 98-82-8 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Methyl Acetate | 79-20-9 | | ND | | 2 | 0.23 | ND | | 2 | 0.23 | ND | | 4 | 0.47 | ND | | 2 | 0.23 | ND | | 2 | 0.23 |
| Methyl cyclohexane | 108-87-2 | | ND | | 10 | 0.4 | ND | | 10 | 0.4 | ND | | 20 | 0.79 | ND | | 10 | 0.4 | ND | | 10 | 0.4 |
| Methyl tert butyl ether | 1634-04-4 | 10 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Methylene chloride | 75-09-2 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| o-Xylene | 95-47-6 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| p/m-Xylene | 179601-23-1 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Styrene | 100-42-5 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Tetrachloroethene | 127-18-4 | 5 | ND | | 0.5 | 0.18 | ND | | 0.5 | 0.18 | ND | | 1 | 0.36 | ND | | 0.5 | 0.18 | ND | | 0.5 | 0.18 |
| Toluene | 108-88-3 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| trans-1,2-Dichloroethene | 156-60-5 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.4 | ND | | 0.5 | 0.16 | ND | | 0.5 | 0.16 | ND | | 1 | 0.33 | ND | | 0.5 | 0.16 | ND | | 0.5 | 0.16 |
| Trichloroethene | 79-01-6 | 5 | ND | | 0.5 | 0.18 | ND | | 0.5 | 0.18 | ND | | 1 | 0.35 | ND | | 0.5 | 0.18 | ND | | 0.5 | 0.18 |
| Trichlorofluoromethane | 75-69-4 | 5 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 | ND | | 5 | 1.4 | ND | | 2.5 | 0.7 | ND | | 2.5 | 0.7 |
| Vinyl chloride | 75-01-4 | 2 | ND | | 1 | 0.07 | ND | | 1 | 0.07 | ND | | 2 | 0.14 | ND | | 1 | 0.07 | ND | | 1 | 0.07 |
| Total VOCs | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **SEMIVOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 5 | ND | | 10 | 0.44 | ND | | 10 | 0.44 | ND | | 10 | 0.44 | ND | | 10 | 0.44 | ND | | 10 | 0.44 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | | ND | | 5 | 0.84 | ND | | 5 | 0.84 | ND | | 5 | 0.84 | ND | | 5 | 0.84 | ND | | 5 | 0.84 |
| 2,4,5-Trichlorophenol | 95-95-4 | | ND | | 5 | 0.77 | ND | | 5 | 0.77 | ND | | 5 | 0.77 | ND | | 5 | 0.77 | ND | | 5 | 0.77 |
| 2,4,6-Trichlorophenol | 88-06-2 | | ND | | 5 | 0.61 | ND | | 5 | 0.61 | ND | | 5 | 0.61 | ND | | 5 | 0.61 | ND | | 5 | 0.61 |
| 2,4-Dichlorophenol | 120-83-2 | 1 | ND | | 5 | 0.41 | ND | | 5 | 0.41 | ND | | 5 | 0.41 | ND | | 5 | 0.41 | ND | | 5 | 0.41 |

| | | SAMPLE ID: | FD01-20230113 | | | | MW-01-20230113 | | | | MW-02-20230113 | | | | MW-03-20230113 | | | | MW-04-20230113 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L2302270-05 | | | | L2302270-01 | | | | L2302270-02 | | | | L2302270-03 | | | | L2302270-04 | | | |
| | | COLLECTION DATE: | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | | 1/13/2023 | | | |
| | | SAMPLE MATRIX: | WATER | | | | WATER | | | | WATER | | | | WATER | | | | WATER | | | |
| | | NY-AWQS | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL |
| 2,4-Dimethylphenol | 105-67-9 | 50 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 |
| 2,4-Dinitrophenol | 51-28-5 | 10 | ND | | 20 | 6.6 | ND | | 20 | 6.6 | ND | | 20 | 6.6 | ND | | 20 | 6.6 | ND | | 20 | 6.6 |
| 2,4-Dinitrotoluene | 121-14-2 | 5 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 |
| 2,6-Dinitrotoluene | 606-20-2 | 5 | ND | | 5 | 0.93 | ND | | 5 | 0.93 | ND | | 5 | 0.93 | ND | | 5 | 0.93 | ND | | 5 | 0.93 |
| 2-Chlorophenol | 95-57-8 | | ND | | 2 | 0.48 | ND | | 2 | 0.48 | ND | | 2 | 0.48 | ND | | 2 | 0.48 | ND | | 2 | 0.48 |
| 2-Methylphenol | 95-48-7 | | ND | | 5 | 0.49 | ND | | 5 | 0.49 | ND | | 5 | 0.49 | ND | | 5 | 0.49 | ND | | 5 | 0.49 |
| 2-Nitroaniline | 88-74-4 | 5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 |
| 2-Nitrophenol | 88-75-5 | | ND | | 10 | 0.85 | ND | | 10 | 0.85 | ND | | 10 | 0.85 | ND | | 10 | 0.85 | ND | | 10 | 0.85 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 5 | ND | | 5 | 1.6 | ND | | 5 | 1.6 | ND | | 5 | 1.6 | ND | | 5 | 1.6 | ND | | 5 | 1.6 |
| 3-Methylphenol/4-Methylphenol | 108-39-4/106-44-5 | | ND | | 5 | 0.48 | ND | | 5 | 0.48 | ND | | 5 | 0.48 | ND | | 5 | 0.48 | ND | | 5 | 0.48 |
| 3-Nitroaniline | 99-09-2 | 5 | ND | | 5 | 0.81 | ND | | 5 | 0.81 | ND | | 5 | 0.81 | ND | | 5 | 0.81 | ND | | 5 | 0.81 |
| 4,6-Dinitro-o-cresol | 534-52-1 | | ND | | 10 | 1.8 | ND | | 10 | 1.8 | ND | | 10 | 1.8 | ND | | 10 | 1.8 | ND | | 10 | 1.8 |
| 4-Bromophenyl phenyl ether | 101-55-3 | | ND | | 2 | 0.38 | ND | | 2 | 0.38 | ND | | 2 | 0.38 | ND | | 2 | 0.38 | ND | | 2 | 0.38 |
| 4-Chloroaniline | 106-47-8 | 5 | ND | | 5 | 1.1 | ND | | 5 | 1.1 | ND | | 5 | 1.1 | ND | | 5 | 1.1 | ND | | 5 | 1.1 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 |
| 4-Nitroaniline | 100-01-6 | 5 | ND | | 5 | 0.8 | ND | | 5 | 0.8 | ND | | 5 | 0.8 | ND | | 5 | 0.8 | ND | | 5 | 0.8 |
| 4-Nitrophenol | 100-02-7 | | ND | | 10 | 0.67 | ND | | 10 | 0.67 | ND | | 10 | 0.67 | ND | | 10 | 0.67 | ND | | 10 | 0.67 |
| Acetophenone | 98-86-2 | | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 |
| Atrazine | 1912-24-9 | 7.5 | ND | | 10 | 0.76 | ND | | 10 | 0.76 | ND | | 10 | 0.76 | ND | | 10 | 0.76 | ND | | 10 | 0.76 |
| Benzaldehyde | 100-52-7 | | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 | ND | | 5 | 0.53 |
| Biphenyl | 92-52-4 | | ND | | 2 | 0.46 | ND | | 2 | 0.46 | ND | | 2 | 0.46 | ND | | 2 | 0.46 | ND | | 2 | 0.46 |
| Bis(2-chloroethoxy)methane | 111-91-1 | 5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 | ND | | 5 | 0.5 |
| Bis(2-chloroethyl)ether | 111-44-4 | 1 | ND | | 2 | 0.5 | ND | | 2 | 0.5 | ND | | 2 | 0.5 | ND | | 2 | 0.5 | ND | | 2 | 0.5 |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 5 | ND | | 2 | 0.53 | ND | | 2 | 0.53 | ND | | 2 | 0.53 | ND | | 2 | 0.53 | ND | | 2 | 0.53 |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 5 | ND | | 3 | 1.5 | ND | | 3 | 1.5 | ND | | 3 | 1.5 | ND | | 3 | 1.5 | ND | | 3 | 1.5 |
| Butyl benzyl phthalate | 85-68-7 | 50 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 |
| Caprolactam | 105-60-2 | | ND | | 10 | 3.3 | ND | | 10 | 3.3 | ND | | 10 | 3.3 | ND | | 10 | 3.3 | ND | | 10 | 3.3 |
| Carbazole | 86-74-8 | | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 | ND | | 2 | 0.49 |
| Di-n-butylphthalate | 84-74-2 | 50 | ND | | 5 | 0.39 | ND | | 5 | 0.39 | ND | | 5 | 0.39 | ND | | 5 | 0.39 | ND | | 5 | 0.39 |
| Di-n-octylphthalate | 117-84-0 | 50 | ND | | 5 | 1.3 | ND | | 5 | 1.3 | ND | | 5 | 1.3 | ND | | 5 | 1.3 | ND | | 5 | 1.3 |
| Dibenzofuran | 132-64-9 | | ND | | 2 | 0.5 | ND | | 2 | 0.5 | 1.6 | J | 2 | 0.5 | ND | | 2 | 0.5 | ND | | 2 | 0.5 |
| Diethyl phthalate | 84-66-2 | 50 | ND | | 5 | 0.38 | ND | | 5 | 0.38 | ND | | 5 | 0.38 | ND | | 5 | 0.38 | ND | | 5 | 0.38 |
| Dimethyl phthalate | 131-11-3 | 50 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 | ND | | 5 | 1.8 |
| Hexachlorocyclopentadiene | 77-47-4 | 5 | ND | | 20 | 0.69 | ND | | 20 | 0.69 | ND | | 20 | 0.69 | ND | | 20 | 0.69 | ND | | 20 | 0.69 |
| Isophorone | 78-59-1 | 50 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 | ND | | 5 | 1.2 |
| n-Nitrosodi-n-propylamine | 621-64-7 | | ND | | 5 | 0.64 | ND | | 5 | 0.64 | ND | | 5 | 0.64 | ND | | 5 | 0.64 | ND | | 5 | 0.64 |
| NDPA/DPA | 86-30-6 | 50 | ND | | 2 | 0.42 | ND | | 2 | 0.42 | ND | | 2 | 0.42 | ND | | 2 | 0.42 | ND | | 2 | 0.42 |
| Nitrobenzene | 98-95-3 | 0.4 | ND | | 2 | 0.77 | ND | | 2 | 0.77 | ND | | 2 | 0.77 | ND | | 2 | 0.77 | ND | | 2 | 0.77 |
| p-Chloro-m-cresol | 59-50-7 | | ND | | 2 | 0.35 | ND | | 2 | 0.35 | ND | | 2 | 0.35 | ND | | 2 | 0.35 | ND | | 2 | 0.35 |
| Phenol | 108-95-2 | 1 | ND | | 5 | 0.57 | ND | | 5 | 0.57 | ND | | 5 | 0.57 | ND | | 5 | 0.57 | ND | | 5 | 0.57 |
| Total SVOCs | | | - | - | - | - | - | - | - | - | 1.6 | - | - | - | - | - | - | - | - | - | - | - |
| **SEMIVOLATILE ORGANICS BY GC/MS-SIM** | | | | | | | | | | | | | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 10 | ND | | 0.2 | 0.02 | ND | | 0.2 | 0.02 | ND | | 0.2 | 0.02 | ND | | 0.2 | 0.02 | ND | | 0.2 | 0.02 |
| 2-Methylnaphthalene | 91-57-6 | | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 |
| Acenaphthene | 83-32-9 | 20 | 0.3 | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | 2.4 | | 0.1 | 0.01 | 0.28 | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Acenaphthylene | 208-96-8 | | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | 0.38 | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Anthracene | 120-12-7 | 50 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Benzo(a)anthracene | 56-55-3 | 0.002 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | 0.02 | J | 0.1 | 0.02 | ND | | 0.1 | 0.02 |
| Benzo(a)pyrene | 50-32-8 | 0 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 |
| Benzo(b)fluoranthene | 205-99-2 | 0.002 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | 0.02 | J | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Benzo(ghi)perylene | 191-24-2 | | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Benzo(k)fluoranthene | 207-08-9 | 0.002 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Chrysene | 218-01-9 | 0.002 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Dibenzo(a,h)anthracene | 53-70-3 | | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Fluoranthene | 206-44-0 | 50 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 |
| Fluorene | 86-73-7 | 50 | 0.29 | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | 3.9 | | 0.1 | 0.01 | 0.29 | | 0.1 | 0.01 | 0.05 | J | 0.1 | 0.01 |
| Hexachlorobenzene | 118-74-1 | 0.04 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 |
| Hexachlorobutadiene | 87-68-3 | 0.5 | ND | | 0.5 | 0.05 | ND | | 0.5 | 0.05 | ND | | 0.5 | 0.05 | ND | | 0.5 | 0.05 | ND | | 0.5 | 0.05 |
| Hexachloroethane | 67-72-1 | 5 | ND | | 0.8 | 0.06 | ND | | 0.8 | 0.06 | ND | | 0.8 | 0.06 | ND | | 0.8 | 0.06 | ND | | 0.8 | 0.06 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.002 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 | ND | | 0.1 | 0.01 |
| Naphthalene | 91-20-3 | 10 | 0.05 | J | 0.1 | 0.05 | ND | | 0.1 | 0.05 | 1 | | 0.1 | 0.05 | 0.05 | J | 0.1 | 0.05 | ND | | 0.1 | 0.05 |
| Pentachlorophenol | 87-86-5 | 1 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 | ND | | 0.8 | 0.01 |
| Phenanthrene | 85-01-8 | 50 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | 0.05 | J | 0.1 | 0.02 |
| Pyrene | 129-00-0 | 50 | 0.02 | J | 0.1 | 0.02 | ND | | 0.1 | 0.02 | ND | | 0.1 | 0.02 | 0.02 | J | 0.1 | 0.02 | 0.02 | J | 0.1 | 0.02 |
| Total SVOCs | | | 0.66 | - | - | - | - | - | - | - | 7.68 | - | - | - | 0.68 | - | - | - | 0.12 | - | - | - |

* Comparison is not performed on parameters with non-numeric criteria.
NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

C.T. MALE ASSOCIATES

# HISTORICAL GROUNDWATER ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | MW-1 | | | FD-GW1-02212018 (MW-1) | | | MW-1 | | | MW-1 | | | MW-1 | | | MW-01-20230113 | | | MW-2 | | | MW-2 | | | MW-2 | | | FD-GW1_200220 (MW-2) | | | MW-2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L1806118-01 | | | L1806118-07 | | | L1909460-01 | | | L2007757-04 | | | L2208194-04 | | | L2302270-01 | | | L1806118-02 | | | L1909460-02 | | | L2007757-03 | | | L2007757-06 | | | L2208194-03 | | |
| | | COLLECTION DATE: | 2/21/2018 | | | 2/21/2018 | | | 3/11/2019 | | | 2/20/2020 | | | 2/16/2022 | | | 1/13/2023 | | | 2/21/2018 | | | 3/11/2019 | | | 2/20/2020 | | | 2/20/2020 | | | 2/16/2022 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | |
| | | NY-AWQS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| **VOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 5 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 |
| 1,1,2-Trichloroethane | 79-00-5 | 1 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| 1,1-Dichloroethane | 75-34-3 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,1-Dichloroethene | 75-35-4 | 5 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 |
| 1,2,3-Trichlorobenzene | 87-61-6 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.04 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2-Dibromoethane | 106-93-4 | 0.0006 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 |
| 1,2-Dichlorobenzene | 95-50-1 | 3 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2-Dichloroethane | 107-06-2 | 0.6 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 |
| 1,2-Dichloropropane | 78-87-5 | 1 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 |
| 1,3,5-Trimethylbenzene | 108-67-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| 1,3-Dichlorobenzene | 541-73-1 | 3 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,4-Dichlorobenzene | 106-46-7 | 3 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,4-Dioxane | 123-91-1 | 0.35 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 |
| 2-Butanone | 78-93-3 | 50 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 |
| 2-Hexanone | 591-78-6 | 50 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| 4-Methyl-2-pentanone | 108-10-1 | NE | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Acetone | 67-64-1 | 50 | 5.8 | | 1.5 | ND | | 1.5 | ND | | 1.5 | 5.3 | | 1.5 | ND | | 1.5 | ND | | 1.5 | 2 | J | 1.5 | 1.5 | J | 1.5 | 5.9 | | 1.5 | 2.8 | J | 1.5 | ND | | 1.5 |
| Benzene | 71-43-2 | 1 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 |
| Bromochloromethane | 74-97-5 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Bromodichloromethane | 75-27-4 | 50 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 |
| Bromoform | 75-25-2 | 50 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 |
| Bromomethane | 74-83-9 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Carbon disulfide | 75-15-0 | 60 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Carbon tetrachloride | 56-23-5 | 5 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 |
| Chlorobenzene | 108-90-7 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloroethane | 75-00-3 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloroform | 67-66-3 | 7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloromethane | 74-87-3 | NE | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| cis-1,2-Dichloroethene | 156-59-2 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.4 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 |
| Cyclohexane | 110-82-7 | NE | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 |
| Dibromochloromethane | 124-48-1 | 50 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 |
| Dichlorodifluoromethane | 75-71-8 | 5 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Ethylbenzene | 100-41-4 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Freon-113 | 76-13-1 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Isopropylbenzene | 98-82-8 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | 1.8 | J | 0.7 | 1.9 | J | 0.7 | ND | | 0.7 |
| Methyl Acetate | 79-20-9 | NE | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 |
| Methyl cyclohexane | 108-87-2 | NE | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 |
| Methyl tert butyl ether | 1634-04-4 | 10 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Methylene chloride | 75-09-2 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| n-Butylbenzene | 104-51-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| n-Propylbenzene | 103-65-1 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Naphthalene | 91-20-3 | 10 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| o-Xylene | 95-47-6 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| p-Isopropyltoluene | 99-87-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| p/m-Xylene | 179601-23-1 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| sec-Butylbenzene | 135-98-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Styrene | 100-42-5 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| tert-Butylbenzene | 98-06-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Tetrachloroethene | 127-18-4 | 5 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 |
| Toluene | 108-88-3 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| trans-1,2-Dichloroethene | 156-60-5 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.4 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 |
| Trichloroethene | 79-01-6 | 5 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 |
| Trichlorofluoromethane | 75-69-4 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Vinyl chloride | 75-01-4 | 2 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 |
| Total VOCs | | NE | 5.8 | - | - | - | - | - | - | - | - | 5.3 | - | - | - | - | - | - | - | - | 2 | - | - | 1.5 | - | - | 7.7 | - | - | 4.7 | - | - | - | - | - | - |

C.T. MALE ASSOCIATES

# HISTORICAL GROUNDWATER ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | MW-1 | | | FD-GW1-02212018 (MW-1) | | | MW-1 | | | MW-1 | | | MW-1 | | | MW-01-20230113 | | | MW-2 | | | MW-2 | | | MW-2 | | | FD-GW1_200220 (MW-2) | | | MW-2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L1806118-01 | | | L1806118-07 | | | L1909460-01 | | | L2007757-04 | | | L2208194-04 | | | L2302270-01 | | | L1806118-02 | | | L1909460-02 | | | L2007757-03 | | | L2007757-06 | | | L2208194-03 | | |
| | | COLLECTION DATE: | 2/21/2018 | | | 2/21/2018 | | | 3/11/2019 | | | 2/20/2020 | | | 2/16/2022 | | | 1/13/2023 | | | 2/21/2018 | | | 3/11/2019 | | | 2/20/2020 | | | 2/20/2020 | | | 2/16/2022 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | |
| ANALYTE | CAS | NY-AWQS (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| **SEMIVOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 5 | ND | | 0.67 | ND | | 0.67 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.67 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | NE | ND | | 0.93 | ND | | 0.93 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.93 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | ND | | 0.72 | ND | | 0.72 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.72 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | ND | | 0.68 | ND | | 0.68 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.68 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 |
| 2,4-Dichlorophenol | 120-83-2 | 1 | ND | | 0.77 | ND | | 0.77 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.77 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 |
| 2,4-Dimethylphenol | 105-67-9 | 50 | ND | | 1.6 | ND | | 1.6 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.6 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| 2,4-Dinitrophenol | 51-28-5 | 10 | ND | | 5.5 | ND | | 5.5 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 5.5 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 |
| 2,4-Dinitrotoluene | 121-14-2 | 5 | ND | | 0.84 | ND | | 0.84 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 0.84 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| 2,6-Dinitrotoluene | 606-20-2 | 5 | ND | | 1.1 | ND | | 1.1 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 1.1 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 |
| 2-Chlorophenol | 95-57-8 | NE | ND | | 0.63 | ND | | 0.63 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.63 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 |
| 2-Methylphenol | 95-48-7 | NE | - | | - | - | | - | - | | - | - | | - | ND | | 0.49 | ND | | 0.49 | - | | - | - | | - | - | | - | - | | - | ND | | 0.49 |
| 2-Nitroaniline | 88-74-4 | 5 | ND | | 1.1 | ND | | 1.1 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 1.1 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| 2-Nitrophenol | 88-75-5 | NE | ND | | 1.5 | ND | | 1.5 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 1.5 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 5 | ND | | 1.4 | ND | | 1.4 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.4 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 |
| 3-Methylphenol/4-Methylphenol | 108-39-4/106-44-5 | NE | ND | | 1.1 | ND | | 1.1 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 1.1 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 |
| 3-Nitroaniline | 99-09-2 | 5 | ND | | 1.2 | ND | | 1.2 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 1.2 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 |
| 4,6-Dinitro-o-cresol | 534-52-1 | NE | ND | | 2.1 | ND | | 2.1 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 2.1 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | ND | | 0.73 | ND | | 0.73 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.73 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 |
| 4-Chloroaniline | 106-47-8 | 5 | ND | | 0.63 | ND | | 0.63 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 0.63 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | ND | | 0.62 | ND | | 0.62 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.62 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 |
| 4-Nitroaniline | 100-01-6 | 5 | ND | | 1.3 | ND | | 1.3 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 1.3 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 |
| 4-Nitrophenol | 100-02-7 | NE | ND | | 1.8 | ND | | 1.8 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 1.8 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 |
| Acetophenone | 98-86-2 | NE | ND | | 0.85 | ND | | 0.85 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.85 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Atrazine | 1912-24-9 | 7.5 | ND | | 1.8 | ND | | 1.8 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 1.8 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 |
| Benzaldehyde | 100-52-7 | NE | ND | | 1.1 | ND | | 1.1 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 1.1 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Biphenyl | 92-52-4 | NE | ND | | 0.76 | ND | | 0.76 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.76 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 |
| Bis(2-chloroethoxy)methane | 111-91-1 | 5 | ND | | 0.63 | ND | | 0.63 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.63 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| Bis(2-chloroethyl)ether | 111-44-4 | 1 | ND | | 0.67 | ND | | 0.67 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.67 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.7 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 5 | ND | | 0.91 | ND | | 0.91 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 0.91 | 2.6 | J | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 |
| Butyl benzyl phthalate | 85-68-7 | 50 | ND | | 1.3 | ND | | 1.3 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.3 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| Caprolactam | 105-60-2 | NE | ND | | 3.6 | ND | | 3.6 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.6 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 |
| Carbazole | 86-74-8 | NE | ND | | 0.63 | ND | | 0.63 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.63 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 |
| Di-n-butylphthalate | 84-74-2 | 50 | ND | | 0.69 | ND | | 0.69 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.69 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 |
| Di-n-octylphthalate | 117-84-0 | 50 | ND | | 1.1 | ND | | 1.1 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.1 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 |
| Dibenzofuran | 132-64-9 | NE | ND | | 0.66 | ND | | 0.66 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.66 | ND | | 0.5 | 1.6 | J | 0.5 | 1.5 | J | 0.5 | ND | | 0.5 |
| Diethyl phthalate | 84-66-2 | 50 | ND | | 0.63 | ND | | 0.63 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.63 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 |
| Dimethyl phthalate | 131-11-3 | 50 | ND | | 0.65 | ND | | 0.65 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 0.65 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| Hexachlorocyclopentadiene | 77-47-4 | 5 | ND | | 7.8 | ND | | 7.8 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 7.8 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 |
| Isophorone | 78-59-1 | 50 | ND | | 0.6 | ND | | 0.6 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 0.6 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| n-Nitrosodi-n-propylamine | 621-64-7 | NE | ND | | 0.7 | ND | | 0.7 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.7 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 |
| NDPA/DPA | 86-30-6 | 50 | ND | | 0.64 | ND | | 0.64 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.64 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 |
| Nitrobenzene | 98-95-3 | 0.4 | ND | | 0.75 | ND | | 0.75 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.75 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 |
| p-Chloro-m-cresol | 59-50-7 | NE | ND | | 0.62 | ND | | 0.62 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.62 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 |
| Phenol | 108-95-2 | 1 | ND | | 1.9 | ND | | 1.9 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 1.9 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 |
| Total SVOCs by GC/MS | | NE | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2.6 | - | - | 1.6 | - | - | 1.5 | - | - | - | - | - |
| **SEMIVOLATILE ORGANICS BY GC/MS-SIM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 10 | ND | | 0.04 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| 2-Methylnaphthalene | 91-57-6 | NE | ND | | 0.05 | 0.09 | J | 0.05 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.05 | ND | | 0.02 | ND | | 0.02 | 0.07 | J | 0.02 | ND | | 0.02 |
| Acenaphthene | 83-32-9 | 20 | ND | | 0.04 | ND | | 0.04 | 0.02 | J | 0.01 | ND | | 0.01 | 0.04 | J | 0.01 | ND | | 0.01 | ND | | 0.04 | 0.52 | | 0.01 | 2.6 | | 0.01 | 2.5 | | 0.01 | 0.2 | | 0.01 |
| Acenaphthylene | 208-96-8 | NE | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | 0.04 | J | 0.04 | ND | | 0.01 | ND | | 0.01 | 0.47 | | 0.01 | ND | | 0.01 |
| Anthracene | 120-12-7 | 50 | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(a)anthracene | 56-55-3 | 0.002 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Benzo(a)pyrene | 50-32-8 | ND | ND | | 0.04 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Benzo(b)fluoranthene | 205-99-2 | 0.002 | ND | | 0.02 | ND | | 0.02 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.02 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(ghi)perylene | 191-24-2 | NE | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | 0.02 | J | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(k)fluoranthene | 207-08-9 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Chrysene | 218-01-9 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Dibenzo(a,h)anthracene | 53-70-3 | NE | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Fluoranthene | 206-44-0 | 50 | ND | | 0.04 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.04 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Fluorene | 86-73-7 | 50 | ND | | 0.04 | ND | | 0.04 | 0.03 | J | 0.01 | ND | | 0.01 | 0.07 | J | 0.01 | ND | | 0.01 | ND | | 0.04 | 0.6 | | 0.01 | 4.4 | | 0.01 | 4.1 | | 0.01 | 0.09 | J | 0.01 |
| Hexachlorobenzene | 118-74-1 | 0.04 | ND | | 0.03 | ND | | 0.03 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.03 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Hexachlorobutadiene | 87-68-3 | 0.5 | ND | | 0.04 | ND | | 0.04 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.04 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 |
| Hexachloroethane | 67-72-1 | 5 | ND | | 0.03 | ND | | 0.03 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.03 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.04 | 0.01 | J | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Naphthalene | 91-20-3 | 10 | ND | | 0.04 | 0.36 | | 0.04 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.04 | 0.08 | J | 0.05 | 1.2 | | 0.05 | 1.2 | | 0.05 | ND | | 0.05 |
| Pentachlorophenol | 87-86-5 | 1 | ND | | 0.22 | ND | | 0.22 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.22 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Phenanthrene | 85-01-8 | 50 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Pyrene | 129-00-0 | 50 | ND | | 0.04 | ND | | 0.04 | 0.03 | J | 0.02 | ND | | 0.02 | 0.02 | J | 0.02 | ND | | 0.02 | 0.12 | | 0.04 | 0.54 | | 0.02 | 0.21 | | 0.02 | 0.19 | | 0.02 | ND | | 0.02 |
| Total SVOCs by GC/MS-SIM | | NE | - | - | - | 0.45 | - | - | 0.08 | - | - | - | - | - | 0.13 | - | - | - | - | - | 0.16 | - | - | 1.77 | - | - | 8.41 | - | - | 8.53 | - | - | 0.29 | - | - |
| Total SVOCs by GC/MS and GC/MS-SIM | | NE | ND | - | - | 0.45 | - | - | 0.08 | - | - | ND | - | - | 0.13 | - | - | ND | - | - | 0.16 | - | - | 4.37 | - | - | 10.01 | - | - | 10.03 | - | - | 0.29 | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

J denotes an estimated concentration

ND denotes Non-Detect results

NE denotes regulatory levels not established

- denotes not applicable

C.T. MALE ASSOCIATES

# HISTORICAL GROUNDWATER ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | MW-02-20230113 | | | MW-3 | | | FD-GW1-20190311 (MW-3) | | | MW-3 | | | MW-3 | | | MW-03-20230113 | | | FD01-20230113 (MW-3) | | | MW-4 | | | MW-4 | | | MW-4 | | | MW-04-20230113 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L2302270-02 | | | L1909460-03 | | | L1909460-05 | | | L2007757-02 | | | L2208194-02 | | | L2302270-03 | | | L2302270-05 | | | L1909460-04 | | | L2007757-01 | | | L2208194-01 | | | L2302270-04 | | |
| | | COLLECTION DATE: | 1/13/2023 | | | 3/11/2019 | | | 3/11/2019 | | | 2/19/2020 | | | 2/16/2022 | | | 1/13/2023 | | | 1/13/2023 | | | 3/11/2019 | | | 2/19/2020 | | | 2/16/2022 | | | 1/13/2023 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | |
| | | NY-AWQS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| **VOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 5 | ND | | 0.33 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 |
| 1,1,2-Trichloroethane | 79-00-5 | 1 | ND | | 1 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| 1,1-Dichloroethane | 75-34-3 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,1-Dichloroethene | 75-35-4 | 5 | ND | | 0.34 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 | ND | | 0.17 |
| 1,2,3-Trichlorobenzene | 87-61-6 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.04 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2-Dibromoethane | 106-93-4 | 0.0006 | ND | | 1.3 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 |
| 1,2-Dichlorobenzene | 95-50-1 | 3 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,2-Dichloroethane | 107-06-2 | 0.6 | ND | | 0.26 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 |
| 1,2-Dichloropropane | 78-87-5 | 1 | ND | | 0.27 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 |
| 1,3,5-Trimethylbenzene | 108-67-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| 1,3-Dichlorobenzene | 541-73-1 | 3 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,4-Dichlorobenzene | 106-46-7 | 3 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| 1,4-Dioxane | 123-91-1 | 0.35 | ND | | 120 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 | ND | | 61 |
| 2-Butanone | 78-93-3 | 50 | ND | | 3.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 | ND | | 1.9 |
| 2-Hexanone | 591-78-6 | 50 | ND | | 2 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| 4-Methyl-2-pentanone | 108-10-1 | NE | ND | | 2 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Acetone | 67-64-1 | 50 | ND | | 2.9 | 2.2 | J | 1.5 | 2.3 | J | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | 2 | J | 1.5 | 7.5 | | 1.5 | ND | | 1.5 | ND | | 1.5 |
| Benzene | 71-43-2 | 1 | ND | | 0.32 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 |
| Bromochloromethane | 74-97-5 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Bromodichloromethane | 75-27-4 | 50 | ND | | 0.38 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 | ND | | 0.19 |
| Bromoform | 75-25-2 | 50 | ND | | 1.3 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 | ND | | 0.65 |
| Bromomethane | 74-83-9 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Carbon disulfide | 75-15-0 | 60 | ND | | 2 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Carbon tetrachloride | 56-23-5 | 5 | ND | | 0.27 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 | ND | | 0.13 |
| Chlorobenzene | 108-90-7 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloroethane | 75-00-3 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloroform | 67-66-3 | 7 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Chloromethane | 74-87-3 | NE | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| cis-1,2-Dichloroethene | 156-59-2 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.4 | ND | | 0.29 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 | ND | | 0.14 |
| Cyclohexane | 110-82-7 | NE | ND | | 0.54 | 0.36 | J | 0.27 | 0.27 | J | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 | ND | | 0.27 |
| Dibromochloromethane | 124-48-1 | 50 | ND | | 0.3 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 | ND | | 0.15 |
| Dichlorodifluoromethane | 75-71-8 | 5 | ND | | 2 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 | ND | | 1 |
| Ethylbenzene | 100-41-4 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Freon-113 | 76-13-1 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Isopropylbenzene | 98-82-8 | 5 | ND | | 1.4 | 3.2 | | 0.7 | 3 | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Methyl Acetate | 79-20-9 | NE | ND | | 0.47 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 | ND | | 0.23 |
| Methyl cyclohexane | 108-87-2 | NE | ND | | 0.79 | 2.8 | J | 0.4 | 2.3 | J | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 | ND | | 0.4 |
| Methyl tert butyl ether | 1634-04-4 | 10 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Methylene chloride | 75-09-2 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| n-Butylbenzene | 104-51-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| n-Propylbenzene | 103-65-1 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Naphthalene | 91-20-3 | 10 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| o-Xylene | 95-47-6 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| p-Isopropyltoluene | 99-87-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| p/m-Xylene | 179601-23-1 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| sec-Butylbenzene | 135-98-8 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Styrene | 100-42-5 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| tert-Butylbenzene | 98-06-6 | 5 | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - | - | | - |
| Tetrachloroethene | 127-18-4 | 5 | ND | | 0.36 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 |
| Toluene | 108-88-3 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| trans-1,2-Dichloroethene | 156-60-5 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.4 | ND | | 0.33 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 |
| Trichloroethene | 79-01-6 | 5 | ND | | 0.35 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 | ND | | 0.18 |
| Trichlorofluoromethane | 75-69-4 | 5 | ND | | 1.4 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Vinyl chloride | 75-01-4 | 2 | ND | | 0.14 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 | ND | | 0.07 |
| Total VOCs | | NE | - | | - | 8.56 | | - | 7.87 | | - | - | | - | - | | - | - | | - | - | | - | 2 | | - | 7.5 | | - | - | | - | - | | - | - | | - |

C.T. MALE ASSOCIATES

# HISTORICAL GROUNDWATER ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | MW-02-20230113 | | | MW-3 | | | FD-GW1-20190311 (MW-3) | | | MW-3 | | | MW-3 | | | MW-03-20230113 | | | FD01-20230113 (MW-3) | | | MW-4 | | | MW-4 | | | MW-4 | | | MW-04-20230113 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L2302270-02 | | | L1909460-03 | | | L1909460-05 | | | L2007757-02 | | | L2208194-02 | | | L2302270-03 | | | L2302270-05 | | | L1909460-04 | | | L2007757-01 | | | L2208194-01 | | | L2302270-04 | | |
| | | COLLECTION DATE: | 1/13/2023 | | | 3/11/2019 | | | 3/11/2019 | | | 2/19/2020 | | | 2/16/2022 | | | 1/13/2023 | | | 1/13/2023 | | | 3/11/2019 | | | 2/19/2020 | | | 2/16/2022 | | | 1/13/2023 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | | WATER | | |
| | | NY-AWQS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| **SEMIVOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 5 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 | ND | | 0.44 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | NE | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 | ND | | 0.84 |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 | ND | | 0.61 |
| 2,4-Dichlorophenol | 120-83-2 | 1 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 | ND | | 0.41 |
| 2,4-Dimethylphenol | 105-67-9 | 50 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| 2,4-Dinitrophenol | 51-28-5 | 10 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 | ND | | 6.6 |
| 2,4-Dinitrotoluene | 121-14-2 | 5 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| 2,6-Dinitrotoluene | 606-20-2 | 5 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 | ND | | 0.93 |
| 2-Chlorophenol | 95-57-8 | NE | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 |
| 2-Methylphenol | 95-48-7 | NE | ND | | 0.49 | - | | - | - | | - | - | | - | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | - | | - | - | | - | ND | | 0.49 | ND | | 0.49 |
| 2-Nitroaniline | 88-74-4 | 5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| 2-Nitrophenol | 88-75-5 | NE | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 | ND | | 0.85 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 5 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 | ND | | 1.6 |
| 3-Methylphenol/4-Methylphenol | 108-39-4/106-44-5 | NE | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 | ND | | 0.48 |
| 3-Nitroaniline | 99-09-2 | 5 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 | ND | | 0.81 |
| 4,6-Dinitro-o-cresol | 534-52-1 | NE | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 |
| 4-Chloroaniline | 106-47-8 | 5 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 | ND | | 1.1 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 |
| 4-Nitroaniline | 100-01-6 | 5 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 | ND | | 0.8 |
| 4-Nitrophenol | 100-02-7 | NE | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 | ND | | 0.67 |
| Acetophenone | 98-86-2 | NE | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Atrazine | 1912-24-9 | 7.5 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 | ND | | 0.76 |
| Benzaldehyde | 100-52-7 | NE | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Biphenyl | 92-52-4 | NE | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 | ND | | 0.46 |
| Bis(2-chloroethoxy)methane | 111-91-1 | 5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| Bis(2-chloroethyl)ether | 111-44-4 | 1 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 5 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 | ND | | 0.53 |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 5 | ND | | 1.5 | 1.8 | J | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 | ND | | 1.5 |
| Butyl benzyl phthalate | 85-68-7 | 50 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| Caprolactam | 105-60-2 | NE | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 | ND | | 3.3 |
| Carbazole | 86-74-8 | NE | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 | ND | | 0.49 |
| Di-n-butylphthalate | 84-74-2 | 50 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 | ND | | 0.39 |
| Di-n-octylphthalate | 117-84-0 | 50 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 | ND | | 1.3 |
| Dibenzofuran | 132-64-9 | NE | 1.6 | J | 0.5 | 3.4 | | 0.5 | 3.3 | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 | ND | | 0.5 |
| Diethyl phthalate | 84-66-2 | 50 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 | ND | | 0.38 |
| Dimethyl phthalate | 131-11-3 | 50 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 | ND | | 1.8 |
| Hexachlorocyclopentadiene | 77-47-4 | 5 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 | ND | | 0.69 |
| Isophorone | 78-59-1 | 50 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 | ND | | 1.2 |
| n-Nitrosodi-n-propylamine | 621-64-7 | NE | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 | ND | | 0.64 |
| NDPA/DPA | 86-30-6 | 50 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 | ND | | 0.42 |
| Nitrobenzene | 98-95-3 | 0.4 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 | ND | | 0.77 |
| p-Chloro-m-cresol | 59-50-7 | NE | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 | ND | | 0.35 |
| Phenol | 108-95-2 | 1 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 | ND | | 0.57 |
| Total SVOCs by GC/MS | | NE | 1.6 | - | - | 5.2 | - | - | 3.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **SEMIVOLATILE ORGANICS BY GC/MS-SIM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 10 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| 2-Methylnaphthalene | 91-57-6 | NE | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.03 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.03 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Acenaphthene | 83-32-9 | 20 | 2.4 | | 0.01 | 5.4 | | 0.01 | 6.1 | | 0.01 | 0.8 | | 0.01 | 0.2 | | 0.01 | 0.28 | | 0.01 | 0.3 | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Acenaphthylene | 208-96-8 | NE | 0.38 | | 0.01 | 1.1 | | 0.01 | 1.2 | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Anthracene | 120-12-7 | 50 | ND | | 0.01 | 0.2 | | 0.01 | 0.17 | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(a)anthracene | 56-55-3 | 0.002 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.02 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Benzo(a)pyrene | 50-32-8 | ND | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.06 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Benzo(b)fluoranthene | 205-99-2 | 0.002 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | 0.02 | J | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(ghi)perylene | 191-24-2 | NE | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Benzo(k)fluoranthene | 207-08-9 | 0.002 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Chrysene | 218-01-9 | 0.002 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Dibenzo(a,h)anthracene | 53-70-3 | NE | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Fluoranthene | 206-44-0 | 50 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.04 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 |
| Fluorene | 86-73-7 | 50 | 3.9 | | 0.01 | 8.4 | | 0.01 | 8.9 | | 0.01 | 0.86 | | 0.01 | 0.14 | | 0.01 | 0.29 | | 0.01 | 0.29 | | 0.01 | 0.02 | J | 0.01 | ND | | 0.01 | ND | | 0.01 | 0.05 | J | 0.01 | ND | | 0.01 |
| Hexachlorobenzene | 118-74-1 | 0.04 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Hexachlorobutadiene | 87-68-3 | 0.5 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 |
| Hexachloroethane | 67-72-1 | 5 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 | ND | | 0.06 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.002 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Naphthalene | 91-20-3 | 10 | 1 | | 0.05 | 0.41 | | 0.05 | 0.5 | | 0.05 | 0.14 | | 0.05 | ND | | 0.05 | 0.05 | J | 0.05 | 0.05 | J | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 | ND | | 0.05 |
| Pentachlorophenol | 87-86-5 | 1 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 | ND | | 0.01 |
| Phenanthrene | 85-01-8 | 50 | ND | | 0.02 | 3.8 | | 0.02 | 3.9 | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.04 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.05 | J | 0.02 | ND | | 0.02 |
| Pyrene | 129-00-0 | 50 | ND | | 0.02 | 0.04 | J | 0.02 | 0.04 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.02 | J | 0.02 | 0.02 | J | 0.02 | 0.03 | J | 0.02 | ND | | 0.02 | ND | | 0.02 | 0.02 | J | 0.02 | ND | | 0.02 |
| Total SVOCs by GC/MS-SIM | | NE | 7.68 | - | - | 19.35 | - | - | 20.81 | - | - | 1.83 | - | - | 0.34 | - | - | 0.68 | - | - | 0.66 | - | - | 0.16 | - | - | 0.06 | - | - | - | - | - | 0.12 | - | - |
| Total SVOCs by GC/MS and GC/MS-SIM | | NE | 9.28 | - | - | 24.55 | - | - | 24.11 | - | - | 1.83 | - | - | 0.34 | - | - | 0.68 | - | - | 0.66 | - | - | 0.16 | - | - | 0.06 | - | - | ND | - | - | 0.12 | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

J denotes an estimated concentration

ND denotes Non-Detect results

NE denotes regulatory levels not established

- denotes not applicable

C.T. MALE ASSOCIATES

# HISTORICAL GROUNDWATER ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | | SAMPLE ID: | MW-5 | | | MW-13 | | | MW-16 | | | MW-18 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L1806118-03 | | | L1806118-04 | | | L1806118-05 | | | L1806118-06 | | |
| | | COLLECTION DATE: | 2/21/2018 | | | 2/21/2018 | | | 2/21/2018 | | | 2/21/2018 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | |
| | | NY-AWQS | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| VOLATILE ORGANICS BY GC/MS | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 5 | ND | | 0.17 | - | | - | - | | - | ND | | 0.17 |
| 1,1,2-Trichloroethane | 79-00-5 | 1 | ND | | 0.5 | - | | - | - | | - | ND | | 0.5 |
| 1,1-Dichloroethane | 75-34-3 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,1-Dichloroethene | 75-35-4 | 5 | ND | | 0.17 | - | | - | - | | - | ND | | 0.17 |
| 1,2,3-Trichlorobenzene | 87-61-6 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.04 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,2-Dibromoethane | 106-93-4 | 0.0006 | ND | | 0.65 | - | | - | - | | - | ND | | 0.65 |
| 1,2-Dichlorobenzene | 95-50-1 | 3 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,2-Dichloroethane | 107-06-2 | 0.6 | ND | | 0.13 | - | | - | - | | - | ND | | 0.13 |
| 1,2-Dichloropropane | 78-87-5 | 1 | ND | | 0.14 | - | | - | - | | - | ND | | 0.14 |
| 1,3,5-Trimethylbenzene | 108-67-8 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| 1,3-Dichlorobenzene | 541-73-1 | 3 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,4-Dichlorobenzene | 106-46-7 | 3 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| 1,4-Dioxane | 123-91-1 | 0.35 | ND | | 61 | - | | - | - | | - | ND | | 61 |
| 2-Butanone | 78-93-3 | 50 | ND | | 1.9 | - | | - | - | | - | ND | | 1.9 |
| 2-Hexanone | 591-78-6 | 50 | ND | | 1 | - | | - | - | | - | ND | | 1 |
| 4-Methyl-2-pentanone | 108-10-1 | NE | ND | | 1 | - | | - | - | | - | ND | | 1 |
| Acetone | 67-64-1 | 50 | ND | | 1.5 | - | | - | - | | - | ND | | 1.5 |
| Benzene | 71-43-2 | 1 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 | ND | | 0.16 |
| Bromochloromethane | 74-97-5 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Bromodichloromethane | 75-27-4 | 50 | ND | | 0.19 | - | | - | - | | - | ND | | 0.19 |
| Bromoform | 75-25-2 | 50 | ND | | 0.65 | - | | - | - | | - | ND | | 0.65 |
| Bromomethane | 74-83-9 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Carbon disulfide | 75-15-0 | 60 | ND | | 1 | - | | - | - | | - | ND | | 1 |
| Carbon tetrachloride | 56-23-5 | 5 | ND | | 0.13 | - | | - | - | | - | ND | | 0.13 |
| Chlorobenzene | 108-90-7 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Chloroethane | 75-00-3 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Chloroform | 67-66-3 | 7 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Chloromethane | 74-87-3 | NE | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| cis-1,2-Dichloroethene | 156-59-2 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.4 | ND | | 0.14 | - | | - | - | | - | ND | | 0.14 |
| Cyclohexane | 110-82-7 | NE | ND | | 0.27 | - | | - | - | | - | ND | | 0.27 |
| Dibromochloromethane | 124-48-1 | 50 | ND | | 0.15 | - | | - | - | | - | ND | | 0.15 |
| Dichlorodifluoromethane | 75-71-8 | 5 | ND | | 1 | - | | - | - | | - | ND | | 1 |
| Ethylbenzene | 100-41-4 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Freon-113 | 76-13-1 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Isopropylbenzene | 98-82-8 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Methyl Acetate | 79-20-9 | NE | ND | | 0.23 | - | | - | - | | - | ND | | 0.23 |
| Methyl cyclohexane | 108-87-2 | NE | ND | | 0.4 | - | | - | - | | - | ND | | 0.4 |
| Methyl tert butyl ether | 1634-04-4 | 10 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| Methylene chloride | 75-09-2 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| n-Butylbenzene | 104-51-8 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| n-Propylbenzene | 103-65-1 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| Naphthalene | 91-20-3 | 10 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| o-Xylene | 95-47-6 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| p-Isopropyltoluene | 99-87-6 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| p/m-Xylene | 179601-23-1 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| sec-Butylbenzene | 135-98-8 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| Styrene | 100-42-5 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| tert-Butylbenzene | 98-06-6 | 5 | - | - | - | ND | | 0.7 | ND | | 0.7 | - | - | - |
| Tetrachloroethene | 127-18-4 | 5 | ND | | 0.18 | - | | - | - | | - | ND | | 0.18 |
| Toluene | 108-88-3 | 5 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 | ND | | 0.7 |
| trans-1,2-Dichloroethene | 156-60-5 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.4 | ND | | 0.16 | - | | - | - | | - | ND | | 0.16 |
| Trichloroethene | 79-01-6 | 5 | ND | | 0.18 | - | | - | - | | - | ND | | 0.18 |
| Trichlorofluoromethane | 75-69-4 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Vinyl chloride | 75-01-4 | 2 | ND | | 0.07 | - | | - | - | | - | ND | | 0.07 |
| Total VOCs | | NE | - | - | - | - | - | - | - | - | - | - | - | - |

| | | SAMPLE ID: | MW-5 | | | MW-13 | | | MW-16 | | | MW-18 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | L1806118-03 | | | L1806118-04 | | | L1806118-05 | | | L1806118-06 | | |
| | | COLLECTION DATE: | 2/21/2018 | | | 2/21/2018 | | | 2/21/2018 | | | 2/21/2018 | | |
| | | SAMPLE MATRIX: | WATER | | | WATER | | | WATER | | | WATER | | |
| | | NY-AWQS | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/l) | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL | Conc | Q | MDL |
| **SEMIVOLATILE ORGANICS BY GC/MS** | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 5 | ND | | 0.67 | - | | - | - | | - | ND | | 0.67 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | NE | ND | | 0.93 | - | | - | - | | - | ND | | 0.93 |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | ND | | 0.72 | - | | - | - | | - | ND | | 0.72 |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | ND | | 0.68 | - | | - | - | | - | ND | | 0.68 |
| 2,4-Dichlorophenol | 120-83-2 | 1 | ND | | 0.77 | - | | - | - | | - | ND | | 0.77 |
| 2,4-Dimethylphenol | 105-67-9 | 50 | ND | | 1.6 | - | | - | - | | - | ND | | 1.6 |
| 2,4-Dinitrophenol | 51-28-5 | 10 | ND | | 5.5 | - | | - | - | | - | ND | | 5.5 |
| 2,4-Dinitrotoluene | 121-14-2 | 5 | ND | | 0.84 | - | | - | - | | - | ND | | 0.84 |
| 2,6-Dinitrotoluene | 606-20-2 | 5 | ND | | 1.1 | - | | - | - | | - | ND | | 1.1 |
| 2-Chlorophenol | 95-57-8 | NE | ND | | 0.63 | - | | - | - | | - | ND | | 0.63 |
| 2-Methylphenol | 95-48-7 | NE | - | - | - | - | | - | - | | - | - | | - |
| 2-Nitroaniline | 88-74-4 | 5 | ND | | 1.1 | - | | - | - | | - | ND | | 1.1 |
| 2-Nitrophenol | 88-75-5 | NE | ND | | 1.5 | - | | - | - | | - | ND | | 1.5 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 5 | ND | | 1.4 | - | | - | - | | - | ND | | 1.4 |
| 3-Methylphenol/4-Methylphenol | 108-39-4/106-44-5 | NE | ND | | 1.1 | - | | - | - | | - | ND | | 1.1 |
| 3-Nitroaniline | 99-09-2 | 5 | ND | | 1.2 | - | | - | - | | - | ND | | 1.2 |
| 4,6-Dinitro-o-cresol | 534-52-1 | NE | ND | | 2.1 | - | | - | - | | - | ND | | 2.1 |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | ND | | 0.73 | - | | - | - | | - | ND | | 0.73 |
| 4-Chloroaniline | 106-47-8 | 5 | ND | | 0.63 | - | | - | - | | - | ND | | 0.63 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | ND | | 0.62 | - | | - | - | | - | ND | | 0.62 |
| 4-Nitroaniline | 100-01-6 | 5 | ND | | 1.3 | - | | - | - | | - | ND | | 1.3 |
| 4-Nitrophenol | 100-02-7 | NE | ND | | 1.8 | - | | - | - | | - | ND | | 1.8 |
| Acetophenone | 98-86-2 | NE | ND | | 0.85 | - | | - | - | | - | ND | | 0.85 |
| Atrazine | 1912-24-9 | 7.5 | ND | | 1.8 | - | | - | - | | - | ND | | 1.8 |
| Benzaldehyde | 100-52-7 | NE | ND | | 1.1 | - | | - | - | | - | ND | | 1.1 |
| Biphenyl | 92-52-4 | NE | ND | | 0.76 | - | | - | - | | - | ND | | 0.76 |
| Bis(2-chloroethoxy)methane | 111-91-1 | 5 | ND | | 0.63 | - | | - | - | | - | ND | | 0.63 |
| Bis(2-chloroethyl)ether | 111-44-4 | 1 | ND | | 0.67 | - | | - | - | | - | ND | | 0.67 |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 5 | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 5 | ND | | 0.91 | - | | - | - | | - | ND | | 0.91 |
| Butyl benzyl phthalate | 85-68-7 | 50 | ND | | 1.3 | - | | - | - | | - | ND | | 1.3 |
| Caprolactam | 105-60-2 | NE | ND | | 3.6 | - | | - | - | | - | ND | | 3.6 |
| Carbazole | 86-74-8 | NE | ND | | 0.63 | - | | - | - | | - | ND | | 0.63 |
| Di-n-butylphthalate | 84-74-2 | 50 | ND | | 0.69 | - | | - | - | | - | ND | | 0.69 |
| Di-n-octylphthalate | 117-84-0 | 50 | ND | | 1.1 | - | | - | - | | - | ND | | 1.1 |
| Dibenzofuran | 132-64-9 | NE | ND | | 0.66 | - | | - | - | | - | ND | | 0.66 |
| Diethyl phthalate | 84-66-2 | 50 | ND | | 0.63 | - | | - | - | | - | ND | | 0.63 |
| Dimethyl phthalate | 131-11-3 | 50 | ND | | 0.65 | - | | - | - | | - | ND | | 0.65 |
| Hexachlorocyclopentadiene | 77-47-4 | 5 | ND | | 7.8 | - | | - | - | | - | ND | | 7.8 |
| Isophorone | 78-59-1 | 50 | ND | | 0.6 | - | | - | - | | - | ND | | 0.6 |
| n-Nitrosodi-n-propylamine | 621-64-7 | NE | ND | | 0.7 | - | | - | - | | - | ND | | 0.7 |
| NDPA/DPA | 86-30-6 | 50 | ND | | 0.64 | - | | - | - | | - | ND | | 0.64 |
| Nitrobenzene | 98-95-3 | 0.4 | ND | | 0.75 | - | | - | - | | - | ND | | 0.75 |
| p-Chloro-m-cresol | 59-50-7 | NE | ND | | 0.62 | - | | - | - | | - | ND | | 0.62 |
| Phenol | 108-95-2 | 1 | ND | | 1.9 | - | | - | - | | - | ND | | 1.9 |
| Total SVOCs by GC/MS | | NE | - | - | - | - | - | - | - | - | - | - | - | - |
| **SEMIVOLATILE ORGANICS BY GC/MS-SIM** | | | | | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 10 | ND | | 0.04 | - | | - | - | | - | ND | | 0.04 |
| 2-Methylnaphthalene | 91-57-6 | NE | ND | | 0.05 | - | | - | - | | - | ND | | 0.05 |
| Acenaphthene | 83-32-9 | 20 | ND | | 0.04 | ND | | 0.03 | ND | | 0.03 | ND | | 0.04 |
| Acenaphthylene | 208-96-8 | NE | ND | | 0.04 | ND | | 0.03 | ND | | 0.03 | ND | | 0.04 |
| Anthracene | 120-12-7 | 50 | ND | | 0.04 | ND | | 0.03 | ND | | 0.03 | 0.04 | J | 0.04 |
| Benzo(a)anthracene | 56-55-3 | 0.002 | ND | | 0.02 | ND | | 0.02 | 0.03 | J | 0.02 | ND | | 0.02 |
| Benzo(a)pyrene | 50-32-8 | ND | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Benzo(b)fluoranthene | 205-99-2 | 0.002 | ND | | 0.02 | ND | | 0.02 | 0.04 | J | 0.02 | ND | | 0.02 |
| Benzo(ghi)perylene | 191-24-2 | NE | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Benzo(k)fluoranthene | 207-08-9 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Chrysene | 218-01-9 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Dibenzo(a,h)anthracene | 53-70-3 | NE | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Fluoranthene | 206-44-0 | 50 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Fluorene | 86-73-7 | 50 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Hexachlorobenzene | 118-74-1 | 0.04 | ND | | 0.03 | - | | - | - | | - | ND | | 0.03 |
| Hexachlorobutadiene | 87-68-3 | 0.5 | ND | | 0.04 | - | | - | - | | - | ND | | 0.04 |
| Hexachloroethane | 67-72-1 | 5 | ND | | 0.03 | - | | - | - | | - | ND | | 0.03 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.002 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Naphthalene | 91-20-3 | 10 | ND | | 0.04 | 0.22 | | 0.04 | 0.04 | J | 0.04 | ND | | 0.04 |
| Pentachlorophenol | 87-86-5 | 1 | ND | | 0.22 | - | | - | - | | - | ND | | 0.22 |
| Phenanthrene | 85-01-8 | 50 | ND | | 0.02 | ND | | 0.02 | 0.02 | J | 0.01 | ND | | 0.02 |
| Pyrene | 129-00-0 | 50 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 | ND | | 0.04 |
| Total SVOCs by GC/MS-SIM | | NE | - | - | - | 0.22 | - | - | 0.13 | - | - | 0.04 | - | - |
| Total SVOCs by GC/MS and GC/MS-SIM | | NE | ND | - | - | 0.22 | - | - | 0.13 | - | - | 0.04 | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

J denotes an estimated concentration

ND denotes Non-Detect results

NE denotes regulatory levels not established

- denotes not applicable

C.T. MALE ASSOCIATES

# TABLE 3: ANALYTICAL SUMMARY TABLE
# SOIL VAPOR AND INDOOR AIR SAMPLING
# USAI LIGHTING
# TOWN OF NEW WINDSOR, ORANGE COUNTY
# NYSDEC NO. C336087

DATA NOT VALIDATED

| | | | | | | SAMPLE ID: | IA-3-20230112 | | | VI-3-20230112 | | | | IA-2-20230112 | | | | VI-1-20230112 | | | | VI-2-20230112 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | LAB ID: | L2302299-06 | | | L2302299-01 | | | | L2302299-07 | | | | L2302299-03 | | | | L2302299-02 | | | |
| | | | | | | COLLECTION DATE: | 1/12/2023 | | | 1/12/2023 | | | | 1/12/2023 | | | | 1/12/2023 | | | | 1/12/2023 | | | |
| | | | | | | AREA OF CONCERN: | AREA 2 | | | AREA 2 | | | | AREA 3A | | | | AREA 3A | | | | AREA 3A | | | |
| | | | | | | SAMPLE MATRIX: | AIR | | | SOIL_VAPOR | | | | AIR | | | | SOIL_VAPOR | | | | SOIL_VAPOR | | | |
| | | MATRIX A | | MATRIX B | | | | | | | | | | | | | | | | | | | | | |
| | | NY-IAC-A | NY-SSC-A | NY-IAC-B | NY-SSC-B | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/m3) | (ug/m3) | (ug/m3) | (ug/m3) | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | - | | - | - | 64.4 | | 1.09 | - | - | | - | - | 7.26 | | 1.09 | - | ND | | 1.09 | - |
| 2,2,4-Trimethylpentane | 540-84-1 | | | | | ND | | 0.934 | - | 3.65 | | 0.934 | - | ND | | 0.934 | - | ND | | 0.934 | - | ND | | 0.934 | - |
| 2-Butanone | 78-93-3 | | | | | 4.63 | | 1.47 | - | ND | | 1.47 | - | 5.34 | | 1.47 | - | 1.51 | | 1.47 | - | ND | | 1.47 | - |
| Acetone | 67-64-1 | | | | | 42.8 | | 2.38 | - | 5.91 | | 2.38 | - | 44.2 | | 2.38 | - | 8.65 | | 2.38 | - | 5.51 | | 2.38 | - |
| Benzene | 71-43-2 | | | | | 0.914 | | 0.639 | - | 0.942 | | 0.639 | - | 0.85 | | 0.639 | - | ND | | 0.639 | - | ND | | 0.639 | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | - | | - | - | ND | | 1.26 | - | - | | - | - | 2.86 | | 1.26 | - | ND | | 1.26 | - |
| Chloroform | 67-66-3 | | | | | ND | | 0.977 | - | ND | | 0.977 | - | ND | | 0.977 | - | 4.84 | | 0.977 | - | ND | | 0.977 | - |
| Chloromethane | 74-87-3 | | | | | 1.21 | | 0.413 | - | 0.438 | | 0.413 | - | 1.18 | | 0.413 | - | ND | | 0.413 | - | ND | | 0.413 | - |
| Dichlorodifluoromethane | 75-71-8 | | | | | 2.5 | | 0.989 | - | 2.71 | | 0.989 | - | 2.48 | | 0.989 | - | 2.46 | | 0.989 | - | 2.43 | | 0.989 | - |
| Ethanol | 64-17-5 | | | | | 652 | | 9.42 | - | 194 | | 9.42 | - | 307 | | 9.42 | - | 45.6 | | 9.42 | - | 11.8 | | 9.42 | - |
| Ethyl Acetate | 141-78-6 | | | | | 6.56 | | 1.8 | - | ND | | 1.8 | - | 5.98 | | 1.8 | - | ND | | 1.8 | - | ND | | 1.8 | - |
| Ethylbenzene | 100-41-4 | | | | | 2.86 | | 0.869 | - | 0.877 | | 0.869 | - | 1.59 | | 0.869 | - | ND | | 0.869 | - | ND | | 0.869 | - |
| Freon-113 | 76-13-1 | | | | | ND | | 1.53 | - | 3.11 | | 1.53 | - | ND | | 1.53 | - | ND | | 1.53 | - | ND | | 1.53 | - |
| Heptane | 142-82-5 | | | | | 1.67 | | 0.82 | - | 1.5 | | 0.82 | - | 1.76 | | 0.82 | - | ND | | 0.82 | - | ND | | 0.82 | - |
| Isopropanol | 67-63-0 | | | | | 60.7 | | 1.23 | - | 11.5 | | 1.23 | - | 225 | | 1.23 | - | 31.5 | | 1.23 | - | 2.39 | | 1.23 | - |
| n-Hexane | 110-54-3 | | | | | 1.39 | | 0.705 | - | 3.06 | | 0.705 | - | 1.28 | | 0.705 | - | ND | | 0.705 | - | ND | | 0.705 | - |
| o-Xylene | 95-47-6 | | | | | 3.9 | | 0.869 | - | 1.17 | | 0.869 | - | 2.15 | | 0.869 | - | ND | | 0.869 | - | 2.5 | | 0.869 | - |
| p/m-Xylene | 179601-23-1 | | | | | 8.6 | | 1.74 | - | 2.8 | | 1.74 | - | 4.82 | | 1.74 | - | ND | | 1.74 | - | 3.94 | | 1.74 | - |
| Styrene | 100-42-5 | | | | | 4.43 | | 0.852 | - | 1.15 | | 0.852 | - | 2.5 | | 0.852 | - | ND | | 0.852 | - | ND | | 0.852 | - |
| Tertiary butyl Alcohol | 75-65-0 | | | | | ND | | 1.52 | - | ND | | 1.52 | - | ND | | 1.52 | - | ND | | 1.52 | - | ND | | 1.52 | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | - | | - | - | 270 | | 1.36 | - | - | | - | - | 1.5 | | 1.36 | - | ND | | 1.36 | - |
| Tetrahydrofuran | 109-99-9 | | | | | ND | | 1.47 | - | ND | | 1.47 | - | ND | | 1.47 | - | ND | | 1.47 | - | 1.52 | | 1.47 | - |
| Toluene | 108-88-3 | | | | | 7.91 | | 0.754 | - | 2.65 | | 0.754 | - | 6.97 | | 0.754 | - | 14.3 | | 0.754 | - | ND | | 0.754 | - |
| Trichloroethene | 79-01-6 | 0.2 | 6 | | | - | | - | - | ND | | 1.07 | - | - | | - | - | 10.1 | | 1.07 | - | ND | | 1.07 | - |
| Trichlorofluoromethane | 75-69-4 | | | | | 1.84 | | 1.12 | - | 2.69 | | 1.12 | - | 1.56 | | 1.12 | - | 1.34 | | 1.12 | - | 1.23 | | 1.12 | - |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | 0.125 | | 0.109 | - | - | - | - | - | 0.306 | | 0.109 | - | - | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | 0.554 | | 0.126 | - | - | - | - | - | 0.56 | | 0.126 | - | - | - | - | - | - | - | - | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | 0.136 | | 0.136 | - | - | - | - | - | ND | | 0.136 | - | - | - | - | - | - | - | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

# TABLE 3: ANALYTICAL SUMMARY TABLE
## SOIL VAPOR AND INDOOR AIR SAMPLING
## USAI LIGHTING
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC NO. C336087



| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | SAMPLE ID: | IA-1-20230112 | | | | IA-1-20230112 | | | | VI-4-20230112 | | | | IA-4-20230112 | | | | IA-4-20230112 | | | |
| | | | | | LAB ID: | L2302299-08 | | | | L2302299-08 R1 | | | | L2302299-04 | | | | L2302299-09 | | | | L2302299-09 R1 | | | |
| | | | | | COLLECTION DATE: | 1/12/2023 | | | | 1/12/2023 | | | | 1/12/2023 | | | | 1/12/2023 | | | | 1/12/2023 | | | |
| | | | | | AREA OF CONCERN: | AREA 4 | | | | AREA 4 | | | | AREA 4 | | | | AREA 8 | | | | AREA 8 | | | |
| | | | | | SAMPLE MATRIX: | AIR | | | | AIR | | | | SOIL_VAPOR | | | | AIR | | | | AIR | | | |
| | | MATRIX A | | MATRIX B | | | | | | | | | | | | | | | | | | | | | |
| | | NY-IAC-A | NY-SSC-A | NY-IAC-B | NY-SSC-B | | | | | | | | | | | | | | | | | | | | |
| ANALYTE | CAS | (ug/m3) | (ug/m3) | (ug/m3) | (ug/m3) | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL | Conc | Q | RL | MDL |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | - | | - | - | - | | - | - | ND | | 1.09 | - | - | | - | - | - | | - | - |
| 2,2,4-Trimethylpentane | 540-84-1 | | | | | ND | | 0.934 | - | - | | - | - | ND | | 0.934 | - | 1.13 | | 0.934 | - | - | | - | - |
| 2-Butanone | 78-93-3 | | | | | 3.01 | | 1.47 | - | - | | - | - | 4.93 | | 1.47 | - | 2.62 | | 1.47 | - | - | | - | - |
| Acetone | 67-64-1 | | | | | 47 | | 2.38 | - | - | | - | - | 61.3 | | 2.38 | - | 38.5 | | 2.38 | - | - | | - | - |
| Benzene | 71-43-2 | | | | | 1.02 | | 0.639 | - | - | | - | - | ND | | 0.639 | - | 1.09 | | 0.639 | - | - | | - | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | - | | - | - | - | | - | - | ND | | 1.26 | - | - | | - | - | - | | - | - |
| Chloroform | 67-66-3 | | | | | ND | | 0.977 | - | - | | - | - | ND | | 0.977 | - | ND | | 0.977 | - | - | | - | - |
| Chloromethane | 74-87-3 | | | | | 1.22 | | 0.413 | - | - | | - | - | ND | | 0.413 | - | 1.2 | | 0.413 | - | - | | - | - |
| Dichlorodifluoromethane | 75-71-8 | | | | | 2.46 | | 0.989 | - | - | | - | - | 2.43 | | 0.989 | - | 2.4 | | 0.989 | - | - | | - | - |
| Ethanol | 64-17-5 | | | | | 1940 | E | 9.42 | - | 2200 | | 47.1 | - | 104 | | 9.42 | - | 974 | E | 9.42 | - | 1020 | | 18.8 | - |
| Ethyl Acetate | 141-78-6 | | | | | 3.64 | | 1.8 | - | - | | - | - | ND | | 1.8 | - | 2.89 | | 1.8 | - | - | | - | - |
| Ethylbenzene | 100-41-4 | | | | | ND | | 0.869 | - | - | | - | - | ND | | 0.869 | - | ND | | 0.869 | - | - | | - | - |
| Freon-113 | 76-13-1 | | | | | ND | | 1.53 | - | - | | - | - | ND | | 1.53 | - | ND | | 1.53 | - | - | | - | - |
| Heptane | 142-82-5 | | | | | 1.2 | | 0.82 | - | - | | - | - | ND | | 0.82 | - | 2.75 | | 0.82 | - | - | | - | - |
| Isopropanol | 67-63-0 | | | | | 17 | | 1.23 | - | - | | - | - | 10.1 | | 1.23 | - | 12.7 | | 1.23 | - | - | | - | - |
| n-Hexane | 110-54-3 | | | | | 1.64 | | 0.705 | - | - | | - | - | 0.708 | | 0.705 | - | 1.98 | | 0.705 | - | - | | - | - |
| o-Xylene | 95-47-6 | | | | | ND | | 0.869 | - | - | | - | - | ND | | 0.869 | - | ND | | 0.869 | - | - | | - | - |
| p/m-Xylene | 179601-23-1 | | | | | ND | | 1.74 | - | - | | - | - | ND | | 1.74 | - | ND | | 1.74 | - | - | | - | - |
| Styrene | 100-42-5 | | | | | ND | | 0.852 | - | - | | - | - | ND | | 0.852 | - | ND | | 0.852 | - | - | | - | - |
| Tertiary butyl Alcohol | 75-65-0 | | | | | 3.82 | | 1.52 | - | - | | - | - | 5.27 | | 1.52 | - | 1.94 | | 1.52 | - | - | | - | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | - | | - | - | - | | - | - | ND | | 1.36 | - | - | | - | - | - | | - | - |
| Tetrahydrofuran | 109-99-9 | | | | | ND | | 1.47 | - | - | | - | - | 5.63 | | 1.47 | - | ND | | 1.47 | - | - | | - | - |
| Toluene | 108-88-3 | | | | | 6.86 | | 0.754 | - | - | | - | - | 48.6 | | 0.754 | - | 5.99 | | 0.754 | - | - | | - | - |
| Trichloroethene | 79-01-6 | 0.2 | 6 | | | - | | - | - | - | | - | - | ND | | 1.07 | - | - | | - | - | - | | - | - |
| Trichlorofluoromethane | 75-69-4 | | | | | 2.43 | | 1.12 | - | - | | - | - | 1.63 | | 1.12 | - | 2.25 | | 1.12 | - | - | | - | - |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | ND | | 0.109 | - | - | | - | - | - | - | - | - | ND | | 0.109 | - | - | | - | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | 0.522 | | 0.126 | - | - | | - | - | - | - | - | - | 0.566 | | 0.126 | - | - | | - | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | ND | | 0.136 | - | - | | - | - | - | - | - | - | ND | | 0.136 | - | - | | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intr
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intr
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vap
NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vap

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

# TABLE 3: ANALYTICAL SUMMARY TABLE
# SOIL VAPOR AND INDOOR AIR SAMPLING
# USAI LIGHTING
# TOWN OF NEW WINDSOR, ORANGE COUNTY
# NYSDEC NO. C336087



| | | SAMPLE ID: | | | | VI-5-20230112 | | | | OA-1-20230112 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LAB ID: | | | | L2302299-05 | | | | L2302299-10 | | | |
| | | COLLECTION DATE: | | | | 1/12/2023 | | | | 1/12/2023 | | | |
| | | AREA OF CONCERN: | | | | AREA 8 | | | | OUTSIDE | | | |
| | | SAMPLE MATRIX: | | | | SOIL_VAPOR | | | | AIR | | | |
| | | MATRIX A | | MATRIX B | | | | | | | | | |
| | | NY-IAC-A | NY-SSC-A | NY-IAC-B | NY-SSC-B | | | | | | | | |
| ANALYTE | CAS | (ug/m3) | (ug/m3) | (ug/m3) | (ug/m3) | Conc | Q | RL | MDL | Conc | Q | RL | MDL |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | ND | | 1.09 | - | - | | - | - |
| 2,2,4-Trimethylpentane | 540-84-1 | | | | | ND | | 0.934 | - | ND | | 0.934 | - |
| 2-Butanone | 78-93-3 | | | | | ND | | 1.47 | - | ND | | 1.47 | - |
| Acetone | 67-64-1 | | | | | ND | | 2.38 | - | 2.97 | | 2.38 | - |
| Benzene | 71-43-2 | | | | | ND | | 0.639 | - | 1.26 | | 0.639 | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | ND | | 1.26 | - | - | | - | - |
| Chloroform | 67-66-3 | | | | | 2.11 | | 0.977 | - | ND | | 0.977 | - |
| Chloromethane | 74-87-3 | | | | | ND | | 0.413 | - | 0.966 | | 0.413 | - |
| Dichlorodifluoromethane | 75-71-8 | | | | | 2.42 | | 0.989 | - | 2.41 | | 0.989 | - |
| Ethanol | 64-17-5 | | | | | ND | | 9.42 | - | ND | | 9.42 | - |
| Ethyl Acetate | 141-78-6 | | | | | ND | | 1.8 | - | ND | | 1.8 | - |
| Ethylbenzene | 100-41-4 | | | | | ND | | 0.869 | - | ND | | 0.869 | - |
| Freon-113 | 76-13-1 | | | | | ND | | 1.53 | - | ND | | 1.53 | - |
| Heptane | 142-82-5 | | | | | ND | | 0.82 | - | ND | | 0.82 | - |
| Isopropanol | 67-63-0 | | | | | ND | | 1.23 | - | ND | | 1.23 | - |
| n-Hexane | 110-54-3 | | | | | ND | | 0.705 | - | 2.07 | | 0.705 | - |
| o-Xylene | 95-47-6 | | | | | ND | | 0.869 | - | ND | | 0.869 | - |
| p/m-Xylene | 179601-23-1 | | | | | ND | | 1.74 | - | ND | | 1.74 | - |
| Styrene | 100-42-5 | | | | | ND | | 0.852 | - | ND | | 0.852 | - |
| Tertiary butyl Alcohol | 75-65-0 | | | | | ND | | 1.52 | - | ND | | 1.52 | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | ND | | 1.36 | - | - | | - | - |
| Tetrahydrofuran | 109-99-9 | | | | | ND | | 1.47 | - | ND | | 1.47 | - |
| Toluene | 108-88-3 | | | | | ND | | 0.754 | - | 1.74 | | 0.754 | - |
| Trichloroethene | 79-01-6 | 0.2 | 6 | | | ND | | 1.07 | - | - | | - | - |
| Trichlorofluoromethane | 75-69-4 | | | | | 1.21 | | 1.12 | - | ND | | 1.12 | - |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | | | 3 | 100 | - | - | - | - | ND | | 0.109 | - |
| Carbon tetrachloride | 56-23-5 | 0.2 | 6 | | | - | - | - | - | 0.522 | | 0.126 | - |
| Tetrachloroethene | 127-18-4 | | | 3 | 100 | - | - | - | - | ND | | 0.136 | - |

* Comparison is not performed on parameters with non-numeric criteria.

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intr
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intr
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vap
NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vap

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

C.T. MALE ASSOCIATES

# TABLE 4: SOIL VAPOR ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087

DATA NOT VALIDATED

| | SAMPLE ID: | VI-1_170329 | | VI-1_171214 | | VI-1_190308 | | VI-1-220309 | | VI-1-20230112 | | IA-1_170329 | | IA-1_171214 | | IA-1-220309 | | IA-1-20230112 | | VI-2_170329 | | VI-2_171214 | | VI-2_190308 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAB ID: | L1709672-01 | | L1746327-01 | | L1909300-01 | | CK84903 | | L2302299-03 | | L1709672-05 | | L1746327-07 | | CK84899 | | L2302299-08 | | L1709672-02 | | L1746327-02 | | L1909300-02 | |
| | COLLECTION DATE: | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | |
| | SAMPLE MATRIX: | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | AIR | | AIR | | AIR | | AIR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | |
| **ANALYTE** | **CAS** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 9.22 | 1.09 | 22.8 | 1.92 | 21.3 | 1.09 | 4.03 | 1.00 | 7.26 | 1.09 | - | - | - | - | < 1.00 | 1.00 | - | - | <2.18 | 2.18 | 1.94 | 1.09 | 1.24 | 1.09 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | <1.37 | 1.37 | <2.42 | 2.42 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 | <2.75 | 2.75 | <1.37 | 1.37 | <1.37 | 1.37 |
| 1,1,2-Trichloroethane | 79-00-5 | <1.09 | 1.09 | <1.92 | 1.92 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 | <2.18 | 2.18 | <1.09 | 1.09 | <1.09 | 1.09 |
| 1,1-Dichloroethane | 75-34-3 | <0.809 | 0.809 | <1.42 | 1.42 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <1.62 | 1.62 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,1-Dichloroethene | 75-35-4 | <0.793 | 0.793 | <1.4 | 1.4 | <0.793 | 0.793 | < 0.20 | 0.20 | <0.793 | 0.793 | - | - | - | - | < 0.20 | 0.20 | - | - | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <1.48 | 1.48 | <2.61 | 2.61 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 | <2.97 | 2.97 | <1.48 | 1.48 | <1.48 | 1.48 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 3.53 | 0.983 | <1.73 | 1.73 | 1.39 | 0.983 | 2.49 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,2-Dibromoethane | 106-93-4 | <1.54 | 1.54 | <2.71 | 2.71 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 | <3.07 | 3.07 | <1.54 | 1.54 | <1.54 | 1.54 |
| 1,2-Dichlorobenzene | 95-50-1 | <1.2 | 1.2 | <2.12 | 2.12 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,2-Dichloroethane | 107-06-2 | 1.01 | 0.809 | <1.42 | 1.42 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <1.62 | 1.62 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,2-Dichloropropane | 78-87-5 | 4.03 | 0.924 | <1.63 | 1.63 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 | <1.85 | 1.85 | <0.924 | 0.924 | <0.924 | 0.924 |
| 1,3,5-Trimethylbenzene | 108-67-8 | <0.983 | 0.983 | <1.73 | 1.73 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,3-Butadiene | 106-99-0 | <0.442 | 0.442 | <0.779 | 0.779 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.885 | 0.885 | <0.442 | 0.442 | <0.442 | 0.442 |
| 1,3-Dichlorobenzene | 541-73-1 | <1.2 | 1.2 | <2.12 | 2.12 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dichlorobenzene | 106-46-7 | <1.2 | 1.2 | <2.12 | 2.12 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dioxane | 123-91-1 | 1.28 | 0.721 | <1.27 | 1.27 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <1.44 | 1.44 | <0.721 | 0.721 | <0.721 | 0.721 |
| 2-Hexanone | 591-78-6 | <0.82 | 0.82 | <1.44 | 1.44 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <1.64 | 1.64 | <0.82 | 0.82 | <0.82 | 0.82 |
| 4-Ethyltoluene | 622-96-8 | <0.983 | 0.983 | <1.73 | 1.73 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | <0.983 | 0.983 |
| 4-Methyl-2-pentanone | 108-10-1 | <2.05 | 2.05 | <3.61 | 3.61 | <2.05 | 2.05 | < 1.00 | 1.00 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | < 1.00 | 1.00 | <2.05 | 2.05 | <4.1 | 4.1 | <2.05 | 2.05 | <2.05 | 2.05 |
| Acetone | 67-64-1 | <2.38 | 2.38 | 7.65 | 4.18 | 8.27 | 2.38 | 18.4 | 1.00 | 8.65 | 2.38 | 57.5 | 2.38 | 31.8 | 2.38 | 62.4 | 1.00 | 47 | 2.38 | 11.1 | 4.75 | 4.39 | 2.38 | 4.56 | 2.38 |
| Benzene | 71-43-2 | 2.8 | 0.639 | <1.12 | 1.12 | <0.639 | 0.639 | < 1.00 | 1.00 | <0.639 | 0.639 | 0.703 | 0.639 | <0.639 | 0.639 | < 1.00 | 1.00 | 1.02 | 0.639 | <1.28 | 1.28 | <0.639 | 0.639 | <0.639 | 0.639 |
| Benzyl chloride | 100-44-7 | <1.04 | 1.04 | <1.82 | 1.82 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 | <2.07 | 2.07 | <1.04 | 1.04 | <1.04 | 1.04 |
| Bromodichloromethane | 75-27-4 | <1.34 | 1.34 | <2.36 | 2.36 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 | <2.68 | 2.68 | <1.34 | 1.34 | <1.34 | 1.34 |
| Bromoform | 75-25-2 | <2.07 | 2.07 | <3.64 | 3.64 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 | <4.14 | 4.14 | <2.07 | 2.07 | <2.07 | 2.07 |
| Bromomethane | 74-83-9 | <0.777 | 0.777 | <1.37 | 1.37 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 | <1.55 | 1.55 | <0.777 | 0.777 | <0.777 | 0.777 |
| Carbon disulfide | 75-15-0 | 10.6 | 0.623 | 1.49 | 1.1 | 1.24 | 0.623 | < 1.00 | 1.00 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | < 1.00 | 1.00 | <0.623 | 0.623 | <1.25 | 1.25 | 1.31 | 0.623 | <0.623 | 0.623 |
| Carbon tetrachloride | 56-23-5 | 4.25 | 1.26 | 7.8 | 2.21 | 5.32 | 1.26 | 1.2 | 0.20 | 2.86 | 1.26 | - | - | - | - | 0.47 | 0.20 | - | - | <2.52 | 2.52 | <1.26 | 1.26 | <1.26 | 1.26 |
| Chlorobenzene | 108-90-7 | 1.62 | 0.921 | <1.62 | 1.62 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 | <1.84 | 1.84 | <0.921 | 0.921 | <0.921 | 0.921 |
| Chloroethane | 75-00-3 | 7.05 | 0.528 | <0.929 | 0.929 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 | <1.06 | 1.06 | <0.528 | 0.528 | <0.528 | 0.528 |
| Chloroform | 67-66-3 | 20 | 0.977 | 21.6 | 1.72 | 8.79 | 0.977 | 2.19 | 1.00 | 4.84 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | < 1.00 | 1.00 | <0.977 | 0.977 | <1.95 | 1.95 | <0.977 | 0.977 | <0.977 | 0.977 |
| Chloromethane | 74-87-3 | 1.76 | 0.413 | <0.727 | 0.727 | <0.413 | 0.413 | < 1.00 | 1.00 | <0.413 | 0.413 | 1.62 | 0.413 | 1.15 | 0.413 | 1.47 | 1.00 | 1.22 | 0.413 | <0.826 | 0.826 | <0.413 | 0.413 | 6.67 | 0.413 |
| cis-1,2-Dichloroethene | 156-59-2 | <0.793 | 0.793 | <1.4 | 1.4 | 8.09 | 0.793 | < 0.20 | 0.20 | <0.793 | 0.793 | - | - | - | - | < 0.20 | 0.20 | - | - | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 |
| cis-1,3-Dichloropropene | 10061-01-5 | <0.908 | 0.908 | <1.6 | 1.6 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <1.82 | 1.82 | <0.908 | 0.908 | <0.908 | 0.908 |
| Cyclohexane | 110-82-7 | <0.688 | 0.688 | <1.21 | 1.21 | 5.27 | 0.688 | < 1.00 | 1.00 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | 1 | 1.00 | <0.688 | 0.688 | <1.38 | 1.38 | <0.688 | 0.688 | 4.96 | 0.688 |
| Dibromochloromethane | 124-48-1 | <1.7 | 1.7 | <3 | 3 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 | <3.41 | 3.41 | <1.7 | 1.7 | <1.7 | 1.7 |
| Dichlorodifluoromethane | 75-71-8 | 2.26 | 0.989 | <1.74 | 1.74 | - | - | 2.52 | 1.00 | 2.46 | 0.989 | 1.39 | 0.989 | 1.72 | 0.989 | 2.23 | 1.00 | 2.46 | 0.989 | <1.98 | 1.98 | 1.57 | 0.989 | - | - |
| Ethanol | 64-17-5 | <9.42 | 9.42 | 22.2 | 16.6 | 33.2 | 9.42 | 57.6 | 1.00 | 45.6 | 9.42 | 326 | 9.42 | 163 | 9.42 | 1,140 | 1.00 | 1940 | 9.42 | <18.8 | 18.8 | 9.95 | 9.42 | 27.3 | 9.42 |
| Ethyl Acetate | 141-78-6 | <1.8 | 1.8 | <3.17 | 3.17 | <1.8 | 1.8 | < 1.00 | 1.00 | <1.8 | 1.8 | 11.6 | 1.8 | 2.41 | 1.8 | 1.51 | 1.00 | 3.64 | 1.8 | <3.6 | 3.6 | <1.8 | 1.8 | <1.8 | 1.8 |
| Ethylbenzene | 100-41-4 | 12.3 | 0.869 | <1.53 | 1.53 | 2.65 | 0.869 | 2.7 | 1.00 | <0.869 | 0.869 | 1.33 | 0.869 | 1.25 | 0.869 | < 1.00 | 1.00 | <0.869 | 0.869 | <1.74 | 1.74 | <0.869 | 0.869 | <0.869 | 0.869 |
| Heptane | 142-82-5 | <0.82 | 0.82 | <1.44 | 1.44 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | 2.3 | 0.82 | <0.82 | 0.82 | 2.26 | 1.00 | 1.2 | 0.82 | <1.64 | 1.64 | <0.82 | 0.82 | <0.82 | 0.82 |
| Hexachlorobutadiene | 87-68-3 | <2.13 | 2.13 | <3.75 | 3.75 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 | <4.27 | 4.27 | <2.13 | 2.13 | <2.13 | 2.13 |
| Isopropanol | 67-63-0 | <1.23 | 1.23 | 7.94 | 2.17 | 7.52 | 1.23 | 3.98 | 1.00 | 31.5 | 1.23 | 54.3 | 1.23 | 58 | 1.23 | 43.5 | 1.00 | 17 | 1.23 | <2.46 | 2.46 | 4.72 | 1.23 | 4.18 | 1.23 |
| Methyl tert butyl ether | 1634-04-4 | <0.721 | 0.721 | <1.27 | 1.27 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <1.44 | 1.44 | <0.721 | 0.721 | <0.721 | 0.721 |
| Methylene chloride | 75-09-2 | 2.36 | 1.74 | <3.06 | 3.06 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 | <3.47 | 3.47 | <1.74 | 1.74 | <1.74 | 1.74 |
| n-Hexane | 110-54-3 | 1.55 | 0.705 | <1.24 | 1.24 | 1.43 | 0.705 | < 1.00 | 1.00 | <0.705 | 0.705 | 1.23 | 0.705 | <0.705 | 0.705 | 1.48 | 1.00 | 1.64 | 0.705 | 2.95 | 1.41 | <0.705 | 0.705 | <0.705 | 0.705 |
| o-Xylene | 95-47-6 | 3.7 | 0.869 | <1.53 | 1.53 | 4.22 | 0.869 | 4.51 | 1.00 | <0.869 | 0.869 | 2.22 | 0.869 | 1.71 | 0.869 | 1.17 | 1.00 | <0.869 | 0.869 | <1.74 | 1.74 | <0.869 | 0.869 | <0.869 | 0.869 |
| p/m-Xylene | 179601-23-1 | 3.97 | 1.74 | <3.06 | 3.06 | 12.1 | 1.74 | 10.6 | 1.00 | <1.74 | 1.74 | 5 | 1.74 | 4.08 | 1.74 | 2.72 | 1.00 | <1.74 | 1.74 | <3.47 | 3.47 | <1.74 | 1.74 | <1.74 | 1.74 |
| Styrene | 100-42-5 | 42.6 | 0.852 | <1.5 | 1.5 | <0.852 | 0.852 | 1.12 | 1.00 | <0.852 | 0.852 | <0.852 | 0.852 | 1.78 | 0.852 | 1.24 | 1.00 | <0.852 | 0.852 | <1.7 | 1.7 | <0.852 | 0.852 | <0.852 | 0.852 |
| Tetrachloroethene | 127-18-4 | 1.91 | 1.36 | <2.39 | 2.39 | 4.37 | 1.36 | 2.23 | 0.25 | 1.5 | 1.36 | - | - | - | - | < 0.25 | 0.25 | - | - | 4.38 | 2.71 | <1.36 | 1.36 | <1.36 | 1.36 |
| Tetrahydrofuran | 109-99-9 | 1.85 | 1.47 | <2.6 | 2.6 | 4.39 | 1.47 | < 1.00 | 1.00 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | 5.95 | 1.00 | <1.47 | 1.47 | <2.95 | 2.95 | <1.47 | 1.47 | <1.47 | 1.47 |
| Toluene | 108-88-3 | 7.54 | 0.754 | <1.33 | 1.33 | 1.97 | 0.754 | 2.64 | 1.00 | 14.3 | 0.754 | 7.76 | 0.754 | 3 | 0.754 | 19.1 | 1.00 | 6.86 | 0.754 | <1.51 | 1.51 | <0.754 | 0.754 | 1.09 | 0.754 |
| trans-1,2-Dichloroethene | 156-60-5 | <0.793 | 0.793 | <1.4 | 1.4 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 |
| trans-1,3-Dichloropropene | 10061-02-6 | <0.908 | 0.908 | <1.6 | 1.6 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <1.82 | 1.82 | <0.908 | 0.908 | <0.908 | 0.908 |
| Trichloroethene | 79-01-6 | 4.21 | 1.07 | 2.09 | 1.89 | 19.2 | 1.07 | 11.2 | 0.20 | 10.1 | 1.07 | - | - | - | - | < 0.20 | 0.20 | - | - | <2.15 | 2.15 | <1.07 | 1.07 | <1.07 | 1.07 |
| Trichlorofluoromethane | 75-69-4 | 1.4 | 1.12 | <1.98 | 1.98 | <1.12 | 1.12 | 1.59 | 1.00 | 1.34 | 1.12 | 2.78 | 1.12 | 2.29 | 1.12 | 2.53 | 1.00 | 2.43 | 1.12 | <2.25 | 2.25 | 1.55 | 1.12 | 1.21 | 1.12 |
| Vinyl chloride | 75-01-4 | <0.511 | 0.511 | <0.9 | 0.9 | <0.511 | 0.511 | < 0.20 | 0.20 | <0.511 | 0.511 | - | - | - | - | < 0.20 | 0.20 | - | - | <1.02 | 1.02 | <0.511 | 0.511 | <0.511 | 0.511 |
| Xylenes, Total | 1330-20-7 | - | - | - | - | 16.3 | 0.869 | | | - | - | - | - | - | - | | | - | - | - | - | - | - | <0.869 | 0.869 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | - | - | - | - | - | - | 4.03 | 1 | - | - | 0.12 | 0.109 | 0.262 | 0.109 | < 1.00 | 1 | <0.109 | 0.109 | - | - | - | - | - | - |
| 1,1-Dichloroethene | 75-35-4 | - | - | - | - | - | - | < 0.2 | 0.2 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | <0.2 | 0.2 | <0.079 | 0.079 | - | - | - | - | - | - |
| 1,2-Dichloroethene (total) | 540-59-0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | - | - | - | - | - | - | 1.2 | 0.2 | - | - | 0.528 | 0.126 | 0.541 | 0.126 | 0.47 | 0.2 | 0.522 | 0.126 | - | - | - | - | - | - |
| cis-1,2-Dichloroethene | 156-59-2 | - | - | - | - | - | - | < 0.2 | 0.2 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | - | - | - | - | - | - |
| Dichlorodifluoromethane | 75-71-8 | - | - | - | - | 1.67 | 0.989 | 2.52 | 1 | - | - | - | - | - | - | 2.23 | 1 | - | - | - | - | - | - | 1.67 | 0.989 |
| Tetrachloroethene | 127-18-4 | - | - | - | - | - | - | 2.23 | 0.25 | - | - | 0.142 | 0.136 | 0.244 | 0.136 | < 0.25 | 0.25 | <0.136 | 0.136 | - | - | - | - | - | - |
| Trichloroethene | 79-01-6 | - | - | - | - | - | - | 11.2 | 0.2 | - | - | 0.14 | 0.107 | <0.107 | 0.107 | < 0.2 | 0.2 | <0.107 | 0.107 | - | - | - | - | - | - |
| Vinyl chloride | 75-01-4 | - | - | - | - | - | - | < 0.2 | 0.2 | - | - | <0.051 | 0.051 | <0.051 | 0.051 | < 0.2 | 0.2 | <0.051 | 0.051 | - | - | - | - | - | - |

* Comparison is not performed on parameters with non-numeric criteria.

C.T. MALE ASSOCIATES

**TABLE 4: SOIL VAPOR ANALYTICAL DATA - POST REMEDIATION**
**USAI LIGHTING FACILITY**
**TOWN OF NEW WINDSOR, ORANGE COUNTY**
**NYSDEC ID: C336087**

DATA NOT VALIDATED

| | SAMPLE ID: | VI-2-220309 | | VI-2-20230112 | | IA-2_170329 | | IA-2_171214 | | IA-2_190308 | | IA-2-220309 | | IA-2-20230112 | | VI-3_170329 | | VI-3_171214 | | VI-3_190308 | | VI-3_190604 | | VI-3-220309 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAB ID: | CK84901 | | L2302299-02 | | L1709672-06 | | L1746327-08 | | L1909300-05 | | CK84898 | | L2302299-07 | | L1709672-03 | | L1746327-03 | | L1909300-03 | | L1923688-01 | | CK84902 | |
| | COLLECTION DATE: | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | | 6/4/2019 | | 3/9/2022 | |
| | SAMPLE MATRIX: | SOIL VAPOR | | SOIL VAPOR | | AIR | | AIR | | AIR | | AIR | | AIR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | |
| **ANALYTE** | **CAS** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | < 1.00 | 1.00 | <1.09 | 1.09 | - | - | - | - | - | - | < 1.00 | 1.00 | - | - | 328 | 2.18 | 314 | 1.09 | 127 | 1.09 | 164 | 1.36 | 32.4 | 1.00 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | < 1.00 | 1.00 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 | <2.75 | 2.75 | <1.37 | 1.37 | <1.37 | 1.37 | <1.72 | 1.72 | < 1.00 | 1.00 |
| 1,1,2-Trichloroethane | 79-00-5 | < 1.00 | 1.00 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 | <2.18 | 2.18 | <1.09 | 1.09 | <1.09 | 1.09 | <1.36 | 1.36 | < 1.00 | 1.00 |
| 1,1-Dichloroethane | 75-34-3 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | 4.05 | 1.62 | 4.65 | 0.809 | <0.809 | 0.809 | 2.26 | 1.01 | < 1.00 | 1.00 |
| 1,1-Dichloroethene | 75-35-4 | < 0.20 | 0.20 | <0.793 | 0.793 | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 | <0.991 | 0.991 | < 0.20 | 0.20 |
| 1,2,4-Trichlorobenzene | 120-82-1 | < 1.00 | 1.00 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 | <2.97 | 2.97 | <1.48 | 1.48 | <1.48 | 1.48 | <1.86 | 1.86 | < 1.00 | 1.00 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 1.31 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | 2.11 | 0.983 | <1.23 | 1.23 | 1.2 | 1.00 |
| 1,2-Dibromoethane | 106-93-4 | < 1.00 | 1.00 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 | <3.07 | 3.07 | <1.54 | 1.54 | <1.54 | 1.54 | <1.92 | 1.92 | < 1.00 | 1.00 |
| 1,2-Dichlorobenzene | 95-50-1 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | 2.18 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | 2.96 | 1.2 | <1.5 | 1.5 | < 1.00 | 1.00 |
| 1,2-Dichloroethane | 107-06-2 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <1.62 | 1.62 | <0.809 | 0.809 | <0.809 | 0.809 | <1.01 | 1.01 | < 1.00 | 1.00 |
| 1,2-Dichloropropane | 78-87-5 | < 1.00 | 1.00 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 | <1.85 | 1.85 | <0.924 | 0.924 | <0.924 | 0.924 | <1.16 | 1.16 | < 1.00 | 1.00 |
| 1,3,5-Trimethylbenzene | 108-67-8 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | <0.983 | 0.983 | <1.23 | 1.23 | < 1.00 | 1.00 |
| 1,3-Butadiene | 106-99-0 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.885 | 0.885 | <0.442 | 0.442 | <0.442 | 0.442 | <0.553 | 0.553 | < 1.00 | 1.00 |
| 1,3-Dichlorobenzene | 541-73-1 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | <1.2 | 1.2 | <1.5 | 1.5 | < 1.00 | 1.00 |
| 1,4-Dichlorobenzene | 106-46-7 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <2.4 | 2.4 | <1.2 | 1.2 | <1.2 | 1.2 | <1.5 | 1.5 | < 1.00 | 1.00 |
| 1,4-Dioxane | 123-91-1 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <1.44 | 1.44 | <0.721 | 0.721 | <0.721 | 0.721 | <0.901 | 0.901 | < 1.00 | 1.00 |
| 2-Hexanone | 591-78-6 | < 1.00 | 1.00 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <1.64 | 1.64 | <0.82 | 0.82 | <0.82 | 0.82 | <1.02 | 1.02 | < 1.00 | 1.00 |
| 4-Ethyltoluene | 622-96-8 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <1.97 | 1.97 | <0.983 | 0.983 | <0.983 | 0.983 | <1.23 | 1.23 | < 1.00 | 1.00 |
| 4-Methyl-2-pentanone | 108-10-1 | < 1.00 | 1.00 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | < 1.00 | 1.00 | <2.05 | 2.05 | <4.1 | 4.1 | <2.05 | 2.05 | <2.05 | 2.05 | <2.56 | 2.56 | < 1.00 | 1.00 |
| Acetone | 67-64-1 | 9.64 | 1.00 | 5.51 | 2.38 | 70.1 | 2.38 | 30.6 | 2.38 | 50.6 | 2.38 | 135 | 1.00 | 44.2 | 2.38 | <4.75 | 4.75 | <2.38 | 2.38 | 10.7 | 2.38 | <2.97 | 2.97 | 7.48 | 1.00 |
| Benzene | 71-43-2 | < 1.00 | 1.00 | <0.639 | 0.639 | 0.661 | 0.639 | <0.639 | 0.639 | 0.76 | 0.639 | < 1.00 | 1.00 | 0.85 | 0.639 | 2.46 | 1.28 | <0.639 | 0.639 | <0.639 | 0.639 | <0.799 | 0.799 | < 1.00 | 1.00 |
| Benzyl chloride | 100-44-7 | < 1.00 | 1.00 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 | <2.07 | 2.07 | <1.04 | 1.04 | <1.04 | 1.04 | <1.29 | 1.29 | < 1.00 | 1.00 |
| Bromodichloromethane | 75-27-4 | < 1.00 | 1.00 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 | <2.68 | 2.68 | <1.34 | 1.34 | <1.34 | 1.34 | <1.67 | 1.67 | < 1.00 | 1.00 |
| Bromoform | 75-25-2 | < 1.00 | 1.00 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 | <4.14 | 4.14 | <2.07 | 2.07 | <2.07 | 2.07 | <2.58 | 2.58 | < 1.00 | 1.00 |
| Bromomethane | 74-83-9 | < 1.00 | 1.00 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 | <1.55 | 1.55 | <0.777 | 0.777 | <0.777 | 0.777 | <0.971 | 0.971 | < 1.00 | 1.00 |
| Carbon disulfide | 75-15-0 | < 1.00 | 1.00 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | < 1.00 | 1.00 | <0.623 | 0.623 | 2.4 | 1.25 | <0.623 | 0.623 | 5.23 | 0.623 | 10.9 | 0.779 | < 1.00 | 1.00 |
| Carbon tetrachloride | 56-23-5 | 0.41 | 0.20 | <1.26 | 1.26 | - | - | - | - | - | - | 0.46 | 0.20 | - | - | <2.52 | 2.52 | <1.26 | 1.26 | <1.26 | 1.26 | <1.57 | 1.57 | 0.43 | 0.20 |
| Chlorobenzene | 108-90-7 | < 1.00 | 1.00 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 | <1.84 | 1.84 | <0.921 | 0.921 | <0.921 | 0.921 | <1.15 | 1.15 | < 1.00 | 1.00 |
| Chloroethane | 75-00-3 | < 1.00 | 1.00 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 | 8.47 | 1.06 | <0.528 | 0.528 | <0.528 | 0.528 | <0.66 | 0.66 | < 1.00 | 1.00 |
| Chloroform | 67-66-3 | < 1.00 | 1.00 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | < 1.00 | 1.00 | <0.977 | 0.977 | 6.98 | 1.95 | 4.82 | 0.977 | <0.977 | 0.977 | <1.22 | 1.22 | < 1.00 | 1.00 |
| Chloromethane | 74-87-3 | < 1.00 | 1.00 | <0.413 | 0.413 | 1.73 | 0.413 | 1.15 | 0.413 | 1.17 | 0.413 | 1.44 | 1.00 | 1.18 | 0.413 | <0.826 | 0.826 | <0.413 | 0.413 | <0.413 | 0.413 | <0.516 | 0.516 | < 1.00 | 1.00 |
| cis-1,2-Dichloroethene | 156-59-2 | < 0.20 | 0.20 | <0.793 | 0.793 | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 | <0.991 | 0.991 | < 0.20 | 0.20 |
| cis-1,3-Dichloropropene | 10061-01-5 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <1.82 | 1.82 | <0.908 | 0.908 | <0.908 | 0.908 | <1.13 | 1.13 | < 1.00 | 1.00 |
| Cyclohexane | 110-82-7 | < 1.00 | 1.00 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | 23 | 0.688 | < 1.00 | 1.00 | <0.688 | 0.688 | 22.5 | 1.38 | 19 | 0.688 | 8.92 | 0.688 | 1.67 | 0.861 | < 1.00 | 1.00 |
| Dibromochloromethane | 124-48-1 | < 1.00 | 1.00 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 | <3.41 | 3.41 | <1.7 | 1.7 | <1.7 | 1.7 | <2.13 | 2.13 | < 1.00 | 1.00 |
| Dichlorodifluoromethane | 75-71-8 | 2.23 | 1.00 | 2.43 | 0.989 | 1.45 | 0.989 | 1.55 | 0.989 | - | - | 2.26 | 1.00 | 2.48 | 0.989 | 3.53 | 1.98 | 2.02 | 0.989 | - | - | 1.75 | 1.24 | 2.09 | 1.00 |
| Ethanol | 64-17-5 | 23.3 | 1.00 | 11.8 | 9.42 | 249 | 9.42 | 219 | 9.42 | 401 | 9.42 | 554 | 1.00 | 307 | 9.42 | <18.8 | 18.8 | <9.42 | 9.42 | 43.7 | 9.42 | 14.1 | 11.8 | 22.2 | 1.00 |
| Ethyl Acetate | 141-78-6 | < 1.00 | 1.00 | <1.8 | 1.8 | 2.7 | 1.8 | 2.34 | 1.8 | <1.8 | 1.8 | 7.17 | 1.00 | 5.98 | 1.8 | <3.6 | 3.6 | <1.8 | 1.8 | <1.8 | 1.8 | <2.25 | 2.25 | < 1.00 | 1.00 |
| Ethylbenzene | 100-41-4 | 1.68 | 1.00 | <0.869 | 0.869 | 1.13 | 0.869 | 0.912 | 0.869 | <0.869 | 0.869 | 5.21 | 1.00 | 1.59 | 0.869 | <1.74 | 1.74 | <0.869 | 0.869 | 1.19 | 0.869 | <1.09 | 1.09 | 1.67 | 1.00 |
| Heptane | 142-82-5 | < 1.00 | 1.00 | <0.82 | 0.82 | 2.18 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | 1.08 | 1.00 | 1.76 | 0.82 | <1.64 | 1.64 | <0.82 | 0.82 | <0.82 | 0.82 | <1.02 | 1.02 | < 1.00 | 1.00 |
| Hexachlorobutadiene | 87-68-3 | < 1.00 | 1.00 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 | <4.27 | 4.27 | <2.13 | 2.13 | <2.13 | 2.13 | <2.67 | 2.67 | < 1.00 | 1.00 |
| Isopropanol | 67-63-0 | 1.38 | 1.00 | 2.39 | 1.23 | 44.2 | 1.23 | 68.6 | 1.23 | 105 | 1.23 | 54.8 | 1.00 | 225 | 1.23 | <2.46 | 2.46 | 4.77 | 1.23 | 7.15 | 1.23 | 3.52 | 1.54 | 2.07 | 1.00 |
| Methyl tert butyl ether | 1634-04-4 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <1.44 | 1.44 | <0.721 | 0.721 | <0.721 | 0.721 | <0.901 | 0.901 | < 1.00 | 1.00 |
| Methylene chloride | 75-09-2 | 4.65 | 3.00 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 | <3.47 | 3.47 | <1.74 | 1.74 | <1.74 | 1.74 | <2.17 | 2.17 | 7.01 | 3.00 |
| n-Hexane | 110-54-3 | 1.1 | 1.00 | <0.705 | 0.705 | 0.895 | 0.705 | <0.705 | 0.705 | 1.49 | 0.705 | 1.8 | 1.00 | 1.28 | 0.705 | 74.7 | 1.41 | 2.23 | 0.705 | <0.705 | 0.705 | 2.4 | 0.881 | 2.05 | 1.00 |
| o-Xylene | 95-47-6 | 2.89 | 1.00 | 2.5 | 0.869 | 1.99 | 0.869 | 1.26 | 0.869 | 1.08 | 0.869 | 8.51 | 1.00 | 2.15 | 0.869 | <1.74 | 1.74 | <0.869 | 0.869 | 1.62 | 0.869 | <1.09 | 1.09 | 2.87 | 1.00 |
| p/m-Xylene | 179601-23-1 | 6.77 | 1.00 | 3.94 | 1.74 | 4.3 | 1.74 | 2.82 | 1.74 | 2.64 | 1.74 | 20.1 | 1.00 | 4.82 | 1.74 | <3.47 | 3.47 | <1.74 | 1.74 | 4.69 | 1.74 | <2.17 | 2.17 | 6.64 | 1.00 |
| Styrene | 100-42-5 | < 1.00 | 1.00 | <0.852 | 0.852 | <0.852 | 0.852 | 0.971 | 0.852 | <0.852 | 0.852 | 2.11 | 1.00 | 2.5 | 0.852 | <1.7 | 1.7 | <0.852 | 0.852 | 1.64 | 0.852 | <1.06 | 1.06 | < 1.00 | 1.00 |
| Tetrachloroethene | 127-18-4 | 1.28 | 0.25 | <1.36 | 1.36 | - | - | - | - | - | - | 0.61 | 0.25 | - | - | 705 | 2.71 | 868 | 1.36 | 555 | 1.36 | 814 | 1.7 | 260 | 0.25 |
| Tetrahydrofuran | 109-99-9 | < 1.00 | 1.00 | 1.52 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | < 1.00 | 1.00 | <1.47 | 1.47 | <2.95 | 2.95 | <1.47 | 1.47 | <1.47 | 1.47 | 4.01 | 1.84 | < 1.00 | 1.00 |
| Toluene | 108-88-3 | 2.05 | 1.00 | <0.754 | 0.754 | 6.33 | 0.754 | 2.4 | 0.754 | 2.46 | 0.754 | 3.64 | 1.00 | 6.97 | 0.754 | 103 | 1.51 | 1.64 | 0.754 | 5.5 | 0.754 | 1.35 | 0.942 | 1.92 | 1.00 |
| trans-1,2-Dichloroethene | 156-60-5 | < 1.00 | 1.00 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 | <1.59 | 1.59 | <0.793 | 0.793 | <0.793 | 0.793 | <0.991 | 0.991 | < 1.00 | 1.00 |
| trans-1,3-Dichloropropene | 10061-02-6 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <1.82 | 1.82 | <0.908 | 0.908 | <0.908 | 0.908 | <1.13 | 1.13 | < 1.00 | 1.00 |
| Trichloroethene | 79-01-6 | 1.03 | 0.20 | <1.07 | 1.07 | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <2.15 | 2.15 | 1.81 | 1.07 | <1.07 | 1.07 | 1.53 | 1.34 | 1.51 | 0.20 |
| Trichlorofluoromethane | 75-69-4 | 1.21 | 1.00 | 1.23 | 1.12 | 1.82 | 1.12 | 1.65 | 1.12 | 1.23 | 1.12 | 1.62 | 1.00 | 1.56 | 1.12 | 10.4 | 2.25 | 11.5 | 1.12 | 4.61 | 1.12 | 5.02 | 1.4 | 2.14 | 1.00 |
| Vinyl chloride | 75-01-4 | < 0.20 | 0.20 | <0.511 | 0.511 | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <1.02 | 1.02 | <0.511 | 0.511 | <0.511 | 0.511 | <0.639 | 0.639 | < 0.20 | 0.20 |
| Xylenes, Total | 1330-20-7 | | | - | - | - | - | - | - | 3.72 | 0.869 | | | - | - | - | - | - | - | 6.34 | 0.869 | <1.09 | 1.09 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | < 1.00 | 1 | - | - | 0.136 | 0.109 | 0.278 | 0.109 | <0.109 | 0.109 | < 1.00 | 1 | 0.306 | 0.109 | - | - | - | - | - | - | - | - | 32.4 | 1 |
| 1,1-Dichloroethene | 75-35-4 | < 0.2 | 0.2 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | - | - | - | - | - | - | - | - | < 0.2 | 0.2 |
| 1,2-Dichloroethene (total) | 540-59-0 | - | - | - | - | - | - | - | - | <0.079 | 0.079 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | 0.41 | 0.2 | - | - | 0.535 | 0.126 | 0.547 | 0.126 | 0.415 | 0.126 | 0.46 | 0.2 | 0.56 | 0.126 | - | - | - | - | - | - | - | - | 0.43 | 0.2 |
| cis-1,2-Dichloroethene | 156-59-2 | < 0.2 | 0.2 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | - | - | - | - | - | - | - | - | < 0.2 | 0.2 |
| Dichlorodifluoromethane | 75-71-8 | 2.23 | 1 | - | - | - | - | - | - | 1.57 | 0.989 | 2.26 | 1 | - | - | - | - | - | - | 1.96 | 0.989 | - | - | 2.09 | 1 |
| Tetrachloroethene | 127-18-4 | 1.28 | 0.25 | - | - | 0.136 | 0.136 | 0.17 | 0.136 | 0.536 | 0.136 | 0.61 | 0.25 | <0.136 | 0.136 | - | - | - | - | - | - | - | - | 260 | 0.25 |
| Trichloroethene | 79-01-6 | 1.03 | 0.2 | - | - | 0.118 | 0.107 | <0.107 | 0.107 | <0.107 | 0.107 | < 0.2 | 0.2 | <0.107 | 0.107 | - | - | - | - | - | - | - | - | 1.51 | 0.2 |
| Vinyl chloride | 75-01-4 | < 0.2 | 0.2 | - | - | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | < 0.2 | 0.2 | <0.051 | 0.051 | - | - | - | - | - | - | - | - | < 0.2 | 0.2 |

* Comparison is not performed on parameters with non-numeric crite

C.T. MALE ASSOCIATES

**TABLE 4: SOIL VAPOR ANALYTICAL DATA - POST REMEDIATION**
**USAI LIGHTING FACILITY**
**TOWN OF NEW WINDSOR, ORANGE COUNTY**
**NYSDEC ID: C336087**

DATA NOT VALIDATED

| | SAMPLE ID: | VI-3-20230112 | | IA-3_170329 | | IA-3_171214 | | IA-3_190308 | | IA-03_20190411 | | IA-3_190604 | | IA-3-220309 | | IA-3-20230112 | | VI-4_170329 | | VI-4_171214 | | VI-4-220309 | | VI-4-20230112 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAB ID: | L2302299-01 | | L1709672-07 | | L1746327-09 | | L1909300-06 | | L1915031-01 | | L1923688-02 | | CK84904 | | L2302299-06 | | L1709672-04 | | L1746327-04 | | CK84900 | | L2302299-04 | |
| | COLLECTION DATE: | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | | 4/11/2019 | | 6/4/2019 | | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | | 3/9/2022 | | 1/12/2023 | |
| | SAMPLE MATRIX: | SOIL_VAPOR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | |
| **ANALYTE** | **CAS** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 64.4 | 1.09 | - | - | - | - | - | - | - | - | - | - | < 1.00 | 1.00 | - | - | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 |
| 1,1,2-Trichloroethane | 79-00-5 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 |
| 1,1-Dichloroethane | 75-34-3 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | 2.45 | 1.00 | <0.809 | 0.809 |
| 1,1-Dichloroethene | 75-35-4 | <0.793 | 0.793 | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <0.793 | 0.793 | <0.793 | 0.793 | 0.39 | 0.20 | <0.793 | 0.793 |
| 1,2,4-Trichlorobenzene | 120-82-1 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 |
| 1,2,4-Trimethylbenzene | 95-63-6 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | 1.47 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | 2.01 | 1.00 | <0.983 | 0.983 |
| 1,2-Dibromoethane | 106-93-4 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 |
| 1,2-Dichlorobenzene | 95-50-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 |
| 1,2-Dichloroethane | 107-06-2 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 |
| 1,2-Dichloropropane | 78-87-5 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 |
| 1,3,5-Trimethylbenzene | 108-67-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 |
| 1,3-Butadiene | 106-99-0 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 |
| 1,3-Dichlorobenzene | 541-73-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 |
| 1,4-Dichlorobenzene | 106-46-7 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 |
| 1,4-Dioxane | 123-91-1 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 |
| 2-Hexanone | 591-78-6 | <0.82 | 0.82 | 1.61 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 |
| 4-Ethyltoluene | 622-96-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 |
| 4-Methyl-2-pentanone | 108-10-1 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | < 1.00 | 1.00 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | 1.68 | 1.00 | <2.05 | 2.05 |
| Acetone | 67-64-1 | 5.91 | 2.38 | 112 | 2.38 | 57.7 | 2.38 | 133 | 2.38 | 94.5 | 2.38 | 64.1 | 2.38 | 129 | 1.00 | 42.8 | 2.38 | 41.3 | 2.38 | <2.38 | 2.38 | 69.1 | 1.00 | 61.3 | 2.38 |
| Benzene | 71-43-2 | 0.942 | 0.639 | 0.968 | 0.639 | <0.639 | 0.639 | 0.732 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | < 1.00 | 1.00 | 0.914 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | 1.17 | 1.00 | <0.639 | 0.639 |
| Benzyl chloride | 100-44-7 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 |
| Bromodichloromethane | 75-27-4 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 |
| Bromoform | 75-25-2 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 |
| Bromomethane | 74-83-9 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 |
| Carbon disulfide | 75-15-0 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | < 1.00 | 1.00 | <0.623 | 0.623 | 1.41 | 0.623 | <0.623 | 0.623 | 1.36 | 1.00 | <0.623 | 0.623 |
| Carbon tetrachloride | 56-23-5 | <1.26 | 1.26 | - | - | - | - | - | - | - | - | - | - | 0.59 | 0.20 | - | - | <1.26 | 1.26 | <1.26 | 1.26 | 0.52 | 0.20 | <1.26 | 1.26 |
| Chlorobenzene | 108-90-7 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 |
| Chloroethane | 75-00-3 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 |
| Chloroform | 67-66-3 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | < 1.00 | 1.00 | <0.977 | 0.977 | <0.977 | 0.977 | 4.54 | 0.977 | 2.34 | 1.00 | <0.977 | 0.977 |
| Chloromethane | 74-87-3 | 0.438 | 0.413 | 1.52 | 0.413 | 1.12 | 0.413 | 1.37 | 0.413 | 1.37 | 0.413 | 1.52 | 0.413 | 1.87 | 1.00 | 1.21 | 0.413 | 1.6 | 0.413 | 0.624 | 0.413 | 1.16 | 1.00 | <0.413 | 0.413 |
| cis-1,2-Dichloroethene | 156-59-2 | <0.793 | 0.793 | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <0.793 | 0.793 | <0.793 | 0.793 | < 0.20 | 0.20 | <0.793 | 0.793 |
| cis-1,3-Dichloropropene | 10061-01-5 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 |
| Cyclohexane | 110-82-7 | <0.688 | 0.688 | 0.902 | 0.688 | <0.688 | 0.688 | 58.9 | 0.688 | 2.21 | 0.688 | <0.688 | 0.688 | 1.07 | 1.00 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | < 1.00 | 1.00 | <0.688 | 0.688 |
| Dibromochloromethane | 124-48-1 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 |
| Dichlorodifluoromethane | 75-71-8 | 2.71 | 0.989 | 1.76 | 0.989 | 1.7 | 0.989 | - | - | 1.79 | 0.989 | 1.44 | 0.989 | 2.63 | 1.00 | 2.5 | 0.989 | 2.24 | 0.989 | 1.72 | 0.989 | 2.49 | 1.00 | 2.43 | 0.989 |
| Ethanol | 64-17-5 | 194 | 9.42 | 341 | 9.42 | 507 | 9.42 | 948 | 9.42 | 1030 | 9.42 | 684 | 9.42 | 1,050 | 1.00 | 652 | 9.42 | <9.42 | 9.42 | <9.42 | 9.42 | 124 | 5.01 | 104 | 9.42 |
| Ethyl Acetate | 141-78-6 | <1.8 | 1.8 | 5.66 | 1.8 | 4.11 | 1.8 | 7.32 | 1.8 | 33.2 | 1.8 | 7.03 | 1.8 | 9.44 | 1.00 | 6.56 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 | < 1.00 | 1.00 | <1.8 | 1.8 |
| Ethylbenzene | 100-41-4 | 0.877 | 0.869 | 2.2 | 0.869 | 2.11 | 0.869 | 2.3 | 0.869 | 3.24 | 0.869 | 1.52 | 0.869 | 8.98 | 1.00 | 2.86 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 1.46 | 1.00 | <0.869 | 0.869 |
| Heptane | 142-82-5 | 1.5 | 0.82 | 2.93 | 0.82 | <0.82 | 0.82 | 2.26 | 0.82 | 5.12 | 0.82 | 1.51 | 0.82 | 1.29 | 1.00 | 1.67 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | 1.46 | 1.00 | <0.82 | 0.82 |
| Hexachlorobutadiene | 87-68-3 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 |
| Isopropanol | 67-63-0 | 11.5 | 1.23 | 280 | 1.23 | 189 | 1.23 | 193 | 1.23 | 102 | 1.23 | 104 | 1.23 | 33.2 | 1.00 | 60.7 | 1.23 | 3.88 | 1.23 | 1.65 | 1.23 | 18.3 | 1.00 | 10.1 | 1.23 |
| Methyl tert butyl ether | 1634-04-4 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 |
| Methylene chloride | 75-09-2 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 | 1.89 | 1.74 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 |
| n-Hexane | 110-54-3 | 3.06 | 0.705 | 1.74 | 0.705 | <0.705 | 0.705 | 2.48 | 0.705 | 0.765 | 0.705 | <0.705 | 0.705 | 2.03 | 1.00 | 1.39 | 0.705 | 2.11 | 0.705 | <0.705 | 0.705 | 1.33 | 1.00 | 0.708 | 0.705 |
| o-Xylene | 95-47-6 | 1.17 | 0.869 | 3.49 | 0.869 | 3.51 | 0.869 | 3.16 | 0.869 | 4.39 | 0.869 | 2.49 | 0.869 | 14.8 | 1.00 | 3.9 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 1.97 | 1.00 | <0.869 | 0.869 |
| p/m-Xylene | 179601-23-1 | 2.8 | 1.74 | 7.6 | 1.74 | 7.12 | 1.74 | 8.64 | 1.74 | 10.5 | 1.74 | 5.6 | 1.74 | 35.2 | 1.00 | 8.6 | 1.74 | 1.81 | 1.74 | <1.74 | 1.74 | 4.69 | 1.00 | <1.74 | 1.74 |
| Styrene | 100-42-5 | 1.15 | 0.852 | 6.43 | 0.852 | 2.26 | 0.852 | 2.18 | 0.852 | 2.31 | 0.852 | 2.72 | 0.852 | 2.81 | 1.00 | 4.43 | 0.852 | 1.97 | 0.852 | <0.852 | 0.852 | 1.05 | 1.00 | <0.852 | 0.852 |
| Tetrachloroethene | 127-18-4 | 270 | 1.36 | - | - | - | - | - | - | - | - | - | - | 0.67 | 0.25 | - | - | <1.36 | 1.36 | <1.36 | 1.36 | 3.66 | 0.25 | <1.36 | 1.36 |
| Tetrahydrofuran | 109-99-9 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | 2.75 | 1.47 | 6.64 | 1.47 | < 1.00 | 1.00 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | 3.86 | 1.00 | 5.63 | 1.47 |
| Toluene | 108-88-3 | 2.65 | 0.754 | 46.4 | 0.754 | 9.72 | 0.754 | 9.35 | 0.754 | 61 | 0.754 | 9.5 | 0.754 | 3.65 | 1.00 | 7.91 | 0.754 | 2.19 | 0.754 | 1.01 | 0.754 | 697 | 5.01 | 48.6 | 0.754 |
| trans-1,2-Dichloroethene | 156-60-5 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 |
| trans-1,3-Dichloropropene | 10061-02-6 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 |
| Trichloroethene | 79-01-6 | <1.07 | 1.07 | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <1.07 | 1.07 | <1.07 | 1.07 | 0.62 | 0.20 | <1.07 | 1.07 |
| Trichlorofluoromethane | 75-69-4 | 2.69 | 1.12 | 2.17 | 1.12 | 1.89 | 1.12 | 1.62 | 1.12 | 2.2 | 1.12 | 2.03 | 1.12 | 1.98 | 1.00 | 1.84 | 1.12 | 2.12 | 1.12 | 1.63 | 1.12 | 1.58 | 1.00 | 1.63 | 1.12 |
| Vinyl chloride | 75-01-4 | <0.511 | 0.511 | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | <0.511 | 0.511 | <0.511 | 0.511 | < 0.20 | 0.20 | <0.511 | 0.511 |
| Xylenes, Total | 1330-20-7 | - | - | - | - | - | - | 11.8 | 0.869 | 14.9 | 0.869 | 8.08 | 0.869 | | | - | - | - | - | - | - | | | - | - |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | - | - | 0.131 | 0.109 | 0.196 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | < 1.0 | 1 | 0.125 | 0.109 | - | - | - | - | < 1.0 | 1 | - | - |
| 1,1-Dichloroethene | 75-35-4 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2. | 0.2 | <0.079 | 0.079 | - | - | - | - | 0.39 | 0.2 | - | - |
| 1,2-Dichloroethene (total) | 540-59-0 | - | - | - | - | - | - | 1.24 | 0.079 | 1.74 | 0.079 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | - | - | 0.503 | 0.126 | 0.705 | 0.126 | 0.421 | 0.126 | 0.428 | 0.126 | 0.516 | 0.126 | 0.59 | 0.2 | 0.554 | 0.126 | - | - | - | - | 0.52 | 0.2 | - | - |
| cis-1,2-Dichloroethene | 156-59-2 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | 1.24 | 0.079 | 1.74 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | - | - | - | - | < 0.2 | 0.2 | - | - |
| Dichlorodifluoromethane | 75-71-8 | - | - | - | - | - | - | 1.5 | 0.989 | - | - | - | - | 2.63 | 1 | - | - | - | - | - | - | 2.49 | 1 | - | - |
| Tetrachloroethene | 127-18-4 | - | - | 0.312 | 0.136 | 0.461 | 0.136 | 0.99 | 0.136 | 0.495 | 0.136 | 0.183 | 0.136 | 0.67 | 0.25 | 0.136 | 0.136 | - | - | - | - | 3.66 | 0.25 | - | - |
| Trichloroethene | 79-01-6 | - | - | 0.258 | 0.107 | 0.371 | 0.107 | 0.742 | 0.107 | 0.161 | 0.107 | <0.107 | 0.107 | < 0.2 | 0.2 | <0.107 | 0.107 | - | - | - | - | 0.62 | 0.2 | - | - |
| Vinyl chloride | 75-01-4 | - | - | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | < 0.2 | 0.2 | <0.051 | 0.051 | - | - | - | - | < 0.2 | 0.2 | - | - |

* Comparison is not performed on parameters with non-numeric crite

# TABLE 4: SOIL VAPOR ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087



| | SAMPLE ID: | IA-4_171214 | | IA-4_190308 | | IA-4-20230112 | | VI-5_171214 | | VI-5_190308 | | VI-5-20230112 | | IA-05_20190411 | | VI-6_171214 | | IA-06_20190411 | | IA-7_20190411 | | IA-08_20190411 | | IA-9_190604 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAB ID: | L1746327-10 | | L1909300-07 | | L2302299-09 | | L1746327-05 | | L1909300-04 | | L2302299-05 | | L1915031-02 | | L1746327-06 | | L1915031-03 | | L1915031-04 | | L1915031-05 | | L1923688-03 | |
| | COLLECTION DATE: | 12/14/2017 | | 3/8/2019 | | 1/12/2023 | | 12/14/2017 | | 3/8/2019 | | 1/12/2023 | | 4/11/2019 | | 12/14/2017 | | 4/11/2019 | | 4/11/2019 | | 4/11/2019 | | 6/4/2019 | |
| | SAMPLE MATRIX: | AIR | | AIR | | AIR | | SOIL VAPOR | | SOIL VAPOR | | SOIL VAPOR | | AIR | | SOIL VAPOR | | AIR | | AIR | | AIR | | AIR | |
| **ANALYTE** | **CAS** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** | **Conc** | **RL** |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | - | - | - | - | - | - | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | - | - | <1.09 | 1.09 | - | - | - | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 |
| 1,1,2-Trichloroethane | 79-00-5 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 |
| 1,1-Dichloroethane | 75-34-3 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,1-Dichloroethene | 75-35-4 | - | - | - | - | - | - | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | - | - | <0.793 | 0.793 | - | - | - | - | - | - | - | - |
| 1,2,4-Trichlorobenzene | 120-82-1 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 |
| 1,2,4-Trimethylbenzene | 95-63-6 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | 1.01 | 0.983 | 1.25 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,2-Dibromoethane | 106-93-4 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 |
| 1,2-Dichlorobenzene | 95-50-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,2-Dichloroethane | 107-06-2 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,2-Dichloropropane | 78-87-5 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 |
| 1,3,5-Trimethylbenzene | 108-67-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,3-Butadiene | 106-99-0 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | 3.72 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | 0.529 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 |
| 1,3-Dichlorobenzene | 541-73-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dichlorobenzene | 106-46-7 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dioxane | 123-91-1 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | 1.1 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 |
| 2-Hexanone | 591-78-6 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 |
| 4-Ethyltoluene | 622-96-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 4-Methyl-2-pentanone | 108-10-1 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | 2.24 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 |
| Acetone | 67-64-1 | 41.3 | 2.38 | 26.4 | 2.38 | 38.5 | 2.38 | 37.3 | 2.38 | 16 | 2.38 | <2.38 | 2.38 | 97.2 | 2.38 | 24.5 | 2.38 | 159 | 2.38 | 98.8 | 2.38 | 110 | 2.38 | 66 | 2.38 |
| Benzene | 71-43-2 | 0.687 | 0.639 | 0.674 | 0.639 | 1.09 | 0.639 | 2.17 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | 1.99 | 0.639 | 0.642 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 |
| Benzyl chloride | 100-44-7 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 |
| Bromodichloromethane | 75-27-4 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 |
| Bromoform | 75-25-2 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 |
| Bromomethane | 74-83-9 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 |
| Carbon disulfide | 75-15-0 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | 0.747 | 0.623 | 0.863 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | 4.05 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 |
| Carbon tetrachloride | 56-23-5 | - | - | - | - | - | - | <1.26 | 1.26 | <1.26 | 1.26 | <1.26 | 1.26 | - | - | <1.26 | 1.26 | - | - | - | - | - | - | - | - |
| Chlorobenzene | 108-90-7 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 |
| Chloroethane | 75-00-3 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | 0.554 | 0.528 |
| Chloroform | 67-66-3 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | 1.65 | 0.977 | <0.977 | 0.977 | 2.11 | 0.977 | <0.977 | 0.977 | 1.02 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 |
| Chloromethane | 74-87-3 | 1.14 | 0.413 | 1.18 | 0.413 | 1.2 | 0.413 | <0.413 | 0.413 | <0.413 | 0.413 | <0.413 | 0.413 | 1.47 | 0.413 | <0.413 | 0.413 | 1.33 | 0.413 | 1.49 | 0.413 | 1.48 | 0.413 | 1.41 | 0.413 |
| cis-1,2-Dichloroethene | 156-59-2 | - | - | - | - | - | - | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | - | - | <0.793 | 0.793 | - | - | - | - | - | - | - | - |
| cis-1,3-Dichloropropene | 10061-01-5 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 |
| Cyclohexane | 110-82-7 | <0.688 | 0.688 | 3.48 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | 4.58 | 0.688 | <0.688 | 0.688 | 2.23 | 0.688 | 1.09 | 0.688 | 2.17 | 0.688 | 3.37 | 0.688 | 2.32 | 0.688 | <0.688 | 0.688 |
| Dibromochloromethane | 124-48-1 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 |
| Dichlorodifluoromethane | 75-71-8 | 2.53 | 0.989 | - | - | 2.4 | 0.989 | 2.01 | 0.989 | - | - | 2.42 | 0.989 | 2.2 | 0.989 | 2.02 | 0.989 | 0.989 | 0.989 | 1.34 | 0.989 | 1.66 | 0.989 | 1.52 | 0.989 |
| Ethanol | 64-17-5 | 899 | 9.42 | 884 | 9.42 | 974 | 9.42 | 18.2 | 9.42 | 311 | 9.42 | <9.42 | 9.42 | 920 | 9.42 | 12.8 | 9.42 | 159 | 9.42 | 155 | 9.42 | 124 | 9.42 | 678 | 9.42 |
| Ethyl Acetate | 141-78-6 | <1.8 | 1.8 | <1.8 | 1.8 | 2.89 | 1.8 | 2.59 | 1.8 | 2.23 | 1.8 | <1.8 | 1.8 | 36.4 | 1.8 | <1.8 | 1.8 | 44 | 1.8 | 27 | 1.8 | 47.9 | 1.8 | 7.32 | 1.8 |
| Ethylbenzene | 100-41-4 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 1.12 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 3.03 | 0.869 | 1.04 | 0.869 | 4.18 | 0.869 | 2.13 | 0.869 | 5.56 | 0.869 | 1.52 | 0.869 |
| Heptane | 142-82-5 | <0.82 | 0.82 | 1.52 | 0.82 | 2.75 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | 5.33 | 0.82 | 2.68 | 0.82 | 5.57 | 0.82 | 5.37 | 0.82 | 6.15 | 0.82 | 1.56 | 0.82 |
| Hexachlorobutadiene | 87-68-3 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 |
| Isopropanol | 67-63-0 | 87.3 | 1.23 | 85.3 | 1.23 | 12.7 | 1.23 | 9.22 | 1.23 | 44 | 1.23 | <1.23 | 1.23 | 102 | 1.23 | 11 | 1.23 | 80.1 | 1.23 | 152 | 1.23 | 62.7 | 1.23 | 105 | 1.23 |
| Methyl tert butyl ether | 1634-04-4 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 |
| Methylene chloride | 75-09-2 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 |
| n-Hexane | 110-54-3 | <0.705 | 0.705 | 0.856 | 0.705 | 1.98 | 0.705 | 0.8 | 0.705 | <0.705 | 0.705 | <0.705 | 0.705 | 0.825 | 0.705 | 2.87 | 0.705 | 0.885 | 0.705 | <0.705 | 0.705 | 0.906 | 0.705 | 0.751 | 0.705 |
| o-Xylene | 95-47-6 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 0.951 | 0.869 | 0.903 | 0.869 | <0.869 | 0.869 | 4.3 | 0.869 | <0.869 | 0.869 | 5.69 | 0.869 | 3.02 | 0.869 | 7.73 | 0.869 | 2.45 | 0.869 |
| p/m-Xylene | 179601-23-1 | 2.07 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | 2.39 | 1.74 | 3.07 | 1.74 | <1.74 | 1.74 | 10 | 1.74 | 1.76 | 1.74 | 13.5 | 1.74 | 7.3 | 1.74 | 18.2 | 1.74 | 5.6 | 1.74 |
| Styrene | 100-42-5 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | 1.93 | 0.852 | <0.852 | 0.852 | 2.75 | 0.852 | 1.39 | 0.852 | 3.78 | 0.852 | 2.5 | 0.852 |
| Tetrachloroethene | 127-18-4 | - | - | - | - | - | - | 3.1 | 1.36 | <1.36 | 1.36 | <1.36 | 1.36 | - | - | 2.31 | 1.36 | - | - | - | - | - | - | - | - |
| Tetrahydrofuran | 109-99-9 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | 6.16 | 1.47 | <1.47 | 1.47 | 2.66 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | 2.06 | 1.47 | 1.64 | 1.47 | 2.74 | 1.47 |
| Toluene | 108-88-3 | 1.88 | 0.754 | 2.15 | 0.754 | 5.99 | 0.754 | 3.09 | 0.754 | 2.66 | 0.754 | <0.754 | 0.754 | 59.9 | 0.754 | 2.34 | 0.754 | 63.7 | 0.754 | 62.9 | 0.754 | 63.7 | 0.754 | 9.95 | 0.754 |
| trans-1,2-Dichloroethene | 156-60-5 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 |
| trans-1,3-Dichloropropene | 10061-02-6 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 |
| Trichloroethene | 79-01-6 | - | - | - | - | - | - | 3.11 | 1.07 | 3.11 | 1.07 | <1.07 | 1.07 | - | - | 3.03 | 1.07 | - | - | - | - | - | - | - | - |
| Trichlorofluoromethane | 75-69-4 | 1.78 | 1.12 | 1.2 | 1.12 | 2.25 | 1.12 | 1.61 | 1.12 | 1.14 | 1.12 | 1.21 | 1.12 | 2.13 | 1.12 | 1.28 | 1.12 | 2.59 | 1.12 | 1.8 | 1.12 | 3.14 | 1.12 | 2.02 | 1.12 |
| Vinyl chloride | 75-01-4 | - | - | - | - | - | - | <0.511 | 0.511 | <0.511 | 0.511 | <0.511 | 0.511 | - | - | <0.511 | 0.511 | - | - | - | - | - | - | - | - |
| Xylenes, Total | 1330-20-7 | - | - | <0.869 | 0.869 | - | - | - | - | 3.97 | 0.869 | - | - | 14.3 | 0.869 | - | - | 19.2 | 0.869 | 10.3 | 0.869 | 26 | 0.869 | 8.04 | 0.869 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | - | - | - | - | - | - | <0.109 | 0.109 | - | - | 0.125 | 0.109 | 0.142 | 0.109 | 0.109 | 0.109 | <0.109 | 0.109 |
| 1,1-Dichloroethene | 75-35-4 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | - | - | - | - | - | - | <0.079 | 0.079 | - | - | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 |
| 1,2-Dichloroethene (total) | 540-59-0 | - | - | <0.079 | 0.079 | - | - | - | - | - | - | - | - | <0.079 | 0.079 | - | - | 0.278 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | - | - |
| Carbon tetrachloride | 56-23-5 | 0.554 | 0.126 | 0.428 | 0.126 | 0.566 | 0.126 | - | - | - | - | - | - | 0.428 | 0.126 | - | - | 0.465 | 0.126 | 0.44 | 0.126 | 0.434 | 0.126 | 0.51 | 0.126 |
| cis-1,2-Dichloroethene | 156-59-2 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | - | - | - | - | - | - | <0.079 | 0.079 | - | - | 0.278 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 |
| Dichlorodifluoromethane | 75-71-8 | - | - | 1.47 | 0.989 | - | - | - | - | 2.59 | 0.989 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Tetrachloroethene | 127-18-4 | <0.136 | 0.136 | <0.136 | 0.136 | <0.136 | 0.136 | - | - | - | - | - | - | 0.359 | 0.136 | - | - | 0.461 | 0.136 | 0.231 | 0.136 | 0.787 | 0.136 | 0.21 | 0.136 |
| Trichloroethene | 79-01-6 | <0.107 | 0.107 | <0.107 | 0.107 | <0.107 | 0.107 | - | - | - | - | - | - | 0.204 | 0.107 | - | - | 0.376 | 0.107 | <0.107 | 0.107 | 0.285 | 0.107 | <0.107 | 0.107 |
| Vinyl chloride | 75-01-4 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | - | - | - | - | - | - | <0.051 | 0.051 | - | - | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 |

* Comparison is not performed on parameters with non-numeric crite

# TABLE 4: SOIL VAPOR ANALYTICAL DATA - POST REMEDIATION
## USAI LIGHTING FACILITY
## TOWN OF NEW WINDSOR, ORANGE COUNTY
## NYSDEC ID: C336087



| | SAMPLE ID: | IA-10_190604 | | OA-1_170329 | | OA-1_171214 | | OA-1_190308 | | OA-1_20190411 | | OA-1_190604 | | OA-1-220309 | | OA-1-20230112 | | OA-2_170329 | | OA-2_171214 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAB ID: | L1923688-04 | | L1709672-08 | | L1746327-11 | | L1909300-08 | | L1915031-06 | | L1923688-05 | | CK84897 | | L2302299-10 | | L1709672-09 | | L1746327-12 | |
| | COLLECTION DATE: | 6/4/2019 | | 3/29/2017 | | 12/14/2017 | | 3/8/2019 | | 4/11/2019 | | 6/4/2019 | | 3/9/2022 | | 1/12/2023 | | 3/29/2017 | | 12/14/2017 | |
| | SAMPLE MATRIX: | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | | AIR | |
| ANALYTE | CAS | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL | Conc | RL |
| **VOLATILE ORGANICS IN AIR** | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | - | - | - | - | - | - | - | - | - | - | - | - | < 1.00 | 1.00 | - | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 | < 1.00 | 1.00 | <1.37 | 1.37 | <1.37 | 1.37 | <1.37 | 1.37 |
| 1,1,2-Trichloroethane | 79-00-5 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 | < 1.00 | 1.00 | <1.09 | 1.09 | <1.09 | 1.09 | <1.09 | 1.09 |
| 1,1-Dichloroethane | 75-34-3 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,1-Dichloroethene | 75-35-4 | - | - | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | - | - | - | - |
| 1,2,4-Trichlorobenzene | 120-82-1 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 | < 1.00 | 1.00 | <1.48 | 1.48 | <1.48 | 1.48 | <1.48 | 1.48 |
| 1,2,4-Trimethylbenzene | 95-63-6 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,2-Dibromoethane | 106-93-4 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 | < 1.00 | 1.00 | <1.54 | 1.54 | <1.54 | 1.54 | <1.54 | 1.54 |
| 1,2-Dichlorobenzene | 95-50-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,2-Dichloroethane | 107-06-2 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 | < 1.00 | 1.00 | <0.809 | 0.809 | <0.809 | 0.809 | <0.809 | 0.809 |
| 1,2-Dichloropropane | 78-87-5 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 | < 1.00 | 1.00 | <0.924 | 0.924 | <0.924 | 0.924 | <0.924 | 0.924 |
| 1,3,5-Trimethylbenzene | 108-67-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 1,3-Butadiene | 106-99-0 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 | < 1.00 | 1.00 | <0.442 | 0.442 | <0.442 | 0.442 | <0.442 | 0.442 |
| 1,3-Dichlorobenzene | 541-73-1 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dichlorobenzene | 106-46-7 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 | < 1.00 | 1.00 | <1.2 | 1.2 | <1.2 | 1.2 | <1.2 | 1.2 |
| 1,4-Dioxane | 123-91-1 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 |
| 2-Hexanone | 591-78-6 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 |
| 4-Ethyltoluene | 622-96-8 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 | < 1.00 | 1.00 | <0.983 | 0.983 | <0.983 | 0.983 | <0.983 | 0.983 |
| 4-Methyl-2-pentanone | 108-10-1 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 | < 1.00 | 1.00 | <2.05 | 2.05 | <2.05 | 2.05 | <2.05 | 2.05 |
| Acetone | 67-64-1 | 60.6 | 2.38 | <2.38 | 2.38 | 3.87 | 2.38 | 3.75 | 2.38 | 2.57 | 2.38 | 3.02 | 2.38 | 28.7 | 1.00 | 2.97 | 2.38 | <2.38 | 2.38 | 3.35 | 2.38 |
| Benzene | 71-43-2 | <0.639 | 0.639 | <0.639 | 0.639 | 0.671 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 | < 1.00 | 1.00 | 1.26 | 0.639 | <0.639 | 0.639 | <0.639 | 0.639 |
| Benzyl chloride | 100-44-7 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 | < 1.00 | 1.00 | <1.04 | 1.04 | <1.04 | 1.04 | <1.04 | 1.04 |
| Bromodichloromethane | 75-27-4 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 | < 1.00 | 1.00 | <1.34 | 1.34 | <1.34 | 1.34 | <1.34 | 1.34 |
| Bromoform | 75-25-2 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 | < 1.00 | 1.00 | <2.07 | 2.07 | <2.07 | 2.07 | <2.07 | 2.07 |
| Bromomethane | 74-83-9 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 | < 1.00 | 1.00 | <0.777 | 0.777 | <0.777 | 0.777 | <0.777 | 0.777 |
| Carbon disulfide | 75-15-0 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 | < 1.00 | 1.00 | <0.623 | 0.623 | <0.623 | 0.623 | <0.623 | 0.623 |
| Carbon tetrachloride | 56-23-5 | - | - | - | - | - | - | - | - | - | - | - | - | 0.43 | 0.20 | - | - | - | - | - | - |
| Chlorobenzene | 108-90-7 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 | < 1.00 | 1.00 | <0.921 | 0.921 | <0.921 | 0.921 | <0.921 | 0.921 |
| Chloroethane | 75-00-3 | 0.53 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 | < 1.00 | 1.00 | <0.528 | 0.528 | <0.528 | 0.528 | <0.528 | 0.528 |
| Chloroform | 67-66-3 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 | < 1.00 | 1.00 | <0.977 | 0.977 | <0.977 | 0.977 | <0.977 | 0.977 |
| Chloromethane | 74-87-3 | 1.54 | 0.413 | 1.14 | 0.413 | 1.03 | 0.413 | 1.02 | 0.413 | 1.14 | 0.413 | 1.18 | 0.413 | 1.28 | 1.00 | 0.966 | 0.413 | 1.16 | 0.413 | 1.07 | 0.413 |
| cis-1,2-Dichloroethene | 156-59-2 | - | - | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | - | - | - | - |
| cis-1,3-Dichloropropene | 10061-01-5 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 |
| Cyclohexane | 110-82-7 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 | < 1.00 | 1.00 | <0.688 | 0.688 | <0.688 | 0.688 | <0.688 | 0.688 |
| Dibromochloromethane | 124-48-1 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 | < 1.00 | 1.00 | <1.7 | 1.7 | <1.7 | 1.7 | <1.7 | 1.7 |
| Dichlorodifluoromethane | 75-71-8 | 1.67 | 0.989 | 1.6 | 0.989 | 1.53 | 0.989 | - | - | 1.36 | 0.989 | 1.29 | 0.989 | 2.26 | 1.00 | 2.41 | 0.989 | 1.63 | 0.989 | 1.76 | 0.989 |
| Ethanol | 64-17-5 | 641 | 9.42 | <9.42 | 9.42 | <9.42 | 9.42 | 10 | 9.42 | 11.3 | 9.42 | 12.8 | 9.42 | 83.6 | 1.00 | <9.42 | 9.42 | <9.42 | 9.42 | <9.42 | 9.42 |
| Ethyl Acetate | 141-78-6 | 6.45 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 | < 1.00 | 1.00 | <1.8 | 1.8 | <1.8 | 1.8 | <1.8 | 1.8 |
| Ethylbenzene | 100-41-4 | 1.57 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | < 1.00 | 1.00 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 |
| Heptane | 142-82-5 | 1.76 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 | < 1.00 | 1.00 | <0.82 | 0.82 | <0.82 | 0.82 | <0.82 | 0.82 |
| Hexachlorobutadiene | 87-68-3 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 | < 1.00 | 1.00 | <2.13 | 2.13 | <2.13 | 2.13 | <2.13 | 2.13 |
| Isopropanol | 67-63-0 | 104 | 1.23 | <1.23 | 1.23 | <1.23 | 1.23 | <1.23 | 1.23 | <1.23 | 1.23 | <1.23 | 1.23 | 7.17 | 1.00 | <1.23 | 1.23 | <1.23 | 1.23 | <1.23 | 1.23 |
| Methyl tert butyl ether | 1634-04-4 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 | < 1.00 | 1.00 | <0.721 | 0.721 | <0.721 | 0.721 | <0.721 | 0.721 |
| Methylene chloride | 75-09-2 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | < 3.00 | 3.00 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 |
| n-Hexane | 110-54-3 | 0.885 | 0.705 | 1.42 | 0.705 | <0.705 | 0.705 | <0.705 | 0.705 | <0.705 | 0.705 | <0.705 | 0.705 | 1.34 | 1.00 | 2.07 | 0.705 | 0.86 | 0.705 | <0.705 | 0.705 |
| o-Xylene | 95-47-6 | 2.58 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | 1.1 | 1.00 | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 |
| p/m-Xylene | 179601-23-1 | 5.95 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 | 3 | 1.00 | <1.74 | 1.74 | <1.74 | 1.74 | <1.74 | 1.74 |
| Styrene | 100-42-5 | 2.87 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 | < 1.00 | 1.00 | <0.852 | 0.852 | <0.852 | 0.852 | <0.852 | 0.852 |
| Tetrachloroethene | 127-18-4 | - | - | - | - | - | - | - | - | - | - | - | - | < 0.25 | 0.25 | - | - | - | - | - | - |
| Tetrahydrofuran | 109-99-9 | 1.83 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 | < 1.00 | 1.00 | <1.47 | 1.47 | <1.47 | 1.47 | <1.47 | 1.47 |
| Toluene | 108-88-3 | 10.1 | 0.754 | <0.754 | 0.754 | <0.754 | 0.754 | <0.754 | 0.754 | 0.927 | 0.754 | <0.754 | 0.754 | 1.63 | 1.00 | 1.74 | 0.754 | <0.754 | 0.754 | <0.754 | 0.754 |
| trans-1,2-Dichloroethene | 156-60-5 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 | < 1.00 | 1.00 | <0.793 | 0.793 | <0.793 | 0.793 | <0.793 | 0.793 |
| trans-1,3-Dichloropropene | 10061-02-6 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 | < 1.00 | 1.00 | <0.908 | 0.908 | <0.908 | 0.908 | <0.908 | 0.908 |
| Trichloroethene | 79-01-6 | - | - | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | - | - | - | - |
| Trichlorofluoromethane | 75-69-4 | 2.01 | 1.12 | 1.23 | 1.12 | 1.66 | 1.12 | <1.12 | 1.12 | <1.12 | 1.12 | 1.16 | 1.12 | 1.22 | 1.00 | <1.12 | 1.12 | 1.23 | 1.12 | 1.57 | 1.12 |
| Vinyl chloride | 75-01-4 | - | - | - | - | - | - | - | - | - | - | - | - | < 0.20 | 0.20 | - | - | - | - | - | - |
| Xylenes, Total | 1330-20-7 | 8.51 | 0.869 | - | - | - | - | <0.869 | 0.869 | <0.869 | 0.869 | <0.869 | 0.869 | | | - | - | - | - | - | - |
| | | | | | | | | | | | | | | | | | | | | | |
| **VOLATILE ORGANICS IN AIR BY SIM** | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 | < 1.0 | 1 | <0.109 | 0.109 | <0.109 | 0.109 | <0.109 | 0.109 |
| 1,1-Dichloroethene | 75-35-4 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 |
| 1,2-Dichloroethene (total) | 540-59-0 | - | - | - | - | - | - | 0.27 | 0.079 | <0.079 | 0.079 | - | - | - | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | 0.516 | 0.126 | 0.51 | 0.126 | 0.642 | 0.126 | 0.396 | 0.126 | 0.409 | 0.126 | 0.478 | 0.126 | 0.43 | 0.2 | 0.522 | 0.126 | 0.516 | 0.126 | 0.535 | 0.126 |
| cis-1,2-Dichloroethene | 156-59-2 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | 0.27 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 | < 0.2 | 0.2 | <0.079 | 0.079 | <0.079 | 0.079 | <0.079 | 0.079 |
| Dichlorodifluoromethane | 75-71-8 | - | - | - | - | - | - | 1.28 | 0.989 | - | - | - | - | 2.26 | 1 | - | - | - | - | - | - |
| Tetrachloroethene | 127-18-4 | 0.332 | 0.136 | <0.136 | 0.136 | <0.136 | 0.136 | 0.149 | 0.136 | 0.21 | 0.136 | <0.136 | 0.136 | < 0.25 | 0.25 | <0.136 | 0.136 | 0.142 | 0.136 | <0.136 | 0.136 |
| Trichloroethene | 79-01-6 | <0.107 | 0.107 | <0.107 | 0.107 | <0.107 | 0.107 | 0.161 | 0.107 | 0.134 | 0.107 | <0.107 | 0.107 | < 0.2 | 0.2 | <0.107 | 0.107 | <0.107 | 0.107 | <0.107 | 0.107 |
| Vinyl chloride | 75-01-4 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 | < 0.2 | 0.2 | <0.051 | 0.051 | <0.051 | 0.051 | <0.051 | 0.051 |

* Comparison is not performed on parameters with non-numeric crite

# Attachment D: 2023 Laboratory Results

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L2302270 |
| Client: | C.T. Male Associates<br>50 Century Hill Drive<br>Latham, NY 12110 |
| ATTN: | Rosaura Andujar-McNeil |
| Phone: | (518) 786-7400 |
| Project Name: | USAI LIGHTING |
| Project Number: | 14.4337 |
| Report Date: | 01/20/23 |



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

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

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2302270-01 | MW-01-20230113 | WATER | 1126 RIVER ROAD, NEW WINDSOR, NY | 01/13/23 10:00 | 01/13/23 |
| L2302270-02 | MW-02-20230113 | WATER | 1126 RIVER ROAD, NEW WINDSOR, NY | 01/13/23 10:50 | 01/13/23 |
| L2302270-03 | MW-03-20230113 | WATER | 1126 RIVER ROAD, NEW WINDSOR, NY | 01/13/23 12:05 | 01/13/23 |
| L2302270-04 | MW-04-20230113 | WATER | 1126 RIVER ROAD, NEW WINDSOR, NY | 01/13/23 12:45 | 01/13/23 |
| L2302270-05 | FD01-20230113 | WATER | 1126 RIVER ROAD, NEW WINDSOR, NY | 01/13/23 00:00 | 01/13/23 |

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302270 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/20/23 |

## Case Narrative

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

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

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

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

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

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

**Project Name:** USAI LIGHTING **Lab Number:** L2302270
**Project Number:** 14.4337 **Report Date:** 01/20/23

**Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2302270-02D: The sample has elevated detection limits due to the dilution required by the sample matrix. (foam)

Semivolatile Organics

The WG1734055-4/-5 MS/MSD recoveries, performed on L2302270-03, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

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

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 01/20/23

# ORGANICS

# VOLATILES

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-01 Date Collected: 01/13/23 10:00
Client ID: MW-01-20230113 Date Received: 01/13/23
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 18:20
Analyst: MJV

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-01 Date Collected: 01/13/23 10:00

Client ID: MW-01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 100 | | 70-130 |
| Toluene-d8 | 101 | | 70-130 |
| 4-Bromofluorobenzene | 107 | | 70-130 |
| Dibromofluoromethane | 99 | | 70-130 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-02 D
Client ID: MW-02-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 10:50
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 18:46
Analyst: MJV

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,1-Dichloroethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| Chloroform | ND | | ug/l | 5.0 | 1.4 | 2 |
| Carbon tetrachloride | ND | | ug/l | 1.0 | 0.27 | 2 |
| 1,2-Dichloropropane | ND | | ug/l | 2.0 | 0.27 | 2 |
| Dibromochloromethane | ND | | ug/l | 1.0 | 0.30 | 2 |
| 1,1,2-Trichloroethane | ND | | ug/l | 3.0 | 1.0 | 2 |
| Tetrachloroethene | ND | | ug/l | 1.0 | 0.36 | 2 |
| Chlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Trichlorofluoromethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,2-Dichloroethane | ND | | ug/l | 1.0 | 0.26 | 2 |
| 1,1,1-Trichloroethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| Bromodichloromethane | ND | | ug/l | 1.0 | 0.38 | 2 |
| trans-1,3-Dichloropropene | ND | | ug/l | 1.0 | 0.33 | 2 |
| cis-1,3-Dichloropropene | ND | | ug/l | 1.0 | 0.29 | 2 |
| Bromoform | ND | | ug/l | 4.0 | 1.3 | 2 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 1.0 | 0.33 | 2 |
| Benzene | ND | | ug/l | 1.0 | 0.32 | 2 |
| Toluene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Ethylbenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Chloromethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| Bromomethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| Vinyl chloride | ND | | ug/l | 2.0 | 0.14 | 2 |
| Chloroethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,1-Dichloroethene | ND | | ug/l | 1.0 | 0.34 | 2 |
| trans-1,2-Dichloroethene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Trichloroethene | ND | | ug/l | 1.0 | 0.35 | 2 |
| 1,2-Dichlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-02 D Date Collected: 01/13/23 10:50

Client ID: MW-02-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,3-Dichlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,4-Dichlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Methyl tert butyl ether | ND | | ug/l | 5.0 | 1.4 | 2 |
| p/m-Xylene | ND | | ug/l | 5.0 | 1.4 | 2 |
| o-Xylene | ND | | ug/l | 5.0 | 1.4 | 2 |
| cis-1,2-Dichloroethene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Styrene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Dichlorodifluoromethane | ND | | ug/l | 10 | 2.0 | 2 |
| Acetone | ND | | ug/l | 10 | 2.9 | 2 |
| Carbon disulfide | ND | | ug/l | 10 | 2.0 | 2 |
| 2-Butanone | ND | | ug/l | 10 | 3.9 | 2 |
| 4-Methyl-2-pentanone | ND | | ug/l | 10 | 2.0 | 2 |
| 2-Hexanone | ND | | ug/l | 10 | 2.0 | 2 |
| Bromochloromethane | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,2-Dibromoethane | ND | | ug/l | 4.0 | 1.3 | 2 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 5.0 | 1.4 | 2 |
| Isopropylbenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 5.0 | 1.4 | 2 |
| Methyl Acetate | ND | | ug/l | 4.0 | 0.47 | 2 |
| Cyclohexane | ND | | ug/l | 20 | 0.54 | 2 |
| 1,4-Dioxane | ND | | ug/l | 500 | 120 | 2 |
| Freon-113 | ND | | ug/l | 5.0 | 1.4 | 2 |
| Methyl cyclohexane | ND | | ug/l | 20 | 0.79 | 2 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 98 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 109 | | 70-130 |
| Dibromofluoromethane | 97 | | 70-130 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-03 Date Collected: 01/13/23 12:05
Client ID: MW-03-20230113 Date Received: 01/13/23
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 19:12
Analyst: MJV

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-03 Date Collected: 01/13/23 12:05

Client ID: MW-03-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 97 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 107 | | 70-130 |
| Dibromofluoromethane | 98 | | 70-130 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-04 Date Collected: 01/13/23 12:45
Client ID: MW-04-20230113 Date Received: 01/13/23
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 01/17/23 19:38
Analyst: MJV

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-04 Date Collected: 01/13/23 12:45

Client ID: MW-04-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 101 | | 70-130 |
| Toluene-d8 | 101 | | 70-130 |
| 4-Bromofluorobenzene | 108 | | 70-130 |
| Dibromofluoromethane | 99 | | 70-130 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-05 Date Collected: 01/13/23 00:00

Client ID: FD01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260D

Analytical Date: 01/17/23 20:03

Analyst: MJV

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-05 Date Collected: 01/13/23 00:00

Client ID: FD01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | | 70-130 |
| Toluene-d8 | 101 | | 70-130 |
| 4-Bromofluorobenzene | 108 | | 70-130 |
| Dibromofluoromethane | 99 | | 70-130 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 01/17/23 17:02
Analyst: LAC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1734543-5 | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 |
| Benzene | ND | | ug/l | 0.50 | 0.16 |
| Toluene | ND | | ug/l | 2.5 | 0.70 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 01/17/23 17:02
Analyst: LAC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1734543-5 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 |
| Styrene | ND | | ug/l | 2.5 | 0.70 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 |
| Acetone | ND | | ug/l | 5.0 | 1.5 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 01/17/23 17:02
Analyst: LAC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1734543-5 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 98 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 109 | | 70-130 |
| Dibromofluoromethane | 99 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734543-3 WG1734543-4 | | | | | | | | |
| Methylene chloride | 100 | | 100 | | 70-130 | 0 | | 20 |
| 1,1-Dichloroethane | 100 | | 100 | | 70-130 | 0 | | 20 |
| Chloroform | 98 | | 100 | | 70-130 | 2 | | 20 |
| Carbon tetrachloride | 110 | | 120 | | 63-132 | 9 | | 20 |
| 1,2-Dichloropropane | 100 | | 100 | | 70-130 | 0 | | 20 |
| Dibromochloromethane | 110 | | 110 | | 63-130 | 0 | | 20 |
| 1,1,2-Trichloroethane | 95 | | 99 | | 70-130 | 4 | | 20 |
| Tetrachloroethene | 100 | | 100 | | 70-130 | 0 | | 20 |
| Chlorobenzene | 97 | | 98 | | 75-130 | 1 | | 20 |
| Trichlorofluoromethane | 85 | | 88 | | 62-150 | 3 | | 20 |
| 1,2-Dichloroethane | 98 | | 100 | | 70-130 | 2 | | 20 |
| 1,1,1-Trichloroethane | 100 | | 110 | | 67-130 | 10 | | 20 |
| Bromodichloromethane | 100 | | 110 | | 67-130 | 10 | | 20 |
| trans-1,3-Dichloropropene | 100 | | 100 | | 70-130 | 0 | | 20 |
| cis-1,3-Dichloropropene | 100 | | 100 | | 70-130 | 0 | | 20 |
| Bromoform | 110 | | 110 | | 54-136 | 0 | | 20 |
| 1,1,2,2-Tetrachloroethane | 97 | | 100 | | 67-130 | 3 | | 20 |
| Benzene | 92 | | 95 | | 70-130 | 3 | | 20 |
| Toluene | 96 | | 99 | | 70-130 | 3 | | 20 |
| Ethylbenzene | 95 | | 98 | | 70-130 | 3 | | 20 |
| Chloromethane | 91 | | 93 | | 64-130 | 2 | | 20 |
| Bromomethane | 54 | | 51 | | 39-139 | 6 | | 20 |
| Vinyl chloride | 88 | | 91 | | 55-140 | 3 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734543-3 WG1734543-4 | | | | | | | | |
| Chloroethane | 86 | | 87 | | 55-138 | 1 | | 20 |
| 1,1-Dichloroethene | 82 | | 85 | | 61-145 | 4 | | 20 |
| trans-1,2-Dichloroethene | 100 | | 110 | | 70-130 | 10 | | 20 |
| Trichloroethene | 96 | | 99 | | 70-130 | 3 | | 20 |
| 1,2-Dichlorobenzene | 97 | | 98 | | 70-130 | 1 | | 20 |
| 1,3-Dichlorobenzene | 98 | | 99 | | 70-130 | 1 | | 20 |
| 1,4-Dichlorobenzene | 95 | | 98 | | 70-130 | 3 | | 20 |
| Methyl tert butyl ether | 94 | | 99 | | 63-130 | 5 | | 20 |
| p/m-Xylene | 100 | | 100 | | 70-130 | 0 | | 20 |
| o-Xylene | 90 | | 90 | | 70-130 | 0 | | 20 |
| cis-1,2-Dichloroethene | 99 | | 100 | | 70-130 | 1 | | 20 |
| Styrene | 80 | | 85 | | 70-130 | 6 | | 20 |
| Dichlorodifluoromethane | 110 | | 110 | | 36-147 | 0 | | 20 |
| Acetone | 89 | | 110 | | 58-148 | **21** | Q | 20 |
| Carbon disulfide | 77 | | 80 | | 51-130 | 4 | | 20 |
| 2-Butanone | 110 | | 110 | | 63-138 | 0 | | 20 |
| 4-Methyl-2-pentanone | 93 | | 99 | | 59-130 | 6 | | 20 |
| 2-Hexanone | 96 | | 100 | | 57-130 | 4 | | 20 |
| Bromochloromethane | 99 | | 100 | | 70-130 | 1 | | 20 |
| 1,2-Dibromoethane | 98 | | 100 | | 70-130 | 2 | | 20 |
| 1,2-Dibromo-3-chloropropane | 94 | | 98 | | 41-144 | 4 | | 20 |
| Isopropylbenzene | 100 | | 100 | | 70-130 | 0 | | 20 |
| 1,2,3-Trichlorobenzene | 100 | | 100 | | 70-130 | 0 | | 20 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** USAI LIGHTING

**Project Number:** 14.4337

**Lab Number:** L2302270

**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734543-3 WG1734543-4 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 99 | | 100 | | 70-130 | 1 | | 20 |
| Methyl Acetate | 100 | | 110 | | 70-130 | 10 | | 20 |
| Cyclohexane | 100 | | 100 | | 70-130 | 0 | | 20 |
| 1,4-Dioxane | 106 | | 108 | | 56-162 | 2 | | 20 |
| Freon-113 | 83 | | 87 | | 70-130 | 5 | | 20 |
| Methyl cyclohexane | 95 | | 100 | | 70-130 | 5 | | 20 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 96 | | 98 | | 70-130 |
| Toluene-d8 | 100 | | 100 | | 70-130 |
| 4-Bromofluorobenzene | 105 | | 104 | | 70-130 |
| Dibromofluoromethane | 98 | | 100 | | 70-130 |

# Matrix Spike Analysis
## *Batch Quality Control*

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734543-8 WG1734543-9 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| Methylene chloride | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| 1,1-Dichloroethane | ND | 10 | 11 | 110 | | 11 | 110 | | 70-130 | 0 | | 20 |
| Chloroform | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| Carbon tetrachloride | ND | 10 | 12 | 120 | | 12 | 120 | | 63-132 | 0 | | 20 |
| 1,2-Dichloropropane | ND | 10 | 11 | 110 | | 11 | 110 | | 70-130 | 0 | | 20 |
| Dibromochloromethane | ND | 10 | 11 | 110 | | 11 | 110 | | 63-130 | 0 | | 20 |
| 1,1,2-Trichloroethane | ND | 10 | 10 | 100 | | 9.8 | 98 | | 70-130 | 2 | | 20 |
| Tetrachloroethene | ND | 10 | 11 | 110 | | 10 | 100 | | 70-130 | 10 | | 20 |
| Chlorobenzene | ND | 10 | 10 | 100 | | 9.8 | 98 | | 75-130 | 2 | | 20 |
| Trichlorofluoromethane | ND | 10 | 9.2 | 92 | | 9.1 | 91 | | 62-150 | 1 | | 20 |
| 1,2-Dichloroethane | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| 1,1,1-Trichloroethane | ND | 10 | 12 | 120 | | 11 | 110 | | 67-130 | 9 | | 20 |
| Bromodichloromethane | ND | 10 | 11 | 110 | | 11 | 110 | | 67-130 | 0 | | 20 |
| trans-1,3-Dichloropropene | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| cis-1,3-Dichloropropene | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| Bromoform | ND | 10 | 11 | 110 | | 11 | 110 | | 54-136 | 0 | | 20 |
| 1,1,2,2-Tetrachloroethane | ND | 10 | 10 | 100 | | 10 | 100 | | 67-130 | 0 | | 20 |
| Benzene | ND | 10 | 10 | 100 | | 9.7 | 97 | | 70-130 | 3 | | 20 |
| Toluene | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| Ethylbenzene | ND | 10 | 10 | 100 | | 9.9 | 99 | | 70-130 | 1 | | 20 |
| Chloromethane | ND | 10 | 10 | 100 | | 9.9 | 99 | | 64-130 | 1 | | 20 |
| Bromomethane | ND | 10 | 3.6 | **36** | Q | 4.2 | 42 | | 39-139 | 15 | | 20 |
| Vinyl chloride | ND | 10 | 10 | 100 | | 10 | 100 | | 55-140 | 0 | | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734543-8 WG1734543-9 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| Chloroethane | ND | 10 | 9.1 | 91 | | 9.6 | 96 | | 55-138 | 5 | | 20 |
| 1,1-Dichloroethene | ND | 10 | 8.8 | 88 | | 8.6 | 86 | | 61-145 | 2 | | 20 |
| trans-1,2-Dichloroethene | ND | 10 | 11 | 110 | | 11 | 110 | | 70-130 | 0 | | 20 |
| Trichloroethene | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| 1,2-Dichlorobenzene | ND | 10 | 10 | 100 | | 9.8 | 98 | | 70-130 | 2 | | 20 |
| 1,3-Dichlorobenzene | ND | 10 | 10 | 100 | | 9.9 | 99 | | 70-130 | 1 | | 20 |
| 1,4-Dichlorobenzene | ND | 10 | 10 | 100 | | 9.7 | 97 | | 70-130 | 3 | | 20 |
| Methyl tert butyl ether | ND | 10 | 9.7 | 97 | | 9.8 | 98 | | 63-130 | 1 | | 20 |
| p/m-Xylene | ND | 20 | 21 | 105 | | 20 | 100 | | 70-130 | 5 | | 20 |
| o-Xylene | ND | 20 | 20 | 100 | | 18 | 90 | | 70-130 | 11 | | 20 |
| cis-1,2-Dichloroethene | ND | 10 | 11 | 110 | | 10 | 100 | | 70-130 | 10 | | 20 |
| Styrene | ND | 20 | 17 | 85 | | 16 | 80 | | 70-130 | 6 | | 20 |
| Dichlorodifluoromethane | ND | 10 | 12 | 120 | | 12 | 120 | | 36-147 | 0 | | 20 |
| Acetone | ND | 10 | 11 | 110 | | 10 | 100 | | 58-148 | 10 | | 20 |
| Carbon disulfide | ND | 10 | 8.2 | 82 | | 8.4 | 84 | | 51-130 | 2 | | 20 |
| 2-Butanone | ND | 10 | 12 | 120 | | 12 | 120 | | 63-138 | 0 | | 20 |
| 4-Methyl-2-pentanone | ND | 10 | 9.9 | 99 | | 9.8 | 98 | | 59-130 | 1 | | 20 |
| 2-Hexanone | ND | 10 | 11 | 110 | | 10 | 100 | | 57-130 | 10 | | 20 |
| Bromochloromethane | ND | 10 | 10 | 100 | | 9.9 | 99 | | 70-130 | 1 | | 20 |
| 1,2-Dibromoethane | ND | 10 | 10 | 100 | | 9.8 | 98 | | 70-130 | 2 | | 20 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | 9.6 | 96 | | 9.4 | 94 | | 41-144 | 2 | | 20 |
| Isopropylbenzene | ND | 10 | 11 | 110 | | 10 | 100 | | 70-130 | 10 | | 20 |
| 1,2,3-Trichlorobenzene | ND | 10 | 11 | 110 | | 11 | 110 | | 70-130 | 0 | | 20 |

# Matrix Spike Analysis

## *Batch Quality Control*

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734543-8 WG1734543-9 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 10 | 11 | 110 | | 10 | 100 | | 70-130 | 10 | | 20 |
| Methyl Acetate | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |
| Cyclohexane | ND | 10 | 11 | 110 | | 11 | 110 | | 70-130 | 0 | | 20 |
| 1,4-Dioxane | ND | 500 | 350 | 70 | | 410 | 82 | | 56-162 | 16 | | 20 |
| Freon-113 | ND | 10 | 8.3 | 83 | | 8.6 | 86 | | 70-130 | 4 | | 20 |
| Methyl cyclohexane | ND | 10 | 10 | 100 | | 10 | 100 | | 70-130 | 0 | | 20 |

| Surrogate | MS % Recovery | MS Qualifier | MSD % Recovery | MSD Qualifier | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 98 | | 101 | | 70-130 |
| 4-Bromofluorobenzene | 106 | | 107 | | 70-130 |
| Dibromofluoromethane | 98 | | 100 | | 70-130 |
| Toluene-d8 | 101 | | 100 | | 70-130 |

# SEMIVOLATILES

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-01
Client ID: MW-01-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 10:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 01/18/23 10:26
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 | 1 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 | 1 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 | 1 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 | 1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 | 1 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 | 1 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 | 1 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 | 1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 | 1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 | 1 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 | 1 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.50 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 | 1 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-01 Date Collected: 01/13/23 10:00

Client ID: MW-01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 | 1 |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 | 1 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 | 1 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 | 1 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 | 1 |
| Phenol | ND | | ug/l | 5.0 | 0.57 | 1 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 | 1 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 | 1 |
| Atrazine | ND | | ug/l | 10 | 0.76 | 1 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 | 1 |
| Caprolactam | ND | | ug/l | 10 | 3.3 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 42 | | 21-120 |
| Phenol-d6 | 37 | | 10-120 |
| Nitrobenzene-d5 | 59 | | 23-120 |
| 2-Fluorobiphenyl | 71 | | 15-120 |
| 2,4,6-Tribromophenol | 49 | | 10-120 |
| 4-Terphenyl-d14 | 78 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-01
Client ID: MW-01-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY
Date Collected: 01/13/23 10:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 12:05
Analyst: JJW
Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 | 1 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 | 1 |
| Naphthalene | ND | | ug/l | 0.10 | 0.05 | 1 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Fluorene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-01 Date Collected: 01/13/23 10:00

Client ID: MW-01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 45 | | 21-120 |
| Phenol-d6 | 43 | | 10-120 |
| Nitrobenzene-d5 | 102 | | 23-120 |
| 2-Fluorobiphenyl | 67 | | 15-120 |
| 2,4,6-Tribromophenol | 83 | | 10-120 |
| 4-Terphenyl-d14 | 72 | | 41-149 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-02
Client ID: MW-02-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 10:50
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 01/18/23 10:48
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 | 1 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 | 1 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 | 1 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 | 1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 | 1 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 | 1 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 | 1 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 | 1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 | 1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 | 1 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 | 1 |
| Dibenzofuran | 1.6 | J | ug/l | 2.0 | 0.50 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 | 1 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-02 Date Collected: 01/13/23 10:50

Client ID: MW-02-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 | 1 |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 | 1 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 | 1 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 | 1 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 | 1 |
| Phenol | ND | | ug/l | 5.0 | 0.57 | 1 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 | 1 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 | 1 |
| Atrazine | ND | | ug/l | 10 | 0.76 | 1 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 | 1 |
| Caprolactam | ND | | ug/l | 10 | 3.3 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 59 | | 21-120 |
| Phenol-d6 | 50 | | 10-120 |
| Nitrobenzene-d5 | 78 | | 23-120 |
| 2-Fluorobiphenyl | 78 | | 15-120 |
| 2,4,6-Tribromophenol | 84 | | 10-120 |
| 4-Terphenyl-d14 | 87 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-02
Client ID: MW-02-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 10:50
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 12:55
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | 2.4 | | ug/l | 0.10 | 0.01 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 | 1 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 | 1 |
| Naphthalene | 1.0 | | ug/l | 0.10 | 0.05 | 1 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Acenaphthylene | 0.38 | | ug/l | 0.10 | 0.01 | 1 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Fluorene | 3.9 | | ug/l | 0.10 | 0.01 | 1 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-02 Date Collected: 01/13/23 10:50

Client ID: MW-02-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS-SIM - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 72 | | 21-120 |
| Phenol-d6 | 60 | | 10-120 |
| Nitrobenzene-d5 | **132** | Q | 23-120 |
| 2-Fluorobiphenyl | 81 | | 15-120 |
| 2,4,6-Tribromophenol | **153** | Q | 10-120 |
| 4-Terphenyl-d14 | 85 | | 41-149 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-03
Client ID: MW-03-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 12:05
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 01/18/23 11:36
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 | 1 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 | 1 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 | 1 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 | 1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 | 1 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 | 1 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 | 1 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 | 1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 | 1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 | 1 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 | 1 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.50 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 | 1 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-03 Date Collected: 01/13/23 12:05

Client ID: MW-03-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 | 1 |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 | 1 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 | 1 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 | 1 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 | 1 |
| Phenol | ND | | ug/l | 5.0 | 0.57 | 1 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 | 1 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 | 1 |
| Atrazine | ND | | ug/l | 10 | 0.76 | 1 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 | 1 |
| Caprolactam | ND | | ug/l | 10 | 3.3 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 50 | | 21-120 |
| Phenol-d6 | 44 | | 10-120 |
| Nitrobenzene-d5 | 63 | | 23-120 |
| 2-Fluorobiphenyl | 70 | | 15-120 |
| 2,4,6-Tribromophenol | 74 | | 10-120 |
| 4-Terphenyl-d14 | 80 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-03
Client ID: MW-03-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY
Date Collected: 01/13/23 12:05
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 13:28
Analyst: JJW
Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | 0.28 | | ug/l | 0.10 | 0.01 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 | 1 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 | 1 |
| Naphthalene | 0.05 | J | ug/l | 0.10 | 0.05 | 1 |
| Benzo(a)anthracene | 0.02 | J | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(b)fluoranthene | 0.02 | J | ug/l | 0.10 | 0.01 | 1 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Fluorene | 0.29 | | ug/l | 0.10 | 0.01 | 1 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Pyrene | 0.02 | J | ug/l | 0.10 | 0.02 | 1 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-03 Date Collected: 01/13/23 12:05

Client ID: MW-03-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 58 | | 21-120 |
| Phenol-d6 | 54 | | 10-120 |
| Nitrobenzene-d5 | 106 | | 23-120 |
| 2-Fluorobiphenyl | 72 | | 15-120 |
| 2,4,6-Tribromophenol | **129** | Q | 10-120 |
| 4-Terphenyl-d14 | 78 | | 41-149 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-04
Client ID: MW-04-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 12:45
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 01/18/23 12:43
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 | 1 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 | 1 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 | 1 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 | 1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 | 1 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 | 1 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 | 1 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 | 1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 | 1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 | 1 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 | 1 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.50 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 | 1 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-04 Date Collected: 01/13/23 12:45

Client ID: MW-04-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 | 1 |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 | 1 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 | 1 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 | 1 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 | 1 |
| Phenol | ND | | ug/l | 5.0 | 0.57 | 1 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 | 1 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 | 1 |
| Atrazine | ND | | ug/l | 10 | 0.76 | 1 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 | 1 |
| Caprolactam | ND | | ug/l | 10 | 3.3 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 55 | | 21-120 |
| Phenol-d6 | 49 | | 10-120 |
| Nitrobenzene-d5 | 69 | | 23-120 |
| 2-Fluorobiphenyl | 77 | | 15-120 |
| 2,4,6-Tribromophenol | 57 | | 10-120 |
| 4-Terphenyl-d14 | 82 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-04
Client ID: MW-04-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 12:45
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 13:45
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 | 1 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 | 1 |
| Naphthalene | ND | | ug/l | 0.10 | 0.05 | 1 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Fluorene | 0.05 | J | ug/l | 0.10 | 0.01 | 1 |
| Phenanthrene | 0.05 | J | ug/l | 0.10 | 0.02 | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Pyrene | 0.02 | J | ug/l | 0.10 | 0.02 | 1 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-04 Date Collected: 01/13/23 12:45

Client ID: MW-04-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS-SIM - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 66 | | 21-120 |
| Phenol-d6 | 63 | | 10-120 |
| Nitrobenzene-d5 | **131** | Q | 23-120 |
| 2-Fluorobiphenyl | 85 | | 15-120 |
| 2,4,6-Tribromophenol | 114 | | 10-120 |
| 4-Terphenyl-d14 | 87 | | 41-149 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-05
Client ID: FD01-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY

Date Collected: 01/13/23 00:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 01/18/23 13:05
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 | 1 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 | 1 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 | 1 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 | 1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 | 1 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 | 1 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 | 1 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 | 1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 | 1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 | 1 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 | 1 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.50 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 | 1 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-05 Date Collected: 01/13/23 00:00

Client ID: FD01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 | 1 |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 | 1 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 | 1 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 | 1 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 | 1 |
| Phenol | ND | | ug/l | 5.0 | 0.57 | 1 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 | 1 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 | 1 |
| Atrazine | ND | | ug/l | 10 | 0.76 | 1 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 | 1 |
| Caprolactam | ND | | ug/l | 10 | 3.3 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 50 | | 21-120 |
| Phenol-d6 | 40 | | 10-120 |
| Nitrobenzene-d5 | 61 | | 23-120 |
| 2-Fluorobiphenyl | 66 | | 15-120 |
| 2,4,6-Tribromophenol | 66 | | 10-120 |
| 4-Terphenyl-d14 | 66 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

## SAMPLE RESULTS

Lab ID: L2302270-05
Client ID: FD01-20230113
Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 14:01
Analyst: JJW

Date Collected: 01/13/23 00:00
Date Received: 01/13/23
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 16:55

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | 0.30 | | ug/l | 0.10 | 0.01 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 | 1 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 | 1 |
| Naphthalene | 0.05 | J | ug/l | 0.10 | 0.05 | 1 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Fluorene | 0.29 | | ug/l | 0.10 | 0.01 | 1 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 | 1 |
| Pyrene | 0.02 | J | ug/l | 0.10 | 0.02 | 1 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 | 1 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 | 1 |

**Project Name:** USAI LIGHTING **Lab Number:** L2302270

**Project Number:** 14.4337 **Report Date:** 01/20/23

**SAMPLE RESULTS**

Lab ID: L2302270-05 Date Collected: 01/13/23 00:00

Client ID: FD01-20230113 Date Received: 01/13/23

Sample Location: 1126 RIVER ROAD, NEW WINDSOR, NY Field Prep: Not Specified

Sample Depth:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab | | | | | | |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 60 | | 21-120 |
| Phenol-d6 | 51 | | 10-120 |
| Nitrobenzene-d5 | 106 | | 23-120 |
| 2-Fluorobiphenyl | 69 | | 15-120 |
| 2,4,6-Tribromophenol | 114 | | 10-120 |
| 4-Terphenyl-d14 | 66 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 01/18/23 01:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 02:54

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1734055-1 | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.50 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.6 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 1.2 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 0.93 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.49 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.38 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.53 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.50 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 0.69 |
| Isophorone | ND | | ug/l | 5.0 | 1.2 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.77 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.42 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.64 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 1.5 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.2 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.39 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.3 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.38 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 1.8 |
| Biphenyl | ND | | ug/l | 2.0 | 0.46 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 1.1 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 0.50 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 0.81 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 0.80 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.50 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.44 |
| Acetophenone | ND | | ug/l | 5.0 | 0.53 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.61 |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.35 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 01/18/23 01:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 02:54

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1734055-1 | | | | | |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.48 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.41 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.8 |
| 2-Nitrophenol | ND | | ug/l | 10 | 0.85 |
| 4-Nitrophenol | ND | | ug/l | 10 | 0.67 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 6.6 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 1.8 |
| Phenol | ND | | ug/l | 5.0 | 0.57 |
| 2-Methylphenol | ND | | ug/l | 5.0 | 0.49 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 0.48 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.77 |
| Carbazole | ND | | ug/l | 2.0 | 0.49 |
| Atrazine | ND | | ug/l | 10 | 0.76 |
| Benzaldehyde | ND | | ug/l | 5.0 | 0.53 |
| Caprolactam | ND | | ug/l | 10 | 3.3 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.84 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 64 | | 21-120 |
| Phenol-d6 | 60 | | 10-120 |
| Nitrobenzene-d5 | 95 | | 23-120 |
| 2-Fluorobiphenyl | 78 | | 15-120 |
| 2,4,6-Tribromophenol | 58 | | 10-120 |
| 4-Terphenyl-d14 | 78 | | 41-149 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 11:48
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 02:54

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1734056-1 | | | | | |
| Acenaphthene | ND | | ug/l | 0.10 | 0.01 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.02 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.02 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.05 |
| Naphthalene | ND | | ug/l | 0.10 | 0.05 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.02 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.01 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.01 |
| Chrysene | ND | | ug/l | 0.10 | 0.01 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.01 |
| Anthracene | ND | | ug/l | 0.10 | 0.01 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.01 |
| Fluorene | ND | | ug/l | 0.10 | 0.01 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.01 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.01 |
| Pyrene | ND | | ug/l | 0.10 | 0.02 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.02 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.01 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.01 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.06 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 01/18/23 11:48
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/23 02:54

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1734056-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 57 | | 21-120 |
| Phenol-d6 | 61 | | 10-120 |
| Nitrobenzene-d5 | **133** | Q | 23-120 |
| 2-Fluorobiphenyl | 88 | | 15-120 |
| 2,4,6-Tribromophenol | 83 | | 10-120 |
| 4-Terphenyl-d14 | 94 | | 41-149 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734055-2 WG1734055-3 | | | | | | | | |
| Bis(2-chloroethyl)ether | 75 | | 70 | | 40-140 | 7 | | 30 |
| 3,3'-Dichlorobenzidine | 75 | | 72 | | 40-140 | 4 | | 30 |
| 2,4-Dinitrotoluene | 106 | | 102 | | 48-143 | 4 | | 30 |
| 2,6-Dinitrotoluene | 94 | | 87 | | 40-140 | 8 | | 30 |
| 4-Chlorophenyl phenyl ether | 75 | | 76 | | 40-140 | 1 | | 30 |
| 4-Bromophenyl phenyl ether | 77 | | 76 | | 40-140 | 1 | | 30 |
| Bis(2-chloroisopropyl)ether | 79 | | 78 | | 40-140 | 1 | | 30 |
| Bis(2-chloroethoxy)methane | 80 | | 77 | | 40-140 | 4 | | 30 |
| Hexachlorocyclopentadiene | 69 | | 65 | | 40-140 | 6 | | 30 |
| Isophorone | 74 | | 72 | | 40-140 | 3 | | 30 |
| Nitrobenzene | 84 | | 82 | | 40-140 | 2 | | 30 |
| NDPA/DPA | 79 | | 77 | | 40-140 | 3 | | 30 |
| n-Nitrosodi-n-propylamine | 76 | | 74 | | 29-132 | 3 | | 30 |
| Bis(2-ethylhexyl)phthalate | 122 | | 120 | | 40-140 | 2 | | 30 |
| Butyl benzyl phthalate | 100 | | 96 | | 40-140 | 4 | | 30 |
| Di-n-butylphthalate | 89 | | 84 | | 40-140 | 6 | | 30 |
| Di-n-octylphthalate | 116 | | 110 | | 40-140 | 5 | | 30 |
| Diethyl phthalate | 88 | | 85 | | 40-140 | 3 | | 30 |
| Dimethyl phthalate | 81 | | 75 | | 40-140 | 8 | | 30 |
| Biphenyl | 75 | | 72 | | 40-140 | 4 | | 30 |
| 4-Chloroaniline | 57 | | 56 | | 40-140 | 2 | | 30 |
| 2-Nitroaniline | 96 | | 97 | | 52-143 | 1 | | 30 |
| 3-Nitroaniline | 88 | | 84 | | 25-145 | 5 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734055-2 WG1734055-3 | | | | | | | | |
| 4-Nitroaniline | 97 | | 98 | | 51-143 | 1 | | 30 |
| Dibenzofuran | 77 | | 74 | | 40-140 | 4 | | 30 |
| 1,2,4,5-Tetrachlorobenzene | 68 | | 67 | | 2-134 | 1 | | 30 |
| Acetophenone | 75 | | 74 | | 39-129 | 1 | | 30 |
| 2,4,6-Trichlorophenol | 74 | | 69 | | 30-130 | 7 | | 30 |
| p-Chloro-m-cresol | 75 | | 75 | | 23-97 | 0 | | 30 |
| 2-Chlorophenol | 77 | | 73 | | 27-123 | 5 | | 30 |
| 2,4-Dichlorophenol | 79 | | 74 | | 30-130 | 7 | | 30 |
| 2,4-Dimethylphenol | 45 | | 49 | | 30-130 | 9 | | 30 |
| 2-Nitrophenol | 100 | | 95 | | 30-130 | 5 | | 30 |
| 4-Nitrophenol | **98** | Q | **94** | Q | 10-80 | 4 | | 30 |
| 2,4-Dinitrophenol | 101 | | 94 | | 20-130 | 7 | | 30 |
| 4,6-Dinitro-o-cresol | 120 | | 117 | | 20-164 | 3 | | 30 |
| Phenol | 61 | | 56 | | 12-110 | 9 | | 30 |
| 2-Methylphenol | 71 | | 67 | | 30-130 | 6 | | 30 |
| 3-Methylphenol/4-Methylphenol | 81 | | 79 | | 30-130 | 3 | | 30 |
| 2,4,5-Trichlorophenol | 73 | | 71 | | 30-130 | 3 | | 30 |
| Carbazole | 82 | | 79 | | 55-144 | 4 | | 30 |
| Atrazine | 79 | | 86 | | 40-140 | 8 | | 30 |
| Benzaldehyde | 75 | | 73 | | 40-140 | 3 | | 30 |
| Caprolactam | 39 | | 37 | | 10-130 | 5 | | 30 |
| 2,3,4,6-Tetrachlorophenol | 79 | | 72 | | 40-140 | 9 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** USAI LIGHTING

**Project Number:** 14.4337

**Lab Number:** L2302270

**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1734055-2 WG1734055-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 68 | | 64 | | 21-120 |
| Phenol-d6 | 62 | | 60 | | 10-120 |
| Nitrobenzene-d5 | 89 | | 78 | | 23-120 |
| 2-Fluorobiphenyl | 74 | | 69 | | 15-120 |
| 2,4,6-Tribromophenol | 83 | | 82 | | 10-120 |
| 4-Terphenyl-d14 | 77 | | 74 | | 41-149 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1734056-2 WG1734056-3 | | | | | | | | |
| Acenaphthene | 69 | | 79 | | 40-140 | 14 | | 40 |
| 2-Chloronaphthalene | 73 | | 77 | | 40-140 | 5 | | 40 |
| Fluoranthene | 79 | | 89 | | 40-140 | 12 | | 40 |
| Hexachlorobutadiene | 68 | | 75 | | 40-140 | 10 | | 40 |
| Naphthalene | 67 | | 72 | | 40-140 | 7 | | 40 |
| Benzo(a)anthracene | 80 | | 92 | | 40-140 | 14 | | 40 |
| Benzo(a)pyrene | 83 | | 95 | | 40-140 | 13 | | 40 |
| Benzo(b)fluoranthene | 85 | | 98 | | 40-140 | 14 | | 40 |
| Benzo(k)fluoranthene | 82 | | 91 | | 40-140 | 10 | | 40 |
| Chrysene | 82 | | 94 | | 40-140 | 14 | | 40 |
| Acenaphthylene | 74 | | 81 | | 40-140 | 9 | | 40 |
| Anthracene | 77 | | 87 | | 40-140 | 12 | | 40 |
| Benzo(ghi)perylene | 91 | | 105 | | 40-140 | 14 | | 40 |
| Fluorene | 74 | | 82 | | 40-140 | 10 | | 40 |
| Phenanthrene | 77 | | 86 | | 40-140 | 11 | | 40 |
| Dibenzo(a,h)anthracene | 97 | | 109 | | 40-140 | 12 | | 40 |
| Indeno(1,2,3-cd)pyrene | 98 | | 110 | | 40-140 | 12 | | 40 |
| Pyrene | 77 | | 88 | | 40-140 | 13 | | 40 |
| 2-Methylnaphthalene | 68 | | 74 | | 40-140 | 8 | | 40 |
| Pentachlorophenol | 84 | | 94 | | 40-140 | 11 | | 40 |
| Hexachlorobenzene | 84 | | 94 | | 40-140 | 11 | | 40 |
| Hexachloroethane | 75 | | 76 | | 40-140 | 1 | | 40 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1734056-2 WG1734056-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 56 | | 68 | | 21-120 |
| Phenol-d6 | 55 | | 62 | | 10-120 |
| Nitrobenzene-d5 | 108 | | 119 | | 23-120 |
| 2-Fluorobiphenyl | 72 | | 78 | | 15-120 |
| 2,4,6-Tribromophenol | 91 | | **132** | Q | 10-120 |
| 4-Terphenyl-d14 | 81 | | 92 | | 41-149 |

# Matrix Spike Analysis

## *Batch Quality Control*

**Project Name:** USAI LIGHTING

**Project Number:** 14.4337

**Lab Number:** L2302270

**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734055-4 WG1734055-5 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 18.2 | 12 | 66 | | 8.8 | 48 | | 40-140 | **31** | Q | 30 |
| 3,3'-Dichlorobenzidine | ND | 18.2 | ND | **0** | Q | ND | **0** | Q | 40-140 | NC | | 30 |
| 2,4-Dinitrotoluene | ND | 18.2 | 15 | 83 | | 13 | 72 | | 48-143 | 14 | | 30 |
| 2,6-Dinitrotoluene | ND | 18.2 | 16 | 88 | | 12 | 66 | | 40-140 | 29 | | 30 |
| 4-Chlorophenyl phenyl ether | ND | 18.2 | 13 | 72 | | 11 | 61 | | 40-140 | 17 | | 30 |
| 4-Bromophenyl phenyl ether | ND | 18.2 | 13 | 72 | | 10 | 55 | | 40-140 | 26 | | 30 |
| Bis(2-chloroisopropyl)ether | ND | 18.2 | 15 | 83 | | 11 | 61 | | 40-140 | **31** | Q | 30 |
| Bis(2-chloroethoxy)methane | ND | 18.2 | 12 | 66 | | 9.2 | 51 | | 40-140 | 26 | | 30 |
| Hexachlorocyclopentadiene | ND | 18.2 | 9.8J | 54 | | 6.5J | **36** | Q | 40-140 | **40** | Q | 30 |
| Isophorone | ND | 18.2 | 11 | 61 | | 8.6 | 47 | | 40-140 | 24 | | 30 |
| Nitrobenzene | ND | 18.2 | 13 | 72 | | 9.3 | 51 | | 40-140 | **33** | Q | 30 |
| NDPA/DPA | ND | 18.2 | 14 | 77 | | 11 | 61 | | 40-140 | 24 | | 30 |
| n-Nitrosodi-n-propylamine | ND | 18.2 | 12 | 66 | | 9.1 | 50 | | 29-132 | 27 | | 30 |
| Bis(2-ethylhexyl)phthalate | ND | 18.2 | 13 | 72 | | 11 | 61 | | 40-140 | 17 | | 30 |
| Butyl benzyl phthalate | ND | 18.2 | 13 | 72 | | 12 | 66 | | 40-140 | 8 | | 30 |
| Di-n-butylphthalate | ND | 18.2 | 13 | 72 | | 10 | 55 | | 40-140 | 26 | | 30 |
| Di-n-octylphthalate | ND | 18.2 | 13 | 72 | | 11 | 61 | | 40-140 | 17 | | 30 |
| Diethyl phthalate | ND | 18.2 | 12 | 66 | | 10 | 55 | | 40-140 | 18 | | 30 |
| Dimethyl phthalate | ND | 18.2 | 14 | 77 | | 11 | 61 | | 40-140 | 24 | | 30 |
| Biphenyl | ND | 18.2 | 16 | 88 | | 12 | 66 | | 40-140 | 29 | | 30 |
| 4-Chloroaniline | ND | 18.2 | 8.7 | 48 | | 7.2 | 40 | | 40-140 | 19 | | 30 |
| 2-Nitroaniline | ND | 18.2 | 15 | 83 | | 12 | 66 | | 52-143 | 22 | | 30 |
| 3-Nitroaniline | ND | 18.2 | 9.5 | 52 | | 7.7 | 42 | | 25-145 | 21 | | 30 |

# Matrix Spike Analysis
## *Batch Quality Control*

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734055-4 WG1734055-5 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| 4-Nitroaniline | ND | 18.2 | 12 | 66 | | 9.9 | 54 | | 51-143 | 19 | | 30 |
| Dibenzofuran | ND | 18.2 | 13 | 72 | | 9.9 | 54 | | 40-140 | 27 | | 30 |
| 1,2,4,5-Tetrachlorobenzene | ND | 18.2 | 14 | 77 | | 11 | 61 | | 2-134 | 24 | | 30 |
| Acetophenone | ND | 18.2 | 14 | 77 | | 10 | 55 | | 39-129 | **33** | Q | 30 |
| 2,4,6-Trichlorophenol | ND | 18.2 | 18 | 99 | | 14 | 77 | | 30-130 | 25 | | 30 |
| p-Chloro-m-cresol | ND | 18.2 | 14 | 77 | | 11 | 61 | | 23-97 | 24 | | 30 |
| 2-Chlorophenol | ND | 18.2 | 13 | 72 | | 9.5 | 52 | | 27-123 | **31** | Q | 30 |
| 2,4-Dichlorophenol | ND | 18.2 | 15 | 83 | | 11 | 61 | | 30-130 | **31** | Q | 30 |
| 2,4-Dimethylphenol | ND | 18.2 | 8.7 | 48 | | 6.9 | 38 | | 30-130 | 23 | | 30 |
| 2-Nitrophenol | ND | 18.2 | 18 | 99 | | 13 | 72 | | 30-130 | **32** | Q | 30 |
| 4-Nitrophenol | ND | 18.2 | 13 | 72 | | 12 | 66 | | 10-80 | 8 | | 30 |
| 2,4-Dinitrophenol | ND | 18.2 | 28 | **150** | Q | 22 | 120 | | 20-130 | 24 | | 30 |
| 4,6-Dinitro-o-cresol | ND | 18.2 | 25 | 140 | | 21 | 120 | | 20-164 | 17 | | 30 |
| Phenol | ND | 18.2 | 8.4 | 46 | | 6.6 | 36 | | 12-110 | 24 | | 30 |
| 2-Methylphenol | ND | 18.2 | 11 | 61 | | 8.9 | 49 | | 30-130 | 21 | | 30 |
| 3-Methylphenol/4-Methylphenol | ND | 18.2 | 12 | 66 | | 9.3 | 51 | | 30-130 | 25 | | 30 |
| 2,4,5-Trichlorophenol | ND | 18.2 | 16 | 88 | | 12 | 66 | | 30-130 | 29 | | 30 |
| Carbazole | ND | 18.2 | 13 | 72 | | 10 | 55 | | 55-144 | 26 | | 30 |
| Atrazine | ND | 18.2 | 18 | 99 | | 15 | 83 | | 40-140 | 18 | | 30 |
| Benzaldehyde | ND | 18.2 | 14 | 77 | | 9.9 | 54 | | 40-140 | **34** | Q | 30 |
| Caprolactam | ND | 18.2 | 9.9J | 54 | | 8.5J | 47 | | 10-130 | 15 | | 30 |
| 2,3,4,6-Tetrachlorophenol | ND | 18.2 | 17 | 94 | | 14 | 77 | | 40-140 | 19 | | 30 |

# Matrix Spike Analysis

***Batch Quality Control***

***Project Name:*** USAI LIGHTING

***Project Number:*** 14.4337

***Lab Number:*** L2302270

***Report Date:*** 01/20/23

| *Parameter* | *Native Sample* | *MS Added* | *MS Found* | *MS %Recovery* | *Qual* | *MSD Found* | *MSD %Recovery* | *Qual* | *Recovery Limits* | *RPD* | *Qual* | *RPD Limits* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734055-4 WG1734055-5 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |

| *Surrogate* | *MS % Recovery* | *MS Qualifier* | *MSD % Recovery* | *MSD Qualifier* | *Acceptance Criteria* |
|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 75 | | 62 | | 10-120 |
| 2-Fluorobiphenyl | 79 | | 60 | | 15-120 |
| 2-Fluorophenol | 61 | | 43 | | 21-120 |
| 4-Terphenyl-d14 | 80 | | 64 | | 41-149 |
| Nitrobenzene-d5 | 75 | | 49 | | 23-120 |
| Phenol-d6 | 50 | | 38 | | 10-120 |

# Matrix Spike Analysis
## *Batch Quality Control*

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302270
**Report Date:** 01/20/23

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734056-4 WG1734056-5 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |
| Acenaphthene | 0.28 | 18.2 | 14 | 75 | | 11 | 59 | | 40-140 | 24 | | 40 |
| 2-Chloronaphthalene | ND | 18.2 | 13 | 72 | | 10 | 55 | | 40-140 | 26 | | 40 |
| Fluoranthene | ND | 18.2 | 15 | 83 | | 12 | 66 | | 40-140 | 22 | | 40 |
| Hexachlorobutadiene | ND | 18.2 | 12 | 66 | | 9.0 | 50 | | 40-140 | 29 | | 40 |
| Naphthalene | 0.05J | 18.2 | 13 | 72 | | 9.6 | 53 | | 40-140 | 30 | | 40 |
| Benzo(a)anthracene | 0.02J | 18.2 | 16 | 88 | | 13 | 72 | | 40-140 | 21 | | 40 |
| Benzo(a)pyrene | ND | 18.2 | 16 | 88 | | 13 | 72 | | 40-140 | 21 | | 40 |
| Benzo(b)fluoranthene | 0.02J | 18.2 | 17 | 94 | | 13 | 72 | | 40-140 | 27 | | 40 |
| Benzo(k)fluoranthene | ND | 18.2 | 16 | 88 | | 13 | 72 | | 40-140 | 21 | | 40 |
| Chrysene | ND | 18.2 | 16 | 88 | | 13 | 72 | | 40-140 | 21 | | 40 |
| Acenaphthylene | ND | 18.2 | 14 | 77 | | 11 | 61 | | 40-140 | 24 | | 40 |
| Anthracene | ND | 18.2 | 16 | 88 | | 12 | 66 | | 40-140 | 29 | | 40 |
| Benzo(ghi)perylene | ND | 18.2 | 18 | 99 | | 15 | 83 | | 40-140 | 18 | | 40 |
| Fluorene | 0.29 | 18.2 | 15 | 81 | | 12 | 64 | | 40-140 | 22 | | 40 |
| Phenanthrene | ND | 18.2 | 15 | 83 | | 12 | 66 | | 40-140 | 22 | | 40 |
| Dibenzo(a,h)anthracene | ND | 18.2 | 20 | 110 | | 16 | 88 | | 40-140 | 22 | | 40 |
| Indeno(1,2,3-cd)pyrene | ND | 18.2 | 20 | 110 | | 16 | 88 | | 40-140 | 22 | | 40 |
| Pyrene | 0.02J | 18.2 | 15 | 83 | | 12 | 66 | | 40-140 | 22 | | 40 |
| 2-Methylnaphthalene | ND | 18.2 | 13 | 72 | | 9.8 | 54 | | 40-140 | 28 | | 40 |
| Pentachlorophenol | ND | 18.2 | 25 | 140 | | 21 | 120 | | 40-140 | 17 | | 40 |
| Hexachlorobenzene | ND | 18.2 | 17 | 94 | | 13 | 72 | | 40-140 | 27 | | 40 |
| Hexachloroethane | ND | 18.2 | 15 | 83 | | 10 | 55 | | 40-140 | 40 | | 40 |

# Matrix Spike Analysis

***Batch Quality Control***

***Project Name:*** USAI LIGHTING

***Project Number:*** 14.4337

***Lab Number:*** L2302270

***Report Date:*** 01/20/23

| *Parameter* | *Native Sample* | *MS Added* | *MS Found* | *MS %Recovery* | *Qual* | *MSD Found* | *MSD %Recovery* | *Qual* | *Recovery Limits* | *RPD* | *Qual* | *RPD Limits* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1734056-4 WG1734056-5 QC Sample: L2302270-03 Client ID: MW-03-20230113 | | | | | | | | | | | | |

| *Surrogate* | *MS % Recovery* | *MS Qualifier* | *MSD % Recovery* | *MSD Qualifier* | *Acceptance Criteria* |
|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | **144** | Q | 116 | | 10-120 |
| 2-Fluorobiphenyl | 75 | | 57 | | 15-120 |
| 2-Fluorophenol | 75 | | 53 | | 21-120 |
| 4-Terphenyl-d14 | 84 | | 67 | | 41-149 |
| Nitrobenzene-d5 | **129** | Q | 92 | | 23-120 |
| Phenol-d6 | 65 | | 48 | | 10-120 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| A | Absent |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2302270-01A | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-01B | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-01C | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-01D | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-01E | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-02A | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-02B | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-02C | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-02D | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-02E | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-03A | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03A1 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03A2 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03B | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03B1 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03B2 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03C | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03C1 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03C2 | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-03D | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-03D1 | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-03D2 | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-03E | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |



*Values in parentheses indicate holding time in days

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302270
**Report Date:** 01/20/23

## Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2302270-03E1 | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-03E2 | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-04A | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-04B | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-04C | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-04D | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-04E | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-05A | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-05B | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-05C | Vial HCl preserved | A | NA | | 4.6 | Y | Absent | | NYTCL-8260(14) |
| L2302270-05D | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |
| L2302270-05E | Amber 250ml unpreserved | A | 7 | 7 | 4.6 | Y | Absent | | NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302270 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/20/23 |

## GLOSSARY

***Acronyms***

| | |
|---|---|
| DL | - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| EDL | - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME). |
| EMPC | - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration. |
| EPA | - Environmental Protection Agency. |
| LCS | - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| LCSD | - Laboratory Control Sample Duplicate: Refer to LCS. |
| LFB | - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes. |
| LOD | - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| LOQ | - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)<br><br>Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) |
| MDL | - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| MS | - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values. |
| MSD | - Matrix Spike Sample Duplicate: Refer to MS. |
| NA | - Not Applicable. |
| NC | - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit. |
| NDPA/DPA | - N-Nitrosodiphenylamine/Diphenylamine. |
| NI | - Not Ignitable. |
| NP | - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil. |
| NR | - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests. |
| RL | - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable. |
| RPD | - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report. |
| SRM | - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples. |
| STLP | - Semi-dynamic Tank Leaching Procedure per EPA Method 1315. |
| TEF | - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD. |
| TEQ | - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values. |
| TIC | - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations. |

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302270 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/20/23 |

***Footnotes***

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

***Terms***

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

***Data Qualifiers***

**A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302270 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/20/23 |

***Data Qualifiers***

Identified Compounds (TICs).

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302270 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/20/23 |

## REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

# Certification Information

**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene
**EPA 625/625.1:** alpha-Terpineol
**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270D/8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility**
**SM 2540D:** TSS
**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Biological Tissue Matrix:** EPA 3050B

**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 332**: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility:**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522, EPA 537.1.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

**Service Centers**
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 1/14/23

ALPHA Job #: L2302270 ~~L2302314~~

## Client Information

Client: C.T. Male Associates
Address: 50 Century Hill Dr.
Latham, NY 12110
Phone: 518-786-7400
Fax:
Email: r.andujar-mcneil@ctmale.com

## Project Information

Project Name: USAI Lighting
Project Location: 1126 River Road, New Windsor, NY
Project #: 14.4337
(Use Project name as Project #) ☐
Project Manager: Roscaura Andujar-McNeil
ALPHAQuote #:

## Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

## Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

## Billing Information

☒ Same as Client Info
PO #

## Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

## Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

**Other project specific requirements/comments:**
Please also send results to m.loughlin@ctmale.com

**Please specify Metals or TAL.**

## ANALYSIS

**Sample Filtration**
☐ Done
☐ Lab to do
**Preservation**
☐ Lab to do
*(Please Specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | TCL VOCs | TCL SVOCs | Sample Specific Comments | Total Bottle |
|---|---|---|---|---|---|---|---|---|---|
| 02314-01 | MW-01-20230113 | 1/13/23 | 10:00 | GW | ML | ✓ | ✓ | | 5 |
| 02 | MW-02-20230113 | | 10:50 | | ML | ✓ | ✓ | | 5 |
| 03 | MW-03-20230113 | | 12:05 | | ML | ✓ | ✓ | MS/MSD | 15 |
| 04 | MW-04-20230113 | | 12:45 | | ML | ✓ | ✓ | | 5 |
| 05 | FD01-20230113 | | — | | ML | ✓ | ✓ | | 5 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Container Type | V | A | | | | | | | | | | | |
| Preservative | B | A | | | | | | | | | | | |

Preservative Code:
A = None
B = HCl
C = $HNO_3$
D = $H_2SO_4$
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| | 1/13/22 12:50 | MR (AAL) | 1-13-23 1250 |
| MSB (AAL) | 1-13-23 1910 | | 1-13-23 2100 |
| | 1-13-23 | AAL | 1/13/23 2340 |
| Capital | 1/14/23 0140 | | 1/14/23 0140 |

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L2302299 |
| Client: | C.T. Male Associates<br>50 Century Hill Drive<br>Latham, NY 12110 |
| ATTN: | Rosaura Andujar-McNeil |
| Phone: | (518) 786-7400 |
| Project Name: | USAI LIGHTING |
| Project Number: | 14.4337 |
| Report Date: | 01/24/23 |



Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L2302299-01 | VI-3-20230112 | SOIL_VAPOR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 16:55 | 01/13/23 |
| L2302299-02 | VI-2-20230112 | SOIL_VAPOR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 16:40 | 01/13/23 |
| L2302299-03 | VI-1-20230112 | SOIL_VAPOR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 16:22 | 01/13/23 |
| L2302299-04 | VI-4-20230112 | SOIL_VAPOR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 17:10 | 01/13/23 |
| L2302299-05 | VI-5-20230112 | SOIL_VAPOR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 17:25 | 01/13/23 |
| L2302299-06 | IA-3-20230112 | AIR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 17:00 | 01/13/23 |
| L2302299-07 | IA-2-20230112 | AIR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 16:38 | 01/13/23 |
| L2302299-08 | IA-1-20230112 | AIR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 17:13 | 01/13/23 |
| L2302299-09 | IA-4-20230112 | AIR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 17:24 | 01/13/23 |
| L2302299-10 | OA-1-20230112 | AIR | 1126 RIVER ROAD NEW WINDSOR, NY | 01/12/23 16:18 | 01/13/23 |

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302299 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/24/23 |

## Case Narrative

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

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

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

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

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

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

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302299 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/24/23 |

**Case Narrative (continued)**

Volatile Organics in Air

Canisters were released from the laboratory on January 11, 2023. The canister certification results are provided as an addendum.

L2302299-08 and -09: The samples were re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2302299-08D and -09D: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 01/24/23

# AIR

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-01
Client ID: VI-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:55
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 01:51
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.549 | 0.200 | -- | 2.71 | 0.989 | -- | | 1 |
| Chloromethane | 0.212 | 0.200 | -- | 0.438 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 103 | 5.00 | -- | 194 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 2.49 | 1.00 | -- | 5.91 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.479 | 0.200 | -- | 2.69 | 1.12 | -- | | 1 |
| Isopropanol | 4.69 | 0.500 | -- | 11.5 | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | 0.406 | 0.200 | -- | 3.11 | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-01
Client ID: VI-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:55
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.868 | 0.200 | -- | 3.06 | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | 11.8 | 0.200 | -- | 64.4 | 1.09 | -- | | 1 |
| Benzene | 0.295 | 0.200 | -- | 0.942 | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | 0.781 | 0.200 | -- | 3.65 | 0.934 | -- | | 1 |
| Heptane | 0.365 | 0.200 | -- | 1.50 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 0.704 | 0.200 | -- | 2.65 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | 39.8 | 0.200 | -- | 270 | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | 0.202 | 0.200 | -- | 0.877 | 0.869 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-01
Client ID: VI-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:55
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| p/m-Xylene | 0.644 | 0.400 | -- | 2.80 | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | 0.270 | 0.200 | -- | 1.15 | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | 0.269 | 0.200 | -- | 1.17 | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 97 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 96 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-02
Client ID: VI-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:40
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 02:32
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.492 | 0.200 | -- | 2.43 | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 6.26 | 5.00 | -- | 11.8 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 2.32 | 1.00 | -- | 5.51 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.218 | 0.200 | -- | 1.23 | 1.12 | -- | | 1 |
| Isopropanol | 0.972 | 0.500 | -- | 2.39 | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-02
Client ID: VI-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:40
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | 0.514 | 0.500 | -- | 1.52 | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-02
Client ID: VI-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:40
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| p/m-Xylene | 0.906 | 0.400 | -- | 3.94 | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | 0.576 | 0.200 | -- | 2.50 | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 95 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-03
Client ID: VI-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:22
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 03:13
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Dichlorodifluoromethane | 0.497 | 0.200 | -- | 2.46 | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 24.2 | 5.00 | -- | 45.6 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 3.64 | 1.00 | -- | 8.65 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.238 | 0.200 | -- | 1.34 | 1.12 | -- | | 1 |
| Isopropanol | 12.8 | 0.500 | -- | 31.5 | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 0.513 | 0.500 | -- | 1.51 | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-03
Client ID: VI-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:22
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | 0.992 | 0.200 | -- | 4.84 | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | 1.33 | 0.200 | -- | 7.26 | 1.09 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | 0.455 | 0.200 | -- | 2.86 | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | 1.88 | 0.200 | -- | 10.1 | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 3.79 | 0.200 | -- | 14.3 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | 0.221 | 0.200 | -- | 1.50 | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-03
Client ID: VI-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:22
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 95 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-04
Client ID: VI-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:10
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 03:54
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Dichlorodifluoromethane | 0.491 | 0.200 | -- | 2.43 | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 55.1 | 5.00 | -- | 104 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 25.8 | 1.00 | -- | 61.3 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.290 | 0.200 | -- | 1.63 | 1.12 | -- | | 1 |
| Isopropanol | 4.10 | 0.500 | -- | 10.1 | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | 1.74 | 0.500 | -- | 5.27 | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 1.67 | 0.500 | -- | 4.93 | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-04
Client ID: VI-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:10
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | 1.91 | 0.500 | -- | 5.63 | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.201 | 0.200 | -- | 0.708 | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 12.9 | 0.200 | -- | 48.6 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-04
Client ID: VI-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:10
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 97 | | 60-140 |
| Bromochloromethane | 96 | | 60-140 |
| chlorobenzene-d5 | 98 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-05
Client ID: VI-5-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:25
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 04:34
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.489 | 0.200 | -- | 2.42 | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.216 | 0.200 | -- | 1.21 | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-05
Client ID: VI-5-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:25
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | 0.432 | 0.200 | -- | 2.11 | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-05
Client ID: VI-5-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:25
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 97 | | 60-140 |
| Bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 96 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-06
Client ID: IA-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/23 21:45
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Dichlorodifluoromethane | 0.505 | 0.200 | -- | 2.50 | 0.989 | -- | | 1 |
| Chloromethane | 0.587 | 0.200 | -- | 1.21 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 346 | 5.00 | -- | 652 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 18.0 | 1.00 | -- | 42.8 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.327 | 0.200 | -- | 1.84 | 1.12 | -- | | 1 |
| Isopropanol | 24.7 | 0.500 | -- | 60.7 | 1.23 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 1.57 | 0.500 | -- | 4.63 | 1.47 | -- | | 1 |
| Ethyl Acetate | 1.82 | 0.500 | -- | 6.56 | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-06
Client ID: IA-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.394 | 0.200 | -- | 1.39 | 0.705 | -- | | 1 |
| Benzene | 0.286 | 0.200 | -- | 0.914 | 0.639 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | 0.407 | 0.200 | -- | 1.67 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 2.10 | 0.200 | -- | 7.91 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | 0.659 | 0.200 | -- | 2.86 | 0.869 | -- | | 1 |
| p/m-Xylene | 1.98 | 0.400 | -- | 8.60 | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | 1.04 | 0.200 | -- | 4.43 | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | 0.899 | 0.200 | -- | 3.90 | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-06
Client ID: IA-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 91 | | 60-140 |
| Bromochloromethane | 93 | | 60-140 |
| chlorobenzene-d5 | 91 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-06
Client ID: IA-3-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:00
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 21:45
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | 0.023 | 0.020 | -- | 0.125 | 0.109 | -- | | 1 |
| Carbon tetrachloride | 0.088 | 0.020 | -- | 0.554 | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | 0.020 | 0.020 | -- | 0.136 | 0.136 | -- | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 92 | | 60-140 |
| bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 92 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-07
Client ID: IA-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:38
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/23 22:26
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.502 | 0.200 | -- | 2.48 | 0.989 | -- | | 1 |
| Chloromethane | 0.573 | 0.200 | -- | 1.18 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 163 | 5.00 | -- | 307 | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 18.6 | 1.00 | -- | 44.2 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.277 | 0.200 | -- | 1.56 | 1.12 | -- | | 1 |
| Isopropanol | 91.6 | 0.500 | -- | 225 | 1.23 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 1.81 | 0.500 | -- | 5.34 | 1.47 | -- | | 1 |
| Ethyl Acetate | 1.66 | 0.500 | -- | 5.98 | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-07
Client ID: IA-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:38
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.363 | 0.200 | -- | 1.28 | 0.705 | -- | | 1 |
| Benzene | 0.266 | 0.200 | -- | 0.850 | 0.639 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | 0.429 | 0.200 | -- | 1.76 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 1.85 | 0.200 | -- | 6.97 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | 0.367 | 0.200 | -- | 1.59 | 0.869 | -- | | 1 |
| p/m-Xylene | 1.11 | 0.400 | -- | 4.82 | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | 0.587 | 0.200 | -- | 2.50 | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | 0.496 | 0.200 | -- | 2.15 | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-07
Client ID: IA-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:38
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 93 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-07
Client ID: IA-2-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:38
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 22:26
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | 0.056 | 0.020 | -- | 0.306 | 0.109 | -- | | 1 |
| Carbon tetrachloride | 0.089 | 0.020 | -- | 0.560 | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 94 | | 60-140 |
| bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-08
Client ID: IA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:13
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/23 23:08
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.498 | 0.200 | -- | 2.46 | 0.989 | -- | | 1 |
| Chloromethane | 0.593 | 0.200 | -- | 1.22 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 1030 | 5.00 | -- | 1940 | 9.42 | -- | E | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 19.8 | 1.00 | -- | 47.0 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.432 | 0.200 | -- | 2.43 | 1.12 | -- | | 1 |
| Isopropanol | 6.93 | 0.500 | -- | 17.0 | 1.23 | -- | | 1 |
| Tertiary butyl Alcohol | 1.26 | 0.500 | -- | 3.82 | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 1.02 | 0.500 | -- | 3.01 | 1.47 | -- | | 1 |
| Ethyl Acetate | 1.01 | 0.500 | -- | 3.64 | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-08
Client ID: IA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:13
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.465 | 0.200 | -- | 1.64 | 0.705 | -- | | 1 |
| Benzene | 0.319 | 0.200 | -- | 1.02 | 0.639 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | 0.292 | 0.200 | -- | 1.20 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 1.82 | 0.200 | -- | 6.86 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-08
Client ID: IA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:13
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 92 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 94 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-08
Client ID: IA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:13
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 23:08
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Carbon tetrachloride | 0.083 | 0.020 | -- | 0.522 | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 92 | | 60-140 |
| bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 94 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-08 D
Client ID: IA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:13
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 07:09
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Ethanol | 1170 | 25.0 | -- | 2200 | 47.1 | -- | | 5 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 92 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 94 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-09
Client ID: IA-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:24
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/23 23:48
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| Dichlorodifluoromethane | 0.486 | 0.200 | -- | 2.40 | 0.989 | -- | | 1 |
| Chloromethane | 0.581 | 0.200 | -- | 1.20 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 517 | 5.00 | -- | 974 | 9.42 | -- | E | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 16.2 | 1.00 | -- | 38.5 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.401 | 0.200 | -- | 2.25 | 1.12 | -- | | 1 |
| Isopropanol | 5.16 | 0.500 | -- | 12.7 | 1.23 | -- | | 1 |
| Tertiary butyl Alcohol | 0.641 | 0.500 | -- | 1.94 | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | 0.888 | 0.500 | -- | 2.62 | 1.47 | -- | | 1 |
| Ethyl Acetate | 0.802 | 0.500 | -- | 2.89 | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-09
Client ID: IA-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:24
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.562 | 0.200 | -- | 1.98 | 0.705 | -- | | 1 |
| Benzene | 0.340 | 0.200 | -- | 1.09 | 0.639 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2,2,4-Trimethylpentane | 0.242 | 0.200 | -- | 1.13 | 0.934 | -- | | 1 |
| Heptane | 0.671 | 0.200 | -- | 2.75 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 1.59 | 0.200 | -- | 5.99 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-09
Client ID: IA-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:24
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 93 | | 60-140 |
| Bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-09
Client ID: IA-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:24
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 23:48
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Carbon tetrachloride | 0.090 | 0.020 | -- | 0.566 | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 94 | | 60-140 |
| bromochloromethane | 96 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-09 D
Client ID: IA-4-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 17:24
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/22/23 07:49
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Ethanol | 541 | 10.0 | -- | 1020 | 18.8 | -- | | 2 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-Difluorobenzene | 94 | | 60-140 |
| Bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-10
Client ID: OA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:18
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/23 17:41
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | 0.487 | 0.200 | -- | 2.41 | 0.989 | -- | | 1 |
| Chloromethane | 0.468 | 0.200 | -- | 0.966 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 1.25 | 1.00 | -- | 2.97 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.200 | -- | ND | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-10
Client ID: OA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:18
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.587 | 0.200 | -- | 2.07 | 0.705 | -- | | 1 |
| Benzene | 0.394 | 0.200 | -- | 1.26 | 0.639 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 0.463 | 0.200 | -- | 1.74 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |

***Project Name:*** USAI LIGHTING
***Project Number:*** 14.4337

***Lab Number:*** L2302299
***Report Date:*** 01/24/23

## *SAMPLE RESULTS*

Lab ID: L2302299-10
Client ID: OA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:18
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air - Mansfield Lab** | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 94 | | 60-140 |
| Bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 94 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

## SAMPLE RESULTS

Lab ID: L2302299-10
Client ID: OA-1-20230112
Sample Location: 1126 RIVER ROAD NEW WINDSOR, NY

Date Collected: 01/12/23 16:18
Date Received: 01/13/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 17:41
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Carbon tetrachloride | 0.083 | 0.020 | -- | 0.522 | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |

| **Internal Standard** | **% Recovery** | **Qualifier** | **Acceptance Criteria** |
|---|---|---|---|
| 1,4-difluorobenzene | 95 | | 60-140 |
| bromochloromethane | 97 | | 60-140 |
| chlorobenzene-d5 | 95 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/21/23 15:42

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG1735896-4 | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.200 | -- | ND | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/21/23 15:42

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG1735896-4 | | | | | | | | |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/21/23 15:42

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab for sample(s): 01-10 Batch: WG1735896-4 | | | | | | | | |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337
**Lab Number:** L2302299
**Report Date:** 01/24/23

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 01/21/23 16:22

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 06-10 Batch: WG1735897-4 | | | | | | | | |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Carbon tetrachloride | ND | 0.020 | -- | ND | 0.126 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG1735896-3 | | | | | | | | |
| Dichlorodifluoromethane | 94 | | - | | 70-130 | - | | |
| Chloromethane | 87 | | - | | 70-130 | - | | |
| Freon-114 | 90 | | - | | 70-130 | - | | |
| Vinyl chloride | 83 | | - | | 70-130 | - | | |
| 1,3-Butadiene | 85 | | - | | 70-130 | - | | |
| Bromomethane | 86 | | - | | 70-130 | - | | |
| Chloroethane | 82 | | - | | 70-130 | - | | |
| Ethanol | 85 | | - | | 40-160 | - | | |
| Vinyl bromide | 80 | | - | | 70-130 | - | | |
| Acetone | 97 | | - | | 40-160 | - | | |
| Trichlorofluoromethane | 93 | | - | | 70-130 | - | | |
| Isopropanol | 96 | | - | | 40-160 | - | | |
| 1,1-Dichloroethene | 91 | | - | | 70-130 | - | | |
| Tertiary butyl Alcohol | 92 | | - | | 70-130 | - | | |
| Methylene chloride | 91 | | - | | 70-130 | - | | |
| 3-Chloropropene | 96 | | - | | 70-130 | - | | |
| Carbon disulfide | 85 | | - | | 70-130 | - | | |
| Freon-113 | 92 | | - | | 70-130 | - | | |
| trans-1,2-Dichloroethene | 86 | | - | | 70-130 | - | | |
| 1,1-Dichloroethane | 89 | | - | | 70-130 | - | | |
| Methyl tert butyl ether | 93 | | - | | 70-130 | - | | |
| 2-Butanone | 97 | | - | | 70-130 | - | | |
| cis-1,2-Dichloroethene | 90 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG1735896-3 | | | | | | | | |
| Ethyl Acetate | 105 | | - | | 70-130 | - | | |
| Chloroform | 94 | | - | | 70-130 | - | | |
| Tetrahydrofuran | 94 | | - | | 70-130 | - | | |
| 1,2-Dichloroethane | 98 | | - | | 70-130 | - | | |
| n-Hexane | 94 | | - | | 70-130 | - | | |
| 1,1,1-Trichloroethane | 107 | | - | | 70-130 | - | | |
| Benzene | 90 | | - | | 70-130 | - | | |
| Carbon tetrachloride | 108 | | - | | 70-130 | - | | |
| Cyclohexane | 93 | | - | | 70-130 | - | | |
| 1,2-Dichloropropane | 96 | | - | | 70-130 | - | | |
| Bromodichloromethane | 106 | | - | | 70-130 | - | | |
| 1,4-Dioxane | 106 | | - | | 70-130 | - | | |
| Trichloroethene | 92 | | - | | 70-130 | - | | |
| 2,2,4-Trimethylpentane | 96 | | - | | 70-130 | - | | |
| Heptane | 106 | | - | | 70-130 | - | | |
| cis-1,3-Dichloropropene | 103 | | - | | 70-130 | - | | |
| 4-Methyl-2-pentanone | 111 | | - | | 70-130 | - | | |
| trans-1,3-Dichloropropene | 93 | | - | | 70-130 | - | | |
| 1,1,2-Trichloroethane | 101 | | - | | 70-130 | - | | |
| Toluene | 80 | | - | | 70-130 | - | | |
| 2-Hexanone | 93 | | - | | 70-130 | - | | |
| Dibromochloromethane | 91 | | - | | 70-130 | - | | |
| 1,2-Dibromoethane | 87 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 Batch: WG1735896-3 | | | | | | | | |
| Tetrachloroethene | 83 | | - | | 70-130 | - | | |
| Chlorobenzene | 84 | | - | | 70-130 | - | | |
| Ethylbenzene | 87 | | - | | 70-130 | - | | |
| p/m-Xylene | 88 | | - | | 70-130 | - | | |
| Bromoform | 93 | | - | | 70-130 | - | | |
| Styrene | 84 | | - | | 70-130 | - | | |
| 1,1,2,2-Tetrachloroethane | 91 | | - | | 70-130 | - | | |
| o-Xylene | 90 | | - | | 70-130 | - | | |
| 4-Ethyltoluene | 85 | | - | | 70-130 | - | | |
| 1,3,5-Trimethylbenzene | 86 | | - | | 70-130 | - | | |
| 1,2,4-Trimethylbenzene | 90 | | - | | 70-130 | - | | |
| Benzyl chloride | 95 | | - | | 70-130 | - | | |
| 1,3-Dichlorobenzene | 82 | | - | | 70-130 | - | | |
| 1,4-Dichlorobenzene | 84 | | - | | 70-130 | - | | |
| 1,2-Dichlorobenzene | 88 | | - | | 70-130 | - | | |
| 1,2,4-Trichlorobenzene | 86 | | - | | 70-130 | - | | |
| Hexachlorobutadiene | 88 | | - | | 70-130 | - | | |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** USAI LIGHTING

**Project Number:** 14.4337

**Lab Number:** L2302299

**Report Date:** 01/24/23

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06-10 Batch: WG1735897-3 | | | | | | | | |
| Vinyl chloride | 78 | | - | | 70-130 | - | | 25 |
| 1,1-Dichloroethene | 87 | | - | | 70-130 | - | | 25 |
| cis-1,2-Dichloroethene | 84 | | - | | 70-130 | - | | 25 |
| 1,1,1-Trichloroethane | 97 | | - | | 70-130 | - | | 25 |
| Carbon tetrachloride | 100 | | - | | 70-130 | - | | 25 |
| Trichloroethene | 85 | | - | | 70-130 | - | | 25 |
| Tetrachloroethene | 75 | | - | | 70-130 | - | | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1735896-5 QC Sample: L2302299-05 Client ID: VI-5-20230112 | | | | | | |
| Dichlorodifluoromethane | 0.489 | 0.488 | ppbV | 0 | | 25 |
| Chloromethane | ND | ND | ppbV | NC | | 25 |
| Freon-114 | ND | ND | ppbV | NC | | 25 |
| Vinyl chloride | ND | ND | ppbV | NC | | 25 |
| 1,3-Butadiene | ND | ND | ppbV | NC | | 25 |
| Bromomethane | ND | ND | ppbV | NC | | 25 |
| Chloroethane | ND | ND | ppbV | NC | | 25 |
| Ethanol | ND | ND | ppbV | NC | | 25 |
| Vinyl bromide | ND | ND | ppbV | NC | | 25 |
| Acetone | ND | ND | ppbV | NC | | 25 |
| Trichlorofluoromethane | 0.216 | 0.218 | ppbV | 1 | | 25 |
| Isopropanol | ND | ND | ppbV | NC | | 25 |
| 1,1-Dichloroethene | ND | ND | ppbV | NC | | 25 |
| Tertiary butyl Alcohol | ND | ND | ppbV | NC | | 25 |
| Methylene chloride | ND | ND | ppbV | NC | | 25 |
| 3-Chloropropene | ND | ND | ppbV | NC | | 25 |
| Carbon disulfide | ND | ND | ppbV | NC | | 25 |
| Freon-113 | ND | ND | ppbV | NC | | 25 |
| trans-1,2-Dichloroethene | ND | ND | ppbV | NC | | 25 |
| 1,1-Dichloroethane | ND | ND | ppbV | NC | | 25 |
| Methyl tert butyl ether | ND | ND | ppbV | NC | | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1735896-5 QC Sample: L2302299-05 Client ID: VI-5-20230112 | | | | | | |
| 2-Butanone | ND | ND | ppbV | NC | | 25 |
| cis-1,2-Dichloroethene | ND | ND | ppbV | NC | | 25 |
| Ethyl Acetate | ND | ND | ppbV | NC | | 25 |
| Chloroform | 0.432 | 0.449 | ppbV | 4 | | 25 |
| Tetrahydrofuran | ND | ND | ppbV | NC | | 25 |
| 1,2-Dichloroethane | ND | ND | ppbV | NC | | 25 |
| n-Hexane | ND | ND | ppbV | NC | | 25 |
| 1,1,1-Trichloroethane | ND | ND | ppbV | NC | | 25 |
| Benzene | ND | ND | ppbV | NC | | 25 |
| Carbon tetrachloride | ND | ND | ppbV | NC | | 25 |
| Cyclohexane | ND | ND | ppbV | NC | | 25 |
| 1,2-Dichloropropane | ND | ND | ppbV | NC | | 25 |
| Bromodichloromethane | ND | ND | ppbV | NC | | 25 |
| 1,4-Dioxane | ND | ND | ppbV | NC | | 25 |
| Trichloroethene | ND | ND | ppbV | NC | | 25 |
| 2,2,4-Trimethylpentane | ND | ND | ppbV | NC | | 25 |
| Heptane | ND | ND | ppbV | NC | | 25 |
| cis-1,3-Dichloropropene | ND | ND | ppbV | NC | | 25 |
| 4-Methyl-2-pentanone | ND | ND | ppbV | NC | | 25 |
| trans-1,3-Dichloropropene | ND | ND | ppbV | NC | | 25 |
| 1,1,2-Trichloroethane | ND | ND | ppbV | NC | | 25 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1735896-5 QC Sample: L2302299-05 Client ID: VI-5-20230112 | | | | | | |
| Toluene | ND | ND | ppbV | NC | | 25 |
| 2-Hexanone | ND | ND | ppbV | NC | | 25 |
| Dibromochloromethane | ND | ND | ppbV | NC | | 25 |
| 1,2-Dibromoethane | ND | ND | ppbV | NC | | 25 |
| Tetrachloroethene | ND | ND | ppbV | NC | | 25 |
| Chlorobenzene | ND | ND | ppbV | NC | | 25 |
| Ethylbenzene | ND | ND | ppbV | NC | | 25 |
| p/m-Xylene | ND | ND | ppbV | NC | | 25 |
| Bromoform | ND | ND | ppbV | NC | | 25 |
| Styrene | ND | ND | ppbV | NC | | 25 |
| 1,1,2,2-Tetrachloroethane | ND | ND | ppbV | NC | | 25 |
| o-Xylene | ND | ND | ppbV | NC | | 25 |
| 4-Ethyltoluene | ND | ND | ppbV | NC | | 25 |
| 1,3,5-Trimethylbenzene | ND | ND | ppbV | NC | | 25 |
| 1,2,4-Trimethylbenzene | ND | ND | ppbV | NC | | 25 |
| Benzyl chloride | ND | ND | ppbV | NC | | 25 |
| 1,3-Dichlorobenzene | ND | ND | ppbV | NC | | 25 |
| 1,4-Dichlorobenzene | ND | ND | ppbV | NC | | 25 |
| 1,2-Dichlorobenzene | ND | ND | ppbV | NC | | 25 |
| 1,2,4-Trichlorobenzene | ND | ND | ppbV | NC | | 25 |
| Hexachlorobutadiene | ND | ND | ppbV | NC | | 25 |

**Project Name:** USAI LIGHTING

**Project Number:** 14.4337

**Lab Number:** L2302299

**Report Date:** 01/24/23

## Canister and Flow Controller Information

| Samplenum | Client ID | Media ID | Media Type | Date Prepared | Bottle Order | Cleaning Batch ID | Can Leak Check | Initial Pressure (in. Hg) | Pressure on Receipt (in. Hg) | Flow Controler Leak Chk | Flow Out mL/min | Flow In mL/min | % RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2302299-01 | VI-3-20230112 | 01768 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 9.9 | 1 |
| L2302299-01 | VI-3-20230112 | 593 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -8.6 | - | - | - | - |
| L2302299-02 | VI-2-20230112 | 01529 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.7 | 7 |
| L2302299-02 | VI-2-20230112 | 3380 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -8.8 | - | - | - | - |
| L2302299-03 | VI-1-20230112 | 01948 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.5 | 5 |
| L2302299-03 | VI-1-20230112 | 3296 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -7.7 | - | - | - | - |
| L2302299-04 | VI-4-20230112 | 01648 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.4 | 4 |
| L2302299-04 | VI-4-20230112 | 654 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -7.0 | - | - | - | - |
| L2302299-05 | VI-5-20230112 | 01447 | Flow 4 | 01/12/23 | 411611 | | - | - | - | Pass | 10.0 | 9.4 | 6 |
| L2302299-05 | VI-5-20230112 | 3468 | 6.0L Can | 01/12/23 | 411611 | L2272546-03 | Pass | -29.3 | -7.4 | - | - | - | - |
| L2302299-06 | IA-3-20230112 | 01671 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.2 | 2 |
| L2302299-06 | IA-3-20230112 | 3335 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -7.6 | - | - | - | - |
| L2302299-07 | IA-2-20230112 | 02067 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.3 | 3 |
| L2302299-07 | IA-2-20230112 | 2054 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -7.8 | - | - | - | - |
| L2302299-08 | IA-1-20230112 | 01665 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.6 | 6 |

**Project Name:** USAI LIGHTING

**Lab Number:** L2302299

**Project Number:** 14.4337

**Report Date:** 01/24/23

## Canister and Flow Controller Information

| Samplenum | Client ID | Media ID | Media Type | Date Prepared | Bottle Order | Cleaning Batch ID | Can Leak Check | Initial Pressure (in. Hg) | Pressure on Receipt (in. Hg) | Flow Controler Leak Chk | Flow Out mL/min | Flow In mL/min | % RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L2302299-08 | IA-1-20230112 | 2629 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -6.9 | - | - | - | - |
| L2302299-09 | IA-4-20230112 | 01426 | Flow 4 | 01/12/23 | 411611 | | - | - | - | Pass | 10.0 | 10.0 | 0 |
| L2302299-09 | IA-4-20230112 | 616 | 6.0L Can | 01/12/23 | 411611 | L2300025-04 | Pass | -29.3 | -6.9 | - | - | - | - |
| L2302299-10 | OA-1-20230112 | 01512 | Flow 4 | 01/11/23 | 411279 | | - | - | - | Pass | 10.0 | 10.3 | 3 |
| L2302299-10 | OA-1-20230112 | 2903 | 6.0L Can | 01/11/23 | 411279 | L2300025-03 | Pass | -29.9 | -6.4 | - | - | - | - |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/27/22 19:45
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | -- | ND | 0.707 | -- | | 1 |
| Propylene | ND | 0.500 | -- | ND | 0.861 | -- | | 1 |
| Propane | ND | 0.500 | -- | ND | 0.902 | -- | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Methanol | ND | 5.00 | -- | ND | 6.55 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Butane | ND | 0.200 | -- | ND | 0.475 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Dichlorofluoromethane | ND | 0.200 | -- | ND | 0.842 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acrolein | ND | 0.500 | -- | ND | 1.15 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Acetonitrile | ND | 0.200 | -- | ND | 0.336 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.200 | -- | ND | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| Pentane | ND | 0.200 | -- | ND | 0.590 | -- | | 1 |
| Ethyl ether | ND | 0.200 | -- | ND | 0.606 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Vinyl acetate | ND | 1.00 | -- | ND | 3.52 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| Xylenes, total | ND | 0.600 | -- | ND | 0.869 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| Diisopropyl ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| 1,2-Dichloroethene (total) | ND | 1.00 | -- | ND | 1.00 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dibromomethane | ND | 0.200 | -- | ND | 1.42 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Methyl Methacrylate | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Butyl acetate | ND | 0.500 | -- | ND | 2.38 | -- | | 1 |
| Octane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | -- | ND | 1.21 | -- | | 1 |
| Nonane | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Bromobenzene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 2-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| n-Propylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| tert-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Decane | ND | 0.200 | -- | ND | 1.16 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | -- | ND | 1.93 | -- | | 1 |
| Undecane | ND | 0.200 | -- | ND | 1.28 | -- | | 1 |
| Dodecane | ND | 0.200 | -- | ND | 1.39 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Naphthalene | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L2272546

**Project Number:** CANISTER QC BAT **Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |

No Tentatively Identified Compounds

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 110 | | 60-140 |
| Bromochloromethane | 113 | | 60-140 |
| chlorobenzene-d5 | 106 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/27/22 19:45
Analyst: TJS

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.050 | -- | ND | 0.349 | -- | | 1 |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,3-Butadiene | ND | 0.020 | -- | ND | 0.044 | -- | | 1 |
| Bromomethane | ND | 0.020 | -- | ND | 0.078 | -- | | 1 |
| Chloroethane | ND | 0.100 | -- | ND | 0.264 | -- | | 1 |
| Acrolein | ND | 0.050 | -- | ND | 0.115 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.050 | -- | ND | 0.281 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| Freon-113 | ND | 0.050 | -- | ND | 0.383 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Chloroform | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Benzene | ND | 0.100 | -- | ND | 0.319 | -- | | 1 |
| Carbon tetrachloride | ND | 0.020 | -- | ND | 0.126 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| 1,2-Dichloropropane | ND | 0.020 | -- | ND | 0.092 | -- | | 1 |
| Bromodichloromethane | ND | 0.020 | -- | ND | 0.134 | -- | | 1 |
| 1,4-Dioxane | ND | 0.100 | -- | ND | 0.360 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Toluene | ND | 0.100 | -- | ND | 0.377 | -- | | 1 |
| Dibromochloromethane | ND | 0.020 | -- | ND | 0.170 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | -- | ND | 0.154 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| Chlorobenzene | ND | 0.100 | -- | ND | 0.461 | -- | | 1 |
| Ethylbenzene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| p/m-Xylene | ND | 0.040 | -- | ND | 0.174 | -- | | 1 |
| Bromoform | ND | 0.020 | -- | ND | 0.207 | -- | | 1 |
| Styrene | ND | 0.020 | -- | ND | 0.085 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| o-Xylene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| Benzyl chloride | ND | 0.100 | -- | ND | 0.518 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2272546
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2272546-03
Client ID: CAN 2929 SHELF 46
Sample Location:

Date Collected: 12/24/22 08:00
Date Received: 12/27/22
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Naphthalene | ND | 0.050 | -- | ND | 0.262 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.050 | -- | ND | 0.533 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 109 | | 60-140 |
| bromochloromethane | 111 | | 60-140 |
| chlorobenzene-d5 | 106 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/03/23 19:17
Analyst: JMB

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | -- | ND | 0.707 | -- | | 1 |
| Propylene | ND | 0.500 | -- | ND | 0.861 | -- | | 1 |
| Propane | ND | 0.500 | -- | ND | 0.902 | -- | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Methanol | ND | 5.00 | -- | ND | 6.55 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Butane | ND | 0.200 | -- | ND | 0.475 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Dichlorofluoromethane | ND | 0.200 | -- | ND | 0.842 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acrolein | ND | 0.500 | -- | ND | 1.15 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Acetonitrile | ND | 0.200 | -- | ND | 0.336 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.200 | -- | ND | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| Pentane | ND | 0.200 | -- | ND | 0.590 | -- | | 1 |
| Ethyl ether | ND | 0.200 | -- | ND | 0.606 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Vinyl acetate | ND | 1.00 | -- | ND | 3.52 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| Xylenes, total | ND | 0.600 | -- | ND | 0.869 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| Diisopropyl ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| 1,2-Dichloroethene (total) | ND | 1.00 | -- | ND | 1.00 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dibromomethane | ND | 0.200 | -- | ND | 1.42 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Methyl Methacrylate | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Butyl acetate | ND | 0.500 | -- | ND | 2.38 | -- | | 1 |
| Octane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | -- | ND | 1.21 | -- | | 1 |
| Nonane | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Bromobenzene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 2-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| n-Propylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| tert-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Decane | ND | 0.200 | -- | ND | 1.16 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | -- | ND | 1.93 | -- | | 1 |
| Undecane | ND | 0.200 | -- | ND | 1.28 | -- | | 1 |
| Dodecane | ND | 0.200 | -- | ND | 1.39 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Naphthalene | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |

No Tentatively Identified Compounds

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 99 | | 60-140 |
| Bromochloromethane | 97 | | 60-140 |
| chlorobenzene-d5 | 98 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/03/23 19:17
Analyst: JMB

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.050 | -- | ND | 0.349 | -- | | 1 |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,3-Butadiene | ND | 0.020 | -- | ND | 0.044 | -- | | 1 |
| Bromomethane | ND | 0.020 | -- | ND | 0.078 | -- | | 1 |
| Chloroethane | ND | 0.100 | -- | ND | 0.264 | -- | | 1 |
| Acrolein | ND | 0.050 | -- | ND | 0.115 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.050 | -- | ND | 0.281 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| Freon-113 | ND | 0.050 | -- | ND | 0.383 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Chloroform | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Benzene | ND | 0.100 | -- | ND | 0.319 | -- | | 1 |
| Carbon tetrachloride | ND | 0.020 | -- | ND | 0.126 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| 1,2-Dichloropropane | ND | 0.020 | -- | ND | 0.092 | -- | | 1 |
| Bromodichloromethane | ND | 0.020 | -- | ND | 0.134 | -- | | 1 |
| 1,4-Dioxane | ND | 0.100 | -- | ND | 0.360 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Toluene | ND | 0.100 | -- | ND | 0.377 | -- | | 1 |
| Dibromochloromethane | ND | 0.020 | -- | ND | 0.170 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | -- | ND | 0.154 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| Chlorobenzene | ND | 0.100 | -- | ND | 0.461 | -- | | 1 |
| Ethylbenzene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| p/m-Xylene | ND | 0.040 | -- | ND | 0.174 | -- | | 1 |
| Bromoform | ND | 0.020 | -- | ND | 0.207 | -- | | 1 |
| Styrene | ND | 0.020 | -- | ND | 0.085 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| o-Xylene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| Benzyl chloride | ND | 0.100 | -- | ND | 0.518 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-03
Client ID: CAN 2323 SHELF 40
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Naphthalene | ND | 0.050 | -- | ND | 0.262 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.050 | -- | ND | 0.533 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 98 | | 60-140 |
| bromochloromethane | 96 | | 60-140 |
| chlorobenzene-d5 | 98 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/03/23 19:55
Analyst: JMB

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Chlorodifluoromethane | ND | 0.200 | -- | ND | 0.707 | -- | | 1 |
| Propylene | ND | 0.500 | -- | ND | 0.861 | -- | | 1 |
| Propane | ND | 0.500 | -- | ND | 0.902 | -- | | 1 |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Methanol | ND | 5.00 | -- | ND | 6.55 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Butane | ND | 0.200 | -- | ND | 0.475 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | ND | 5.00 | -- | ND | 9.42 | -- | | 1 |
| Dichlorofluoromethane | ND | 0.200 | -- | ND | 0.842 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acrolein | ND | 0.500 | -- | ND | 1.15 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Acetonitrile | ND | 0.200 | -- | ND | 0.336 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.200 | -- | ND | 1.12 | -- | | 1 |
| Isopropanol | ND | 0.500 | -- | ND | 1.23 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| Pentane | ND | 0.200 | -- | ND | 0.590 | -- | | 1 |
| Ethyl ether | ND | 0.200 | -- | ND | 0.606 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Tertiary butyl Alcohol | ND | 0.500 | -- | ND | 1.52 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Vinyl acetate | ND | 1.00 | -- | ND | 3.52 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| Xylenes, total | ND | 0.600 | -- | ND | 0.869 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| 2,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | ND | 0.200 | -- | ND | 0.705 | -- | | 1 |
| Diisopropyl ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| tert-Butyl Ethyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |
| 1,2-Dichloroethene (total) | ND | 1.00 | -- | ND | 1.00 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| Benzene | ND | 0.200 | -- | ND | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| tert-Amyl Methyl Ether | ND | 0.200 | -- | ND | 0.836 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT

**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| Dibromomethane | ND | 0.200 | -- | ND | 1.42 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Methyl Methacrylate | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| Heptane | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | ND | 0.200 | -- | ND | 0.754 | -- | | 1 |
| 1,3-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Butyl acetate | ND | 0.500 | -- | ND | 2.38 | -- | | 1 |
| Octane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Tetrachloroethene | ND | 0.200 | -- | ND | 1.36 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| p/m-Xylene | ND | 0.400 | -- | ND | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |
| Styrene | ND | 0.200 | -- | ND | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |
| o-Xylene | ND | 0.200 | -- | ND | 0.869 | -- | | 1 |
| 1,2,3-Trichloropropane | ND | 0.200 | -- | ND | 1.21 | -- | | 1 |
| Nonane | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Bromobenzene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 2-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| n-Propylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Chlorotoluene | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| tert-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| Decane | ND | 0.200 | -- | ND | 1.16 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dibromo-3-chloropropane | ND | 0.200 | -- | ND | 1.93 | -- | | 1 |
| Undecane | ND | 0.200 | -- | ND | 1.28 | -- | | 1 |
| Dodecane | ND | 0.200 | -- | ND | 1.39 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Naphthalene | ND | 0.200 | -- | ND | 1.05 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION **Lab Number:** L2300025

**Project Number:** CANISTER QC BAT **Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air - Mansfield Lab | | | | | | | | |

| | Results | Qualifier | Units | RDL | Dilution Factor |
|---|---|---|---|---|---|
| Tentatively Identified Compounds | | | | | |

No Tentatively Identified Compounds

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 98 | | 60-140 |
| Bromochloromethane | 96 | | 60-140 |
| chlorobenzene-d5 | 98 | | 60-140 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/03/23 19:55
Analyst: JMB

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** | **RL** | **MDL** | **Results** | **RL** | **MDL** | **Qualifier** | **Dilution Factor** |
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.200 | -- | ND | 0.989 | -- | | 1 |
| Chloromethane | ND | 0.200 | -- | ND | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.050 | -- | ND | 0.349 | -- | | 1 |
| Vinyl chloride | ND | 0.020 | -- | ND | 0.051 | -- | | 1 |
| 1,3-Butadiene | ND | 0.020 | -- | ND | 0.044 | -- | | 1 |
| Bromomethane | ND | 0.020 | -- | ND | 0.078 | -- | | 1 |
| Chloroethane | ND | 0.100 | -- | ND | 0.264 | -- | | 1 |
| Acrolein | ND | 0.050 | -- | ND | 0.115 | -- | | 1 |
| Acetone | ND | 1.00 | -- | ND | 2.38 | -- | | 1 |
| Trichlorofluoromethane | ND | 0.050 | -- | ND | 0.281 | -- | | 1 |
| Acrylonitrile | ND | 0.500 | -- | ND | 1.09 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Methylene chloride | ND | 0.500 | -- | ND | 1.74 | -- | | 1 |
| Freon-113 | ND | 0.050 | -- | ND | 0.383 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| 2-Butanone | ND | 0.500 | -- | ND | 1.47 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.020 | -- | ND | 0.079 | -- | | 1 |
| Chloroform | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.020 | -- | ND | 0.081 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Benzene | ND | 0.100 | -- | ND | 0.319 | -- | | 1 |
| Carbon tetrachloride | ND | 0.020 | -- | ND | 0.126 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| 1,2-Dichloropropane | ND | 0.020 | -- | ND | 0.092 | -- | | 1 |
| Bromodichloromethane | ND | 0.020 | -- | ND | 0.134 | -- | | 1 |
| 1,4-Dioxane | ND | 0.100 | -- | ND | 0.360 | -- | | 1 |
| Trichloroethene | ND | 0.020 | -- | ND | 0.107 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.020 | -- | ND | 0.091 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.020 | -- | ND | 0.109 | -- | | 1 |
| Toluene | ND | 0.100 | -- | ND | 0.377 | -- | | 1 |
| Dibromochloromethane | ND | 0.020 | -- | ND | 0.170 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.020 | -- | ND | 0.154 | -- | | 1 |
| Tetrachloroethene | ND | 0.020 | -- | ND | 0.136 | -- | | 1 |
| 1,1,1,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| Chlorobenzene | ND | 0.100 | -- | ND | 0.461 | -- | | 1 |
| Ethylbenzene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| p/m-Xylene | ND | 0.040 | -- | ND | 0.174 | -- | | 1 |
| Bromoform | ND | 0.020 | -- | ND | 0.207 | -- | | 1 |
| Styrene | ND | 0.020 | -- | ND | 0.085 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.020 | -- | ND | 0.137 | -- | | 1 |
| o-Xylene | ND | 0.020 | -- | ND | 0.087 | -- | | 1 |
| Isopropylbenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| 1,2,4-Trimethylbenzene | ND | 0.020 | -- | ND | 0.098 | -- | | 1 |
| Benzyl chloride | ND | 0.100 | -- | ND | 0.518 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |

**Project Name:** BATCH CANISTER CERTIFICATION
**Project Number:** CANISTER QC BAT
**Lab Number:** L2300025
**Report Date:** 01/24/23

# Air Canister Certification Results

Lab ID: L2300025-04
Client ID: CAN 992 SHELF 41
Sample Location:

Date Collected: 12/30/22 18:00
Date Received: 01/03/23
Field Prep: Not Specified

Sample Depth:

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air by SIM - Mansfield Lab | | | | | | | | |
| sec-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| p-Isopropyltoluene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.020 | -- | ND | 0.120 | -- | | 1 |
| n-Butylbenzene | ND | 0.200 | -- | ND | 1.10 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Naphthalene | ND | 0.050 | -- | ND | 0.262 | -- | | 1 |
| 1,2,3-Trichlorobenzene | ND | 0.050 | -- | ND | 0.371 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.050 | -- | ND | 0.533 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-difluorobenzene | 98 | | 60-140 |
| bromochloromethane | 95 | | 60-140 |
| chlorobenzene-d5 | 97 | | 60-140 |

**Project Name:** USAI LIGHTING
**Project Number:** 14.4337

**Lab Number:** L2302299
**Report Date:** 01/24/23

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| NA | Present/Intact |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L2302299-01A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30) |
| L2302299-02A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30) |
| L2302299-03A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30) |
| L2302299-04A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30) |
| L2302299-05A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30) |
| L2302299-06A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30),TO15-SIM(30) |
| L2302299-07A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-SIM(30),TO15-LL(30) |
| L2302299-08A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30),TO15-SIM(30) |
| L2302299-09A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-SIM(30),TO15-LL(30) |
| L2302299-10A | Canister - 2.7 Liter | NA | NA | | | Y | Absent | | TO15-LL(30),TO15-SIM(30) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302299 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/24/23 |

## GLOSSARY

***Acronyms***

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: Data Usability Report*

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302299 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/24/23 |

***Footnotes***

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

***Terms***

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

***Data Qualifiers***

**A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

*Report Format: Data Usability Report*

| | | | |
|---|---|---|---|
| **Project Name:** | USAI LIGHTING | **Lab Number:** | L2302299 |
| **Project Number:** | 14.4337 | **Report Date:** | 01/24/23 |

***Data Qualifiers***

**ND** - Not detected at the reporting limit (RL) for the sample.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

**V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: Data Usability Report*

## REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

# Certification Information

**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene
**EPA 625/625.1:** alpha-Terpineol
**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270D/8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility**
**SM 2540D:** TSS
**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Biological Tissue Matrix:** EPA 3050B

**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 332**: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

**Mansfield Facility:**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522, EPA 537.1.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# AIR ANALYSIS

PAGE 1 OF 1

**CHAIN OF CUSTODY**

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/14/23

ALPHA Job #: L2302299

## Client Information

Client: C.T. Male Associates
Address: 50 Century Hill Drive
Latham, NY 12110
Phone: 518-786-7400
Fax:
Email: J.McIver@ctmale.com

☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: USAI Lighting
Project Location: 1126 River Road New Windsor, NY
Project #: 14.4337
Project Manager: Rosaura Andujar-McNeil
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

## Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables: ASB Cat B
Report to: (if different than Project Manager)

## Billing Information

☒ Same as Client info PO #: 14.4337

## Regulatory Requirements/Report Limits

| State/Fed | Program | Res / Comm |
|---|---|---|
| NY | | |

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

**All Columns Below Must Be Filled Out**

| ALPHA Lab ID (Lab Use Only) | Sample ID | COLLECTION End Date | Start Time | End Time | Initial Vacuum | Final Vacuum | Sample Matrix* | Sampler's Initials | Can Size | I D Can | I D - Flow Controller | ANALYSIS TO-15 | TO-15 SIM | APH Subtract Non-petroleum HCs ☐ | Fixed Gases | Sulfides & Mercaptans by TO-15 | Sample Comments (i.e. PID) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 02299-01 | VI-3-20230112 | 1/12/23 | 10:15 | 16:55 | -29.32 | -8.20 | SV | ML | 6L | 593 | 01768 | ✓ | | | | | |
| -02 | VI-2-20230112 | | 10:10 | 16:40 | -30.43 | -9.24 | SV | ML | 6L | 3380 | 01589 | ✓ | | | | | |
| -03 | VI-1-20230112 | | 10:05 | 16:22 | -28.14 | -7.93 | SV | ML | 6L | 3296 | 01948 | ✓ | | | | | |
| -04 | VI-4-20230112 | | 09:35 | 17:10 | -30.25 | -7.18 | SV | ML | 6L | 654 | 01648 | ✓ | | | | | |
| -05 | VI-5-20230112 | | 09:55 | 17:25 | -30.51 | -7.92 | SV | ML | 6L | 3468 | 01447 | ✓ | | | | | |
| -06 | IA-3-20230112 | | 10:16 | 17:00 | -30.48 | -8.19 | AA | ML | 6L | 3335 | 01671 | ✓ | | | | | |
| -07 | IA-2-20230112 | | 10:09 | 16:38 | -30.52 | -8.70 | AA | ML | 6L | 2054 | 02067 | ✓ | | | | | |
| -08 | IA-1-20230112 | | 09:46 | 17:13 | -30.32 | -7.51 | AA | ML | 6L | 2629 | 01665 | ✓ | | | | | |
| -09 | IA-4-20230112 | | 09:50 | 17:24 | -30.35 | -7.81 | AA | ML | 6L | 616 | 01426 | ✓ | | | | | |
| -10 | OA-1-20230112 | | 09:41 | 16:18 | -30.41 | -8.58 | AA | ML | 6L | 2903 | 01512 | ✓ | | | | | |

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

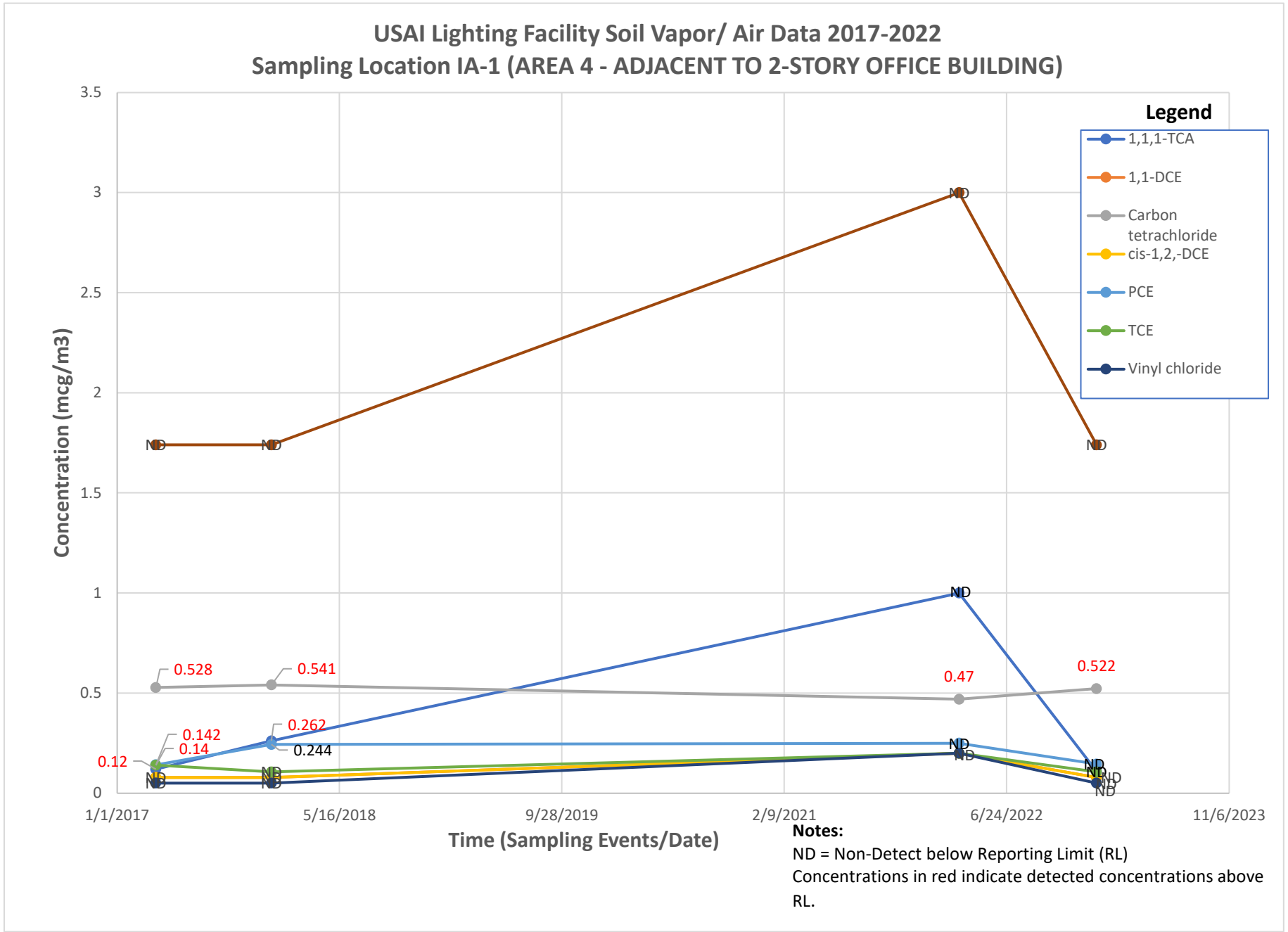
Container Type: 6L Summa

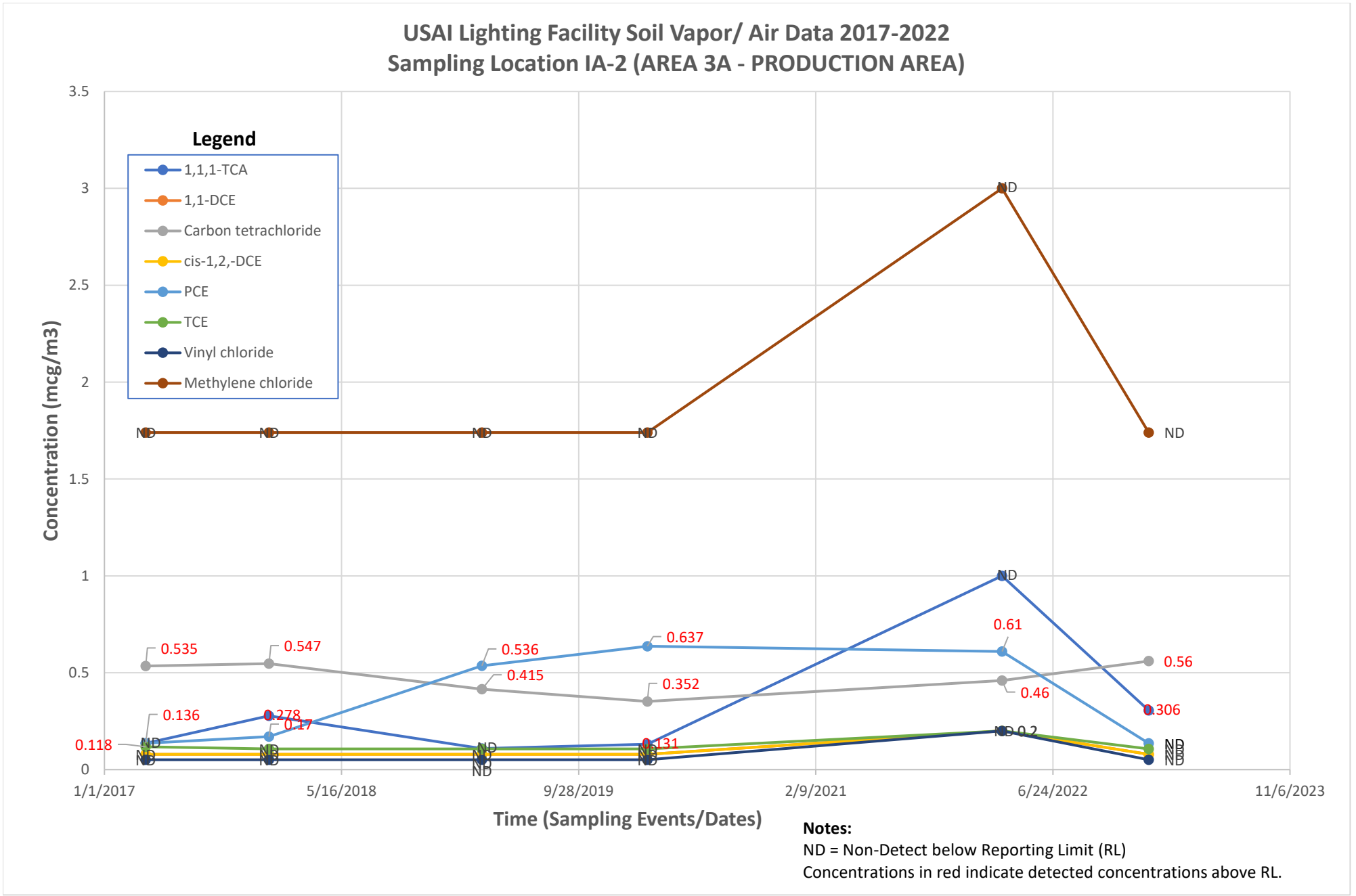
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

| Relinquished By: | Date/Time | Received By: | Date/Time: |
|---|---|---|---|
| MJL (AAL) | 1/13/23 12:50 | MJL (AAL) | 1-13-23 1250 |
| | 1-13-23 1910 | | 1-13-23 2100 |
| | 1-13-23 | | 1/13/23 2340 |
| eCAAL | 1/14/23 0310 | eCAAL | 1/14/23 03:10 |

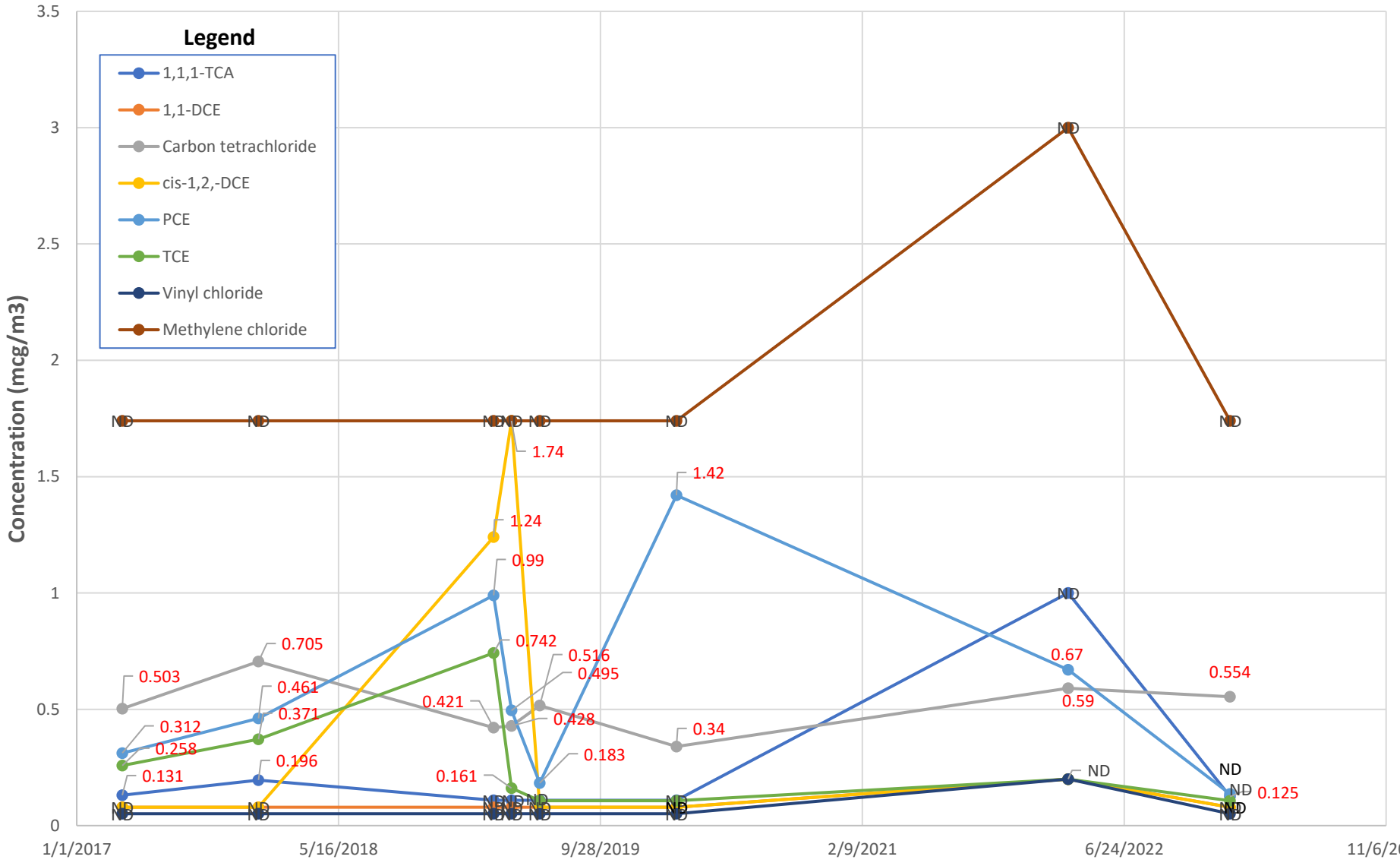
Form No: 101-02 Rev: (25-Sep-15)

# Attachment E: Trend Analyses

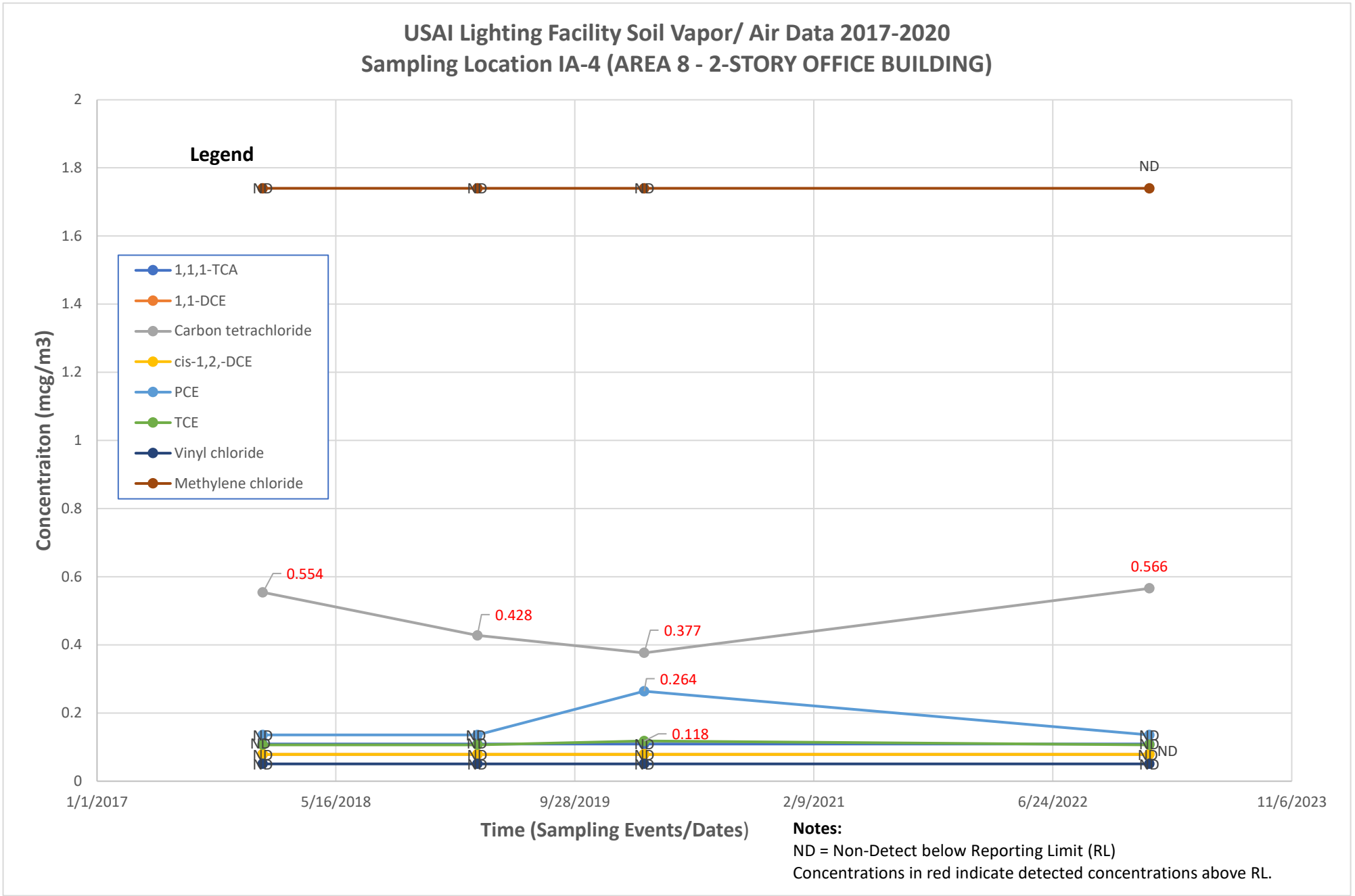

USAI Lighting Facility Soil Vapor/ Air Data 2017-2022
Sampling Location IA-1 (AREA 4 - ADJACENT TO 2-STORY OFFICE BUILDING)
Concentration (mcg/m3)
Time (Sampling Events/Date)
Legend
1,1,1-TCA
1,1-DCE
Carbon tetrachloride
cis-1,2,-DCE
PCE
TCE
Vinyl chloride
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2017
5/16/2018
9/28/2019
2/9/2021
6/24/2022
11/6/2023
ND
0.528
0.541
0.47
0.522
0.142
0.14
0.12
0.262
0.244
Notes:
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.


USAI Lighting Facility Soil Vapor/ Air Data 2017-2022
Sampling Location IA-2 (AREA 3A - PRODUCTION AREA)
Legend
1,1,1-TCA
1,1-DCE
Carbon tetrachloride
cis-1,2,-DCE
PCE
TCE
Vinyl chloride
Methylene chloride
Concentration (mcg/m3)
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2017
5/16/2018
9/28/2019
2/9/2021
6/24/2022
11/6/2023
Time (Sampling Events/Dates)
0.535
0.547
0.536
0.637
0.61
0.56
0.415
0.352
0.46
0.136
0.278
0.17
0.306
0.118
0.131
0.2
ND
Notes:
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

# USAI Lighting Facility Soil Vapor/ Air Data 2017-2022
## Sampling Location IA-3 (AREA 2 - OFFICE SPACE IN PRODUCTION AREA)

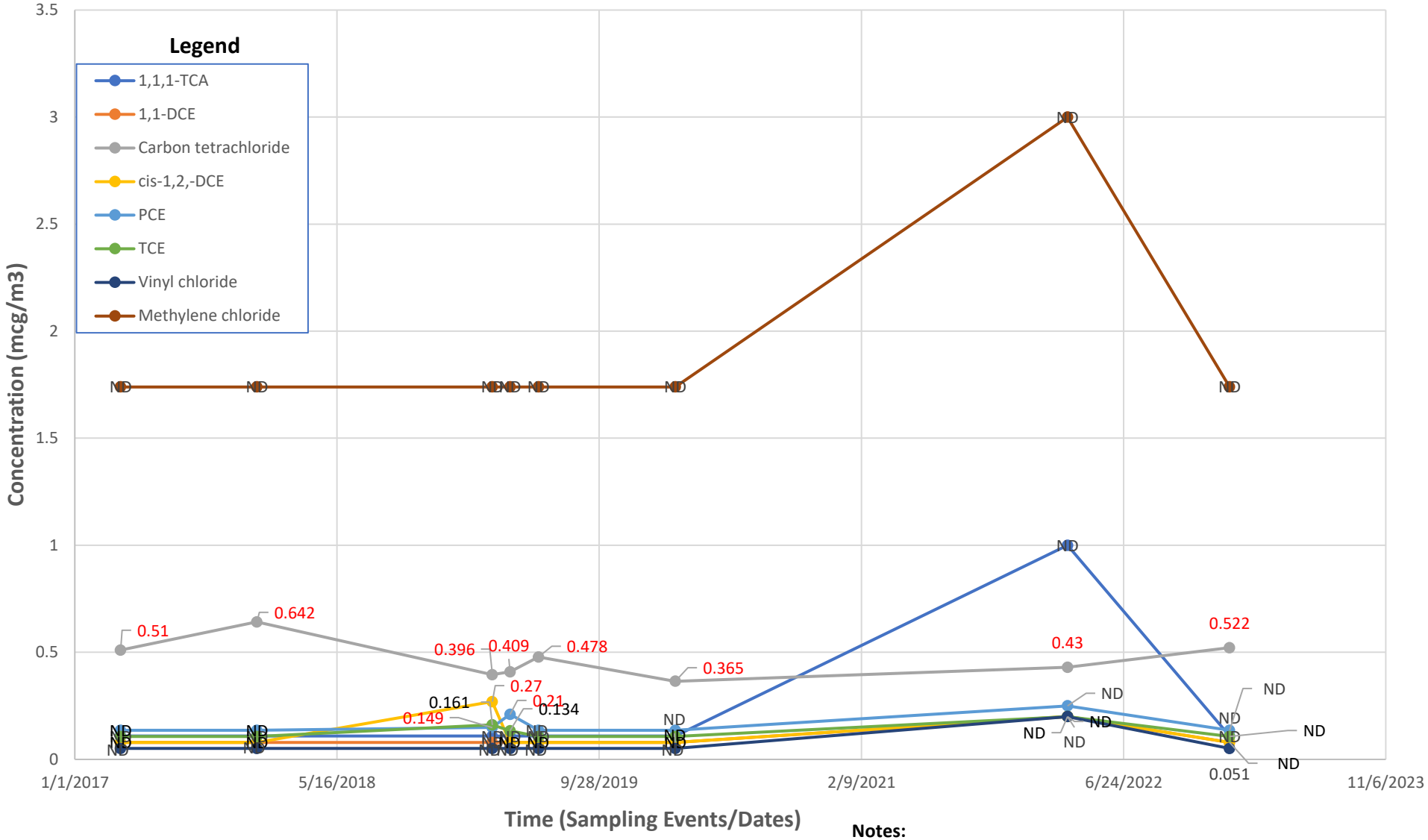



**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

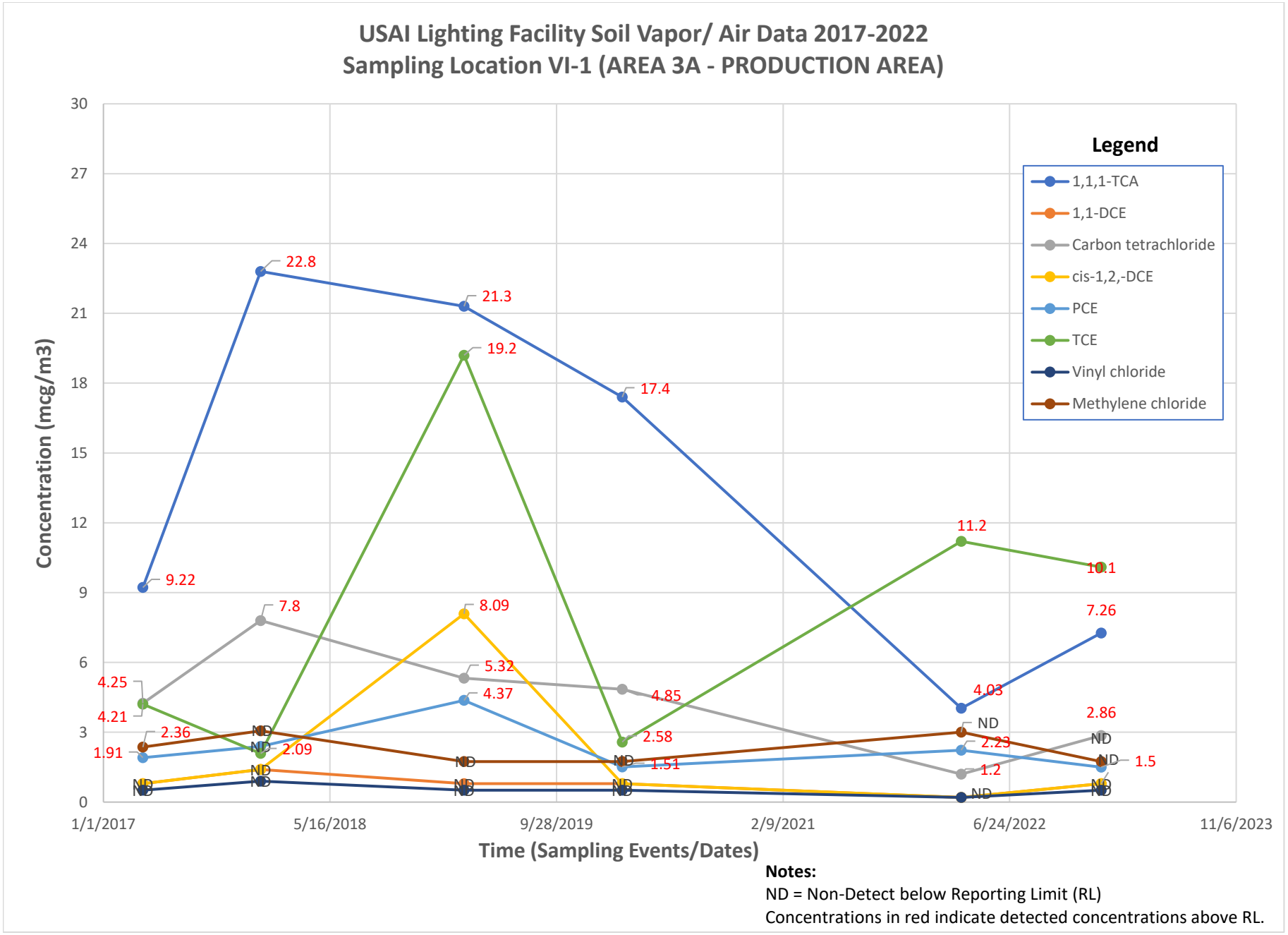



**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

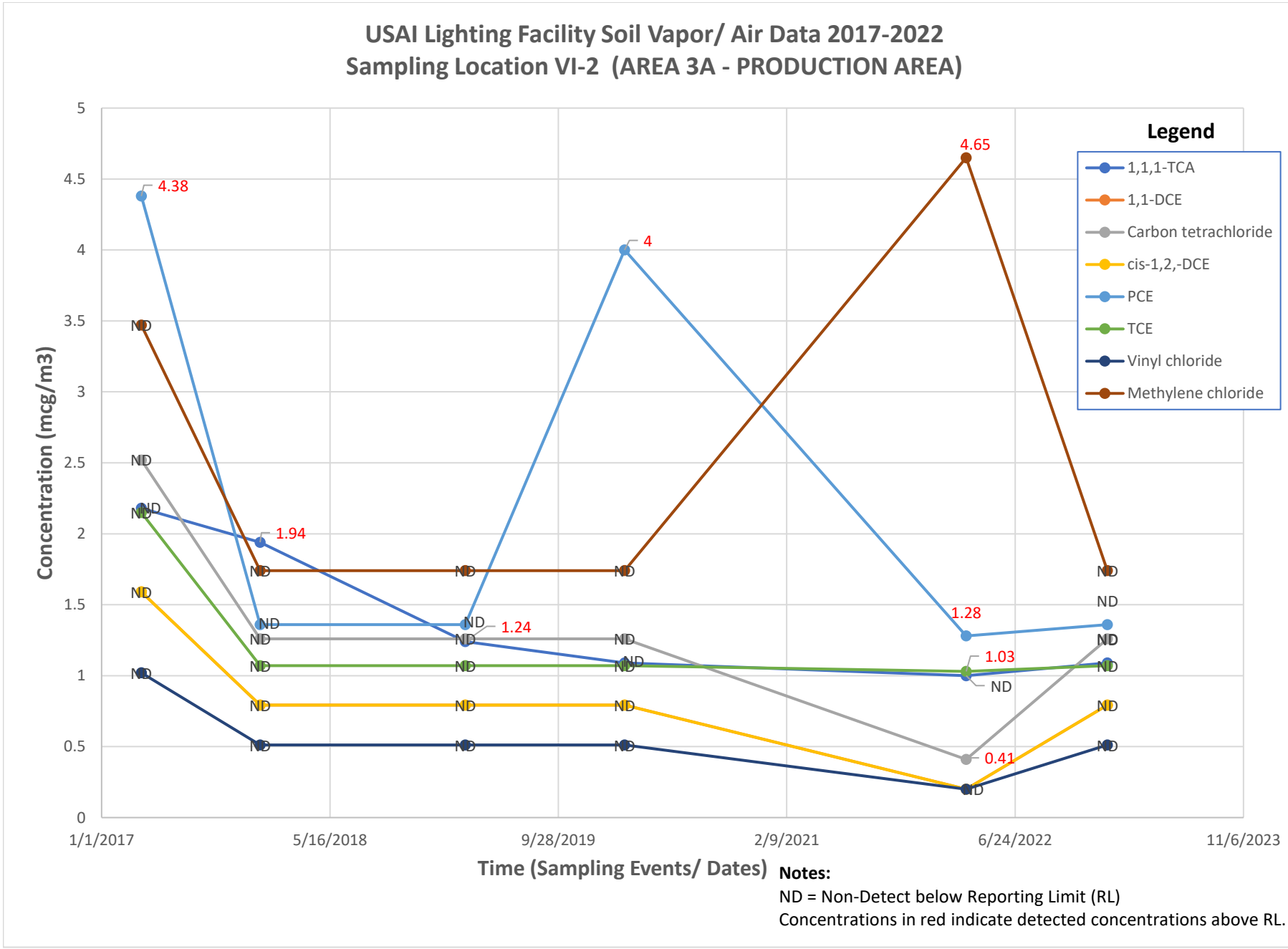
# USAI Lighting Facility Soil Vapor/ Air Data 2017-2022
## Sampling Location OA-1 (OUTDOOR AIR)




**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.



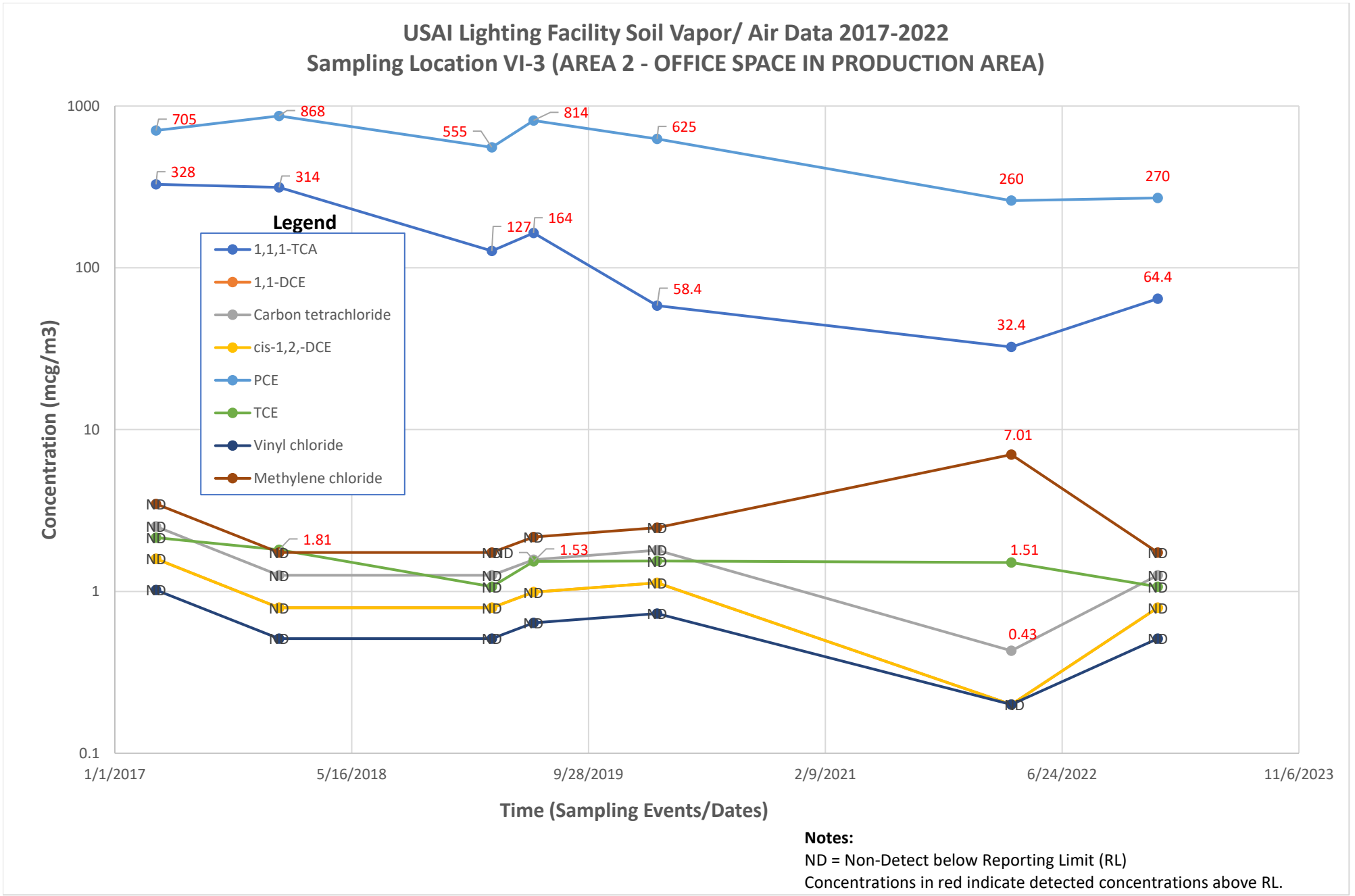

**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

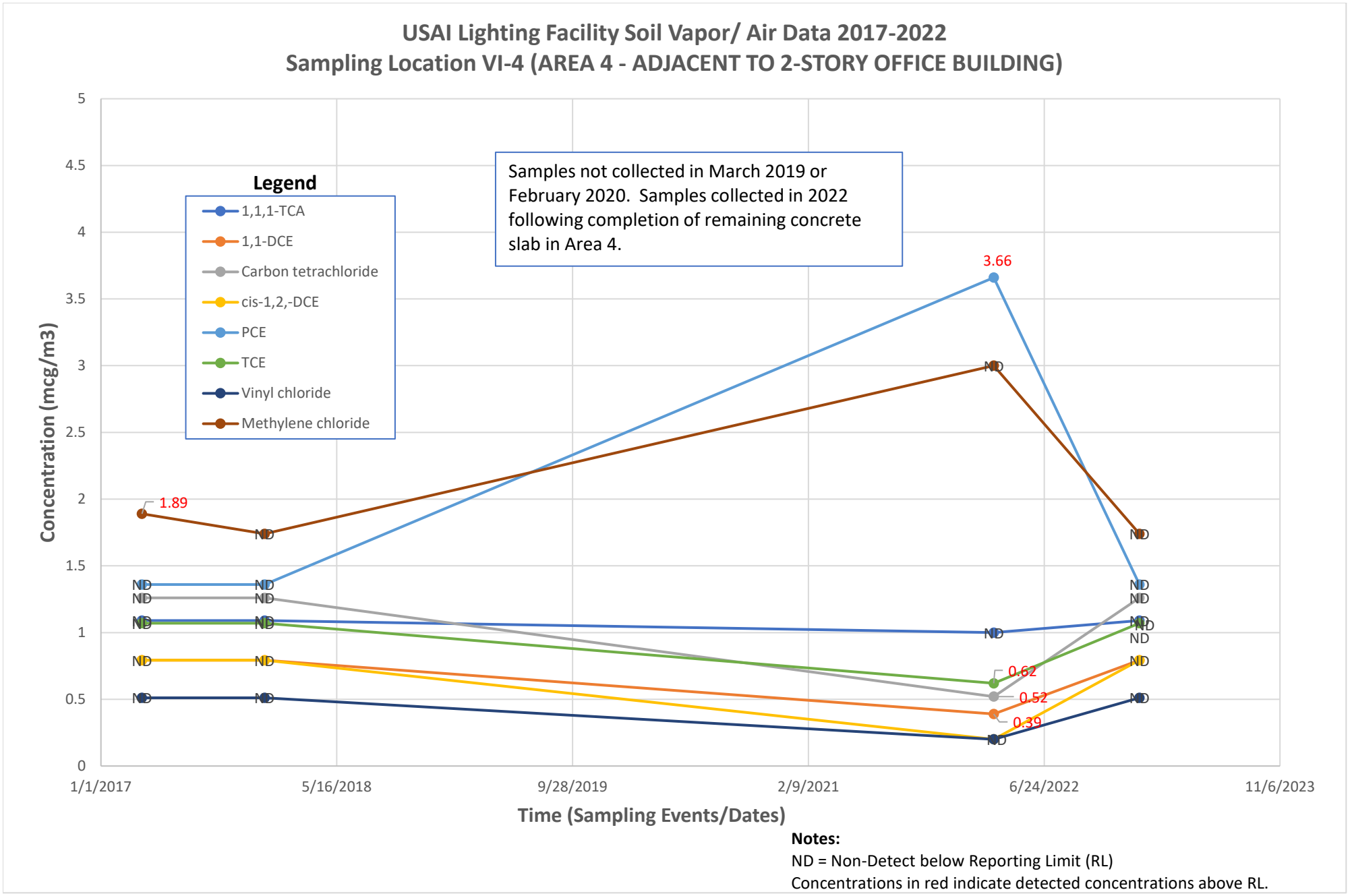



**Notes:**

ND = Non-Detect below Reporting Limit (RL)

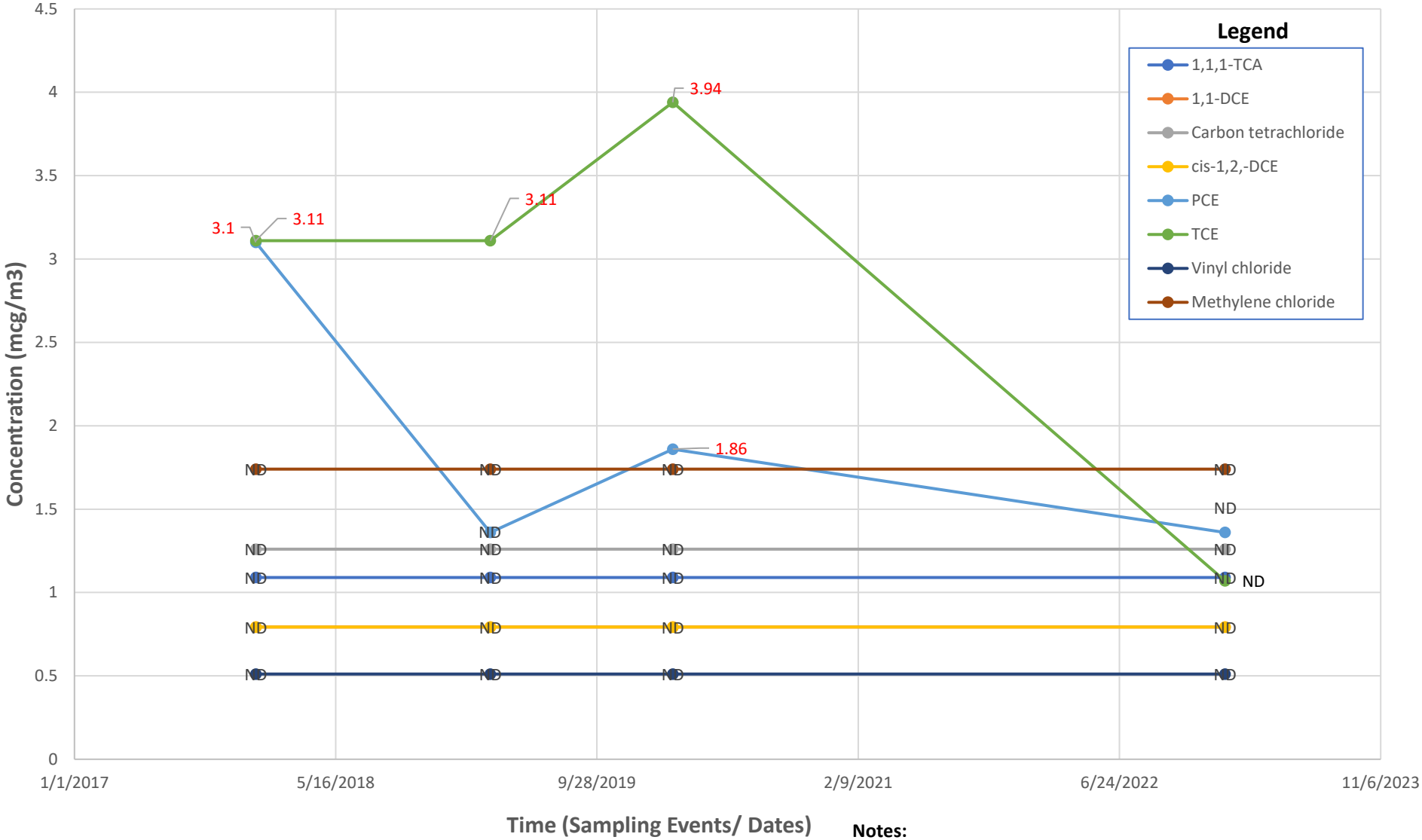
Concentrations in red indicate detected concentrations above RL.


USAI Lighting Facility Soil Vapor/ Air Data 2017-2022
Sampling Location VI-3 (AREA 2 - OFFICE SPACE IN PRODUCTION AREA)
Concentration (mcg/m3)
1000
100
10
1
0.1
1/1/2017
5/16/2018
9/28/2019
2/9/2021
6/24/2022
11/6/2023
Time (Sampling Events/Dates)
Legend
1,1,1-TCA
1,1-DCE
Carbon tetrachloride
cis-1,2,-DCE
PCE
TCE
Vinyl chloride
Methylene chloride
705
868
555
814
625
260
270
328
314
127
164
58.4
32.4
64.4
7.01
1.81
1.53
1.51
0.43
ND
Notes:
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

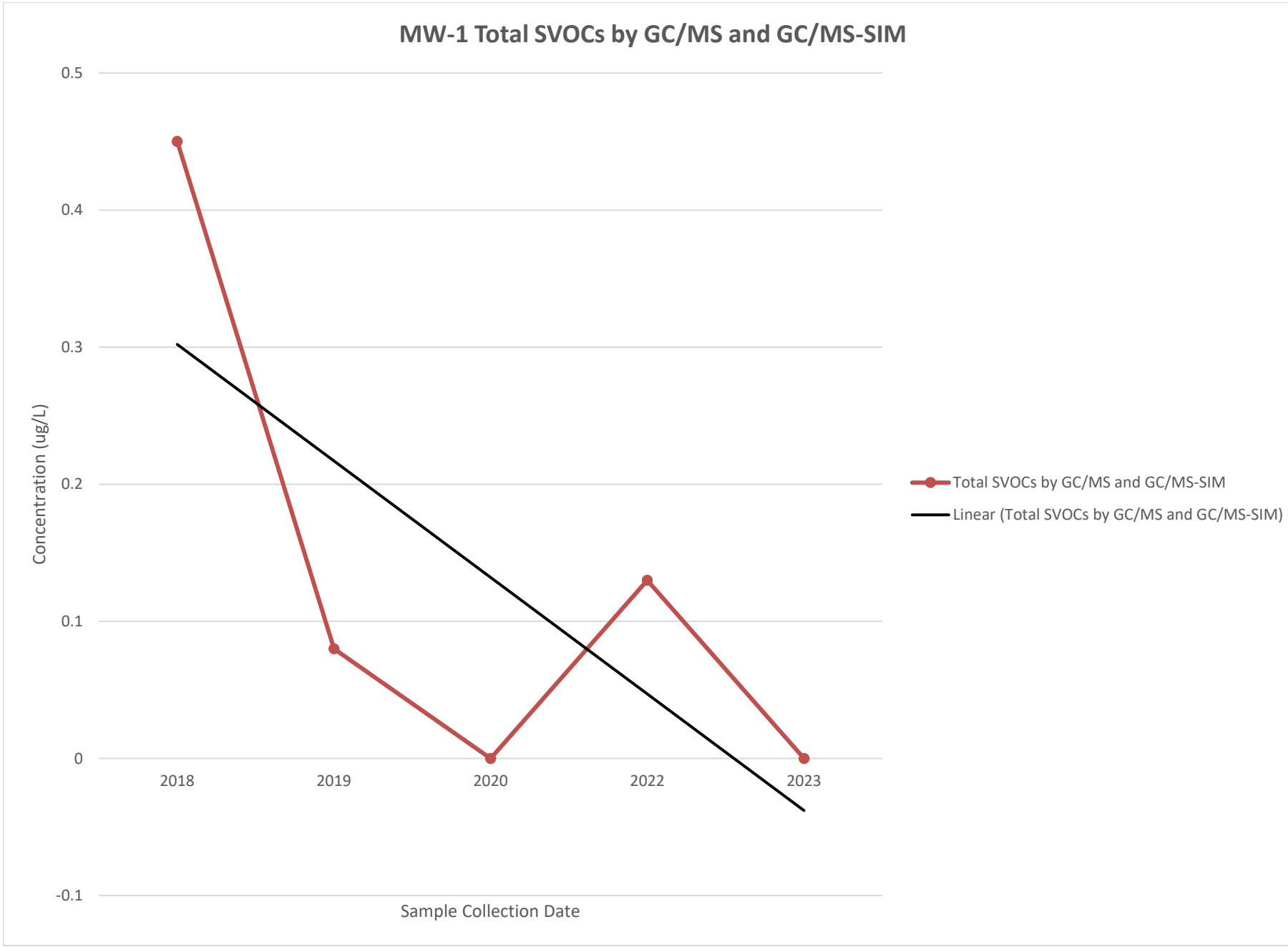


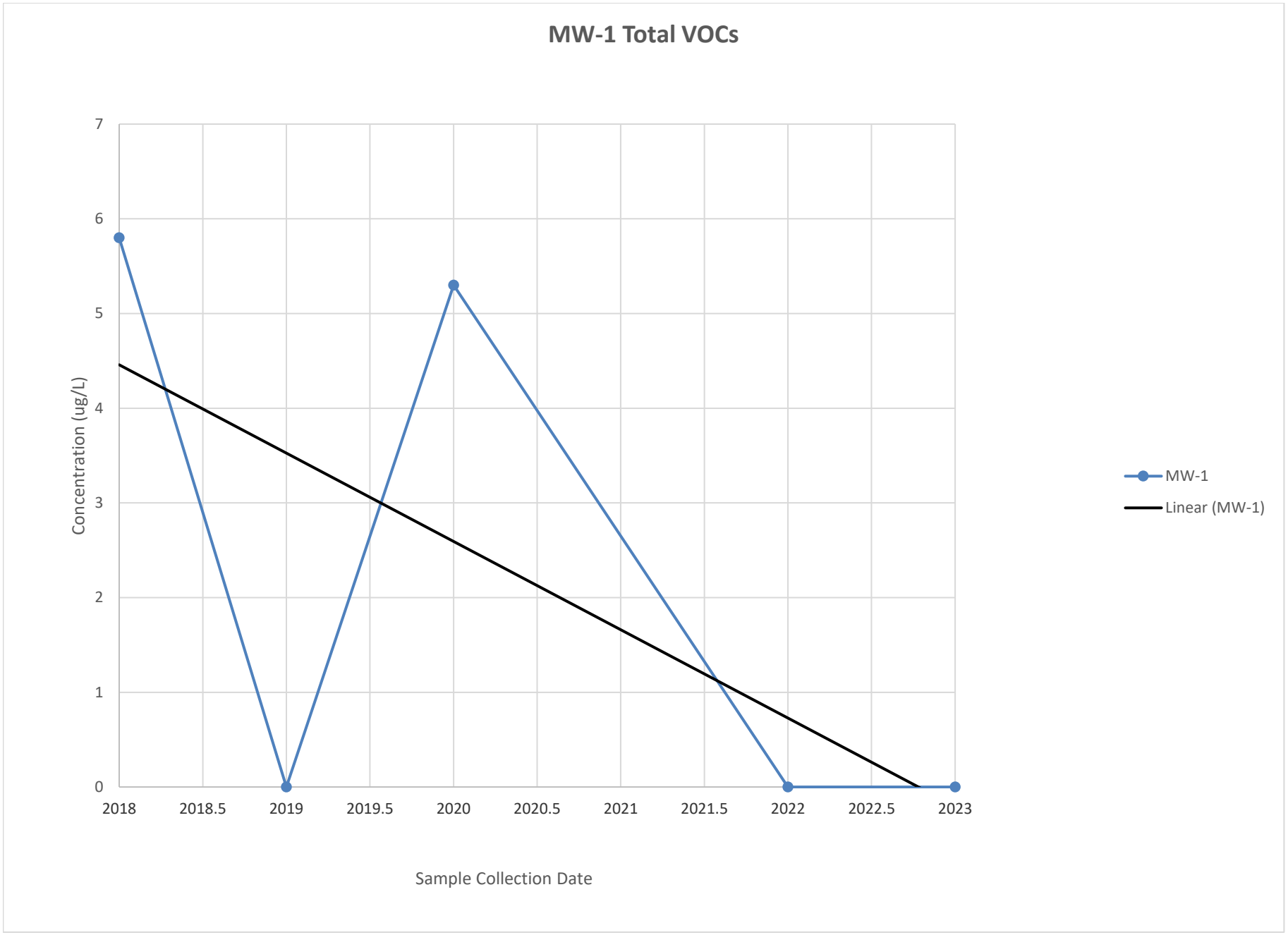

**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

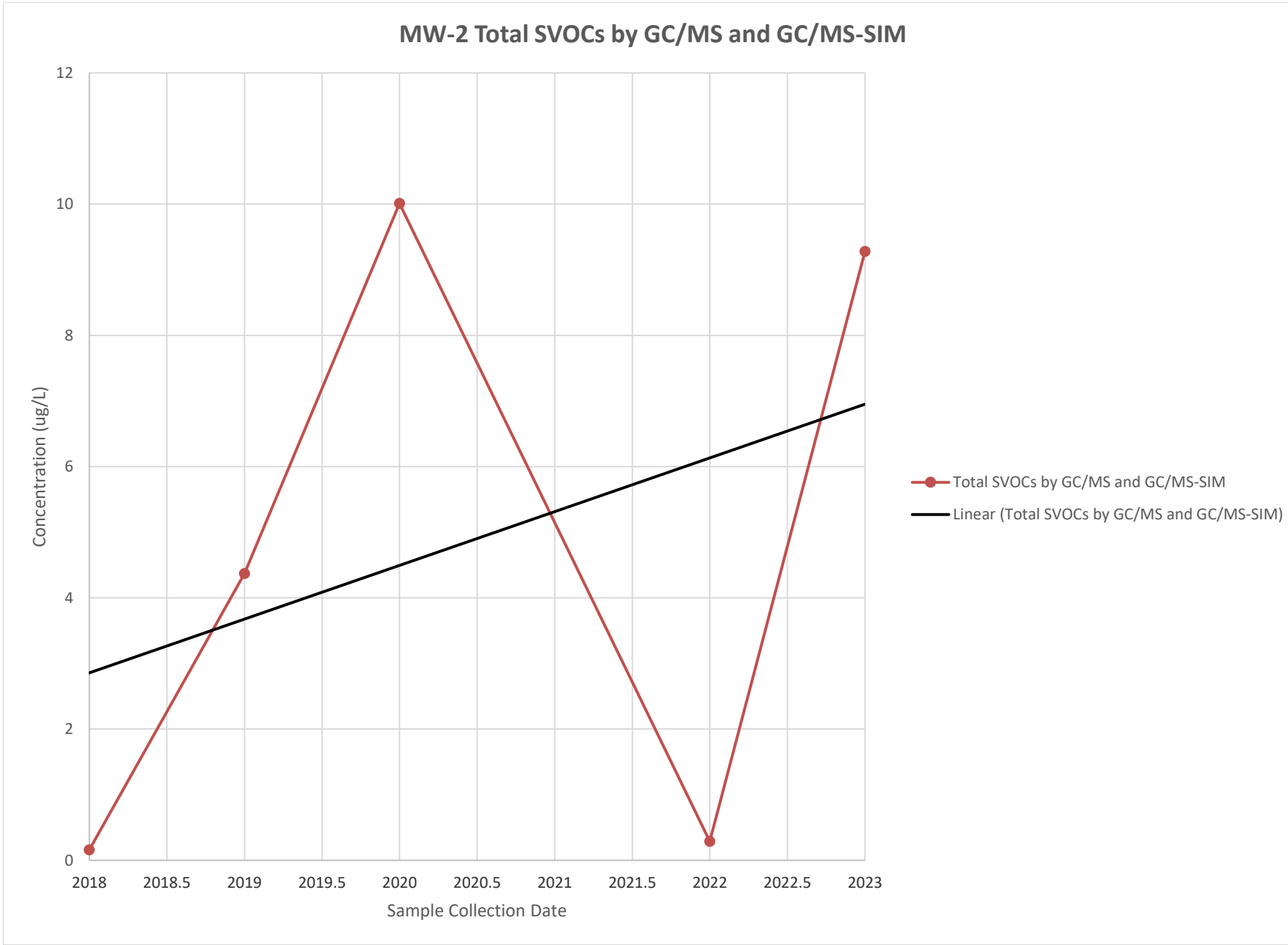
# USAI Lighting Facility Soil Vapor/ Air Data 2017-2020
## Sampling Location VI-5 (AREA 8 - 2-STORY OFFICE BUILDING)

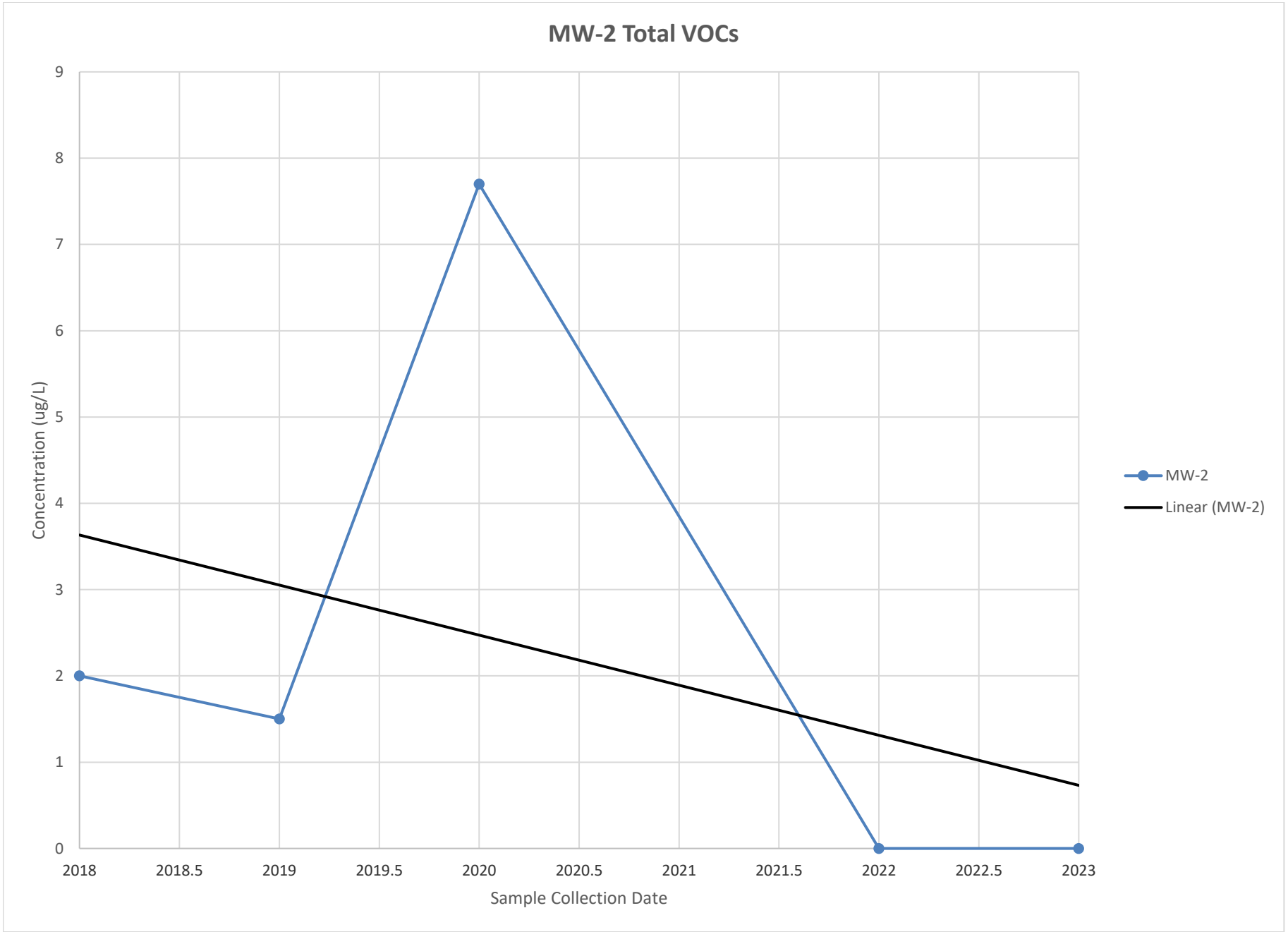


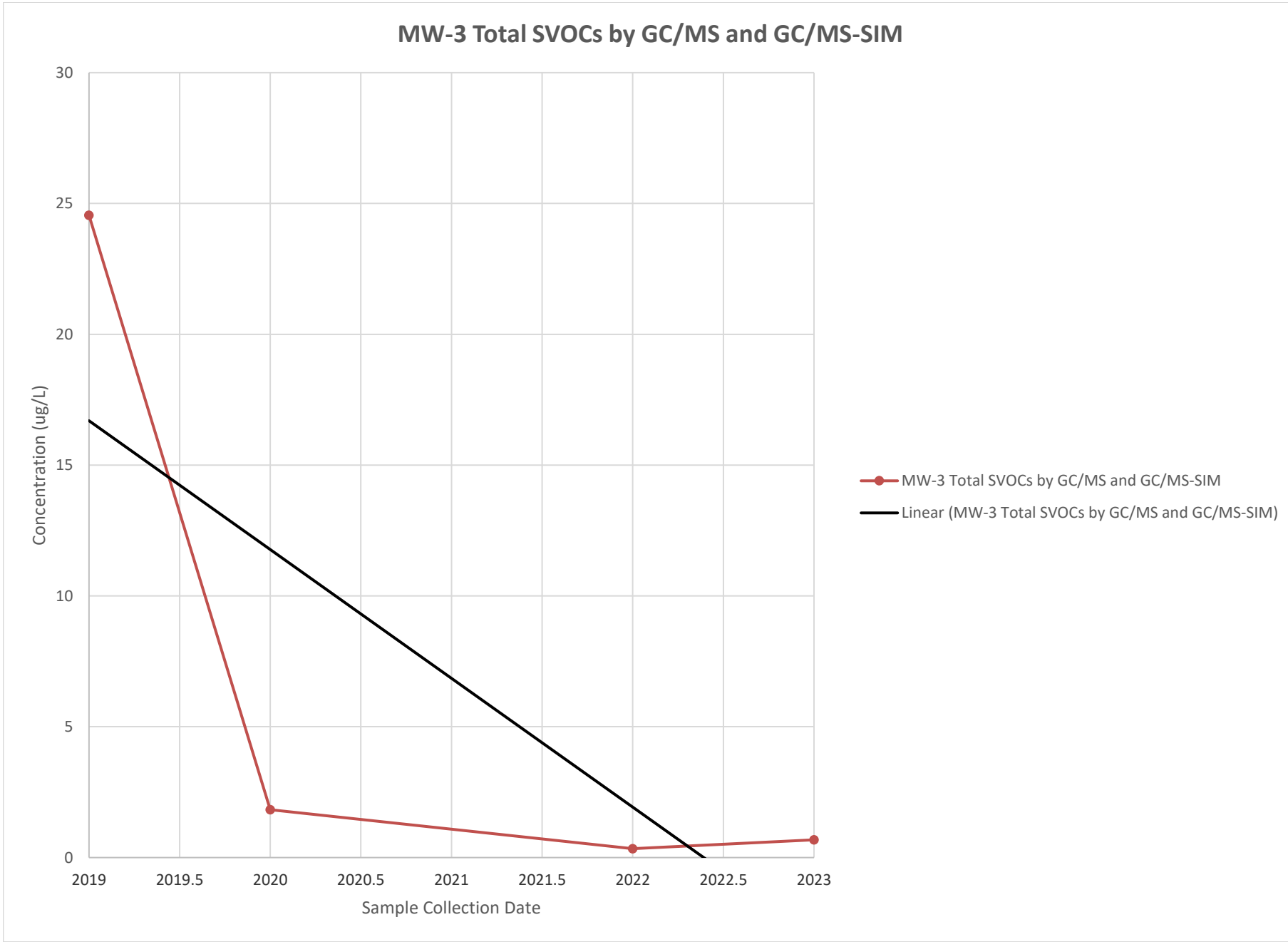

**Notes:**
ND = Non-Detect below Reporting Limit (RL)
Concentrations in red indicate detected concentrations above RL.

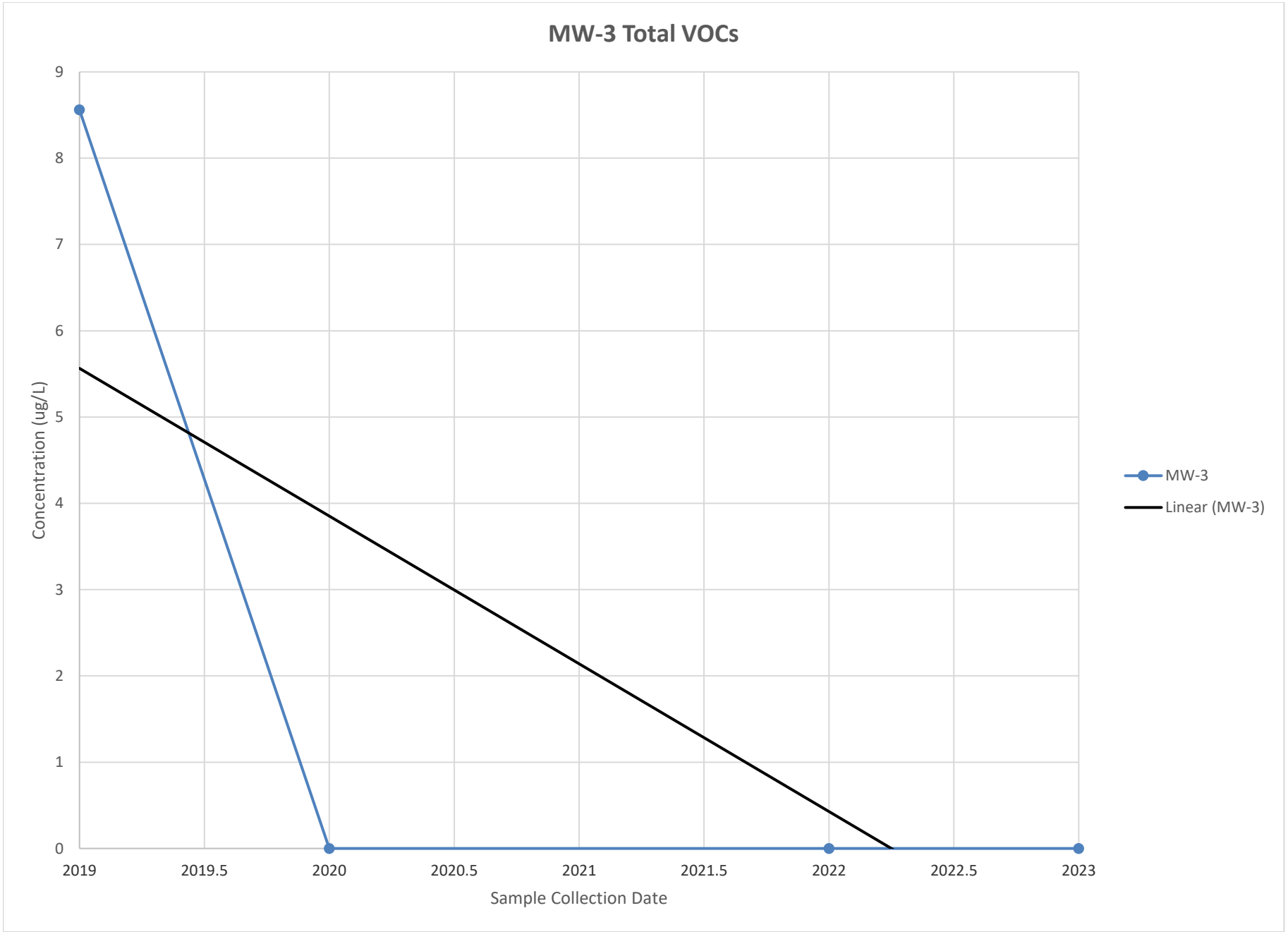

MW-1 Total SVOCs by GC/MS and GC/MS-SIM
0.5
0.4
0.3
0.2
0.1
0
-0.1
Concentration (ug/L)
2018
2019
2020
2022
2023
Sample Collection Date
Total SVOCs by GC/MS and GC/MS-SIM
Linear (Total SVOCs by GC/MS and GC/MS-SIM)

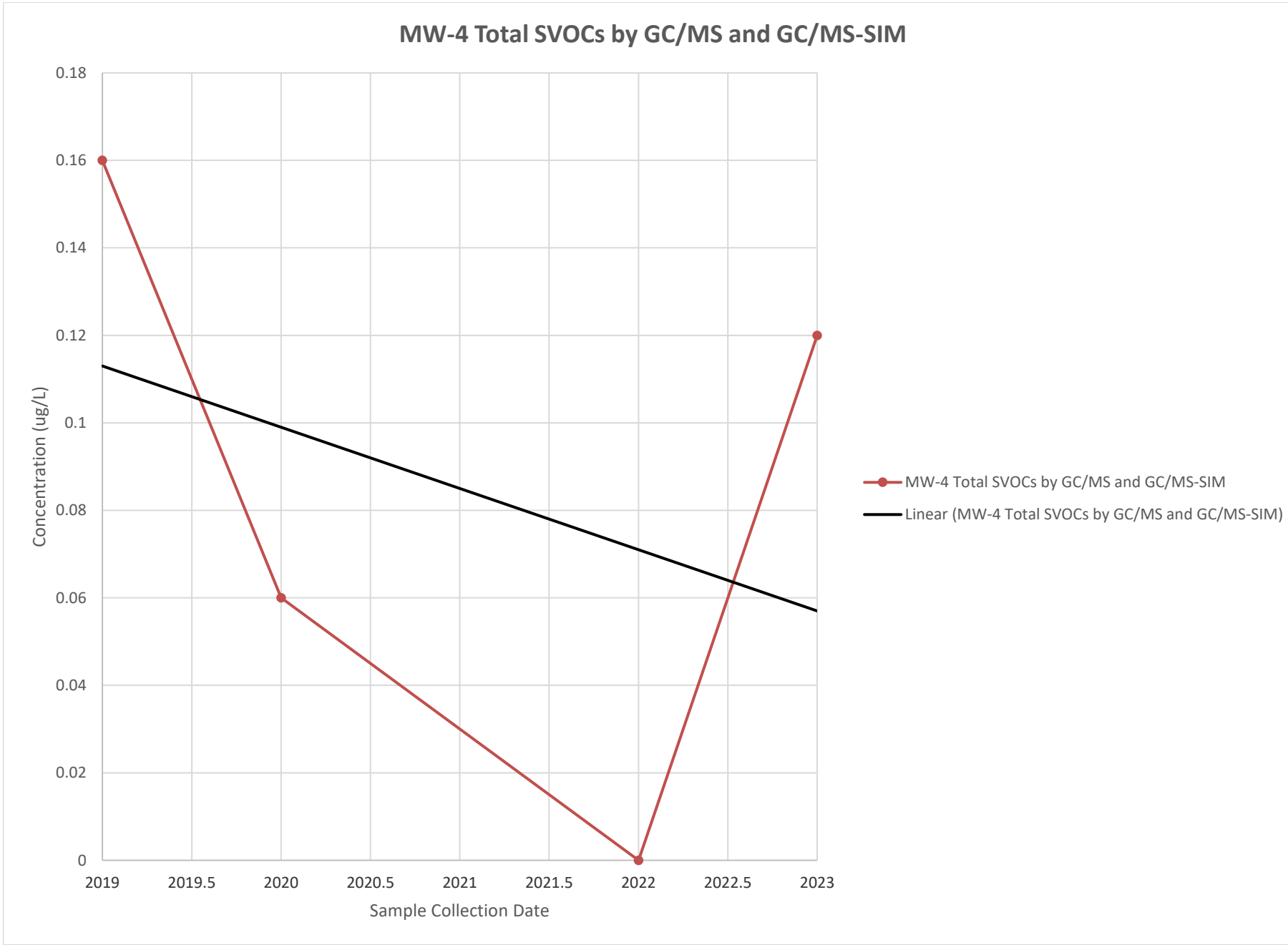

MW-1 Total VOCs
Concentration (ug/L)
0
1
2
3
4
5
6
7
2018
2018.5
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-1
Linear (MW-1)

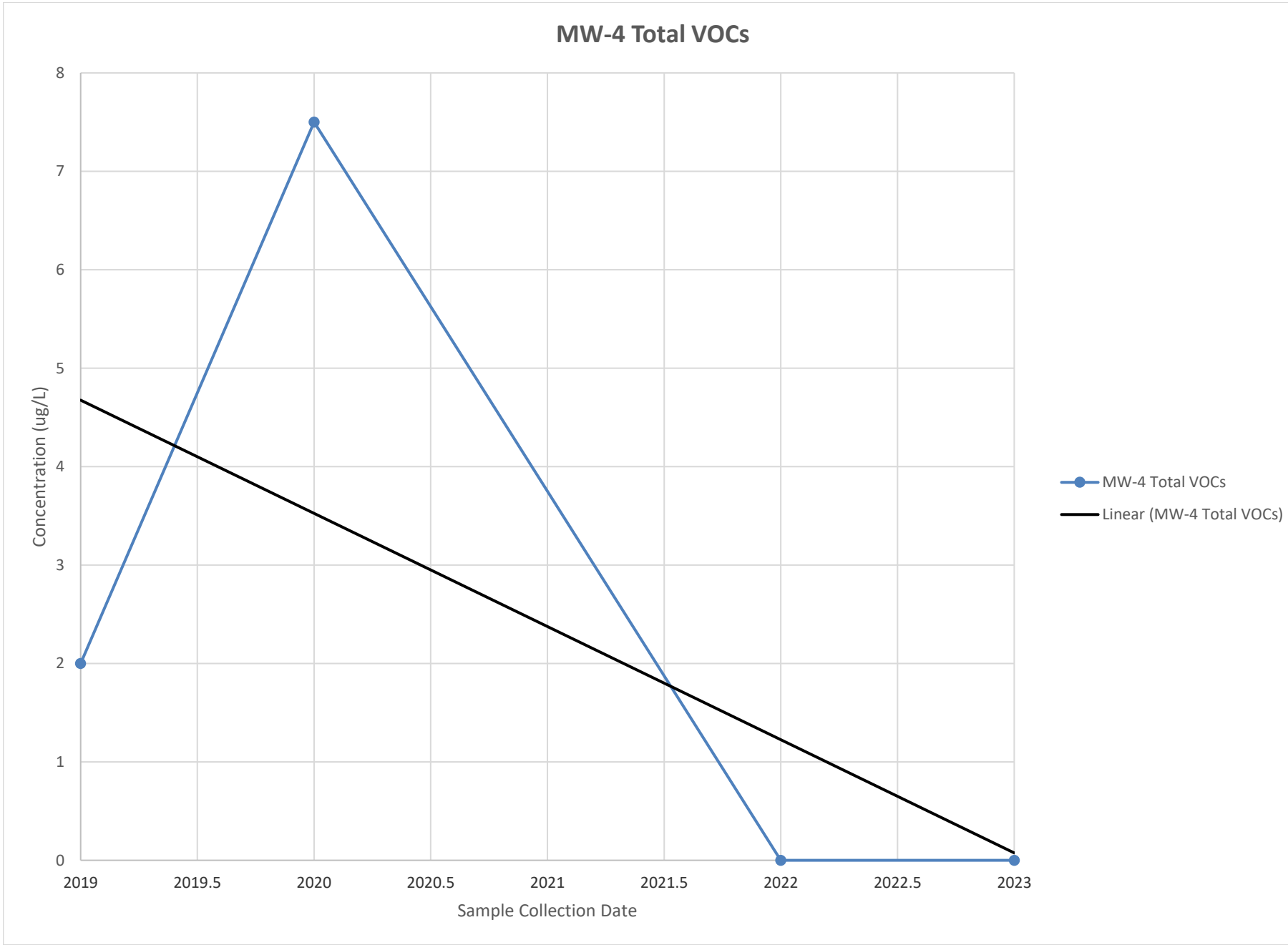

MW-2 Total SVOCs by GC/MS and GC/MS-SIM
Concentration (ug/L)
0
2
4
6
8
10
12
2018
2018.5
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
Total SVOCs by GC/MS and GC/MS-SIM
Linear (Total SVOCs by GC/MS and GC/MS-SIM)


MW-2 Total VOCs
Concentration (ug/L)
9
8
7
6
5
4
3
2
1
0
2018
2018.5
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-2
Linear (MW-2)


MW-3 Total SVOCs by GC/MS and GC/MS-SIM
30
25
20
15
10
5
0
Concentration (ug/L)
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-3 Total SVOCs by GC/MS and GC/MS-SIM
Linear (MW-3 Total SVOCs by GC/MS and GC/MS-SIM)


MW-3 Total VOCs
Concentration (ug/L)
9
8
7
6
5
4
3
2
1
0
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-3
Linear (MW-3)


MW-4 Total SVOCs by GC/MS and GC/MS-SIM
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (ug/L)
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-4 Total SVOCs by GC/MS and GC/MS-SIM
Linear (MW-4 Total SVOCs by GC/MS and GC/MS-SIM)


MW-4 Total VOCs
Concentration (ug/L)
0
1
2
3
4
5
6
7
8
2019
2019.5
2020
2020.5
2021
2021.5
2022
2022.5
2023
Sample Collection Date
MW-4 Total VOCs
Linear (MW-4 Total VOCs)

# Attachment F: SVI – Structure Sampling Building Questionnaire

**Soil Vapor Intrusion - Structure Sampling Building Questionnaire** **Structure ID :** _____

BCP site no. C336087

**Site No. :** 14.4337 **Site Name :** USAI Lighting

**Date:** 1/12/2023 **Time:** 12:30

**Structure Address :** 1126 River Road, New Windsor, NY

**Preparer's Name & Affiliation :** Mary Laughlin, Geologist, C.T. Male Associates

**Residential ?** ☐ Yes ☒ No **Owner Occupied ?** ☒ Yes ☐ No **Owner Interviewed ?** ☐ Yes ☒ No

**Commercial ?** ☐ Yes ☒ No **Industrial ?** ☒ Yes ☐ No **Mixed Uses ?** ☐ Yes ☒ No

**Identify all non-residential use(s) :** Light fixture manufacturing/ assembly/ packagi

**Owner Name :** USAI Lighting **Owner Phone :** (845) 565 - 8500

**Secondary Owner Phone :** ( ) _____ - _____

**Owner Address** (if different) : Same as above

**Occupant Name :** Mike Griffin Plant manager/ Site contact **Occupant Phone :** (845) 565 - 8500 x 182

**Secondary Occupant Phone :** ( ) _____ - _____

**Number & Age of All Persons Residing at this Location :** Unknown

**Additional Owner/Occupant Information :** 50 - 100 persons work at this facility

**Describe Structure** (style, number floors, size) : 2- story industrial manufacturing concrete block/ brick building, Approximately 4,000 sq ft manufacturing space & 1,000 sq ft office spaces

Approximate **Year Built :** Unknown **Is the building Insulated?** ☒ Yes ☐ No

**Lowest level :** ☒ Slab-on-grade ☐ Basement ☐ Crawlspace

**Describe Lowest Level** (finishing, use, time spent in space) : partial office space and partial warehouse/ manufacturing plant area

**Floor Type:** ☒ Concrete Slab ☐ Dirt ☐ Mixed : _____

**Floor Condition :** ☒ Good (few or no cracks) ☒ Average (some cracks) ☐ Poor (broken concrete or dirt)

**Sumps/Drains?** ☐ Yes ☒ No Describe : None observed

**Identify other floor penetrations & details :** Permanent vapor Point/ vapor pins installed for SV sampling purposes. No other known floor penetrations

**Wall Construction :** ☒ Concrete Block ☐ Poured Concrete ☒ Laid-Up Stone Brick

**Identify any wall penetrations :** N/A - unknown behind sheetrock - none Observed.

**Identify water, moisture, or seepage: location & severity** (sump, cracks, stains, etc) : Some cracks noted in the concrete floor of the manufacturing/ warehouse areas & near SV-3 Sample location

**Heating Fuel :** ☐ Oil ☒ Gas ☐ Wood ☐ Electric ☐ Other : _____

**Heating System :** ☒ Forced Air ☐ Hot Water ☐ Other : _____

**Hot Water System :** ☐ Combustion ☐ Electric ☐ Boilermate ☒ Other: unknown - public water supply

**Clothes Dryer :** ☐ Electric ☐ Gas Where is dryer **vented** to? N/A - no dryer(s) observed on site

**If combustion occurs, describe where air is drawn from** (cold air return, basement, external air, etc.) : unknown

**Fans & Vents** (identify where fans/vents pull air from and where they vent/exhaust to) : Air distribution located in office spaces only - above the drop ceiling & not visible

## Structure Sampling - Product Inventory



Homeowner Name & Address: USAL, 1126 River Road, New Windsor, NY Date: 1/12/23

Samplers & Company: M. Loughlin, C.T. Male Associates Structure ID: N/A

Site Number & Name: USAL Lighting Phone Number:

Make & Model of PID: Mini Rae 3000 Date of PID Calibration: 12/15/22

Identify any Changes from Original Building Questionnaire : N/A

| Product Name/Description | Quantity | Chemical Ingredients | PID Reading | Location |
|---|---|---|---|---|
| Pledge Lemon clean 13.8oz | 5 | Water, lubricant blend, Naptha, petroleum, Nitrogen, polyethylene | 0.0 | Storage Closet V1-3 |
| Lysol All purpose Cleaner Lemon Breeze Scent 32 oz | 26 | Active ingredients: - dimethyl benzyl ammonium chloride Other ingredients (99.8%). inactive - not listed | 0.0 | |
| Purell professional Surface disinfectant 16 oz | 1 | Ethyl Alcohol, isopropyl alcohol, water | 0.0 | |
| Germs be Gone hand sanitizer gel 15 oz | 6 | water, isopropyl alcohol, glycerin, Carbomer, Aminomethyl propanol, Fragrance, propylene glycol, Isopropyl Myristate, Aloe leaf extract, Tocopheryll Acetate (vitamin E) | 0.0 | |
| Uline antibacterial hand soap | 36 | Benzylalkonium chloride | 0.0 | |
| Febreze air aerosol 8.8 oz | 6 | water, alcohol (ethanol), fragrance, odor eliminator, Nitrogen | 0.0 | |
| Avouk 75% Alcohol disinfection wipes | 3 | Ethyl alcohol, water | 0.0 | |
| Purell hand Sanitizing wipes - 270 wipes | 1 | Benzalkonium chloride | 0.2 | open container |
| 409 multisurface cleaner | 1 | Alkyl dimethyl benzyl ammonium chloride. Other ingredients not listed. | 0.0 | |
| Lysol clean + Fresh multi surface cleaner | 6 | Alcohols, C10-16 ethoxylated Quaternary ammonium compounds, benzyl C12-16 alkyldimethyl, chlorides | 0.0 | |
| Microban 24hr Sanitizing spray | 2 | Alkyl dimethyl benzyl ammonium chloride + other ammonium chloride active ingredients | 0.0 | |

## Structure Sampling - Product Inventory



**Homeowner Name & Address:** USAI, 1126 River Road, New Windsor, NY **Date:** 1/12/23

**Samplers & Company:** M. Loughlin, C.T. Male **Structure ID:** N/A

**Site Number & Name:** USAI Lighting **Phone Number:**

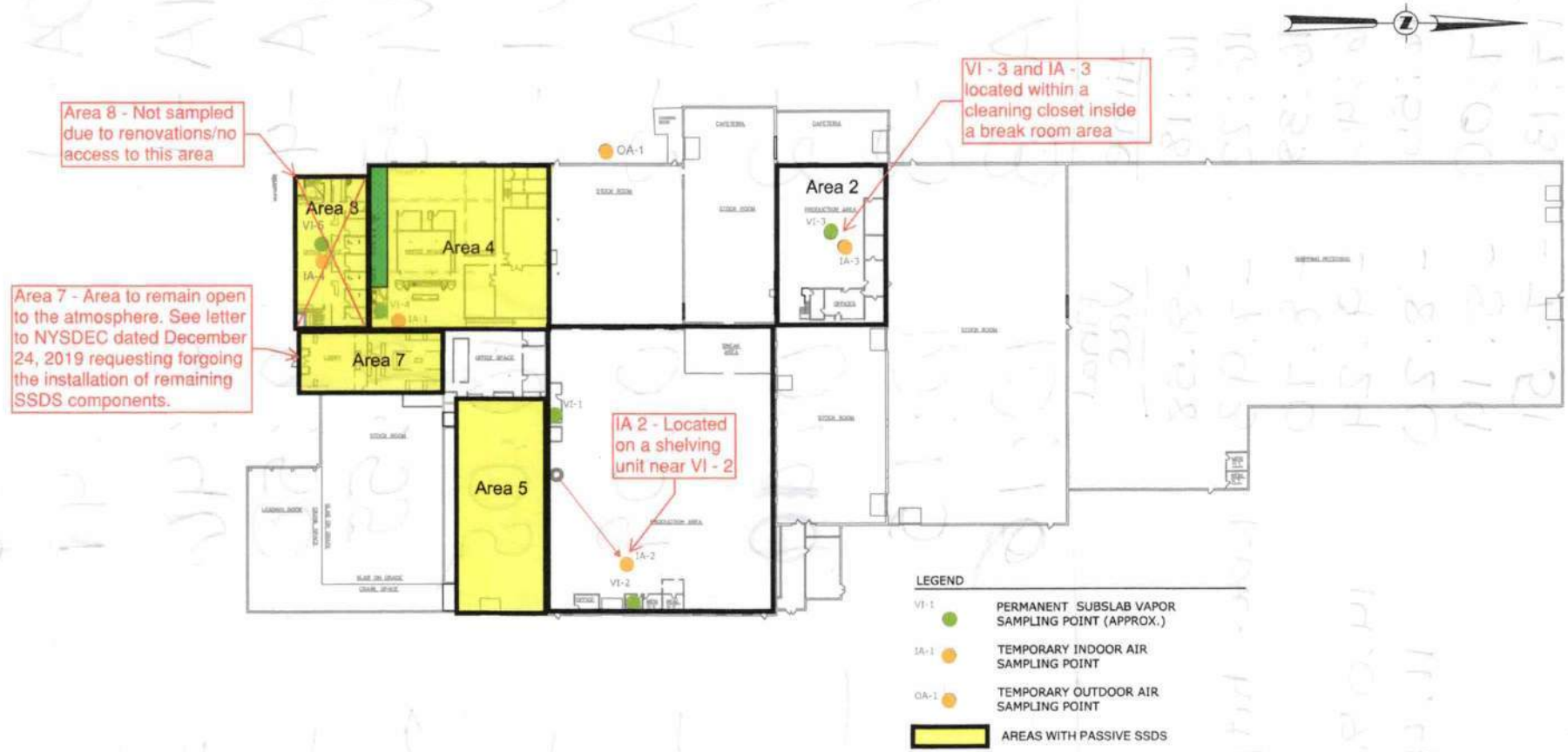
**Make & Model of PID:** Mini Rae, 3000 **Date of PID Calibration:** 12/15/22

**Identify any Changes from Original Building Questionnaire :** N/A

| Product Name/Description | Quantity | Chemical Ingredients | PID Reading | Location |
|---|---|---|---|---|
| Uline air freshner citrus blossom | 4 | propane, isobutane, isopropyl alcohol, linalool, ethyl - methylphenylglycidate | 0.0 | Storage closet VI-3 |
| windex with vinegar 67.5 oz | 3 | Ethyleneglycol Monohexylether, Lactic Acid | 0.0 | ↓ |
| Lysol air freshener | 19 | Triethylene glycol, dimethyl benzyl ammonium Saccharinate | 0.0 | |
| Dial antimicrobial hand soap | 1 | Benzalkonium chloride | 0.0 | |
| Clorox disinfecting wipes | 4 | Ammonium chloride, other ingredients (99.6%) not listed | 0.0 | |
| Dawn Dish Soap | 4 | H20, Sodium Laurel sulfate, C-10-16 Alkyldimethylamine oxide, biodegradable surfactants | 0.0 | |
| | | | | |
| | | | | |

XREFS: NONE

PROJECT NUMBER: 14.4337




**NOTE**: VI MITIGATION MEASURES FOR ALL AREAS DEPICTED IN RECORD DRAWING "BUILDING VAPOR MITITGATION INTRUSION MEASURES", WM-1 BY FELLENZER ENGINEERING (DATED 11/23/16, REVISED 12/2/2016) AND CONSTRUCTION COMPLETION REPORT FOR SSDS IN 2-STORY OFFICE BUILDING BY C.T. MALE (DATED MARCH 29, 2018).

NOTE:
THE LOCATIONS AND FEATURES DEPICTED IN THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY BY C.T. MALE.

MAP REFERENCE:
BUILDING FLOOR PLAN PROVIDED BY FELLENZER ENGINEERING LLP OF MIDDLETOWN, NY.

| DATE | | REVISIONS RECORD/DESCRIPTION | DRAFTED | CHECK | APPR. |
|---|---|---|---|---|---|
| 3/29/19 | 1 | Sampling locations modified | RAM | | |
| 4/13/20 | 2 | SSDS loc. and other areas/shading | RAM | | |
| 1/27/21 | 3 | ECs deficiencies per 1/25/2021 visit | RAM | | |
| | 4 | | | | |
| | 5 | | | | |
| | 6 | | | | |
| | 7 | | | | |
| | 8 | | | | |
| | 9 | | | | |



DESIGNED :
DRAFTED : J.MARX
CHECKED : J.MCIVER
PROJ. NO : 14.4337
SCALE : NOT TO SCALE
DATE : MAY 2, 2017

# FIGURE
# VAPOR INTRUSION SAMPLING LOCATIONS

## USAI LIGHTING FACILITY
## 1126 RIVER ROAD

TOWN OF NEW WINDSOR — ORANGE COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 17-288

CAD DWG. FILE NAME: K:\Projects\14437\Env\Drawings and Maps\VI Perm Sampling Map.dwg

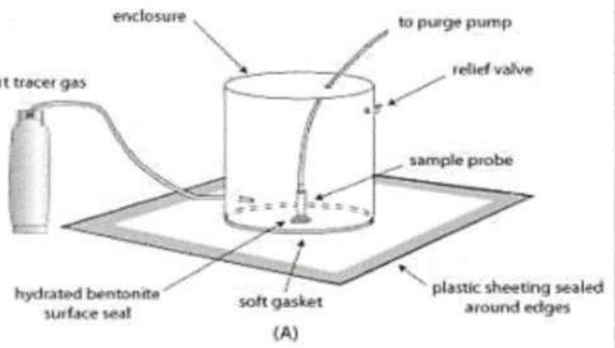
# Attachment G: Soil Vapor/Air Sampling Logs

C.T. MALE ASSOCIATES

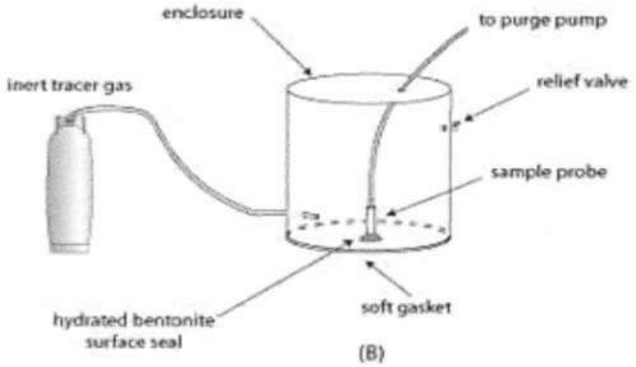
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

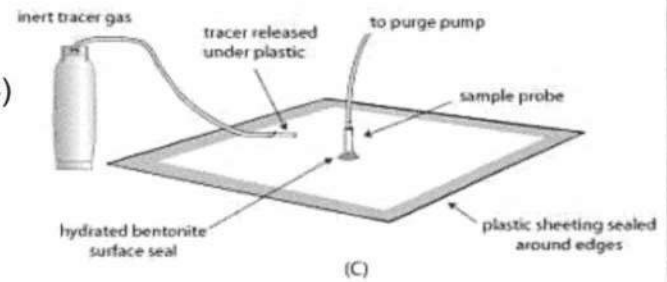
(A)



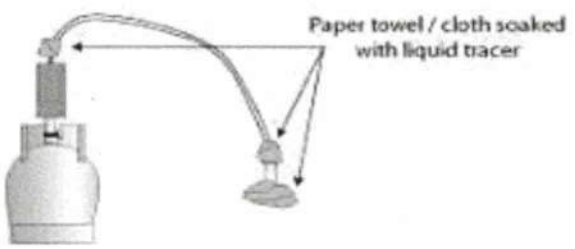

(B)




(C)




(D)




Project Name: USAI
Location: 1126 River Road, New Windsor
Project No.: 14.4337

Sample Point ID: VI-3 Date: 1/12/2023

Sampling Personnel: Mary Laughlin
Notes Taken By: "

SV Point Activity: ☒ Leak Test ☒ Sample Collection

**Circle one of the tracer gas application method used**
(A) B C D NA

Tracer Gas and Seal Information:

Tracer Gas Used: He Supplier: Party City
Material Used for Seal Construction: Pottery clay
Instrument to Measure Tracer: MGD-2002 He detector
Ambient Tracer Concentration: 0.0 PPM
Initial Tracer Concentration Applied to Enclosure: 25.2% He
Volume of Water Purged from SV Point: N/A
Purge Method (Vapor): 1) MGD-2002 Duration: 2 min
2) ~~Summa~~
Sample Tubing Tracer Concentration: 0.0 PPM
Final Enclosure Tracer Concentration: 11.2% He

Sample Information

Sample Type: ☐ Soil Vapor ☐ Ambient/Outdoor Air
☒ Sub-Slab ☐ Indoor Air

Sample Collection: ☐ Grab ☒ Regulator Flow 8 hr
Container Type: Summa Size: 6L
Container ID: 593 Regulator ID: 01768

Start Time and Date: 1/12 10:15 Initial Pressure: -29.32
Stop Time and Date: 1/12 16:55 Final Pressure: -8.20

Notes:

- Crack in concrete slab noted in vicinity of SV well
- Sample located in cleaning / storage closet - removed floor tile.

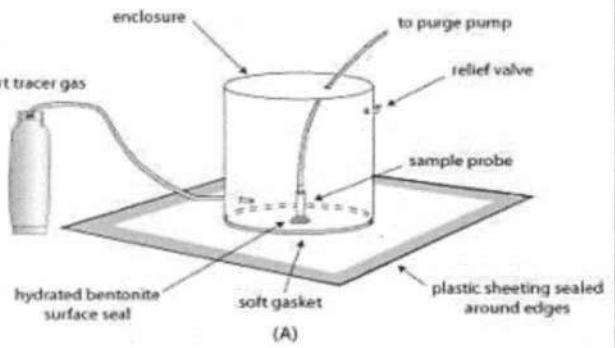
Sample ID VI-3-2023112
mbient Sample IA-3 located on top of fridge. Sample ID IA-3-20230112
an ID: 3335 Start: 1/12 10:16
eg. ID: 01671 Stop: 1/12 17:00
initial pressure: -30.48
Final Pressure: -8.19

C.T. MALE ASSOCIATES

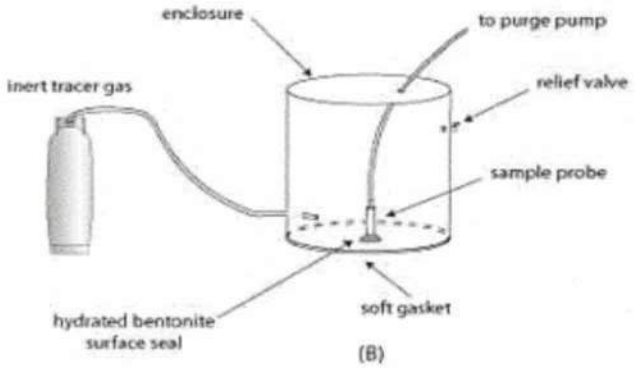
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

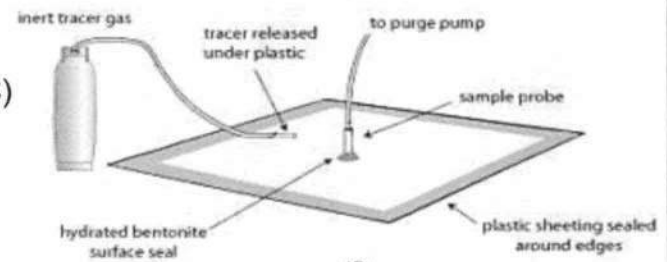
(A)



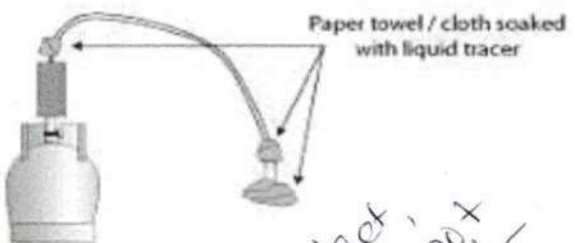

(B)




(C)




(D)




Project Name: USAI
Location: New Windsor, NY
Project No.: 19.4337

Sample Point ID: V1 - 1 Date: 1/12/23

Sampling Personnel: M. Loughlin
Notes Taken By: "

SV Point Activity: [X] Leak Test [X] Sample Collection

**Circle one of the tracer gas application method used**
(A) B C D NA

Tracer Gas and Seal Information:

Tracer Gas Used: He Supplier: Party City
Material Used for Seal Construction: Potters Clay
Instrument to Measure Tracer: MGD-2002
Ambient Tracer Concentration: 0.0 PPM
Initial Tracer Concentration Applied to Enclosure: 18.1% He
Volume of Water Purged from SV Point: N/A
Purge Method (Vapor): 1) MGD-2002 Duration: 4 min
2) _____
Sample Tubing Tracer Concentration: 0.0 PPM
Final Enclosure Tracer Concentration: 7,850 PPM (< 5% He)

Sample Information

Sample Type: [ ] Soil Vapor [ ] Ambient/Outdoor Air
[X] Sub-Slab [ ] Indoor Air

Sample Collection: [ ] Grab [X] Regulator Flow 8 hr
Container Type: Summa Size: 6L
Container ID: 3296 Regulator ID: 01948

Start Time and Date: 1/12 10:05 Initial Pressure: -28.14
Stop Time and Date: 1/12 16:22 Final Pressure: -7.93

Notes:

- Located in manufacturing / Packaging area
- Sample ID V1-1-20230112

Sample in-tact, canister not damaged - bucket / enclosure seal broken

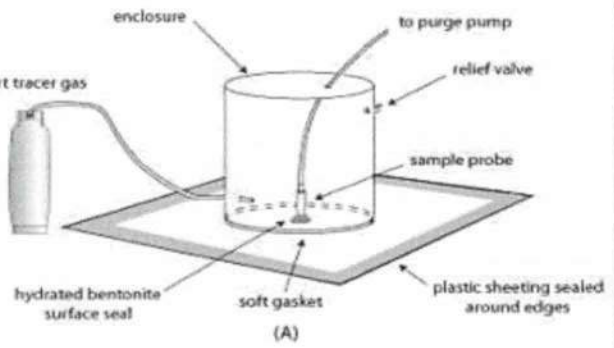
* Note that bucket / sample appeared slightly moved / disturbed @ end of sampling event when

C.T. MALE ASSOCIATES

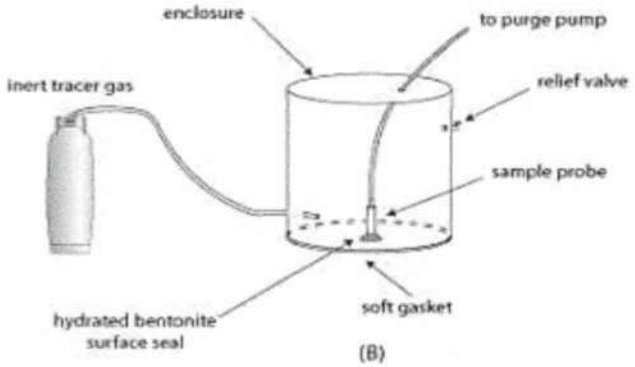
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

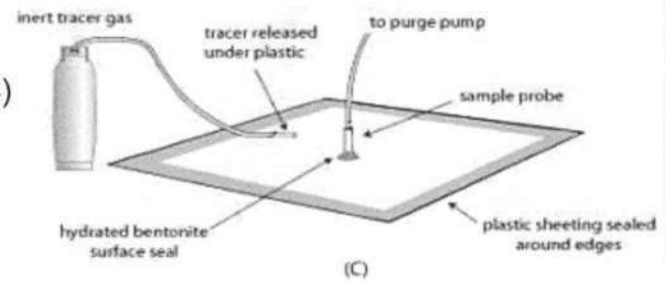
(A)



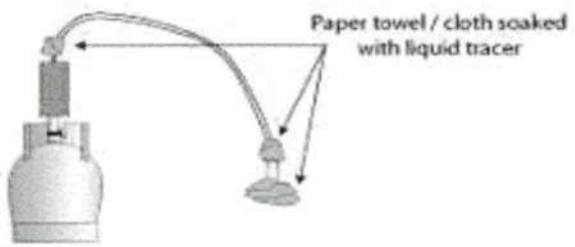

(B)




(C)




(D)




Ambient Sample 1A-2 located on shelving unit near V1-2 sample location.
Can ID: 2054 Start: 1/12 10:09
Reg ID: 02067 Stop: 1/12 16:38
initial pressure: -30.52
Final pressure: -8.70

Project Name: OSAI
Location: New Windsor, NY
Project No.: 14.4337

Sample Point ID: V1-2 Date: 1/12/2023

Sampling Personnel: M. Laughlin
Notes Taken By: "

SV Point Activity: ☒ Leak Test ☒ Sample Collection

**Circle one of the tracer gas application method used**
(A) B C D NA

Tracer Gas and Seal Information:

Tracer Gas Used: He Supplier: Party City
Material Used for Seal Construction: Pottery clay
Instrument to Measure Tracer: MGD-2002 He detector
Ambient Tracer Concentration: 0.0 PPM
Initial Tracer Concentration Applied to Enclosure: 22.4% He
Volume of Water Purged from SV Point: N/A
Purge Method (Vapor): 1) MGD-2002 Duration: 3 min
2) _____
Sample Tubing Tracer Concentration: 0.0 PPM
Final Enclosure Tracer Concentration: 14.0 % He

Sample Information

Sample Type: ☐ Soil Vapor ☐ Ambient/Outdoor Air
☒ Sub-Slab ☐ Indoor Air

Sample Collection: ☐ Grab ☒ Regulator Flow 8 hr
Container Type: Summa Size: 6L
Container ID: 3380 Regulator ID: 01529

Start Time and Date: 1/12 10:10 Initial Pressure: -30.52
Stop Time and Date: 1/12 16:40 Final Pressure: -9.24

Notes:

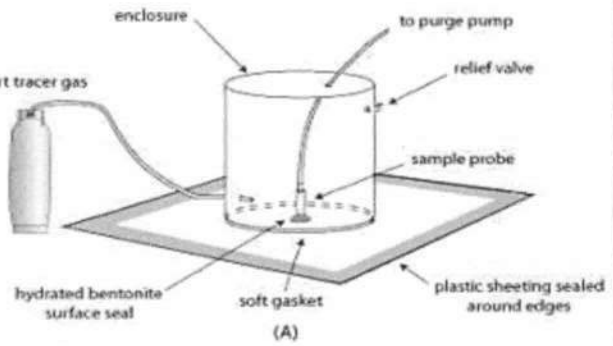
- Located in manufacturing / packaging area
- Sample ID V1-2-20230112
- Ambient Sample ID: 1A-2-20230112

C.T. MALE ASSOCIATES

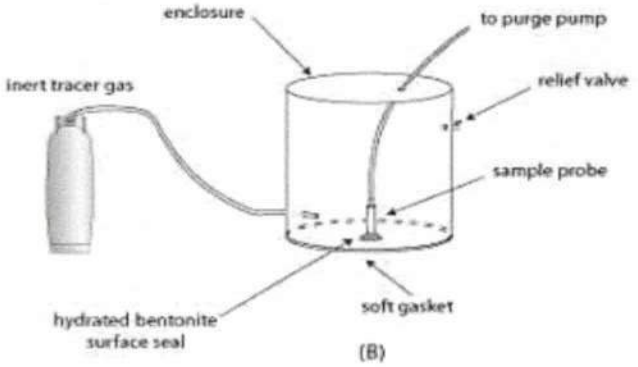
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

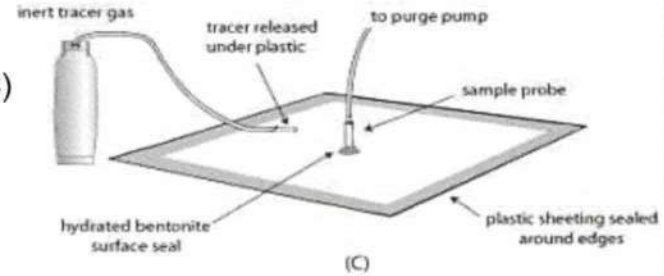
(A)



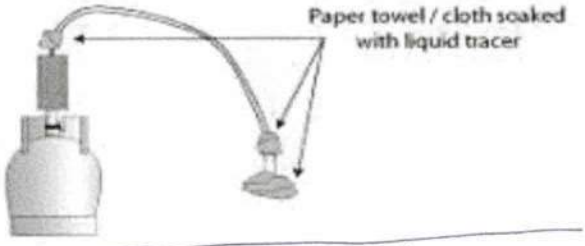

(B)




(C)




(D)




Project Name: USAI
Location: New Windsor, NY
Project No.: 14.4337

Sample Point ID: VI-4 Date: 1/12/2023

Sampling Personnel: M. Loughlin
Notes Taken By: "

SV Point Activity: ☒ Leak Test ☒ Sample Collection

**Circle one of the tracer gas application method used**
(A) B C D NA

Tracer Gas and Seal Information:

Tracer Gas Used: He Supplier: Party City
Material Used for Seal Construction: Pottery Clay
Instrument to Measure Tracer: MGD-2002
Ambient Tracer Concentration: 0.0 PPM
Initial Tracer Concentration Applied to Enclosure: 17.2%
Volume of Water Purged from SV Point: N/A
Purge Method (Vapor): 1) MGD-2002 Duration: 2 min
2) _____
Sample Tubing Tracer Concentration: 0.0 PPM
Final Enclosure Tracer Concentration: 8.0% He

Sample Information

Sample Type: ☐ Soil Vapor ☐ Ambient/Outdoor Air
☒ Sub-Slab ☐ Indoor Air

Sample Collection: ☐ Grab ☒ Regulator Flow 8 hr
Container Type: Summa Size: 6L
Container ID: 654 Regulator ID: 01648

Start Time and Date: 1/12 9:35 Initial Pressure: -30.25
Stop Time and Date: 1/12 17:10 Final Pressure: -7.18

Notes:

- Location is vapor pin in electrical closet
- Sample ID VI-4-20230112

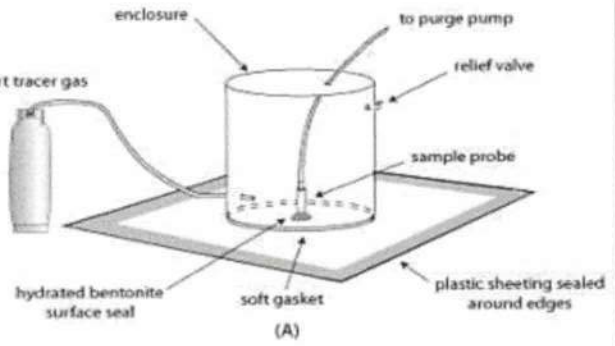
Ambient sample IA-1 located on desk in conference room near electrical closet.
IA-1-20230112
canID: 2629 start: 1/12 9:46 initial: -30.32
RegID: 01665 stop: 1/12 17:13 Final: -7.51

C.T. MALE ASSOCIATES

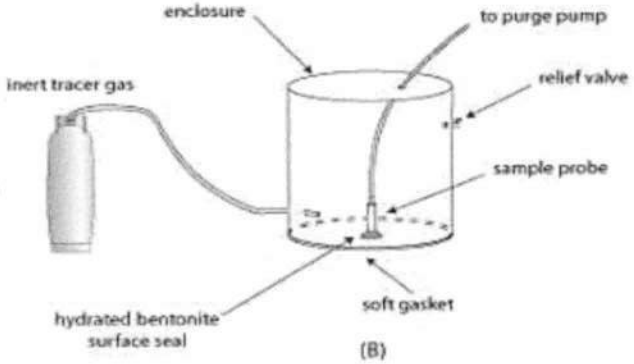
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

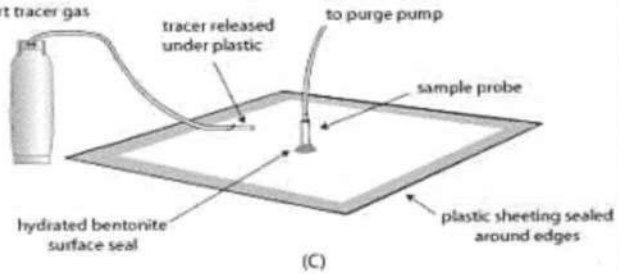
(A)



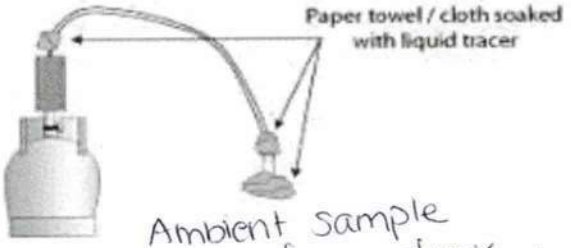

(B)




(C)




(D)




Project Name: USAI
Location: New Windsor, NY
Project No.: 14.4337

Sample Point ID: V1-5 Date: 1/12/2023

Sampling Personnel: M. Loughlin
Notes Taken By: "

SV Point Activity: ☒ Leak Test ☒ Sample Collection

**Circle one of the tracer gas application method used**
(A) B C D NA

Tracer Gas and Seal Information:

Tracer Gas Used: He Supplier: Party City
Material Used for Seal Construction: Pottery Clay
Instrument to Measure Tracer: MGD-2002
Ambient Tracer Concentration: 0.0 PPM
Initial Tracer Concentration Applied to Enclosure: 10.0% He
Volume of Water Purged from SV Point: N/A
Purge Method (Vapor): 1) MGD-2002 Duration: 3min
2) _____
Sample Tubing Tracer Concentration: 0.0 PPM
Final Enclosure Tracer Concentration: 6.2% He

Sample Information

Sample Type: ☐ Soil Vapor ☐ Ambient/Outdoor Air
☒ Sub-Slab ☐ Indoor Air

Sample Collection: ☐ Grab ☒ Regulator Flow 8hr
Container Type: Summa Size: 6L
Container ID: 3468 Regulator ID: 01447

Start Time and Date: 1/12 9:55 Initial Pressure: -30.51
Stop Time and Date: 1/12 17:25 Final Pressure: -7.92

Notes:

- Vapor pin located under stairs - SW corner of the building - near building entrance

Ambient Sample located on desk + storage drawers

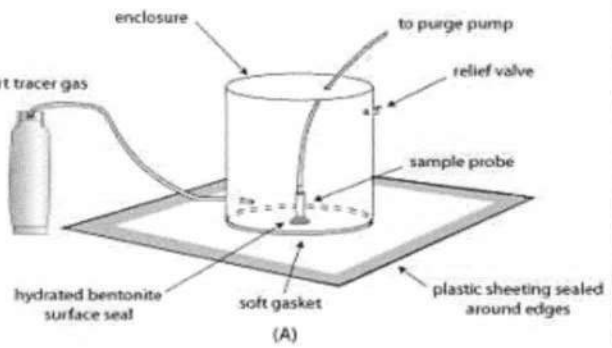
Ambient: Sample ID V1-5-20230112
1A-4 Start: 1/12 9:50 initial -30.35
Reg: 01426 Stop: 1/12 17:24 Final -7.81
Can: 616

C.T. MALE ASSOCIATES

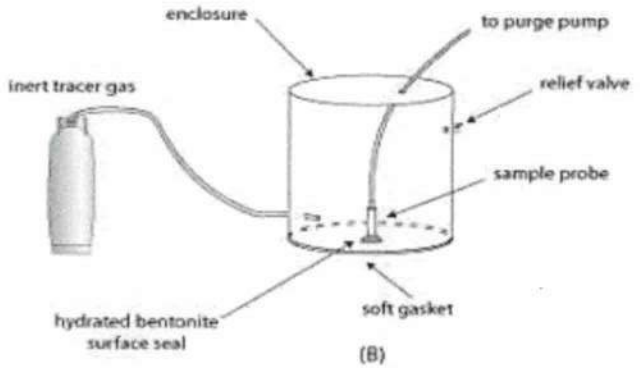
# SOIL VAPOR (SV) / AIR SAMPLE LOG

Tracer Gas Application Method*:

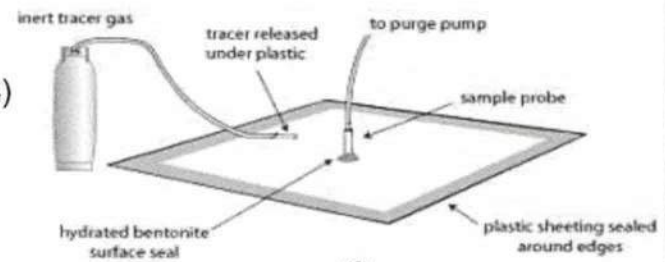
(A)



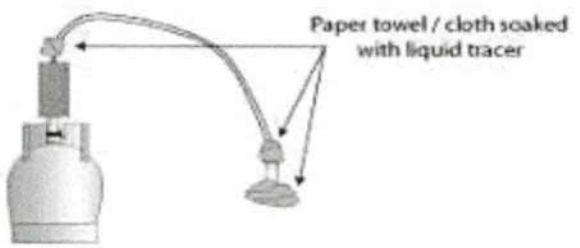

(B)




(C)




(D)




Project Name: USAI
Location: New Windsor, NY
Project No.: 14.4337

Sample Point ID: OA-1 Date: 1/12/23

Sampling Personnel: _____
Notes Taken By: _____

SV Point Activity: ☐ Leak Test ☒ Sample Collection

**Circle one of the tracer gas application method used**

A B C D (NA)

Tracer Gas and Seal Information:

Tracer Gas Used: — Supplier: —
Material Used for Seal Construction: —
Instrument to Measure Tracer: —
Ambient Tracer Concentration: —
Initial Tracer Concentration Applied to Enclosure: —
Volume of Water Purged from SV Point: —
Purge Method (Vapor): 1) — Duration: —
2) _____ _____
Sample Tubing Tracer Concentration: —
Final Enclosure Tracer Concentration: —

Sample Information

Sample Type: ☐ Soil Vapor ☒ Ambient/Outdoor Air
☐ Sub-Slab ☐ Indoor Air

Sample Collection: ☐ Grab ☒ Regulator Flow 8hr
Container Type: Summa Size: 6L
Container ID: 2903 Regulator ID: 01512

Start Time and Date: 1/12 9:41 Initial Pressure: -30.41
Stop Time and Date: 1/12 16:18 Final Pressure: -8.58

Notes:

- Located outside - west of site building
- Sample ID OA-1-20230112

# Attachment H: Forms

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

12 Raymond Avenue, Poughkeepsie, New York 12603
845.454.4400 www.ctmale.com

**USAI LIGHTING FACILITY SITE (C336087)**
**SITE MANAGEMENT PLAN (SMP) INSPECTION FORM**

| | |
|---|---|
| Date of Inspections | March 30, 2023 (RAM); December 16, 2022 (ML) |
| Personnel Performing Inspection | Rosaura Andujar-McNeil, P.E. (RAM); Mary Loughlin (ML) |
| Weather Conditions | Sunny, ~37 °F (3/30/23); Light rain ~39 °F (12/16/22) |
| Institutional Controls (List) | Site Management Plan Implementation |
| | Groundwater Use Restriction Without Treatment |
| | Use Restriction (Restricted Commercial and Industrial) |
| | |
| | |
| Engineering Controls (List) | Surface Cover System (site-wide) |
| | Vapor Intrusion (VI) Mitigation Measures |

This SMP Inspection Form shall be utilized to document the observations of the USAI Lighting Facility BCP Site located at 1126 River Road in the Town of New Windsor, Orange County, New York. These observations are to confirm the following:

- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;

- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any SMP for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;

---

***General Surface Condition***

Has the overall condition of the cover system changed from the previous inspection? Yes ☐ No ☒

If Yes, provide detail below and identify on Site Plan

*The cover system was restored in-kind following construction.*

*Note: Limited excavation was conducted in March 2022 for the footings of a new awning in main entrance at the southern parking lot.*

Is there evidence that the site been disturbed for utility repair or construction? Yes ☒ No ☐

If Yes, provide detail below and identify on Site Plan

*A small stockpile of excavated soils (2-5 cyd) remains on-site as a result of the limited Excavation during renovation work. The stockpile is covered with plastic (below and atop soils) and is awaiting off-site disposal and/or reintroduction under the cover system.*

***Groundwater Use***

Is there evidence of groundwater use? Yes ☐ No ☒
If Yes, provide detail below

If groundwater use is occurring, is there treatment? Yes ☐ No ☐
If Yes, provide type of treatment below
**Not Applicable**

If groundwater treatment is occurring, did NYSDEC and NYSDOH approve such treatment? Yes ☐ No ☐
If Yes, provide detail on their approval below
**Not Applicable**

***Site Use***

Is there evidence of site use for activities not allowed by the restricted commercial use BCP definition? Yes ☐ No ☒
If Yes, provide detail below


**MAP REFERENCE**
Orange County Parcel Access
Date accessed: 2/4/2021

N

C.T.MALE ASSOCIATES
ENGINEERING, SURVEYING, ARCHITECTURE
LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE
LATHAM, NY 12110

# FIGURE 1 - SITE LOCATION MAP

**USAI LIGHTING FACILITY**
**1126 RIVER ROAD**

| TOWN OF NEW WINDSOR | ORANGE COUNTY, NY |
|---|---|
| SCALE: NTS | The locations and features depicted on this map are approximate and do not represent an actual survey. |
| DRAFTER: RAM | |
| PROJECT No: 14.4337 | |

USAI Lighting Facility
BCP ID: C336087

**Vapor Intrusion (VI) Mitigation Measures Assessment Form**

| | |
|---|---|
| Date of Inspections | March 30, 2023 |
| Personnel Performing Inspection | Rosaura Andujar-McNeil, P.E. |

| Area Number and Label* | Location | VI Mitigation Measure** | Condition of Visible Components of VI Mitigation Measure | Corrective Action Y/N | Notes |
|---|---|---|---|---|---|
| 1<br>Stock Room | Central | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Good | N | Equipment assembly area. |
| 2<br>Production Areas and Offices | Central | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Good | N | Used for offices and storage. |
| 3A<br>Production Area | Central | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Good | N | Occupied. Product assembly. |
| 3B<br>Stock Room | Central | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Good | N | Used for storage. Portions of the slab not visible due to storage of product. |
| 4<br>Office Space | South-west | Slab to remain, import ¾" stone, 4-inch dia. vent piping in 2016, 10 mil vapor barrier, new concrete slab | Good | N | 50% area renovated in 2021 & 50% remained as storage space |
| 5<br>Not labeled but area used as cafeteria | South-east | Slab to remain, import ¾" stone, 3-inch dia. vent piping, 10 mil vapor barrier, new concrete slab | Good | N | Area used as cafeteria. |
| 6A<br>Stock Room | South-east | New 1/4" thick epoxy coating atop existing concrete floor | Good | N | |
| 6B<br>Loading Dock | South-east | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Good | N | |

## Vapor Intrusion (VI) Mitigation Measures Assessment Form

| Area Number and Label* | Location | VI Mitigation Measure** | Condition of Visible Components of VI Mitigation Measure | Corrective Action Y/N | Notes |
|---|---|---|---|---|---|
| 7<br>Lobby | South-central | Import ¾" stone (min 16 inches), 4-inch dia. vent piping in 2016. 10 mil vapor barrier and new concrete slab not installed. | Sub-slab piping and stone installed in 2016. Area no longer to be used as interior space. Area to remain open to the atmosphere. | N | Area vacant. Currently open to the atmosphere. No renovations are intended for this area at this time. |
| 8<br>Office Space | South-west | Retrofit passive SSDS installed in 2018. Stone installed at suction points. 3-inch dia. vent piping. Existing slab remains. | Excellent. | N | Known as "2-story office Building". Area renovated in 2021. SSDS modified in 2022 during renovation work. |
| 9<br>Storage Room | Central | Slab to remain, 10 mil vapor barrier, new concrete slab (6") | Excellent | N | Used as storage. Portions of the slab not visible due to storage of product. |
| 10<br>Stock Room | North | Concrete floor cracks sealed with epoxy | Good. | N | Storage space. |
| 11<br>Shipping Receiving | North | Concrete floor cracks sealed with epoxy | Good. | N | Storage space. |
| 15<br>Labeled as "Cafeteria" in older drawings | Central | New ¼" thick epoxy coating atop of existing concrete floor | Good. | N | Currently used as storage space. |
| 16<br>Office Space | South-central | Concrete floor, cracks sealed with epoxy | Good. | N | Storage and office space. |

Notes:
* Per depiction in "VI Mitigation Measures Map" by C.T. Male Associates, dated December 1, 2016
** Per depiction in "Building Vapor Mitigation Intrusion Measures" drawing by Fellenzer Engineering LLP, dated December 9, 2016, except as follow: (1) Areas 12, 13 and 14 not depicted on the Fellenzer drawing. (2) Areas 7 and 8 not as depicted in Fellenzer drawing as SSDSs were modified subsequent to VI mitigation measures installation.
Areas needing corrective action are **bold and highlighted yellow**.

**Vapor Intrusion (VI) Mitigation Measures Assessment Form**

**Passive Sub-Slab Depressurization System (SSDS)**
Areas needing corrective action are **bold and highlighted yellow**.

For each passive SSDS indicate:

| **Area and Location:** | **Area 4** |
|---|---|
| Condition of the concrete slab: | **Good.** |
| Number of SSDS exhaust pipes: | 2 |
| Condition of the SSDS exhaust pipes: | Good. |
| Obstruction to air flow at the SSDS exhaust pipes? (Y/N) | N. Client/owner provided photographs. |
| Visible SSDS piping labeled? (Y/N) | Interior label visible. Exterior label should be replaced. Owner rep. notified. |
| Corrective Action (Y/N)? If Y, indicate: | N |
| Additional Comments: | None. |

| **Area and Location:** | **Area 5 (Cafeteria)** |
|---|---|
| Condition of the concrete slab: | Good |
| Number of SSDS exhaust pipes: | 2 |
| Condition of the SSDS exhaust pipes: | **Good.** |

**Vapor Intrusion (VI) Mitigation Measures Assessment Form**

| **Area and Location:** | **Area 5 (Cafeteria)** |
|---|---|
| Obstruction to air flow at the SSDS exhaust pipes? (Y/N) | N. Client/owner provided photographs. |
| Visible SSDS piping labeled? (Y/N) | Interior label visible. Exterior label should be replaced. Owner rep. notified. |
| Corrective Action (Y/N)? If Y, indicate: | N |
| Additional Comments: | None. |

| **Area and Location:** | **Area 8 (2-story office building)** |
|---|---|
| Condition of the concrete slab: | Good |
| Number of SSDS exhaust pipes: | 1 |
| Condition of the SSDS exhaust pipes: | Good. |
| Obstruction to air flow at the SSDS exhaust pipes? (Y/N) | N. |
| Visible SSDS piping labeled? (Y/N) | Label not observed. |
| Corrective Action (Y/N)? If Y, indicate: | N |
| Additional Comments: | None |

**Vapor Intrusion (VI) Mitigation Measures Assessment Form**

| | |
|---|---|
| Other Comments: | **Area 7 -** SSDS in Area 7 not to be installed (area exposed to atmosphere and no longer included in renovation work) as documented in letter to NYSDEC dated December 24, 2019. |
| Personnel Performing Inspection | Rosaura Andujar-McNeil, P.E. |
| Signature |  |
| Date | March 30, 2023 |

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

12 Raymond Avenue, Poughkeepsie, New York 12603
845.454.4400 www.ctmale.com

**Summary of Green Remediation Metrics for Site Management**

Site Name: USAI Lighting Facility Site Code: C336087
Address: 1126 River Road City: New Windsor
State: NY Zip Code: 12553 County: Orange County

**Initial Report Period (Start Date of period covered by the Initial Report submittal)**
Start Date: December 22, 2016

**Current Reporting Period**
Reporting Period From: January 30, 2022 To: January 30, 2023

**Contact Information**
Preparer's Name: Rosaura Andújar-McNeil, P.E. Phone No.: (845) 454-4400
Preparer's Affiliation: Remedial Engineer for BBL, LLC

**I. Energy Usage:** Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

| | **Current Reporting Period** | **Total to Date** |
|---|---|---|
| Fuel Type 1 (e.g. natural gas (cf)) | 0 | 0 |
| Fuel Type 2 (e.g. fuel oil, propane (gals)) | 0 | 0 |
| Electricity (kWh) | Minimal | Minimal |
| **Of that Electric usage, provide quantity:** | | |
| Derived from renewable sources (e.g. solar, wind) | 0 | 0 |
| **Other energy sources** (e.g. geothermal, solar thermal (Btu)) | 0 | 0 |

*Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.*

**II. Solid Waste Generation:** Quantify the management of solid waste generated on-site.

| | **Current Reporting Period (tons)** | **Total to Date (tons)** |
|---|---|---|
| **Total waste generated on-site** | <5 lbs. | <5 lbs. |
| | | |
| **Of that total amount, provide quantity:** | | |
| Transported off-site to landfills | <5 lbs. | <5 lbs. |
| Transported off-site to other disposal facilities | 0 | 0 |
| Transported off-site for recycling/reuse | 0 | 0 |
| Reused on-site | 0 | 0 |

*Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.*

**III. Transportation/Shipping:** Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

| | **Current Reporting Period (miles)** | **Total to Date (miles)** |
|---|---|---|
| Standby Engineer/Contractor | 349 | 4,574 |
| Laboratory Courier/Delivery Service | 0 | 0 |
| Waste Removal/Hauling | 0 | 0 |

*Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.*

**IV. Water Usage:** Quantify the volume of water used on-site from various sources.

| | **Current Reporting Period (gallons)** | **Total to Date (gallons)** |
|---|---|---|
| Total quantity of water used on-site | 0 | 0 |
| **Of that total amount, provide quantity:** | | |
| Public potable water supply usage | 0 | 0 |
| Surface water usage | 0 | 0 |
| On-site groundwater usage | 0 | 0 |
| Collected or diverted storm water usage | 0 | 0 |

*Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.*

**V. Land Use and Ecosystems:** Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

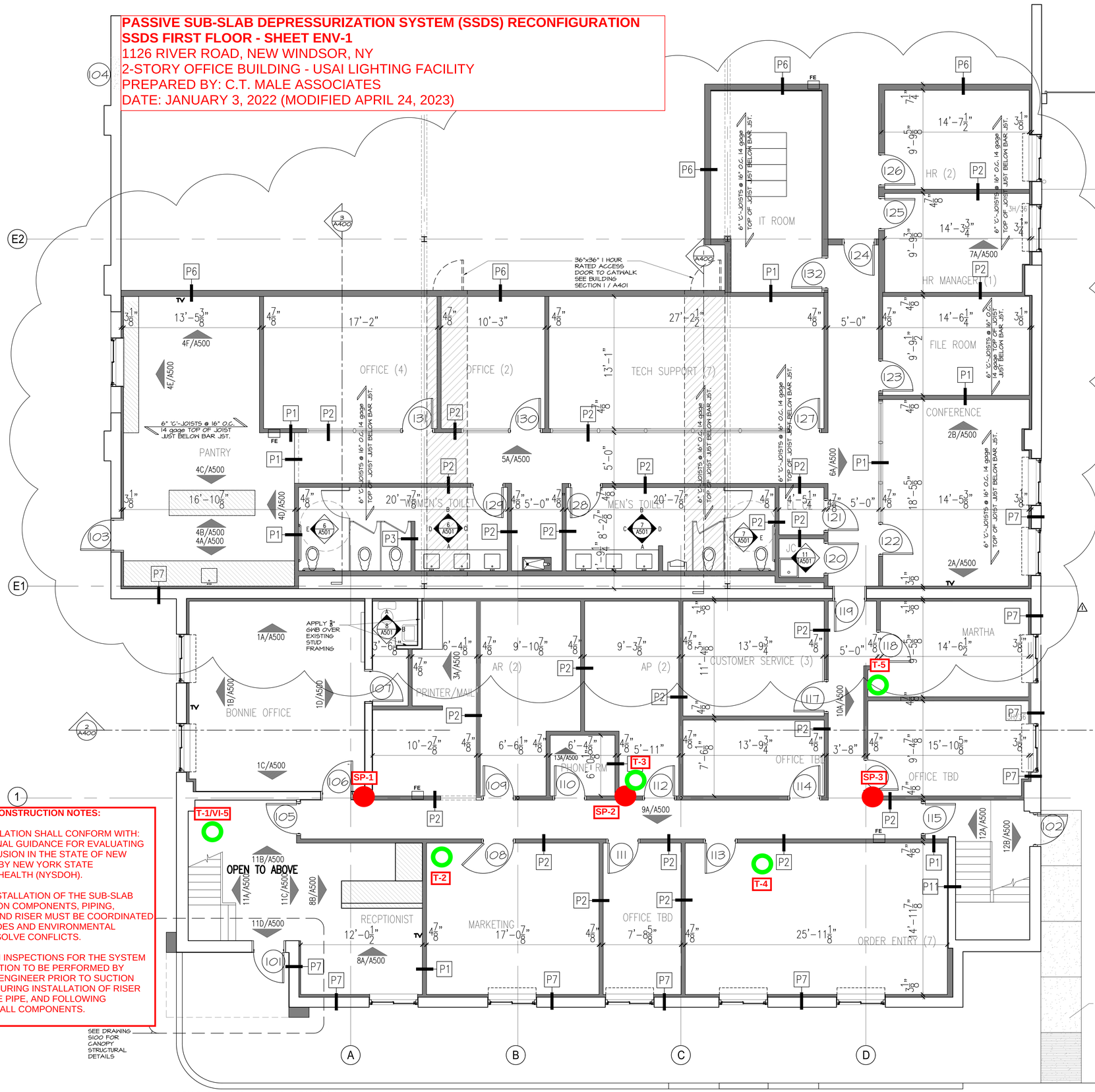
| | **Current Reporting Period (acres)** | **Total to Date (acres)** |
|---|---|---|
| Land disturbed | 0 | 0 |
| Land restored | 0 | 0 |

*Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.*

| **Description of green remediation programs reported above**<br>(Attach additional sheets if needed) |
|---|
| Energy Usage:<br><br>Minimal energy was used (from batteries) to remove water from the groundwater monitoring wells and air from the vapor sampling ports. There are no other energy sources being used for remedial purposes. |
| Waste Generation:<br><br>Minimal waste generated, mainly associated with soil vapor and groundwater sampling. |
| Transportation/Shipping:<br><br>Transportation to and from the Site is related to SMP monitoring activities by the Remedial Engineer and/or field personnel. Visits to the Site are only on an as needed basis, and usually by a single person (car pooling is often not feasible). Analytical samples collected per the SMP are typically delivered to the laboratory on the return trip from the Site. If this is not feasible, pick up of samples is performed by the laboratory when the laboratory currier is in route to other pickups. |
| Water usage:<br><br>There is no water usage for remedial purposes. |
| Land Use and Ecosystems:<br><br>The vegetative growth relative to the landscape areas and stormwater management features installed/planted during the remedial action has been maintained during the reporting period and has become well established. Plantings have continued to grow. The land use and ecosystems in the southern portion of the Site are likely to have improved following remedial activities. |
| Other: |

# Attachment I: SSDS Schematic – Area 8

**PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) RECONFIGURATION**
**SSDS FIRST FLOOR - SHEET ENV-1**
1126 RIVER ROAD, NEW WINDSOR, NY
2-STORY OFFICE BUILDING - USAI LIGHTING FACILITY
PREPARED BY: C.T. MALE ASSOCIATES
DATE: JANUARY 3, 2022 (MODIFIED APRIL 24, 2023)




FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

**GENERAL SSDS CONSTRUCTION NOTES:**

1. SYSTEM INSTALLATION SHALL CONFORM WITH: OCTOBER 2006 FINAL GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK PREPARED BY NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH).

2. DESIGN AND INSTALLATION OF THE SUB-SLAB DEPRESSURIZATION COMPONENTS, PIPING, PENETRATIONS, AND RISER MUST BE COORDINATED WITH OTHER TRADES AND ENVIRONMENTAL ENGINEER TO RESOLVE CONFLICTS.

3. CONSTRUCTION INSPECTIONS FOR THE SYSTEM DURING INSTALLATION TO BE PERFORMED BY ENVIRONMENTAL ENGINEER PRIOR TO SUCTION POINT CLOSING, DURING INSTALLATION OF RISER AND CONVEYANCE PIPE, AND FOLLOWING INSTALLATION OF ALL COMPONENTS.

REINFORCEMENT SHALL BE AS FOLLOWS: 5" THICK SIDEWALK: 6" X 6-W2.9/W2.9 WELDED WIRE MESH

THICKNESS OF CONCRETE (D) SHALL BE 5".

CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH ($f'_c$) OF 4,000 PSI AND HAVE BETWEEN 5% AND 8% ENTRAINED AIR.

PROVIDE PREMOLDED EXPANSION JOINT FILLER AND SEALER AT 20' O.C. OR AS SHOWN ON PLANS.

PROVIDE TOOLED CONTRACTION JOINTS AT 5'-0" O.C. BOTH WAYS OR AS SHOWN ON PLANS.

JOINTS SHALL NOT BE SAW CUT.

ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURE FINISH.

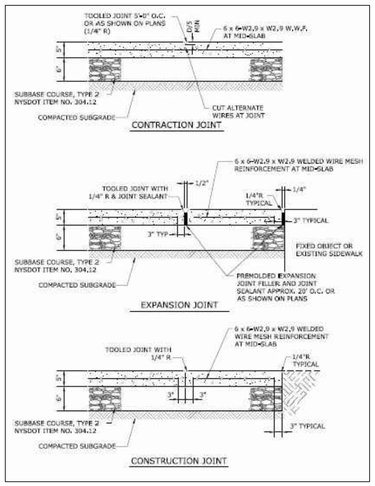
DETECTABLE WARNING UNITS:

A. DETECTABLE WARNING UNITS SHALL BE EMBEDDED DETECTABLE WARNING UNITS CONFORMING WITH SUB-SECTIONS 608-2.07 AND 722-03-EMBEDDED DETECTABLE WARNING UNITS, OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERETO; DETECTABLE WARNING UNITS SHALL COMPLY WITH THE MOST CURRENT EDITION OF ICC/ANSI 117.1, ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES.

B. FURNISH AND INSTALL DETECTABLE WARNINGS ON SIDEWALK CURB RAMPS AND AT OTHER LOCATIONS AS SHOWN IN THE DRAWINGS OR AS DIRECTED BY THE ARCHITECT/ENGINEER.

ALL CONCRETE SURFACES (WALKS, PADS & CURBS) SHALL BE TREATED WITH AN APPROVED WATER-BORNE DEEP PENETRATING SEALER.
APPROVED SEALERS INCLUDE:
- DAYTON U-29 WB
- EDCO SHIELD 40 WB
- L & M AQUAPEL PLUS
- CRESSET ENVIRO SEAL 40

CONCRETE SIDEWALK NOTES
SCALE: N.T.S.




CONCRETE SIDEWALK DETAILS
SCALE: N.T.S.

**LEGEND:**

- SUCTION POINT (SP). SEE DETAIL IN ENV-4. 2" DIAMETER SCHEDULE 40 SOLID PVC. STARTING IN SUB-SLAB, RUNNING VERTICAL INSIDE WALL OF FIRST FLOOR AND MANIFOLDED IN CEILING PLENUM VIA A 3" DIAMETER SCHEDULE 40 SOLID PVC CONVEYANCE PIPE.
- NEW TEST PORTS (T) ACCESSIBLE FOLLOWING CONSTRUCTION.

**MAP REFERENCE:**

1. BASE MAP NOT PREPARED BY C.T. MALE ASSOCIATES, BUT WAS USED TO DEPICT THE SSDS RECONFIGURATION FOR COORDINATION PURPOSES.

2. C.T. MALE ASSOCIATES ADDED INFORMATION AND FEATURES ARE SHOWN IN COLOR. THESE ARE APPROXIMATE AND NOT TO SCALE.

GENERAL NOTES


ENVIRONMENTAL ENGINEER:
C.T. MALE ASSOCIATES ENGINEERING, SURVEYING, ARCHITECTURE, LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.
12 RAYMOND AVENUE, 2ND FLOOR
POUGHKEEPSIE, NY 12603
TEL: (845) 454-4400


| No. | REVISION/SUBMISSION | DATE |
|---|---|---|
| 1 | GENERAL REVISIONS | 12-22-2021 |


fpm design llc
9 Van Voorhis Drive, Fishkill, New York 12524
t. 914.299.4733
www.fpmdesignllc.com

Mechanical/Electrical/Plumbing Engineer
FELLENZER ENGINEERING LLP
www.fellp.com
181 Church Street, Suite 100, Poughkeepsie, NY 12601, t 845-454-9704 fx 845-454-9705
22 Mulberry St., Suite 2A, Middletown, NY 10940, t 845-343-1481 fx 845-343-4986

Structural Engineer
DAY STOKOSA ENGINEERING P.C.
3 Van Wyck Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

Liscum McCormack VanVoorhis LLP
ARCHITECTURE PLANNING INTERIORS
181 CHURCH STREET POUGHKEEPSIE, NEW YORK 12601
PHONE 845-452-2268 FAX 845-452-3752


PROJECT
USAI LIGHTING
RIVER ROAD
NEW WINDSOR, N.Y.

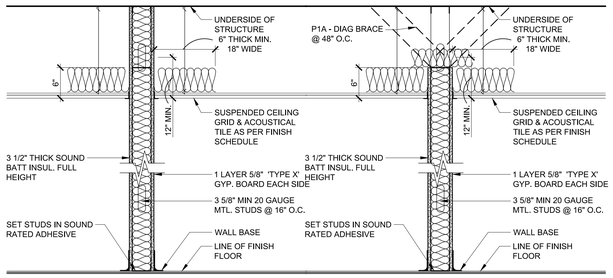
DRAWING
1st FLOOR PLAN

SEAL

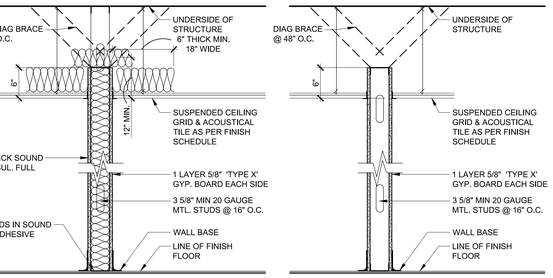
| DRAWN BY | PROJECT No. |
|---|---|
| KS | 15106 |
| CHECKED BY | DATE |
| MM | 12-11-20 |

DRAWING No.
A101

FILE P:\2015\15106-USAI



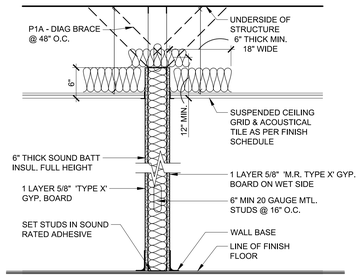

P1 ACOUSTIC INTERIOR WALL PARTITION
TAPE AND SEAL ALL JOINTS
-ALL WALLS IN BATHROOMS TO HAVE 1 LAYER MOISTURE RESISTANT GYP. BOARD WALLS & CEILING.
-ALL PLUMBING WALLS TO BE 6" MIN 20 GAUGE MTL. STUDS @ 16" O.C.



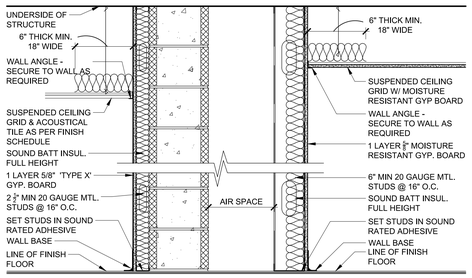

P2 INTERIOR WALL PARTITION
TAPE AND SEAL ALL JOINTS



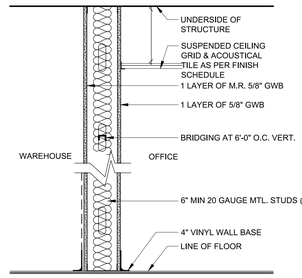

P3 INTERIOR WALL PARTITION
TAPE AND SEAL ALL JOINTS



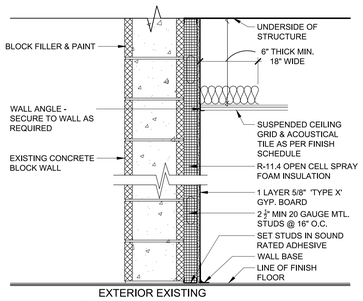

P4 INTERIOR WALL PARTITION
TAPE AND SEAL ALL JOINTS



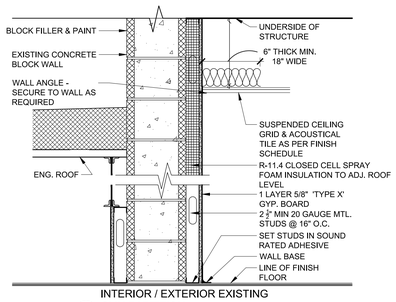

P5 INTERIOR PLUMBING WALL PARTITION
TAPE AND SEAL ALL JOINTS



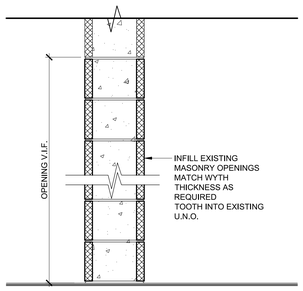

P6 1 HOUR DEMISING PARTITION
TAPE AND SEAL ALL JOINTS



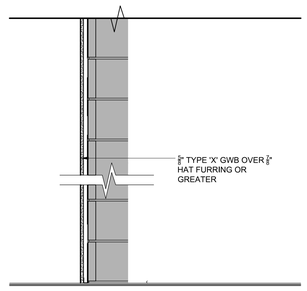

P7 EXTERIOR EXISTING CMU PARTITION
TAPE AND SEAL ALL JOINTS




P8 INTERIOR / EXTERIOR EXISTING CMU PARTITION
TAPE AND SEAL ALL JOINTS

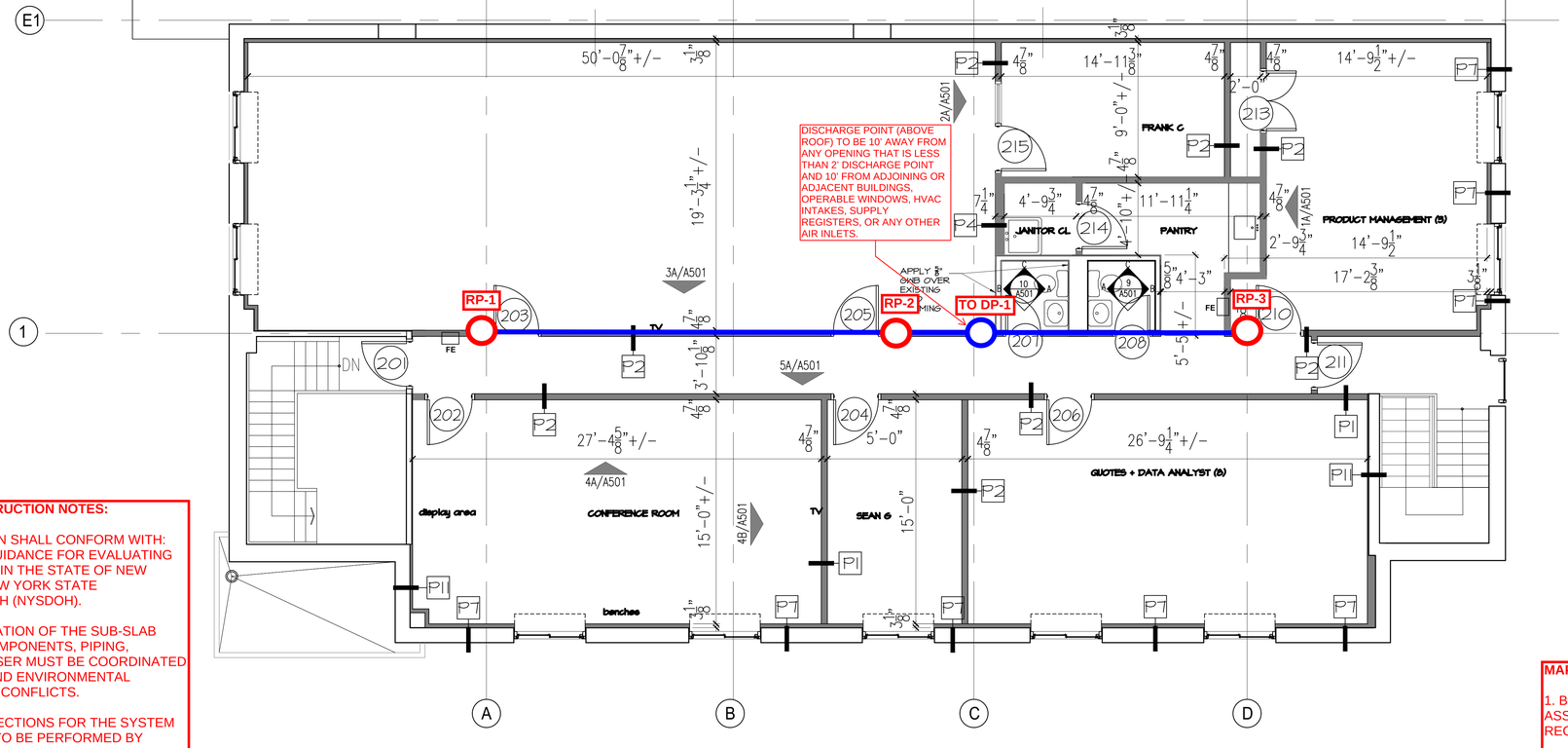



P10 NEW CMU INFILL




P11 INTERIOR NEW PARTITION

**PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) RECONFIGURATION**
**SSDS SECOND FLOOR - SHEET ENV-2**
1126 RIVER ROAD, NEW WINDSOR, NY
2-STORY OFFICE BUILDING - USAI LIGHTING FACILITY
PREPARED BY: C.T. MALE ASSOCIATES
DATE: JANUARY 4, 2022 (MODIFIED APRIL 24, 2023)




SECOND FLOOR PLAN
SCALE: 1/8"=1-0"

**GENERAL SSDS CONSTRUCTION NOTES:**

1. SYSTEM INSTALLATION SHALL CONFORM WITH: OCTOBER 2006 FINAL GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK PREPARED BY NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH).

2. DESIGN AND INSTALLATION OF THE SUB-SLAB DEPRESSURIZATION COMPONENTS, PIPING, PENETRATIONS, AND RISER MUST BE COORDINATED WITH OTHER TRADES AND ENVIRONMENTAL ENGINEER TO RESOLVE CONFLICTS.

3. CONSTRUCTION INSPECTIONS FOR THE SYSTEM DURING INSTALLATION TO BE PERFORMED BY ENVIRONMENTAL ENGINEER PRIOR TO SUCTION POINT CLOSING, DURING INSTALLATION OF RISER AND CONVEYANCE PIPE, AND FOLLOWING INSTALLATION OF ALL COMPONENTS.

**LEGEND:**

- RISER PIPE (RP). SEE DETAIL IN ENV-4. 2" DIAMETER SCHEDULE 40 SOLID PVC. STARTING IN SUB-SLAB, RUNNING VERTICAL INSIDE WALL AND MANIFOLDED IN FIRST FLOOR CEILING PLENUM VIA A 3" DIAMETER SCHEDULE 40 SOLID PVC CONVEYANCE PIPE.
- 3" DIAMETER SCHEDULE 40 SOLID PVC CONVEYANCE PIPE MANIFOLDED AT FIRST FLOOR CEILING PLENUM. HORIZONTAL RUN MUST BE PITCHED 1/8" VERTICAL (MIN.) PER FOOT HORIZONTAL (1% SLOPE) TOWARDS THE LOWEST POINT IN THE SYSTEM TO MITIGATE ACCUMULATION OF CONDENSATION.
- CONNECTION POINT OF HORIZONTAL CONVEYANCE PIPE TO DISCHARGE POINT (DP, ABOVE ROOF) VIA A VERTICAL 3" DIAMETER SCHEDULE 40 SOLID PVC.

**MAP REFERENCE:**

1. BASE MAP NOT PREPARED BY C.T. MALE ASSOCIATES, BUT WAS USED TO DEPICT THE SSDS RECONFIGURATION FOR COORDINATION PURPOSES.

2. C.T. MALE ASSOCIATES ADDED INFORMATION AND FEATURES ARE SHOWN IN COLOR. THESE ARE APPROXIMATE AND NOT TO SCALE.

GENERAL NOTES

ENVIRONMENTAL ENGINEER:
C.T. MALE ASSOCIATES ENGINEERING, SURVEYING, ARCHITECTURE, LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.
12 RAYMOND AVENUE, 2ND FLOOR
POUGHKEEPSIE, NY 12603
TEL: (845) 454-4400

| No. | REVISION/SUBMISSION | DATE |
|---|---|---|
| 1 | GENERAL REVISIONS | 02-18-21 |

fpm design llc
9 Van Voorhis Drive, Fishkill, New York 12524
t. 914.299.4733
www.fpmdesignllc.com

Mechanical/Electrical/Plumbing Engineer
FELLENZER ENGINEERING LLP
www.fellp.com
181 Church Street, Suite 100, Poughkeepsie, NY 12601, t 845-454-9704 fx 845-454-9705
22 Mulberry St., Suite 2A, Middletown, NY 10940, t 845-343-1481 fx 845-343-4986

Structural Engineer
DAY STOKOSA ENGINEERING P.C.
3 Van Wyck Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

Liscum McCormack VanVoorhis LLP
ARCHITECTURE PLANNING INTERIORS
181 CHURCH STREET POUGHKEEPSIE, NEW YORK 12601
PHONE 845-452-2268 FAX 845-452-3752

PROJECT
USAI LIGHTING
RIVER ROAD
NEW WINDSOR, N.Y.

DRAWING
PROJECT DESCRIPTION
DRAWING TITLE 1
DRAWING TITLE 2

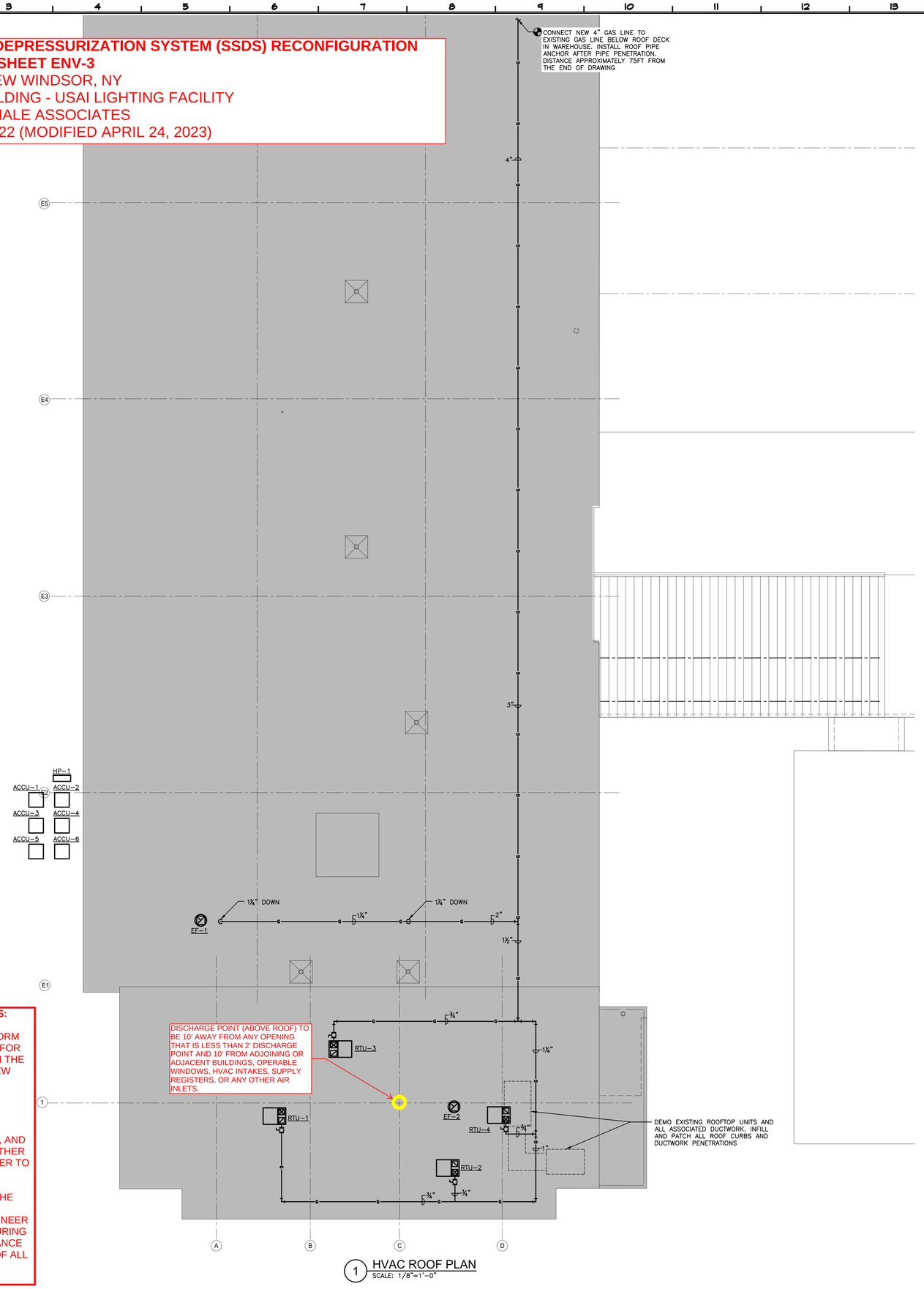
SEAL

| DRAWN BY | PROJECT No. |
|---|---|
| KS | 15106 |
| CHECKED BY | DATE |
| MM | 12-11-20 |

DRAWING No. A102

FILE P:\2015\15106 -USAI

**PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) RECONFIGURATION**
**SSDS ROOF LEVEL - SHEET ENV-3**
1126 RIVER ROAD, NEW WINDSOR, NY
2-STORY OFFICE BUILDING - USAI LIGHTING FACILITY
PREPARED BY: C.T. MALE ASSOCIATES
DATE: JANUARY 4, 2022 (MODIFIED APRIL 24, 2023)




1 HVAC ROOF PLAN
SCALE: 1/8"=1'-0"

**GENERAL SSDS CONSTRUCTION NOTES:**

1. SYSTEM INSTALLATION SHALL CONFORM WITH: OCTOBER 2006 FINAL GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK PREPARED BY NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH).

2. DESIGN AND INSTALLATION OF THE SUB-SLAB DEPRESSURIZATION COMPONENTS, PIPING, PENETRATIONS, AND RISER MUST BE COORDINATED WITH OTHER TRADES AND ENVIRONMENTAL ENGINEER TO RESOLVE CONFLICTS.

3. CONSTRUCTION INSPECTIONS FOR THE SYSTEM DURING INSTALLATION TO BE PERFORMED BY ENVIRONMENTAL ENGINEER PRIOR TO SUCTION POINT CLOSING, DURING INSTALLATION OF RISER AND CONVEYANCE PIPE, AND FOLLOWING INSTALLATION OF ALL COMPONENTS.

**LEGEND:**

DISCHARGE POINT (DP, ABOVE ROOF), VERTICAL 3" DIAMETER SCHEDULE 40 SOLID PVC. SEE DETAIL IN ENV-4.

**MAP REFERENCE:**

1. BASE MAP NOT PREPARED BY C.T. MALE ASSOCIATES, BUT WAS USED TO DEPICT THE SSDS RECONFIGURATION FOR COORDINATION PURPOSES.

2. C.T. MALE ASSOCIATES ADDED INFORMATION AND FEATURES ARE SHOWN IN COLOR. THESE ARE APPROXIMATE AND NOT TO SCALE.


ENVIRONMENTAL ENGINEER:
C.T. MALE ASSOCIATES ENGINEERING, SURVEYING, ARCHITECTURE, LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.
12 RAYMOND AVENUE, 2ND FLOOR
POUGHKEEPSIE, NY 12603
TEL: (845) 454-4400


| No. | REVISION/SUBMISSION | DATE |
|---|---|---|
| | 100% FOR BID | 12/11/20 |


fpm design llc
9 Van Voorhis Drive, Fishkill, New York 12524
t. 914.299.4733
www.fpmdesignllc.com

Mechanical/Electrical/Plumbing Engineer
FELLENZER ENGINEERING LLP
20-384
www.fellp.com
181 Church Street, Suite 100, Poughkeepsie, NY 12601, t 845-454-9704 fx 845-454-9705
22 Mulberry St., Suite 2A, Middletown, NY 10940, t 845-343-1481 fx 845-343-4986

Structural Engineer
M.A. DAY Engineering, PC
Consulting Engineers
3 Van Wyck Ln.
Suite 2
Wappingers Falls, New York
(845)-223-3202

ARCHITECTURE PLANNING INTERIORS
Liscum McCormack VanVoorhis LLP
181 CHURCH STREET
POUGHKEEPSIE, NEW YORK 12601
PHONE 845-452-2268 FAX 845-452-3752


PROJECT
USAI LIGHTING
RIVER ROAD
NEW WINDSOR, N.Y.

DRAWING
HVAC:
ROOF PLAN

MARK D. FELLENZER, P.E.
NY PROFESSIONAL ENGINEER NO. 081656-1

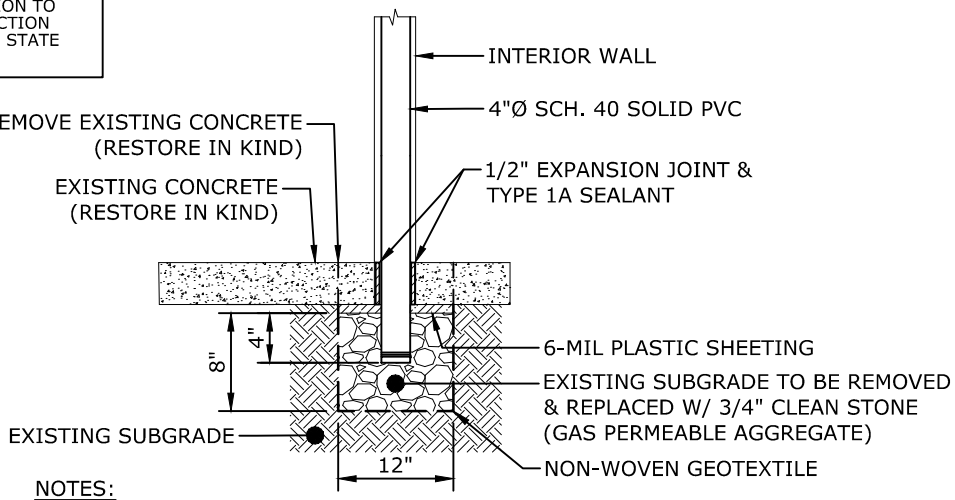
| DRAWN BY | PROJECT No. |
|---|---|
| MFB | 20-384 |
| CHECKED BY | DATE |
| DSS | 11-03-20 |

DRAWING No.
H-201

FILE

NONE :XREFS






NOTES:

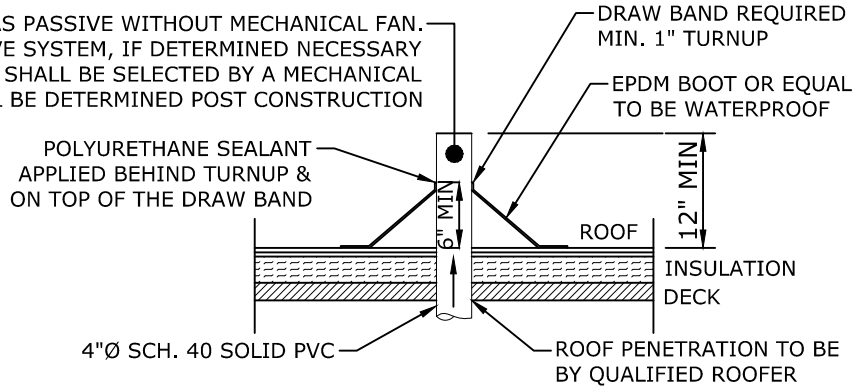
1. MINIMUM 12" SQUARE SAW CUT OR EQUIVALENT MUST BE MADE IN EXISTING CONCRETE SLAB TO ACCESS SUCTION POINT CONSTRUCTION AREA.

1 / ENV-4

## TYP. SSDS SUCTION POINT

SCALE: NONE
CROSS REFERENCE: NONE

SYSTEM TO BE CONSTRUCTED AS PASSIVE WITHOUT MECHANICAL FAN. FAN SELECTION FOR AN ACTIVE SYSTEM, IF DETERMINED NECESSARY BY REGULATORY AGENCY, SHALL BE SELECTED BY A MECHANICAL ENGINEER & SHALL BE DETERMINED POST CONSTRUCTION




NOTES:

1. EXHAUST PIPING FROM THE SSDS SHALL EXTEND:
   -12" ABOVE ROOF

   -10' AWAY FROM ANY OPENING THAT IS LESS THAN 2' BELOW THE SSDS DISCHARGE POINT

   -10' AWAY FROM ADJOINING OR ADJACENT BUILDINGS OR HVAC INTAKES OR SUPPLY REGISTERS

2. SSDS DISCHARGE POINT TO BE COORDINATED WITH PROJECT ARCHITECT & OTHER TRADES.

3. SSDS DISCHARGE POINT & ALL VISIBLE SYSTEM COMPONENTS SHALL BE IDENTIFIED AS FOLLOW VIA TAG, STENCIL OR APPROVED MARKING: "VAPOR INTRUSION MITIGATION SYSTEM. DO NOT ALTER IF DAMAGED REPORT TO BUILDING ADMINISTRATION"

2 / ENV-4

## SSDS DISCHARGE POINT

SCALE: NONE
CROSS REFERENCE: NONE

# ENV-4

| Date | RECORD OF WORK | Appr. |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

Drafter: S.WUNSCH | Checker: J.MARX

Appr. by: R.ANDUJAR | Proj. No. 14.4337

**PASSIVE SSDS DETAILS**
1126 RIVER ROAD

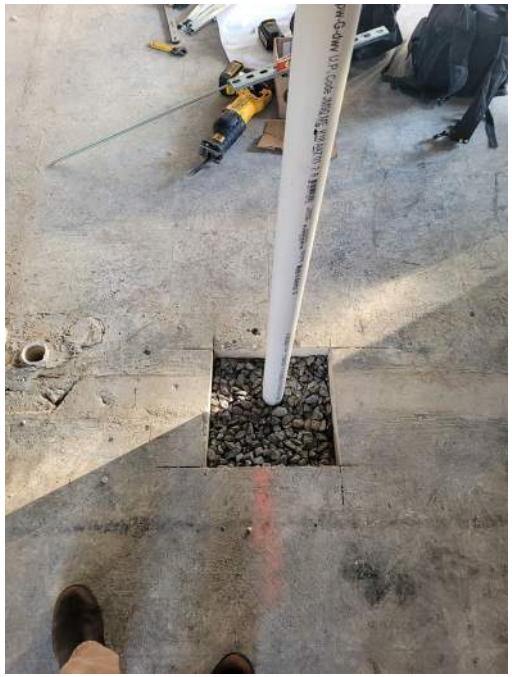
TOWN OF NEW WINDSOR | ORANGE COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

SCALE: NONE | DATE: JANUARY 5, 2022

CAD DWG. FILE NAME: K:\Projects\144337\Env\Drawings and Maps\ENV-4.dwg

# Attachment J: Renovation Documentation



01 - SE SSDS Point 02.10.2022

02 - SE SSDS Point (2) 02.10.2022

03 - SW SSDS Point 02.10.2022

04 - Center SSDS Point 02.10.2022

05 - SSDS PVC Convergance 02.10.2022


06 - GravelCloseUp 02.10.2022

07 - SecondFloor SSDS Top 02.10.2022

08 - SecondFloor SSDS Through Floor 02.10.2022

09 - Awning excavation markout 03.21.2022

10 - Area of awning excavation 03.21.2022

11 - Water encountered in excavation 03.21.2022

12 - Water encountered in excavation (2) 03.21.2022

13 - Removed asphalt in dupmster 03.21.2022

14 - Relocation of excavated soils on plastic 03.21.2022

15 - Excavated soils on plastic 03.21.2022

16 - Installation of T-1 Vapor Pin 04.28.2022

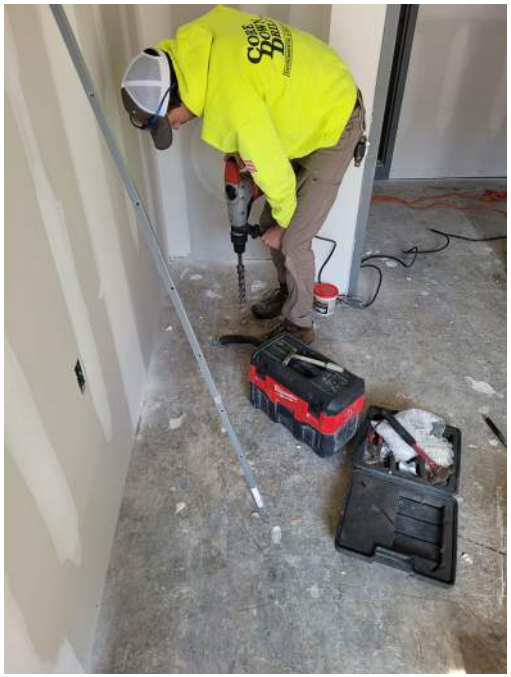
17 - Location of T-1 04.28.2022

18 - Location of T-2 Vapor Pin 04.28.2022

19 - Installation of T-3 04.28.2022

20 - Location of T-3 04.28.2022

21 - Location of T-4 04.28.2022



22 - Installation of T-5 04.28.2022

23 - Location of T-5 04.28.2022

24 - Excavated Soils on Plastic 04.13.2023

| | |
|---|---|
| Instrument Name | DustTrak II |
| Model Number | 8530 |
| Serial Number | 8530162307 |
| Firmware Version | 3.1 |
| Calibration Date | 3/10/2022 |
| Test Name | MANUAL_001 |
| Test Start Time | 8:54:18 AM |
| Test Start Date | 3/21/2022 |
| Test Length [D:H:M] | 0:04:39 |
| Test Interval [M:S] | 1:00 |
| Mass Average [mg/m3] | 0.026 |
| Mass Minimum [mg/m3] | 0.003 |
| Mass Maximum [mg/m3] | 0.918 |
| Mass TWA [mg/m3] | 0.015 |
| Photometric User Cal | 1 |
| Flow User Cal | 0 |
| Errors | |
| Number of Samples | 279 |

| Elapsed Time [s] | Mass [mg/m3] | Alarms | Errors | 15 minute average |
|---|---|---|---|---|
| 60 | 0.01 | | | |
| 120 | 0.014 | | | |
| 180 | 0.021 | | | |
| 240 | 0.007 | | | |
| 300 | 0.01 | | | |
| 360 | 0.005 | | | |
| 420 | 0.006 | | | |
| 480 | 0.013 | | | |
| 540 | 0.008 | | | |
| 600 | 0.008 | | | |
| 660 | 0.006 | | | |
| 720 | 0.028 | | | |
| 780 | 0.015 | | | |
| 840 | 0.008 | | | |
| 900 | 0.01 | | | 0.011267 |
| 960 | 0.013 | | | |
| 1020 | 0.044 | | | |
| 1080 | 0.007 | | | |
| 1140 | 0.008 | | | |
| 1200 | 0.017 | | | |
| 1260 | 0.007 | | | |
| 1320 | 0.013 | | | |
| 1380 | 0.007 | | | |
| 1440 | 0.007 | | | |
| 1500 | 0.006 | | | |
| 1560 | 0.012 | | | |
| 1620 | 0.008 | | | |

| | | |
|---|---|---|
| 1680 | 0.009 | |
| 1740 | 0.008 | |
| 1800 | 0.01 | 0.011733 |
| 1860 | 0.009 | |
| 1920 | 0.009 | |
| 1980 | 0.006 | |
| 2040 | 0.006 | |
| 2100 | 0.007 | |
| 2160 | 0.006 | |
| 2220 | 0.006 | |
| 2280 | 0.007 | |
| 2340 | 0.01 | |
| 2400 | 0.006 | |
| 2460 | 0.007 | |
| 2520 | 0.02 | |
| 2580 | 0.007 | |
| 2640 | 0.006 | |
| 2700 | 0.008 | 0.008 |
| 2760 | 0.012 | |
| 2820 | 0.005 | |
| 2880 | 0.005 | |
| 2940 | 0.006 | |
| 3000 | 0.004 | |
| 3060 | 0.007 | |
| 3120 | 0.015 | |
| 3180 | 0.005 | |
| 3240 | 0.003 | |
| 3300 | 0.004 | |
| 3360 | 0.007 | |
| 3420 | 0.006 | |
| 3480 | 0.005 | |
| 3540 | 0.006 | |
| 3600 | 0.005 | 0.006333 |
| 3660 | 0.005 | |
| 3720 | 0.004 | |
| 3780 | 0.005 | |
| 3840 | 0.005 | |
| 3900 | 0.005 | |
| 3960 | 0.005 | |
| 4020 | 0.006 | |
| 4080 | 0.005 | |
| 4140 | 0.008 | |
| 4200 | 0.004 | |
| 4260 | 0.004 | |
| 4320 | 0.014 | |
| 4380 | 0.004 | |
| 4440 | 0.006 | |

| | | |
|---|---|---|
| 4500 | 0.006 | 0.005733 |
| 4560 | 0.005 | |
| 4620 | 0.004 | |
| 4680 | 0.004 | |
| 4740 | 0.013 | |
| 4800 | 0.006 | |
| 4860 | 0.02 | |
| 4920 | 0.027 | |
| 4980 | 0.004 | |
| 5040 | 0.004 | |
| 5100 | 0.004 | |
| 5160 | 0.013 | |
| 5220 | 0.015 | |
| 5280 | 0.007 | |
| 5340 | 0.009 | |
| 5400 | 0.006 | 0.0094 |
| 5460 | 0.006 | |
| 5520 | 0.006 | |
| 5580 | 0.004 | |
| 5640 | 0.006 | |
| 5700 | 0.003 | |
| 5760 | 0.019 | |
| 5820 | 0.009 | |
| 5880 | 0.005 | |
| 5940 | 0.004 | |
| 6000 | 0.003 | |
| 6060 | 0.005 | |
| 6120 | 0.007 | |
| 6180 | 0.004 | |
| 6240 | 0.159 | |
| 6300 | 0.355 | 0.039667 |
| 6360 | 0.095 | |
| 6420 | 0.383 | |
| 6480 | 0.754 | |
| 6540 | 0.266 | |
| 6600 | 0.918 | |
| 6660 | 0.117 | |
| 6720 | 0.017 | |
| 6780 | 0.005 | |
| 6840 | 0.012 | |
| 6900 | 0.024 | |
| 6960 | 0.046 | |
| 7020 | 0.014 | |
| 7080 | 0.013 | |
| 7140 | 0.004 | |
| 7200 | 0.006 | 0.178267 |
| 7260 | 0.084 | |

| | | |
|---|---|---|
| 7320 | 0.017 | |
| 7380 | 0.005 | |
| 7440 | 0.011 | |
| 7500 | 0.004 | |
| 7560 | 0.026 | |
| 7620 | 0.008 | |
| 7680 | 0.004 | |
| 7740 | 0.008 | |
| 7800 | 0.003 | |
| 7860 | 0.004 | |
| 7920 | 0.006 | |
| 7980 | 0.007 | |
| 8040 | 0.032 | |
| 8100 | 0.003 | 0.0148 |
| 8160 | 0.015 | |
| 8220 | 0.007 | |
| 8280 | 0.004 | |
| 8340 | 0.004 | |
| 8400 | 0.01 | |
| 8460 | 0.008 | |
| 8520 | 0.003 | |
| 8580 | 0.006 | |
| 8640 | 0.008 | |
| 8700 | 0.004 | |
| 8760 | 0.008 | |
| 8820 | 0.004 | |
| 8880 | 0.006 | |
| 8940 | 0.006 | |
| 9000 | 0.003 | 0.0064 |
| 9060 | 0.005 | |
| 9120 | 0.01 | |
| 9180 | 0.004 | |
| 9240 | 0.004 | |
| 9300 | 0.004 | |
| 9360 | 0.003 | |
| 9420 | 0.003 | |
| 9480 | 0.004 | |
| 9540 | 0.005 | |
| 9600 | 0.004 | |
| 9660 | 0.005 | |
| 9720 | 0.025 | |
| 9780 | 0.008 | |
| 9840 | 0.009 | |
| 9900 | 0.012 | 0.007 |
| 9960 | 0.009 | |
| 10020 | 0.005 | |
| 10080 | 0.039 | |

| | | |
|---|---|---|
| 10140 | 0.012 | |
| 10200 | 0.013 | |
| 10260 | 0.009 | |
| 10320 | 0.005 | |
| 10380 | 0.004 | |
| 10440 | 0.005 | |
| 10500 | 0.015 | |
| 10560 | 0.016 | |
| 10620 | 0.013 | |
| 10680 | 0.008 | |
| 10740 | 0.011 | |
| 10800 | 0.014 | 0.011867 |
| 10860 | 0.008 | |
| 10920 | 0.006 | |
| 10980 | 0.004 | |
| 11040 | 0.009 | |
| 11100 | 0.009 | |
| 11160 | 0.005 | |
| 11220 | 0.006 | |
| 11280 | 0.008 | |
| 11340 | 0.005 | |
| 11400 | 0.004 | |
| 11460 | 0.008 | |
| 11520 | 0.017 | |
| 11580 | 0.025 | |
| 11640 | 0.065 | |
| 11700 | 0.015 | 0.012933 |
| 11760 | 0.01 | |
| 11820 | 0.007 | |
| 11880 | 0.005 | |
| 11940 | 0.006 | |
| 12000 | 0.009 | |
| 12060 | 0.007 | |
| 12120 | 0.005 | |
| 12180 | 0.004 | |
| 12240 | 0.005 | |
| 12300 | 0.004 | |
| 12360 | 0.006 | |
| 12420 | 0.01 | |
| 12480 | 0.009 | |
| 12540 | 0.004 | |
| 12600 | 0.005 | 0.0064 |
| 12660 | 0.004 | |
| 12720 | 0.004 | |
| 12780 | 0.003 | |
| 12840 | 0.003 | |
| 12900 | 0.003 | |

| | | |
|---|---|---|
| 12960 | 0.003 | |
| 13020 | 0.003 | |
| 13080 | 0.003 | |
| 13140 | 0.003 | |
| 13200 | 0.003 | |
| 13260 | 0.003 | |
| 13320 | 0.003 | |
| 13380 | 0.004 | |
| 13440 | 0.004 | |
| 13500 | 0.008 | 0.0036 |
| 13560 | 0.003 | |
| 13620 | 0.003 | |
| 13680 | 0.004 | |
| 13740 | 0.003 | |
| 13800 | 0.003 | |
| 13860 | 0.003 | |
| 13920 | 0.004 | |
| 13980 | 0.004 | |
| 14040 | 0.003 | |
| 14100 | 0.003 | |
| 14160 | 0.003 | |
| 14220 | 0.004 | |
| 14280 | 0.005 | |
| 14340 | 0.003 | |
| 14400 | 0.004 | 0.003467 |
| 14460 | 0.005 | |
| 14520 | 0.022 | |
| 14580 | 0.147 | |
| 14640 | 0.162 | |
| 14700 | 0.326 | |
| 14760 | 0.4 | |
| 14820 | 0.122 | |
| 14880 | 0.251 | |
| 14940 | 0.108 | |
| 15000 | 0.004 | |
| 15060 | 0.012 | |
| 15120 | 0.026 | |
| 15180 | 0.011 | |
| 15240 | 0.017 | |
| 15300 | 0.005 | 0.107867 |
| 15360 | 0.006 | |
| 15420 | 0.003 | |
| 15480 | 0.008 | |
| 15540 | 0.04 | |
| 15600 | 0.007 | |
| 15660 | 0.013 | |
| 15720 | 0.008 | |

| | | |
|---|---|---|
| 15780 | 0.006 | |
| 15840 | 0.006 | |
| 15900 | 0.007 | |
| 15960 | 0.011 | |
| 16020 | 0.021 | |
| 16080 | 0.008 | |
| 16140 | 0.009 | |
| 16200 | 0.007 | 0.0428 |
| 16260 | 0.032 | |
| 16320 | 0.171 | |
| 16380 | 0.145 | |
| 16440 | 0.021 | |
| 16500 | 0.015 | |
| 16560 | 0.016 | |
| 16620 | 0.005 | |
| 16680 | 0.006 | |
| 16740 | 0.01 | |

| | |
|---|---|
| Instrument Name | DustTrak II |
| Model Number | 8530 |
| Serial Number | 8530162221 |
| Firmware Version | 3.1 |
| Calibration Date | 3/9/2022 |
| Test Name | MANUAL_001 |
| Test Start Time | 8:51:12 AM |
| Test Start Date | 3/21/2022 |
| Test Length [D:H:M] | 0:04:45 |
| Test Interval [M:S] | 1:00 |
| Mass Average [mg/m3] | 0.011 |
| Mass Minimum [mg/m3] | 0.003 |
| Mass Maximum [mg/m3] | 0.653 |
| Mass TWA [mg/m3] | 0.007 |
| Photometric User Cal | 1 |
| Flow User Cal | 0 |
| Errors | |
| Number of Samples | 285 |

| Elapsed Time [s] | Mass [mg/m3] | Alarms | Errors | 15 min average |
|---|---|---|---|---|
| 60 | 0.007 | | | |
| 120 | 0.007 | | | |
| 180 | 0.006 | | | |
| 240 | 0.007 | | | |
| 300 | 0.006 | | | |
| 360 | 0.006 | | | |
| 420 | 0.005 | | | |
| 480 | 0.007 | | | |
| 540 | 0.006 | | | |
| 600 | 0.009 | | | |
| 660 | 0.006 | | | |
| 720 | 0.008 | | | |
| 780 | 0.036 | | | |
| 840 | 0.011 | | | |
| 900 | 0.006 | | | 0.008867 |
| 960 | 0.008 | | | |
| 1020 | 0.008 | | | |
| 1080 | 0.006 | | | |
| 1140 | 0.006 | | | |
| 1200 | 0.007 | | | |
| 1260 | 0.006 | | | |
| 1320 | 0.008 | | | |
| 1380 | 0.007 | | | |
| 1440 | 0.007 | | | |
| 1500 | 0.007 | | | |
| 1560 | 0.007 | | | |
| 1620 | 0.006 | | | |

| | | |
|---|---|---|
| 1680 | 0.006 | |
| 1740 | 0.006 | |
| 1800 | 0.007 | 0.0068 |
| 1860 | 0.007 | |
| 1920 | 0.008 | |
| 1980 | 0.008 | |
| 2040 | 0.006 | |
| 2100 | 0.008 | |
| 2160 | 0.013 | |
| 2220 | 0.009 | |
| 2280 | 0.007 | |
| 2340 | 0.006 | |
| 2400 | 0.007 | |
| 2460 | 0.01 | |
| 2520 | 0.013 | |
| 2580 | 0.007 | |
| 2640 | 0.008 | |
| 2700 | 0.006 | 0.0082 |
| 2760 | 0.007 | |
| 2820 | 0.008 | |
| 2880 | 0.007 | |
| 2940 | 0.007 | |
| 3000 | 0.006 | |
| 3060 | 0.008 | |
| 3120 | 0.007 | |
| 3180 | 0.011 | |
| 3240 | 0.006 | |
| 3300 | 0.007 | |
| 3360 | 0.006 | |
| 3420 | 0.007 | |
| 3480 | 0.006 | |
| 3540 | 0.007 | |
| 3600 | 0.006 | 0.007067 |
| 3660 | 0.006 | |
| 3720 | 0.006 | |
| 3780 | 0.006 | |
| 3840 | 0.006 | |
| 3900 | 0.005 | |
| 3960 | 0.005 | |
| 4020 | 0.007 | |
| 4080 | 0.006 | |
| 4140 | 0.006 | |
| 4200 | 0.006 | |
| 4260 | 0.006 | |
| 4320 | 0.006 | |
| 4380 | 0.006 | |
| 4440 | 0.005 | |

| | | |
|---|---|---|
| 4500 | 0.006 | 0.005867 |
| 4560 | 0.005 | |
| 4620 | 0.009 | |
| 4680 | 0.005 | |
| 4740 | 0.005 | |
| 4800 | 0.005 | |
| 4860 | 0.005 | |
| 4920 | 0.006 | |
| 4980 | 0.008 | |
| 5040 | 0.007 | |
| 5100 | 0.005 | |
| 5160 | 0.005 | |
| 5220 | 0.006 | |
| 5280 | 0.005 | |
| 5340 | 0.006 | |
| 5400 | 0.005 | 0.0058 |
| 5460 | 0.004 | |
| 5520 | 0.005 | |
| 5580 | 0.005 | |
| 5640 | 0.005 | |
| 5700 | 0.005 | |
| 5760 | 0.005 | |
| 5820 | 0.006 | |
| 5880 | 0.066 | |
| 5940 | 0.113 | |
| 6000 | 0.006 | |
| 6060 | 0.006 | |
| 6120 | 0.007 | |
| 6180 | 0.004 | |
| 6240 | 0.006 | |
| 6300 | 0.005 | 0.016533 |
| 6360 | 0.653 | |
| 6420 | 0.203 | |
| 6480 | 0.045 | |
| 6540 | 0.104 | |
| 6600 | 0.008 | |
| 6660 | 0.188 | |
| 6720 | 0.051 | |
| 6780 | 0.013 | |
| 6840 | 0.01 | |
| 6900 | 0.013 | |
| 6960 | 0.013 | |
| 7020 | 0.007 | |
| 7080 | 0.005 | |
| 7140 | 0.009 | |
| 7200 | 0.008 | 0.088667 |
| 7260 | 0.028 | |

| | | |
|---|---|---|
| 7320 | 0.045 | |
| 7380 | 0.026 | |
| 7440 | 0.007 | |
| 7500 | 0.005 | |
| 7560 | 0.003 | |
| 7620 | 0.004 | |
| 7680 | 0.005 | |
| 7740 | 0.005 | |
| 7800 | 0.004 | |
| 7860 | 0.005 | |
| 7920 | 0.004 | |
| 7980 | 0.004 | |
| 8040 | 0.005 | |
| 8100 | 0.005 | 0.010333 |
| 8160 | 0.004 | |
| 8220 | 0.004 | |
| 8280 | 0.005 | |
| 8340 | 0.005 | |
| 8400 | 0.006 | |
| 8460 | 0.014 | |
| 8520 | 0.005 | |
| 8580 | 0.004 | |
| 8640 | 0.004 | |
| 8700 | 0.004 | |
| 8760 | 0.006 | |
| 8820 | 0.005 | |
| 8880 | 0.004 | |
| 8940 | 0.004 | |
| 9000 | 0.016 | 0.006 |
| 9060 | 0.005 | |
| 9120 | 0.004 | |
| 9180 | 0.004 | |
| 9240 | 0.008 | |
| 9300 | 0.006 | |
| 9360 | 0.008 | |
| 9420 | 0.004 | |
| 9480 | 0.004 | |
| 9540 | 0.005 | |
| 9600 | 0.004 | |
| 9660 | 0.004 | |
| 9720 | 0.004 | |
| 9780 | 0.005 | |
| 9840 | 0.004 | |
| 9900 | 0.004 | 0.004867 |
| 9960 | 0.005 | |
| 10020 | 0.004 | |
| 10080 | 0.034 | |

| | | |
|---|---|---|
| 10140 | 0.006 | |
| 10200 | 0.004 | |
| 10260 | 0.004 | |
| 10320 | 0.004 | |
| 10380 | 0.006 | |
| 10440 | 0.004 | |
| 10500 | 0.004 | |
| 10560 | 0.004 | |
| 10620 | 0.003 | |
| 10680 | 0.003 | |
| 10740 | 0.012 | |
| 10800 | 0.005 | 0.0068 |
| 10860 | 0.012 | |
| 10920 | 0.007 | |
| 10980 | 0.004 | |
| 11040 | 0.004 | |
| 11100 | 0.004 | |
| 11160 | 0.003 | |
| 11220 | 0.003 | |
| 11280 | 0.004 | |
| 11340 | 0.004 | |
| 11400 | 0.004 | |
| 11460 | 0.007 | |
| 11520 | 0.005 | |
| 11580 | 0.005 | |
| 11640 | 0.005 | |
| 11700 | 0.004 | 0.005 |
| 11760 | 0.007 | |
| 11820 | 0.004 | |
| 11880 | 0.04 | |
| 11940 | 0.007 | |
| 12000 | 0.005 | |
| 12060 | 0.003 | |
| 12120 | 0.006 | |
| 12180 | 0.008 | |
| 12240 | 0.003 | |
| 12300 | 0.003 | |
| 12360 | 0.003 | |
| 12420 | 0.004 | |
| 12480 | 0.003 | |
| 12540 | 0.003 | |
| 12600 | 0.006 | 0.007 |
| 12660 | 0.004 | |
| 12720 | 0.004 | |
| 12780 | 0.024 | |
| 12840 | 0.004 | |
| 12900 | 0.004 | |

| | | |
|---|---|---|
| 12960 | 0.004 | |
| 13020 | 0.004 | |
| 13080 | 0.003 | |
| 13140 | 0.005 | |
| 13200 | 0.006 | |
| 13260 | 0.003 | |
| 13320 | 0.01 | |
| 13380 | 0.009 | |
| 13440 | 0.004 | |
| 13500 | 0.008 | 0.0064 |
| 13560 | 0.006 | |
| 13620 | 0.004 | |
| 13680 | 0.003 | |
| 13740 | 0.003 | |
| 13800 | 0.003 | |
| 13860 | 0.003 | |
| 13920 | 0.003 | |
| 13980 | 0.003 | |
| 14040 | 0.003 | |
| 14100 | 0.003 | |
| 14160 | 0.005 | |
| 14220 | 0.004 | |
| 14280 | 0.004 | |
| 14340 | 0.005 | |
| 14400 | 0.005 | 0.0038 |
| 14460 | 0.004 | |
| 14520 | 0.004 | |
| 14580 | 0.004 | |
| 14640 | 0.004 | |
| 14700 | 0.047 | |
| 14760 | 0.004 | |
| 14820 | 0.008 | |
| 14880 | 0.004 | |
| 14940 | 0.004 | |
| 15000 | 0.003 | |
| 15060 | 0.004 | |
| 15120 | 0.003 | |
| 15180 | 0.004 | |
| 15240 | 0.005 | |
| 15300 | 0.007 | 0.007267 |
| 15360 | 0.006 | |
| 15420 | 0.005 | |
| 15480 | 0.004 | |
| 15540 | 0.004 | |
| 15600 | 0.004 | |
| 15660 | 0.009 | |
| 15720 | 0.005 | |

| | | |
|---|---|---|
| 15780 | 0.007 | |
| 15840 | 0.005 | |
| 15900 | 0.004 | |
| 15960 | 0.006 | |
| 16020 | 0.005 | |
| 16080 | 0.011 | |
| 16140 | 0.007 | |
| 16200 | 0.006 | 0.005867 |
| 16260 | 0.007 | |
| 16320 | 0.005 | |
| 16380 | 0.005 | |
| 16440 | 0.005 | |
| 16500 | 0.006 | |
| 16560 | 0.017 | |
| 16620 | 0.004 | |
| 16680 | 0.008 | |
| 16740 | 0.004 | |
| 16800 | 0.005 | |
| 16860 | 0.005 | |
| 16920 | 0.004 | |
| 16980 | 0.01 | |
| 17040 | 0.007 | |
| 17100 | 0.013 | 0.007 |