### PERIODIC REVIEW REPORT

APRIL 26, 2021 TO APRIL 26, 2022 FORMER TRICO PLANT (BCP SITE No. C915281)

**BUFFALO, NEW YORK** 

May 2022 0092-016-001

Prepared for:

### 847 Main Street, LLC and 791 Washington Street, LLC

Prepared By:



Benchmark Civil/Environmental Engineering & Geology, PLLC 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218 (716)856-0599

In association with:



TurnKey Environmental Restoration, LLC 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218 (716)856-0635

### PERIODIC REVIEW REPORT

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### 1.0 Introduction

Benchmark Civil/Environmental Engineering and Geology, PLLC, in association with TurnKey Environmental Restoration, LLC (Benchmark-TurnKey) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Former Trico Plant Site (BCP Site No. C915281), located in the City of Buffalo, Erie County, New York (see Figures 1 and 2).

This PRR has been prepared in accordance with the NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation* (May 2010; Ref. 1) and the NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been prepared for the Site. This PRR and the associated IC/EC Form (see Appendix A) have been completed for the post-remedial period from April 26, 2021 to April 26, 2022.

### 1.1 Site Background

847 Main Street, LLC entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in October 2013, to investigate and remediate the approximate ±2.11-acre Site located at 791 Washington Street, in the City of Buffalo, Erie County, New York. The BCA was amended in January 2017 to add the entity 791 Washington Street, LLC and amended again in July 2019 to identify 791 Washington Street, LLC as the property owner. BCP activities were performed in accordance with BCA Index #C915281-10-13.

The Site is identified as Section 111.31, Block 1, Lot 1.11 on the Erie County Tax Map. The Site is approximately  $\pm 2.11$ -acres in size and is bounded by a parking lot and building associated with the Innovation Center of the Buffalo Niagara Medical Campus to the north, Goodell Street to the south, Ellicott Street to the east, and Washington Street to the west (see Figure 2).

The property consists of a complex of five (5) adjoining buildings totaling 617,627 square feet. The oldest of the five (5) buildings was constructed circa 1890 as a portion of the Christian Weyand Brewery that operated at the Site until the enactment of prohibition. The building was purchased in 1920 by the Trico Products Corporation for the manufacturing of windshield wiper blades for the automobile industry. The remaining buildings were constructed from 1920 to 1954. The Trico Products Corporation operated at



the Site until approximately 1993. Historic operations included electroplating, smelting, diecasting, rubber extrusion, and metal fabrication. The building complex was idle since at least 2000. The Site was purchased by 791 Washington Street, LLC in May 2017 from the Buffalo Brownfield Restoration Corporation who acquired the property in 2007.

### 1.2 Remedial History

A Remedial Investigation (RI) was completed by Benchmark-TurnKey in accordance with a NYSDEC-approved Remedial Investigation & Alternative Analysis Work Plan (RI/AA WP, Ref. 2). RI activities were completed between May and June 2016 with supplemental investigation activities being completed in November and December 2016. The RI included the completion of soil borings and installation of monitoring wells/piezometers to assess soil and groundwater conditions, soil vapor intrusion (SVI) sampling (indoor, outdoor, and sub-slab air), interior utility observations, and basement surface water sampling at the Site. Results of the RI were summarized in the NYSDEC-approved Remedial Investigation/Alternatives Analysis (RI/AA, Ref. 3)

Select chlorinated volatile organic compounds (cVOCs) were detected exceeding 6NYCRR Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs, Ref. 4), and select semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals (arsenic, mercury, and barium) were detected exceeding Restricted-Residential SCOs (RRSCOs) in subsurface soil samples.

cVOCs were detected exceeding TOGS 1.1.1 Groundwater Quality Standards/Guidance Values (GWQS, Ref. 5) at multiple groundwater sampling locations in the central portion of the Site. Two (2) individual SVOCs and certain naturally occurring metals were identified exceeding GWQS. VOCs were not detected above their respective GWQS in the two (2) off-site wells.

Results of the SVI sampling identified that the building requires soil vapor mitigation due to the elevated concentrations of trichloroethene (TCE), cis-1,2-dichlorethene (cis-DCE), and 1,1-dichloroethene (1,1-DCE) that were detected based on the New York State Department of Health (NYSDOH) SVI Guidance decision matrices (Ref. 6).



The results of the basement surface water sampling indicate that low levels of metals and pesticides are present in the water. No VOCs, PCBs, or herbicides were detected above method detection limits (MDLs).

Based on the findings of the RI, an Alternatives Analysis (AA) was completed. The AA outlined the Remedial Action Objectives (RAOs) and required remedial activities to be completed to achieve a Track 4 Restricted-Residential Use cleanup. The remedial actions described in the AAR, Decision Document (Ref. 7) and Remedial Action Work Plan (RAWP, Ref. 8) were as follows:

- Removal of hydraulic lifts, associated infrastructure and associated impacted soil/fill.
- In-Situ direct injection of biological amendments to address areas of the Site impacted with chlorinated VOCs in groundwater.
- Installation of an active sub-slab depressurization (ASD) system within the existing building.
- Cleaning accessible utility and/or sewer structures with evidence of potential impacts.
- Sub-basement water removal, treatment, and discharge.
- Removing and properly disposing off-site miscellaneous abandoned regulated waste materials; and abating building components for lead, asbestos, oil staining, and PCBs as required during redevelopment.
- Maintenance and replacement of site cover system within areas of the building footprint that will undergo demolition/redevelopment.
- Development of a Site Management Plan (SMP) for post-certificate of completion (COC) operation, maintenance, and monitoring.
- Filing an Environmental Easement (EE) with Erie County, which was done on October 31, 2019.

Benchmark-TurnKey prepared an ASD System Design Work Plan (Ref. 9) to present the results of the sub-slab communication testing that was completed in the basement of the building and to provide the ASD system design requirements. The ASD system will be installed prior to building occupancy.

Benchmark-TurnKey prepared an RAWP Addendum Work Plan (RAWP Addendum) on behalf of 847 Main Street, LLC and 791 Washington Street, LLC (Ref. 10).



The RAWP Addendum provided the scope of work to address PCB contamination that was identified in the former interior loading area and certain limited areas of the building basement that formerly contained oil-filled electrical equipment (referred to as electrical equipment areas, or EEAs). The sampling of the loading dock area and EEAs were completed in accordance with NYSDEC-approved work plans: Loading Dock Concrete & Soil Sampling Work Plan (Ref. 11) and Concrete-Slab Sampling Work Plan for Areas Formerly Containing Oil-Filled Electrical Equipment (Ref. 12), respectively. PCBs were identified above 1 mg/kg in a limited area of the existing concrete Site cover system (approximately 8,000 square feet, less than 10% of the total cover system, which covers approximately 84,000 square feet). The PCB impacts greater than 1 mg/kg were addressed by removal, off-site disposal, and cover system replacement.

The Site was remediated to a 6NYCRR Part 375 Track 4 Restricted-Residential use cleanup. Materials removed from the Site included: friable and non-friable ACM; paint debris; hydraulic lifts/oil; water, sediment, and sludge present within the building; miscellaneous drums and oils from former equipment/machinery left within the building; RI derived soil and water drums; oil-filled electrical equipment (TSCA and non-TSCA); PCB-impacted concrete (TSCA and non-TSCA regulated); and decontamination water/supplies. A summary of contaminated materials removed from the Site is included in the NYSDEC-approved Final Engineering Report (FER, Ref. 13).

In May and June 2019, groundwater amendment injections were completed to address the cVOCs detected in the groundwater within the central portion of the Site. The groundwater injections consisted of 89 injection locations within the central portion of the building and in the sidewalk along Ellicott Street east of the building. The injections consisted of three (3) amendments manufactured by Regenesis: 3-D Microemulsion (3DME, also known as HRC Advanced®); Chemical Reducing Solution (CRS®); and Bio-Dechlor Inoculum Plus (BDI), which were mixed together with water in the field prior to injection. In total, 16,000 pounds (lbs) of 3DME, 6,400 lbs of CRS, and 96 lbs of BDI were injected into the subsurface groundwater. The depth of the injections ranged from 3.5 to 13.5 feet below the lower basement area and 11 to 21 fbgs in the upper basement. Groundwater sampling completed in July, August, and September 2019, to monitor the effects of the groundwater injections indicated that the groundwater amendment injections were effective



in reducing the concentrations of cVOCs in the monitoring wells, as further discussed in Section 4.3.

The Site is primarily covered by a hardscape cover system in the form of the concrete building footprint and asphalt roadway of former Burton Street in the northwest corner of the Site. A 2-foot-thick crushed stone cover (2-inch crusher run) was placed in select areas of the Site (e.g., the former subbasement area and former EEAs where the concrete floors were removed due to PCB contamination). Exposure to remaining contamination in the soil/fill at the Site is prevented by the hardscape cover system and/or 2-foot-thick stone cover system in place over the Site. Figure 3 identities the current cover system for the Site. In accordance with the NYSDEC-approved Site Management Plan (SMP; Ref. 14) the following remedial actions need to be completed prior to building occupancy.

- Removal of PCB contamination greater than 50 mg/kg in the suspended concrete slab on the 1<sup>st</sup> of the building (future parking area) and installation of a 6-inch concrete cap over areas with less 50 mg/kg PCBs;
- Installation of the ASD system within the building in accordance with the ASD System Work Plan; and
- Remediation of PCBs detected above 50 mg/kg on a small area of the wall in the western portion of the former loading dock area, in consultation with NYSDEC/NYSDOH.

The remedial action and cover system installation work was documented in the NYSDEC-approved FER. NYSDEC issued a Certificate of Completion dated December 26, 2019 for the Site, which was filed with Erie County (File 2020016567).

### 1.3 Compliance

The Site is in compliance as the cover system is in place.

### 1.4 Recommendations

Any future redevelopment activities to be conducted will be completed in accordance with the NYSDEC-approved SMP and documented in the associated PRR reporting period. The SMP will be updated to include the redevelopment/cover system changes once they are completed.



### 2.0 SITE OVERVIEW

The Site was remediated under the BCP to a Track 4 Restricted Residential cleanup. The remediated property is subject to a comprehensive, site-wide SMP which identifies requirements for monitoring and maintenance of engineering and institutional controls, post-remedial media (groundwater and building material) monitoring and sampling, operation and maintenance of the ASD system, which will be installed prior to occupancy, and procedures for post-remedial excavation, demolition, and related activities.

No significant redevelopment activities have occurred at the Site within the April 26, 2021 to April 26, 2022 reporting period. The Site is currently vacant and secured from public access by a 6-foot chain link fence. Some building demolition debris was generated (concrete, brick, and limestone foundation walls) was generated as part of redevelopment activities after the COC was issued and prior to the COVID-19 pandemic which halted the project. The Site was secured with perimeter fencing and is visited weekly to inspect the premises for vandals, trespassers, and maintain the perimeter fencing. The project team is currently assessing the project financing to restart the redevelopment in 2022.

The areas surrounding the Site have not changed.



### 3.0 REMEDY PERFORMANCE

A post-remedial site inspection and two (2) groundwater monitoring events (May 2021 and November 2021) were completed at the Site as required by the SMP during this reporting period. Per the SMP, future groundwater monitoring events for years 2022 on will be completed annual (June/July time frame).

The site inspection involving a walk-over of the Site covered by this PRR was performed to visually observe and document the use of the Site for restricted residential, commercial, and/or industrial use, confirm absence of site groundwater use, inspect the cover system integrity, and verify conformance with other requirements under the SMP. The groundwater monitoring events involved sample collection for VOC analysis, as further discussed in Sections 4.2.4 and 4.3.

The Site is currently vacant and secured from public access by a chain link fence. The Site is in compliance and functioning as intended in accordance with the SMP.

The results of the groundwater sampling, as further discussed in Section 4.3, generally indicate a decrease in cVOC concentrations compared to concentrations observed prior to remedial activities. Further monitoring will be completed as required by the SMP.

The completed IC/EC Certification forms and site photographs are included in Appendices A and B, respectively.



### 4.0 SITE MANAGEMENT PLAN

A site-wide SMP was prepared for the Site and approved by the Department in December 2019. Key components of the SMP are described below.

### 4.1 Institutional and Engineering Control (IC/EC) Plan

Since contaminated soil, groundwater, and soil vapor remains beneath the site, Institutional Controls and Engineering Controls (IC/ECs) are required to protect human health and the environment. The Engineering and Institutional Control Plan describes the procedures for the implementation and management of all IC/ECs at the Site. At the time of the site inspection, the Site is compliant with all institutional and engineering control requirements.

### 4.1.1 Institutional Controls (ICs)

The Site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may be used for: restricted residential; commercial, industrial use;
- The future parking area on the 1st floor will be restricted to use as a low occupancy area as defined in 40 CFR 761.3 prior to occupancy;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;



- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 3, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

### 4.1.2 Engineering Controls (ECs)

Engineering controls at the Site include:

- Cover System Exposure to remaining contamination in soil/fill at the Site is prevented by a final cover system placed over the site. This cover system is comprised of a minimum of 6-inches of existing asphalt pavement and subbase (northeastern exterior portion of the Site along former Burton Street), concrete-covered sidewalks, concrete building slabs, and 2-feet of crushed stone underlain by a demarcation layer (former sub-basement area and three (3) former oil-filled electrical equipment areas). The cover system must be maintained in compliance with the SMP.
- Suspended Concrete Slab Cap A concrete cap consisting of a minimum of 6-inches of concrete will be installed over the PCB-impacted suspended concrete slab in the future parking area prior to occupancy to prevent exposure to residual PCB-impacts in the suspended slab on the 1<sup>st</sup> floor. The cap must be maintained in compliance with the SMP.
- Active Sub-Slab Depressurization System An ASD system will be installed at
  the Site prior to building occupancy. The ASD system will be installed as
  outlined in the NYSDEC-approved ASD System Design Work Plan included
  as Appendix L of the SMP. NYSDEC will be notified prior to the start of

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- work activities related to the ASD system installation. Once installed, the ASD system must be operated and maintained in compliance with the Operation and Maintenance Plan, included in the SMP.
- The interior parking areas of the building, basement, and southwestern portion of the 1st floor will be outfitted with a dedicated ventilation system. The system will remove vapors/fumes associated with vehicle traffic generated inside the building and bring in outdoor ambient air. The ventilation system will be operated and maintained in accordance with the manufacturer's specifications while the interior areas are utilized for parking. Although considered an EC, this is not a remedial element under the BCP.

### 4.2 Excavation Work Plan

An Excavation Work Plan (EWP) was included in the NYSDEC-approved SMP for the Site. The EWP provides guidelines for the management of soil/fill material during intrusive actives. Future intrusive work that will penetrate the cover and/or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the EWP.

### 4.2.1 Site Redevelopment Activities

No significant redevelopment activities occurred during the past reporting period and the Site is currently vacant and secured by a chain-link fence.

Building debris was generated during the reporting period prior to the COVID-19 pandemic. The building debris remains on-site and was sampled by Benchmark-TurnKey, in accordance with the SMP, for off-site recycling. The data was sent to NYSDEC on March 17, 2020 and approved by NYSDEC for off-site recycling on March 20, 2020. The analytical data and correspondence are included in Appendix C. The material will be addressed once Site redevelopment activities resume.

### 4.2.2 Exported Materials

No materials were exported from the Site during the past reporting period.



### 4.2.3 Imported Materials

No materials were imported to the Site during the past reporting period.

### 4.3 Post-Remediation Media Monitoring and Sampling

Five (5) accessible on-site monitoring wells (RIMW-2, RIMW-4, RIMW-6, RIMW-9, and RIMW-10) were sampled in May and November 2021. Monitoring wells RIMW-11 and RIMW-12 were removed from the SMP sampling program with NYSDEC permission after the July 2020 sampling event (see correspondence in Appendix D). RIMW-7 was not sampled during either 2021 events due to the presence of building debris over the well location. RIMW-7 will be sampled during future events once this debris has been moved. The groundwater was sampled for Target Compound List (TCL) VOCs during both sampling events. The results of the groundwater sampling are summarized on Table 1 and the laboratory reports are included in Appendix D. Figure 4 contains monitoring well locations and analytical results for the monitoring wells with GWQS exceedances. Table 1 also includes the historic sample results from 2016 for MW-1 through MW-12, which represent pre-remedial conditions, and from 2019 for MWRI-2, RIMW-4, RIMW-6, RIMW-7, RIMW-9, RIMW-10, RIMW-11, and RIMW-12, which represent conditions immediately following groundwater injections, for comparative purposes. The results of the sampling are discussed below by location.

RIMW-2: TCE (6.4 ug/L) was the only compound detected above its respective above its GWQS of 5 ug/L. Prior to remedial actions TCE was present in RWMW-2 at 11 ug/l; it has since shown an approximate 47% decrease based on the average concentrations (5.8 ug/l) of the seven (7) sample rounds completed since the remedial injections (2019) which have fluctuated from 4.3 to 7.8 ug/l..

RIMW-4: cVOCs (cis-DCE, trans-DCE, and VC) were detected above their respective GWQS in the 2021 sampling events. The total concentration of cVOCs prior to the remedial injections was 425 ug/l. The post-injection monitoring have shown a downward trend in total cVOC concentrations. The total cVOCs detected 2021 results were 66 ug/l and 58 ug/l which is an



approximate 85% decrease in the total cVOC concentrations. TCE has not been detected above its GWQS for the past four (4) sample rounds (2 years).

RIMW-6: Due to heavy rains in May 2021, the basement area where RIMW-6 is located was underwater and it could not be sampled. In November 2021, no VOCs were detected above GWQS consistent with previous sampling events.

RIMW-7: This well was not sampled in 2021 due to demolition debris (as discussed in Section 4.2.1) present over the well location. Four (4) cVOCs were detected above their respective GWQS in the last sample event in September 2019 (cis-DCE, trans-DCE, TCE, and VC). The total cVOC concentrations detected at this monitoring well in September 2019 were 253 ug/l consistent with total cVOCs concentrations pre-injection, 225.5 ug/l.

RIMW-9: There were no exceedances of the GWQS for the 5<sup>th</sup> straight sampling event (September 2019, July 2020, November 2020, May 2021, and November 2021) at this location.

RIMW-10: No VOCs were detected above GWQS before or after remedial actions.

The results of the 2021 post-remediation groundwater sampling indicate there has been improvement in the groundwater quality at the Site since the remedial action have been completed. Groundwater monitoring will continue to be completed on an annual basis from 2022 on, as required by the SMP.

### 4.4 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the institutional controls and engineering controls employed on the Site are unchanged from the original design and/or previous certification. The Annual Certification includes a Site Inspection and completion of the NYSDEC's IC/EC Certification Form. The Site inspection is intended to verify that:



- the IC/ECs are in place, effective, performing as designed,
- nothing has occurred that would impair the ability of the controls to protect the public health and environment,
- nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls, and
- access is available to the Site to evaluate continued maintenance of such controls.

Inspection of the Site was conducted by Mr. Christopher Boron. P.G. of TurnKey Environmental Restoration, LLC, a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12, on April 22, 2022. At the time of the inspection, no redevelopment activities were occurring, and the Site was vacant. The cover system was in place and functioning as designed. Any future redevelopment activities that disturb the existing cover system are subject to the NYSDEC-approved SMP.

As discussed in Section 4.2.1, building demolition debris is present on top of the cover system. This material, generated prior to the COVID-19 pandemic, has been approved by NYSDEC for off-site recycling and will be addressed when redevelopment activities restart at the Site.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A.

### 4.5 Operation, Monitoring and Maintenance Plan

### 4.5.1 Active Sub-slab Depressurization System

An ASD system will be installed within the building prior to occupancy. The ASD System will be installed in accordance with the NYSDEC-approved ASD System Design Work Plan on a design-build approach that will allow the ASD system to be built using performance-based testing during the installation. The NYSDEC-approved SMP will be revised after the ASD system is installed to add required information and the Operation and Maintenance Manual will be provided in Appendix J of the SMP. As required by the Department-approved SMP, once installed and in operation, the ASD system must: (1) be operated continuously to maintain a negative pressure (below ambient atmospheric) under



the floor slab; (2) be visually inspected periodically to verify proper operation; and (3) annually inspected and certified that the system is performing properly and remains an effective engineering control (EC).

### 4.5.2 Ventilation System

Although not a remedial element under the BCP, a dedicated ventilation system will be installed within the interior parking areas of the building, basement, and southwestern portion of the first floor. The ventilation system will be installed, operated, and maintained to meet design air change criteria.



### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions for this reporting period and recommendations for the next reporting period are as follows:

- No significant redevelopment activities occurred during the past reporting period and the Site is currently vacant. The existing cover systems are intact and are performing as intended.
- Future redevelopment activities involving cover system modification or import/export of soil or stone materials will be subject to the SMP. In areas subject to redevelopment, Site access will be restricted via construction fencing and will be limited to authorized construction personnel.
- Groundwater sampling performed during the reporting period, as required by the SMP, indicates that there has been improvement in the groundwater quality at the Site since remedial actions have been completed.
- Groundwater sampling will be continued on an annual basis as outlined in the SMP from 2022 on; and off-site monitoring wells (MW-11 and MW-12) were approved by NYSDEC to be removed from the sampling program in 2020.



### 6.0 DECLARATION/LIMITATION

Personnel under direct supervision of Benchmark-TurnKey conducted the annual site inspection for BCP Site No. C915281, located in Buffalo, New York, according to generally accepted practices. This report complied with the scope of work provided to 847 Main Street, LLC and 791 Washington Street, LLC by Benchmark-TurnKey.

This report has been prepared for the exclusive use of the 847 Main Street, LLC and 791 Washington Street, LLC. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of 847 Main Street, LLC and 791 Washington Street, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark-TurnKey.



### 7.0 REFERENCES

- 1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.
- 2. TurnKey Environmental Restoration, LLC. Remedial Investigation & Alternatives Analysis Work Plan, Former Trico Plant, 791 Washington Street, Buffalo, New York. August 2013, Revised October 2013.
- 3. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. Remedial Investigation/Alternatives Analysis (RI/AA) Report. Former Trico Plant, BCP Site No. C915281, Buffalo, New York. January 2017.
- 4. New York State Department of Environmental Conservation Division of Environmental Remediation. 6 NYCRR Part 375 Environmental Remediation Programs. December 2006.
- 5. New York State Department of Environmental Conservation Division of Water Technical and Operation Guidance. *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.* June 1998.
- 6. New York State Department of Health. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006 (and subsequent updates).
- 7. New York State Department of Environmental Conservation Division of Environmental Remediation. *Decision Document, Former Trico Plant, Brownfield Cleanup Program, Buffalo, Erie County, Site No. C915281*. July 2017.
- 8. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. Remedial Action Work Plan, Former Trico Plant, BCP Site No. 915281, Buffalo, New York. July 2017.
- 9. Benchmark Environmental Engineering & Science, PLLC. ASD System Design Work Plan, Former Trico Plant, 791 Washington Street, Buffalo, New York. November 2017.
- 10. Benchmark Environmental Engineering & Science, PLLC. Remedial Action Work Plan Addendum, Former Trico Plant, BCP Site C915281. December 2019.
- 11. Benchmark Environmental Engineering & Science, PLLC. Loading Dock Concrete & Soil Sampling Work Plan, Former Trico Plant (BCP Site No. C9152811). November 18, 2019.
- 12. Benchmark Environmental Engineering & Science, PLLC. Concrete-Slab Sampling Work Plan for Areas Formerly Containing Oil-filled Electrical Equipment, Former Trico Plant (BCP Site No. C915281). November 2019.
- 13. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. Final Engineering Report, Former Trico Plant, BCP Site No. C915281, Buffalo, New York. December 2019.



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### **TABLES**



### TABLE 1 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

NA -230 -126 -143 NLS NLS NLS -96 NA -122 -85 -85 NLS NLS NLS NLS

### GROUNDWATER MONITORING FORMER TRICO PLANT **BUFFALO, NEW YORK**

PARAMETER 1	GWQS <sup>2</sup>	RI MW-1				RI MV	W-2				RI MW-3	RI MW-4			RI MW-5	RI MW-6							RI MW-7 RI MW							RI MW-8							
		06/14/16	06/14/16	07/01/19	08/09/19	09/13/19	07/21/20	11/20/20	05/07/21	11/09/21	06/14/16	06/14/16	07/01/19	08/09/19	09/14/19	07/21/20	11/20/20	05/07/21	11/09/21	06/14/16	06/14/16	07/01/19	08/09/19	09/13/19	07/21/20	11/20/20	05/07/21	11/09/21	06/14/16	07/01/19	08/09/19	09/13/19	07/21/20	11/20/20	05/07/21	11/09/21	06/14/16
Volatile Organic Compounds	(VOCs) - ug	<u>/L</u>																																			
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND		ND	0.6 J	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND			ND	0.57 J	ND	ND					ND
2-Butanone (MEK)	50	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND			ND	ND	12 J	ND					ND
Acetone	50	ND	44	ND	5.8 J	ND	ND	ND	ND	ND	3 J	3.2 J	ND	12	12	8.8 J	13 J	5.4 J	6 J	ND	3.8 J	ND	4.4 J	ND	ND	ND			14	ND	6.8 J	ND					4.3 J
Benzene	1	ND	ND	1.0	ND	ND	ND	ND	ND	ND	0.73 J	ND	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND					ND
Carbon disulfide	120	ND	0.96 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	0.98 J	3	ND	0.37 J	ND	ND	0.38 J	ND	ND	ND	ND	ND			0.42 J	0.33	ND	ND					ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Was Not		ND	ND	ND	ND					ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Sampled		ND	ND	ND	ND		Was Not			ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Due to		ND	ND	ND	ND	Sampled	Sampled	Sampled S	Sampled	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	110	ND	120	180	34	7.7	8.9	ND	1.9	2.2	3.1	2.8	3.6	3.5	heavy	4.4	36 F1		40	39	Due to			Due to	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	rains		ND	ND	ND	ND	Bldg	Bldg	Bldg	Bldg	ND
Methylcyclohexane		0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	flooding		ND	ND	ND	ND	Debris	Debris	Debris	Debris	ND
Methyl tert butyl ether (MTBE)	) 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	ND	ND	2.1 J	1.8	1.5	ND	ND	ND	ND	ND	ND	ND	well		ND	ND	ND	ND	Over	Over	Over	Over	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	location		ND	ND	ND	ND	Well	Well	Well	Well	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	iocation		ND	ND	ND	ND					ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			0.54 J	ND	ND	ND					ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	0.53 J		ND					ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200	160	ND	89	230 D	54	50	39	ND	1.3	1.5	2.2	ND	1.8 J	ND		2.1	100 J	110 D	110	100					ND
Trichloroethene	5	ND	11	4.4	6.1	5.3	6.8	7.8	4.3	6.4	ND	82	78	1.3	32	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			89 J	110 D	100	100					ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	8.7	ND	9.3	73	17	8	9.6	ND	ND	ND	ND	ND	ND	ND			ND	15	12	14					ND
Total cVOCs		0	11	4.4	6.1	5.3	6.8	7.8	4.3	6.4	0	424.7 J	356.7	1.3	250.3	484.1	105	66	58	0	3.2	3.7	5.3	2.8	5.4 J	3.5	0	6.5	225.54	280.57	262	253	0	0	0	0	0
Total VOCs	-	0.64	55.96	5.4	22.9	5.3	6.8	7.8	4.3	6.4	4.66	429.9 J	391.4 J	27.86	263.28	495.9 J	120.1	73.3	65.0	0	7.38	3.7	19.7	2.8	5.4 J	3.5	0	6.5	239.96	281.43	280.8 J	253	0	0	0	0	4.3
Field Measurements (Units as	Indicated)																																				
pH (units)	6.5 - 8.5	7.6	7.2	NA	7.39	7.33	7.3	7.04	7.24	7.22	7.5	7.5	NA	7.08	6.9	7.07	7.17	7.3	7.36	7.8	7.4	NA	7.74	7.53	7.55	7.49	NS	7.62	7.2	NA	6.72	6.63	NS	NS	NS	NS	7.5
Temperature (oC)	-	11.3	8.9	NA	12.5	12.4	13.1	11.8	8.2	12.8	9.5	9.5	NA	12.9	13.7	15.5	11.7	6.8	12.1	10.2	9.4	NA	14.7	13.2	12.2	11.6	NS	12.9	9.5	NA	12.3	12.2	NS	NS	NS	NS	9.8
Specific Conductance (uS)	-	1340	5180	NA	5199	5093	6784	5412	5838	7521	4762	3870	NA	3776	3889	3741	5831	3848	3789	3282	2350	NA	1643	2038	1914	2048	NS	1907	1793	NA	1797	1960	NS	NS	NS	NS	2184
Turbidity	-	>1000	131	NA	85.2	111	60.5	34.4	65	9.12	>1000	>1000	NA	>1000	>1000	>1000	>1000	>1000	>1000	>1000	47.9	NA	352	92.8	143	109	NS	49.2	113	NA	57.3	15.4	NS	NS	NS	NS	172
DO (ppm)	-	2.61	5.24	NA	1.3	4.05	1.48	1.91	2.68	2.88	4.34	2.75	NA	2.01	1.11	1.48	3.15	3.49	1.53	3.44	4.98	NA	2.82	2.35	1.71	1.95	NS	1.57	5.34	NA	0.46	1.33	NS	NS	NS	NS	3.66
ORP (mV)		-25	-248	NA	-63	-163	196	190	197	252	41	-58	NA	-200	-280	-125	-76	-80	-246	-34	-209	NA	-152	-106	-111	-57	NS	-133	-70	NA	-251	-245	NS	NS	NS	NS	-204
PARAMETER 1	GWQS <sup>2</sup>	06/14/16	11/20/16	11/28/2016 - DUP	12/00/16		RI MW-9	00/42/40	07/24/20	44/20/20	05/07/21	RI MW-10  11/09/21 06/14/16 1/14/2016 DUI 7/1/19 8/9/19 9/919 7/21/20 11/20/20				14/20/20	RI MW-11 <sup>3</sup> 11/20/20 11/28/16 7/1/19 8/9/19 9/13/19 7/21/20 11/20/20 5/7/2						E/7/24	Ri MW-12 <sup>3</sup> 1.11/9/21 1.11/28/16 7/11/19 8/9/19 9/13/19 7/21/20 1.11/20/20 5/7/21 1.1/9					11/9/21								
Volatile Organic Compounds	(VOCs) - un		11/20/10	11/20/2010 - DOF	12/03/10	0//01/13	00/03/13	03/13/13	07721720	11/20/20	03/07/21	11/03/21	00/14/10	114/2010 D	, ,,,,,,	0/3/13	3/3/13	1121120	11/20/20	11/20/20	11/20/20	11/20/10	771713	0/3/13	3/13/13	1121120	11/20/20	SITIZI	11/3/21	11/20/10	171713	0/3/13	3/13/13	7721720	11/20/20	3/1/21	11/3/21
1.1-Dichloroethene	5	ND.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	11	23	4.1 J	ND	ND	ND	ND	2.4 J	ND	9.6 J	ND	ND	ND	ND	ND	ND	ND	8.6 J	ND	ND	NLS	NLS	NLS	ND	ND	8.1 J	ND	ND		NLS	NLS
Acetone	50	16 J	6.7	5.8	ND	ND	5.5 J		26	28 J	3.6 J	19 J	20	19	ND	4.6 J	ND	ND	ND	ND	ND	3 J	ND	5.2 J	ND	ND	NLS	NLS	NLS	8.5	ND	6.6 J	ND	ND	NLS	NLS	NLS
Benzene	1	ND.	ND	ND.	ND	ND	0.0 0	ND.	ND.	20 J	3.0 J	ND	ND.	ND	ND	4.0 J	ND	ND	ND	ND	ND	0.54	ND	J.Z J	0.7	ND	NLS	NLS	NLS	0.34 J	ND	0.42 J	ND	ND	NLS	NLS	NLS
Carbon disulfide	120	1.4 J	ND ND	ND	ND	0.23 J	0.22 J	ND	1.5	ND	0.34 J	ND	1.9	1.9	ND	ND	ND	ND	ND	ND	ND	ND.	0.27 J	0.65 J	ND.	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
Chlorobenzene	5	ND ND	ND	ND	ND	ND	ND	ND	ND.	ND	0.04 0 ND	ND	ND.	ND.	ND	ND	ND	ND	ND	ND ND	ND	ND	ND.	ND.	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
Chloroethane	5	ND ND	ND.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND		NLS	NLS
Chloroform	7	ND	ND	ND	ND	0.99 J	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	0.65 J	0.4 J	ND.	ND	ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
cis-1,2-Dichloroethene	5	1.8 J	3.1	2.2 J	ND	ND	ND	ND	2.8	4.1	2.5	2.7	ND	ND	ND	ND.	ND.	ND	ND	ND ND	ND	2.8	11	1.4	2.7	2.2	NLS	NLS	NLS	ND	ND	2.5	1.6 F2	ND	NLS	NLS	NLS
Cyclohexane		ND	ND.	ND	ND.	ND	ND	ND	ND.	ND.	Z.J ND	ND.	ND	ND	ND	ND	ND	ND	ND	ND.	ND	ND.	ND.	ND	ND	ND.	NLS	NLS	NLS	0.28 J	ND	ND.	ND.	ND	NLS	NLS	NLS
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND.	ND	ND	ND	ND	NLS	NLS	NLS
Methyl tert butyl ether (MTBE)	10	ND ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
Methylene chloride	5	ND	ND ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	0.93 J	NLS	NLS	NLS	ND	ND	ND	ND	ND		NLS	NLS
Styrene	5	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	U.93 J	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
Tetrachloroethene	5	4.200	8.5	7.2	4.9	ND	0.38 J	1	0.68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
Toluene	5	<b>4,200</b>	8.5 ND	7.2	4.9	0.71 J	U.36 J	ND	U.00 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS	NLS	NLS
	5	ND ND	ND ND	ND	ND	U./ I J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	NLS	NLS	NLS	ND	ND	ND	ND	ND	NLS		NLS
trans-1,2-Dichloroethene Trichloroethene	5	7	1	0.74	0.45 J	11	7.8	4.2	3.7	ND	0.88 J	ND ND	2.5	2.8	1.9	2.4	3.4	2	3.2	1.9	2	ND	ND	ND	ND	ND	NLS	NLS	NLS	0.33 J	ND	1.1	ND	ND	NLS	NLS NLS	NLS NLS
			ND	0.74	0.45 J	TT ND	7.6	4.2	3.1	ND	U.00 J	ND	2.5	2.0	1.9	2.4	3.4	Z ND	3.2		_	ND	ND	ND	ND	ND				U.33 J	ND	I.I	ND	ND			NLS
Vinyl chloride	2	ND	ND	ND	ND F 2F	ND	0.4C	ND F.O	7 40 L	ND 4.4.1	ND ND	ND 27.1	ND 2.E	ND	ND 4.0	ND 2.4	ND 2.4	ND	ND	ND 1.0	ND	ND	ND 4.4	ND 4.4	ND 0.7	ND	NLS	NLS	NLS	ND	ND	ND	ND 4.C	ND	NLS	NLS	
Total cVOCs		4208.8	12.6	10.14	5.35				7.100		3.38 J	2.7 J	2.5	2.8		2.4	3.4	2 42 1	3.2	1.9	2	2.8	1.1	1.4	2.7		NLS	NLS	NLS	0.61	0	3.6	1.6			NLS	NLS
Total VOCs		4229.5	19.3	15.94	5.35	12.93	24.9	48.2	38.78 J	32.1 J	7.32 J	21.7 J	24.4	26.1	2.35	17.25	3.8	2.43 J	3.2	1.9		6.34	1.37	15.85	3.4	3.13 J	NLS	NLS	NLS	9.45	U	18.72	1.6	ND	NLS	NLS	NLS
Field Measurements (Units as		7.0	7.00	7.00	7.07		0.46	1 0.00	7.04	7.44	7.05	7.40		7.4		7.47	7.47	7.44	7.00	7.44	7.57	7.40		7.4	7.5	7.11	NII O	L NII O	LNIC	7.50		7.40	7.44	7.44	NII O	NII O	NII O
pH (units)	6.5 - 8.5	7.2	7.36	7.36	7.27	NA	6.49	0.00	7.24	7.44	7.65	7.42	7.1	7.1	NA	7.47	7.47	7.44		7.44	7.57		NA	7.4		7.44	NLS	NLS	NLS	7.53	NA	7.43	7.44	7.41		NLS	NLS
Temperature (oC)		10.5	10.1	10.1	10.8		12.8	13		13.4	9	15.1	10.4			13.6	13.6			8.6	13.2		NA	14.3	15.1	18.1	NLS	NLS				14	16.5	15.4		NLS	NLS

A -135 -208 -174 -92 -103 -170 167 167 NA -89 127 176 181 201 170 -92

### Turbidity

- Notes:

  1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds or analytes were reported as non-detect.

  2. GW/GS Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Class GA (TOGS 1.1.1)

  3. Monitoring weis IMW-11 and IMW-12 no longer require monitoring per NYSDEC o-mail acknowledgment on 11/16/20.

- enntions:

  GWQS Groundwater Quality Standard

  ND = Parameter not detected above laboratory detection limit.

  "." = No value available for the parameter; Parameter not analysed for.

  NLS = No Longer Sampled per NYSDEC approval.
- B = Compound was found in the blank and the sample. F1 = MS and/or MSD Recovery is outside acceptance limits.

F2 = MS/MSD RPD exceeds control limits.

### **FIGURES**

### FIGURE 1









SCALE IN FEET (approximate)

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0092-016-001

DATE: MAY 2022 DRAFTED BY: RFL

### SITE LOCATION AND VICINITY MAP

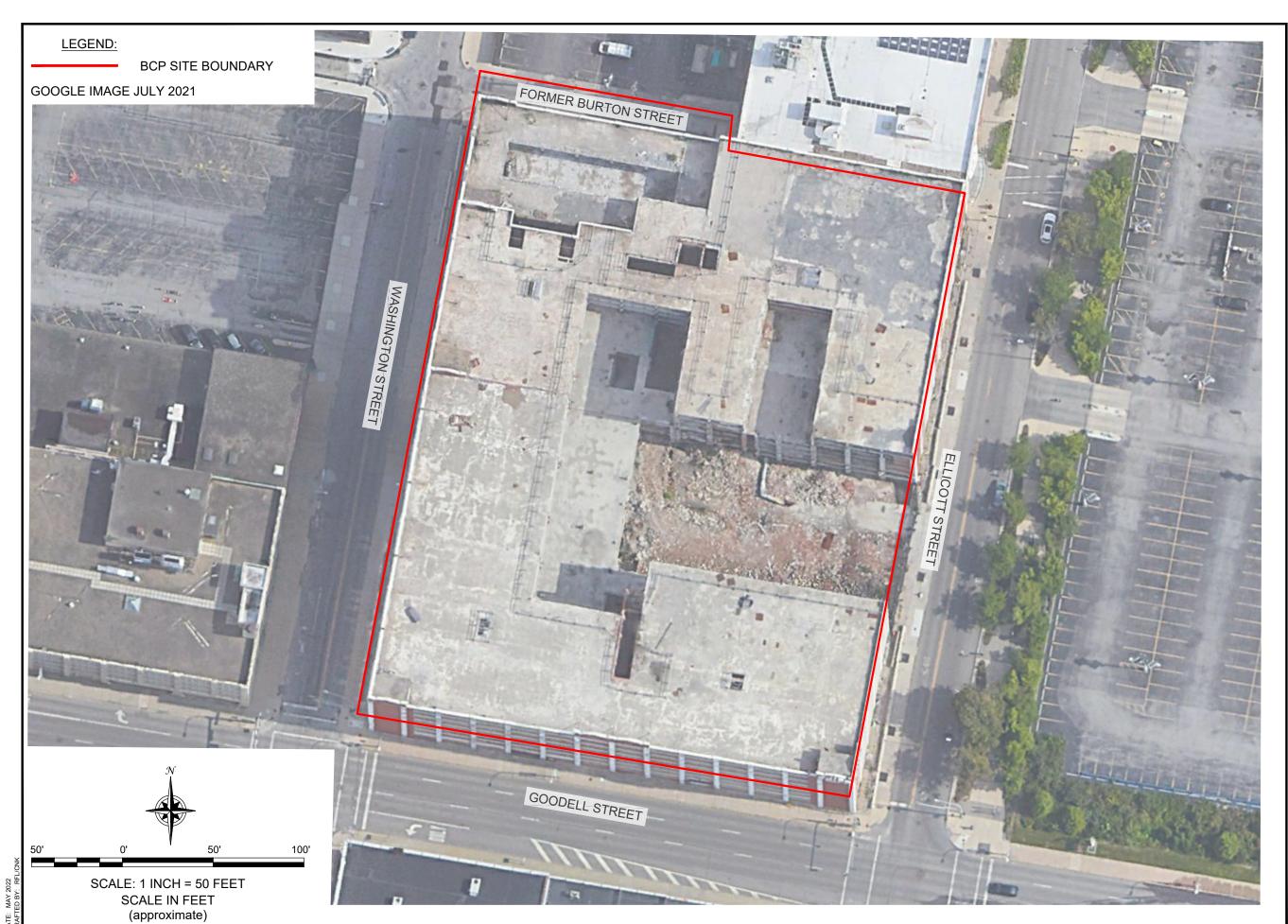
PERIODIC REVIEW REPORT

FORMER TRICO PLANT (BCP SITE NO. C915281) 791 WASHINGTON STREET BUFFALO, NEW YORK

PREPARED FOR

847 MAIN STREET, LLC & 791 WASHINGTON STREET, LLC

DISCLAIMER: PROPERTY OF BENCHMARKEI/EDVERORONEMENILAE/EDISIBERTROIG. & SCHENCE; PPELC.C. & TURNKEY ENVIRONMENTALIRES DRAIDON, LIC. (MROPORTIANII:) ISHIS DRAWING PRINT IIS LIOXINED FOR MULTUAL ASSSSSTANCE: AND ASSSSOCIASS SIDELECTO CRECALALA TANANTIMEMENIORORONIANTIVO OD OLATARINE RECROSINO TIVO BO BISCUISSEOSED GEPROPRODED CLIANY FORMITORIN III DENETARTUES PARTIES PARTIES PARTIES BANGROBORS TRAUTORISES & VIUTRUETIS ENVIRIOUEN TUENSENDENT TEMBENOISEMIRKOF BENICEMARKO EMETIRONIAENTE ERIGIDI REGEDE GOSCIENCE & PURINKER CHINKER CHIN



## SITE PLAN (AERIAL)

PERIODIC REVIEW REPORT

FORMER TRICO PLANT (BCP SITE NO. 791 WASHINGTON STREET

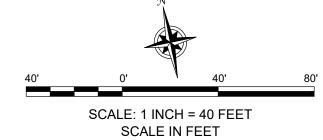
BUFFALO, NEW YORK

PREPARED FOR IAIN STREET, LLC & 791 WASHINGTON STREET, LL

JOB NO.: (

FIGURE 2





(approximate)

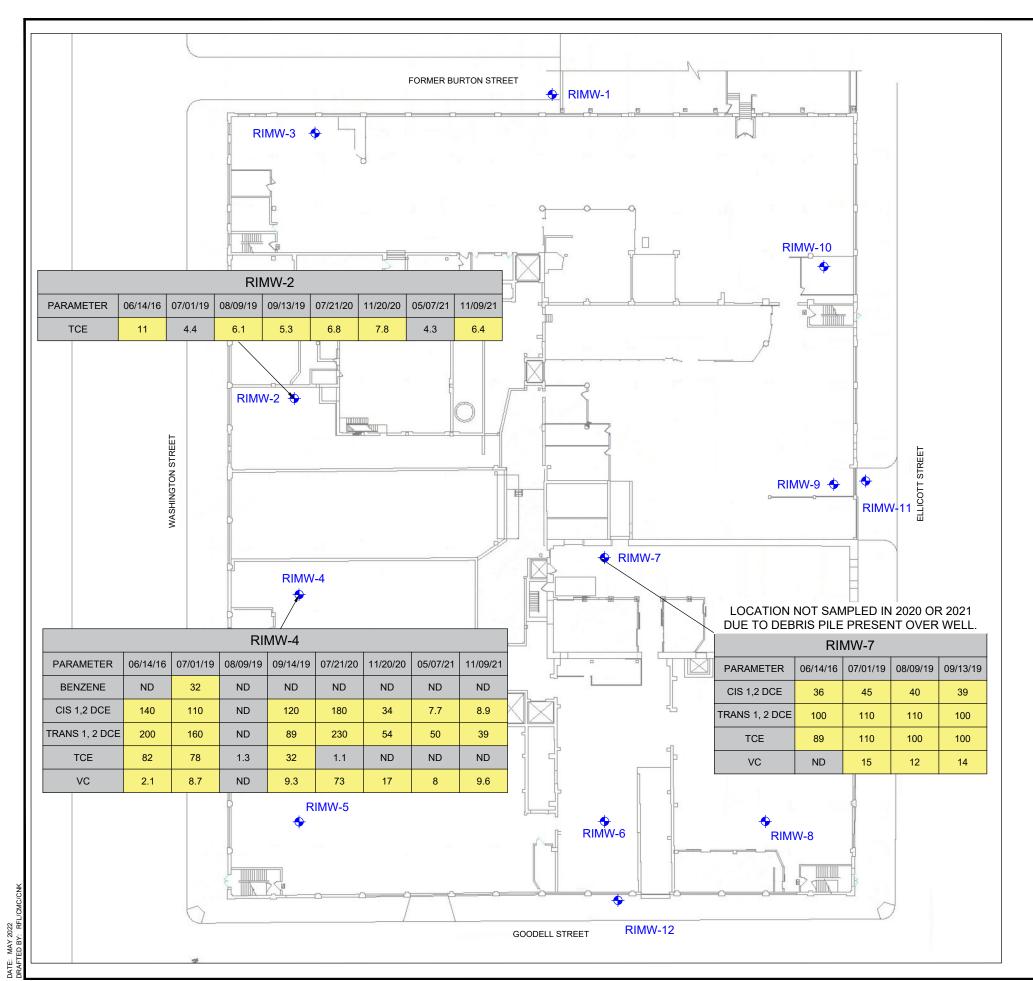
### SYSTEM MAP COVER

BENCHMARK

FORMER TRICO PLANT (BCP SITE NO. C915281)
791 WASHINGTON STREET SITE MANAGEMENT PLAN

FIGURE 3

2558 HAMBURG TURNPIKE, (716)



### LEGEND:

RIMW-2 💠

MONITORING WELL LOCATION

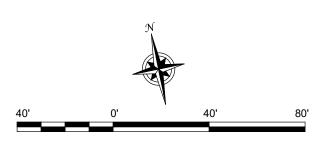
WELL NUMBER PARAMETER 06/14/16-SAMPLE DATE TCE CONCENTRATION (ug/l)

### NOTES:

RESULTS COMPARED TO TOGS 1.1.1 GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES (GWQS/GV).



- CIS 1, 2 DCE = CIS-1,2-DICHLOROETHENE TRANS 1, 2 DCE = TRANS-1,2-DICHLOROETHENE PCE = TETRACHLOROETHENE TCE = TRICHLOROETHENE VC = VINYL CHLORIDE
- ug/I = MICROGRAMS PER LITER
- COMPLETE GROUNDWATER SUMMARY RESULTS PROVIDED ON TABLE 1 OF THE PRR.
- CVOC MEANS CHLORINATED VOLATILE ORGANIC COMPOUNDS LISTED ABOVE IN NOTE 3



SCALE: 1 INCH = 40 FEET SCALE IN FEET (approximate)

# CVOC POST REMEDIAL SAMPLING GROUNDWATER QUA

FIGURE 4

NO.: 0092-016 JOB 791 WASHINGTON STREET, LLC

### **APPENDIX A**

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORMS





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



Sit	e No.	C915281	Site Details		Box 1	
Sit	e Name Fo	rmer Trico Plant				
Cit Co	e Address: 7 y/Town: Bu unty:Erie e Acreage: 2		Zip Code: 14203			
Re	porting Perio	od: April 26, 2021 to April 26	5, 2022			
					YES	NO
1.	Is the inform	mation above correct?			X	
	If NO, inclu	de handwritten above or on	a separate sheet.			
2.		or all of the site property been nendment during this Report	en sold, subdivided, merged, or ui ing Period?	ndergone a		X
3.		peen any change of use at the RR 375-1.11(d))?	ne site during this Reporting Perio	od		X
4.	Have any for or at the	een issued		X		
	-		thru 4, include documentation outlined the state of the s			
5.	Is the site of	currently undergoing develop	oment?		X	
					Box 2	
					YES	NO
6.		ent site use consistent with the Residential, Commercial, an	` '		X	
7.	Are all ICs	in place and functioning as o	designed?	X		
	IF TI		ESTION 6 OR 7 IS NO, sign and e REST OF THIS FORM. Otherwise		and	
A	Corrective M	easures Work Plan must be	submitted along with this form t	to address tl	nese iss	ues.
 Sig	nature of Ow	ner, Remedial Party or Design	 nated Representative	Date		

		Box 2	Α
		YES	NO
8.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		X
	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)	X	
	If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		
SITI	E NO. C915281	Box	x 3

### **Description of Institutional Controls**

<u>Parcel</u> <u>Owner</u> **Institutional Control** 

111.31-1-1.11 791 Washington Street, LLC

Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan

O&M Plan IC/EC Plan

Monitoring Plan

- . Prohibition of use of groundwater.
- . Restricted Residential Use.
- . Soil Vapor Intrusion Evaluation for any future structures.
- . Soil Management or Excavation Work Plan for any future intrusive work.

Box 4

### **Description of Engineering Controls**

**Engineering Control** <u>Parcel</u>

111.31-1-1.11

Vapor Mitigation Cover System

. Operation and Maintenance Plan for the Sub-slab Depressurization System.

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;						
	<ul> <li>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.</li> </ul>						
	YES NO						
	X						
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						
	X						
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. C915281

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.

Peter Krog	at	4 Centre Drive, Orchard Park, NY 14127					
print name	Owner	print business address					
am certifying as		(Owner or Reme	dial Party)				
for the Site named in the Site I	Details Section	of this form.	2				
Signature of Owner, Remedial	Party, or Design	gnated Representative Date					
Rendering Certification							

### **EC CERTIFICATIONS**

Box 7

### **Professional Engineer 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.

Thomas H. Forbes, P.E.	Suite 330, Buffalo NY 14218
print name	print business address
am certifying as a Professional Engineer for the _	Owner  Owner  Owner Pemedial Party)
	PONSH. FOR

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Required for PF)

Date

### **APPENDIX B**

**PHOTOGRAPHIC LOG** 



### **SITE PHOTOGRAPHS**

### Photo 1:



Photo 3:

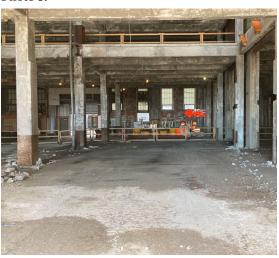


Photo 2:



Photo 4:



- Photo 1: Asphalt cover system (Former Burton Street) on north side of building looking east.
- Photo 2: 2-foot crushed stone cover system over former subbasement in central portion of the building looking north.
- Photo 3: Concrete cover system (covered with plywood) in former loading dock area, looking west.
- Photo 4: 2-foot crushed stone cover system in former transformer room in central portion of the building, looking southwest.

# **SITE PHOTOGRAPHS**

# Photo 5:



Photo 7:

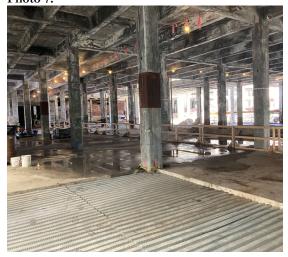


Photo 6:



Photo 8:



Photo 5: Concrete cover system in northern portion of the building, looking west.

Photo 6: Concrete cover system in south portion (basement) of the building, looking west.

Photo 7: Metal decking installed in areas of the building (1st floor) where suspended concrete over basement was previously removed, looking northeast.

Photo 8: Concrete cover system in the eastern central portion of the building, looking south.

# **APPENDIX C**

DEMOLITION DEBRIS SAMPLING AND CORRESPONDENCE INFORMATION



From: Walia, Jaspal (DEC)
To: Chris Z. Boron

Cc: Tom H. Forbes, Michael McGuigan, Tom A. Behrendt

Subject: RE: Former Trico Plant Demolition Debris

Date: Friday, March 20, 2020 10:36:36 AM

Attachments: <u>image001.png</u>

Chris,

I have reviewed the materials data. Based upon our conversation today and review of the data, the materials can be removed from the site to an acceptable facility.

Thanks,

Jaspal

From: Chris Z. Boron <cboron@bm-tk.com> Sent: Tuesday, March 17, 2020 10:18 AM

To: Walia, Jaspal (DEC) < jaspal.walia@dec.ny.gov>

Cc: Tom H. Forbes <TForbes@bm-tk.com>; Michael McGuigan <mmcguigan@kroggrp.com>; Tom A.

Behrendt <TBehrendt@bm-tk.com>

**Subject:** Former Trico Plant Demolition Debris

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello Jaspal,

Hope all is well.

Some demolition debris has been generated at Trico from the on-going redevelopment activities. The concrete, brick, and block are from areas outside the former mass demolition area. As required by the Site Management Plan, representative composite samples were collected from the material and analyzed for PCBs. Benchmark collected the samples on February 21<sup>st</sup>. Wargo provided an excavator to dig into the piles and generate the 5-point composite samples. The attached photos show the three (3) areas of debris that were sampled. No material has been added to these piles since the sampling was completed.

We estimated that approximately 715 cubic yards of demo debris are present in the three (3) areas sampled. The analytical results are in the report titled L2007958. Demo Debris (DD) Comp #1 was collected from an estimated volume of 220 cyd, DD Comp #2 from an estimated volume of 215 cyds and DD Comp #3 from an estimated volume of 280 cyds. The PCB sample results were 0.319 mg/kg, 0.382 mg/kg, and 0.162 mg/kg, respectively, and the material is acceptable to be taken off-site for recycling. Similar to the mass demolition debris that had PCB concentration less than 1 mg/kg, the material will be taken to Iron City for recycling.

In addition to the demo debris, we also collected two (2) composite samples from the limestone blocks that was used to construct the wall in the old icehouse that will be removed. The analytical results are in the report titled L2009474. Sample LS-North had a PCB result of 0.32 mg/kg and LS-

South had a PCB result of 0.0165 mg/kg. The PCB concentrations are less than 1 mg/kg and the material is acceptable to be taken off-site for recycling (Iron City).

We would like to Department's approval to remove these materials from the Site. Please let us know if you have any questions or would like to discuss.

Regards,

# Christopher Boron, P.G.

Sr. Project Manager



Strong Advocates | Effective Solutions | Integrated Implementation 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218 Phone: (716) 856-0599, Cell Phone: (716) 864-2726

www.benchmarkturnkey.com

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<u>Virus Warning:</u> While reasonable precautions have been taken to protect against viruses in this message, we accept no responsibility for any damages arising from the potential presence of such viruses.

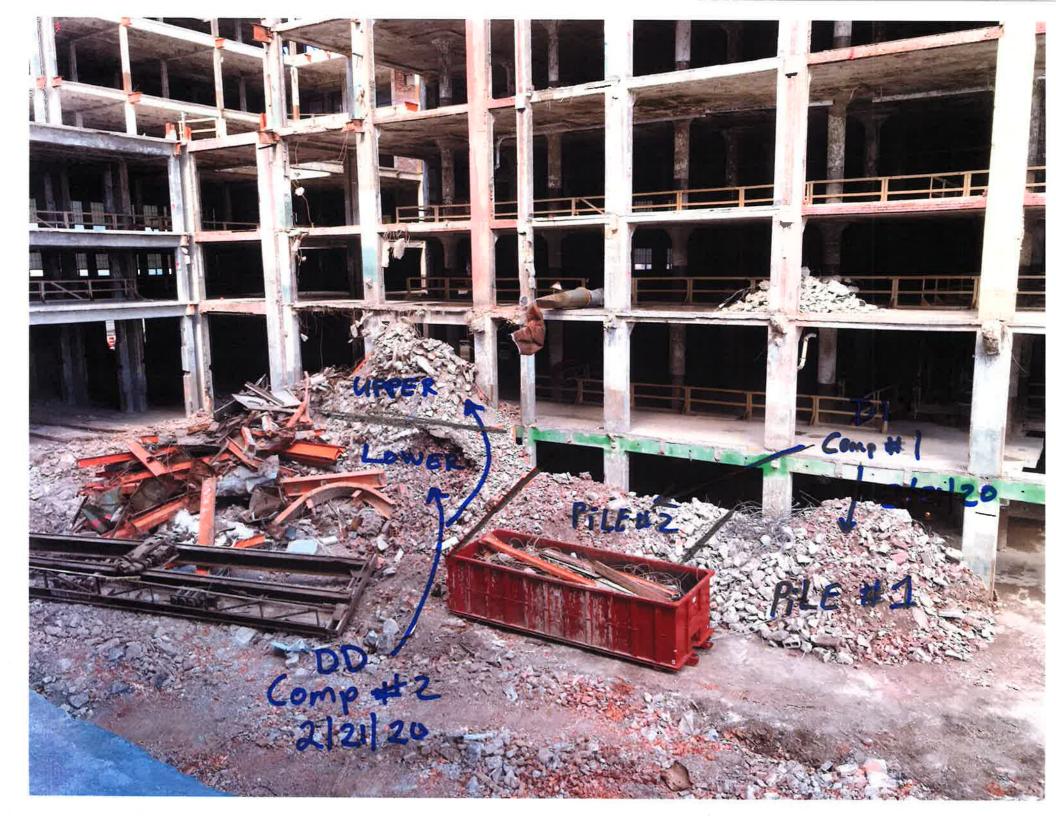
<u>Contracts:</u> Nothing in this message shall be construed as legally binding upon Benchmark or TurnKey.

<u>Professional Opinions:</u> Views expressed in this message may only be relied upon as professional opinion if and when provided by principals of the Companies to authorized representatives of the organization with which we have an active client-engineer relationship and when directly pertaining to a binding contract scope of work.

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# ANALYTICAL REPORT

Lab Number: L2007958

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Chris Boron
Phone: (716) 856-0599

Project Name: FORMER TRICO PLANT

Project Number: 0092-016-001-006-06B

Report Date: 02/28/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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



L2007958

02/28/20

02/21/20

Lab Number:

02/21/20 12:20

**Project Name:** FORMER TRICO PLANT **Project Number:** 0092-016-001-006-06B

DD COMP #3 2/21/20

6-001-006-06B Report Date:

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2007958-01	DD COMP #1 2/21/20	BRICK	BUFFALO	02/21/20 12:10	02/21/20
L2007958-02	DD COMP #2 2/21/20	BRICK	BUFFALO	02/21/20 12:15	02/21/20

**BUFFALO** 

**BRICK** 



L2007958-03

# **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:FORMER TRICO PLANTLab Number:L2007958Project Number:0092-016-001-006-06BReport Date:02/28/20

# **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.

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:

Title: Technical Director/Representative Date: 02/28/20

Custen Walker Cristin Walker

# **ORGANICS**



# **PCBS**



Project Name:FORMER TRICO PLANTLab Number:L2007958

**Project Number:** 0092-016-001-006-06B **Report Date:** 02/28/20

**SAMPLE RESULTS** 

Lab ID: L2007958-01 Date Collected: 02/21/20 12:10

Client ID: DD COMP #1 2/21/20 Date Received: 02/21/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Brick Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 02/24/20 08:35
Analytical Date: 02/25/20 13:32 Cleanup Method: EPA 3665A

Analytical Date: 02/25/20 13:32 Cleanup Method: EPA 3665A
Analyst: AWS Cleanup Date: 02/25/20
Percent Solids: 96% Cleanup Method: EPA 3660B
Cleanup Date: 02/25/20

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by G	C - Westborough Lab						
Aroclor 1016	ND		ug/kg	91.0	8.08	1	Α
Aroclor 1221	ND		ug/kg	91.0	9.12	1	Α
Aroclor 1232	ND		ug/kg	91.0	19.3	1	Α
Aroclor 1242	ND		ug/kg	91.0	12.3	1	Α
Aroclor 1248	286		ug/kg	91.0	13.6	1	Α
Aroclor 1254	ND		ug/kg	91.0	9.96	1	Α
Aroclor 1260	32.6	J	ug/kg	91.0	16.8	1	В
Aroclor 1262	ND		ug/kg	91.0	11.6	1	Α
Aroclor 1268	ND		ug/kg	91.0	9.43	1	Α
PCBs, Total	319	J	ug/kg	91.0	8.08	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	Α
Decachlorobiphenyl	47		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	55		30-150	В
Decachlorobiphenyl	48		30-150	В



**Project Name:** FORMER TRICO PLANT Lab Number: L2007958

**Project Number:** 0092-016-001-006-06B **Report Date:** 02/28/20

**SAMPLE RESULTS** 

Lab ID: L2007958-02 Date Collected: 02/21/20 12:15

Client ID: DD COMP #2 2/21/20 Date Received: 02/21/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Brick Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 02/24/20 08:35

Analytical Date: 02/25/20 13:44

Analyst: AWS

Percent Solids: 95%

Cleanup Method: EPA 3665A

Cleanup Date: 02/25/20

Cleanup Method: EPA 3660B

Cleanup Date: 02/25/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westb	orough Lab						
Aroclor 1016	ND		ug/kg	88.9	7.90	1	Α
Aroclor 1221	ND		ug/kg	88.9	8.91	1	Α
Aroclor 1232	ND		ug/kg	88.9	18.8	1	Α
Aroclor 1242	ND		ug/kg	88.9	12.0	1	Α
Aroclor 1248	183		ug/kg	88.9	13.3	1	Α
Aroclor 1254	154		ug/kg	88.9	9.73	1	В
Aroclor 1260	44.6	J	ug/kg	88.9	16.4	1	Α
Aroclor 1262	ND		ug/kg	88.9	11.3	1	Α
Aroclor 1268	ND		ug/kg	88.9	9.21	1	Α
PCBs, Total	382	J	ug/kg	88.9	7.90	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	Α
Decachlorobiphenyl	61		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	70		30-150	В
Decachlorobiphenyl	59		30-150	В



**Project Name:** FORMER TRICO PLANT **Lab Number:** L2007958

**Project Number:** 0092-016-001-006-06B **Report Date:** 02/28/20

**SAMPLE RESULTS** 

Lab ID: L2007958-03 Date Collected: 02/21/20 12:20

Client ID: DD COMP #3 2/21/20 Date Received: 02/21/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Brick Extraction Method: EPA 3540C Analytical Method: 1,8082A Extraction Date: 02/24/20 08:35

Analytical Date: 02/25/20 13:56 Cleanup Method: EPA 3665A
Analyst: AWS Cleanup Date: 02/25/20
Percent Solids: 95% Cleanup Method: EPA 3660B

Percent Solids: 95% Cleanup Method: EPA 3660 Cleanup Date: 02/25/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - West	borough Lab						
Aroclor 1016	ND		ug/kg	90.8	8.06	1	Α
Aroclor 1221	ND		ug/kg	90.8	9.10	1	Α
Aroclor 1232	ND		ug/kg	90.8	19.2	1	Α
Aroclor 1242	ND		ug/kg	90.8	12.2	1	Α
Aroclor 1248	162		ug/kg	90.8	13.6	1	Α
Aroclor 1254	ND		ug/kg	90.8	9.93	1	А
Aroclor 1260	ND		ug/kg	90.8	16.8	1	Α
Aroclor 1262	ND		ug/kg	90.8	11.5	1	А
Aroclor 1268	ND		ug/kg	90.8	9.41	1	А
PCBs, Total	162		ug/kg	90.8	8.06	1	А

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Calumn
	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	Α
Decachlorobiphenyl	49		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	55		30-150	В
Decachlorobiphenyl	49		30-150	В



Project Name:FORMER TRICO PLANTLab Number:L2007958

**Project Number:** 0092-016-001-006-06B **Report Date:** 02/28/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 02/25/20 12:57

Analyst: AWS

Extraction Method: EPA 3540C
Extraction Date: 02/24/20 08:35
Cleanup Method: EPA 3665A
Cleanup Date: 02/25/20
Cleanup Method: EPA 3660B
Cleanup Date: 02/25/20

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC -	Westboroug	h Lab for s	ample(s):	01-03	Batch:	WG134	3716-1
Aroclor 1016	ND		ug/kg	96.3		8.55	А
Aroclor 1221	ND		ug/kg	96.3		9.65	А
Aroclor 1232	ND		ug/kg	96.3		20.4	Α
Aroclor 1242	ND		ug/kg	96.3		13.0	Α
Aroclor 1248	ND		ug/kg	96.3		14.4	Α
Aroclor 1254	ND		ug/kg	96.3		10.5	Α
Aroclor 1260	ND		ug/kg	96.3		17.8	Α
Aroclor 1262	ND		ug/kg	96.3		12.2	А
Aroclor 1268	ND		ug/kg	96.3		9.98	Α
PCBs, Total	ND		ug/kg	96.3		8.55	Α

		A	Acceptano	e
Surrogate	%Recovery (	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	Α
Decachlorobiphenyl	51		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	61		30-150	В
Decachlorobiphenyl	51		30-150	В



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** FORMER TRICO PLANT

Lab Number:

L2007958

**Project Number:** 0092-016-001-006-06B Report Date:

02/28/20

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - West	borough Lab Associa	ted sample(s)	: 01-03 Batch	: WG1343	716-2 WG13437′	16-3			
Aroclor 1016	68		64		40-140	6		50	Α
Aroclor 1260	59		54		40-140	9		50	А

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	67	58	30-150 A
Decachlorobiphenyl	57	51	30-150 A
2,4,5,6-Tetrachloro-m-xylene	65	57	30-150 B
Decachlorobiphenyl	57	50	30-150 B

# INORGANICS & MISCELLANEOUS



02/21/20 12:10

Date Collected:

 Project Name:
 FORMER TRICO PLANT
 Lab Number:
 L2007958

 Project Number:
 0092-016-001-006-06B
 Report Date:
 02/28/20

**SAMPLE RESULTS** 

Lab ID: L2007958-01

Client ID: DD COMP #1 2/21/20 Date Received: 02/21/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Brick

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	95.7		%	0.100	NA	1	-	02/22/20 12:45	121,2540G	RI



L2007958

02/21/20 12:15

**Project Name:** Lab Number: FORMER TRICO PLANT **Project Number:** 0092-016-001-006-06B

Report Date: 02/28/20

Date Collected:

**SAMPLE RESULTS** 

Lab ID: L2007958-02

Client ID: Date Received: DD COMP #2 2/21/20 02/21/20 Not Specified Sample Location: BUFFALO Field Prep:

Sample Depth:

Matrix: Brick

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	94.8		%	0.100	NA	1	-	02/22/20 12:45	121,2540G	RI



L2007958

**Project Name:** Lab Number: FORMER TRICO PLANT **Project Number:** 0092-016-001-006-06B

Report Date: 02/28/20

**SAMPLE RESULTS** 

Lab ID: Date Collected: L2007958-03 02/21/20 12:20

Client ID: Date Received: DD COMP #3 2/21/20 02/21/20 Not Specified Sample Location: BUFFALO Field Prep:

Sample Depth:

Matrix: Brick

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	95.1		%	0.100	NA	1	-	02/22/20 12:45	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Lab Number: **Project Name:** FORMER TRICO PLANT L2007958 **Project Number:** Report Date: 02/28/20 0092-016-001-006-06B

Parameter	Native Sam	ple D	Ouplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab A	Associated sample(s): 01-03	QC Batch ID:	WG1343446-1	QC Sample:	L2007965-01	Client ID:	DUP Sample
Solids, Total	96.7		96.9	%	0		20



Lab Number: L2007958

Report Date: 02/28/20

Sample Receipt and Container Information

Were project specific reporting limits specified?

FORMER TRICO PLANT

**Cooler Information** 

Project Name:

Cooler Custody Seal

**Project Number:** 0092-016-001-006-06B

A Absent

Container Information		Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2007958-01A	Glass 120ml/4oz unpreserved	Α	NA		5.3	Υ	Absent		TS(7),NYTCL-8082-CNCRT(14)
L2007958-02A	Glass 120ml/4oz unpreserved	Α	NA		5.3	Υ	Absent		TS(7),NYTCL-8082-CNCRT(14)
L2007958-03A	Glass 120ml/4oz unpreserved	Α	NA		5.3	Υ	Absent		TS(7),NYTCL-8082-CNCRT(14)



## **GLOSSARY**

### **Acronyms**

**EDL** 

LOQ

MS

NP

RPD

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.)

 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.)

- 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.

 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.

- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

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.

- 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.

# Footnotes

Report Format: DU Report with 'J' Qualifiers



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

#### **Terms**

1

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.

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'.

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, Benza(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. If a 'Total' result is requested, the results of its individual components will also be reported.

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.)

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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- 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.
- 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 Identified Compounds (TICs).
- $\label{eq:main_equation} \textbf{M} \qquad \text{-Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.}$
- 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.
- ${f P}$  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

Report Format: DU Report with 'J' Qualifiers



# Data Qualifiers

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.

Report Format: DU Report with 'J' Qualifiers



Project Name:FORMER TRICO PLANTLab Number:L2007958Project Number:0092-016-001-006-06BReport Date:02/28/20

# REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

# **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.



Alpha Analytical, Inc.
Facility: Company-wide
Department: Quality Assurance

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:**17873** Revision 16

Page 1 of 1

Published Date: 2/17/2020 10:46:05 AM

# 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

**EPA 8260C:** <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; 4-Ethyltoluene, Azobenzene, Azobenzene, Azobenzene, Azobenzene, Azobenzene, Azobenzene

Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; 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.

**EPA TO-12** Non-methane organics

EPA 3C Fixed gases

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, SM4500CI-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 II, Endosulfan III, 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.

# 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.

# 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.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Westborough, MA 01561 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 White Albany, NY 12205: 14 Walke Tonawanda, NY 14150: 275 of Project Information Project Name: Project Location:	r Way Cooper Ave, Suite			ge of /	Deli	Date in t iverables	ab O	2/=	ASP-B	20	ALPHA Job # 1958 Billing Information  Same as Client Info	
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Please specify Metals  ALPHA Lab ID (Lab Use Only)		CAT B	Coll	ection	Sample	Sampler's	PCBs						☐ Done ☐ Lab to do Preservation ☐ Lab to do  (Please Specify below)	
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= MeOH C = NaHSO <sub>4</sub> O = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> E	= Cube = Other = Encore = BOD Bottle	Relinquished B				R	eceive	ed By:	J 3/	1/20	ate/Time	45	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.)	



# ANALYTICAL REPORT

Lab Number: L2009474

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Chris Boron
Phone: (716) 856-0599

Project Name: FORMER TRICO PLANT

Project Number: B0092-016-001-006-06

Report Date: 03/10/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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:** FORMER TRICO PLANT **Project Number:** 

B0092-016-001-006-06

Lab Number: L2009474 Report Date: 03/10/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2009474-01	LS-NORTH 3/3/20	SOLID	BUFFALO	03/03/20 10:50	03/03/20
L2009474-02	LS-SOUTH 3/3/20	SOLID	BUFFALO	03/03/20 11:00	03/03/20



# **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.								



Serial\_No:03102010:28

Project Name:FORMER TRICO PLANTLab Number:L2009474Project Number:B0092-016-001-006-06Report Date:03/10/20

# **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.

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:

Title: Technical Director/Representative Date: 03/10/20

Melissa Sturgis Melissa Sturgis

# **ORGANICS**



# **PCBS**



Serial\_No:03102010:28

**Project Name:** FORMER TRICO PLANT Lab Number: L2009474

**SAMPLE RESULTS** 

Lab ID: L2009474-01 Date Collected: 03/03/20 10:50

Client ID: LS-NORTH 3/3/20 Date Received: 03/03/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Solid Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 03/07/20 11:40

Analytical Date: 03/08/20 23:46 Cleanup Method: EPA 3665A
Analyst: CW Cleanup Date: 03/08/20
Percent Solids: 98% Cleanup Method: EPA 3660B

Percent Solids: 98% Cleanup Method: EPA 366 Cleanup Date: 03/08/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	93.2	8.28	1	Α			
Aroclor 1221	ND		ug/kg	93.2	9.34	1	Α			
Aroclor 1232	ND		ug/kg	93.2	19.8	1	Α			
Aroclor 1242	ND		ug/kg	93.2	12.6	1	Α			
Aroclor 1248	280		ug/kg	93.2	14.0	1	В			
Aroclor 1254	ND		ug/kg	93.2	10.2	1	Α			
Aroclor 1260	39.9	J	ug/kg	93.2	17.2	1	В			
Aroclor 1262	ND		ug/kg	93.2	11.8	1	Α			
Aroclor 1268	ND		ug/kg	93.2	9.66	1	А			
PCBs, Total	320	J	ug/kg	93.2	8.28	1	В			

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	Α
Decachlorobiphenyl	67		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	63		30-150	В
Decachlorobiphenyl	72		30-150	В



Serial\_No:03102010:28

**Project Name:** FORMER TRICO PLANT Lab Number: L2009474

**SAMPLE RESULTS** 

Lab ID: Date Collected: 03/03/20 11:00

Client ID: LS-SOUTH 3/3/20 Date Received: 03/03/20 Sample Location: BUFFALO Field Prep: Not Specified

Sample Depth:

Matrix: Solid Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 03/07/20 11:40

Analystical Date: 03/08/20 23:58

Analyst: CW

Cleanup Method: EPA 3665A

Cleanup Date: 03/08/20

Percent Solids: 98% Cleanup Method: EPA 3660B
Cleanup Date: 03/08/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westb	orough Lab						
Aroclor 1016	ND		ug/kg	99.8	8.87	1	А
Aroclor 1221	ND		ug/kg	99.8	10.0	1	Α
Aroclor 1232	ND		ug/kg	99.8	21.2	1	Α
Aroclor 1242	ND		ug/kg	99.8	13.5	1	Α
Aroclor 1248	16.5	J	ug/kg	99.8	15.0	1	В
Aroclor 1254	ND		ug/kg	99.8	10.9	1	Α
Aroclor 1260	ND		ug/kg	99.8	18.4	1	Α
Aroclor 1262	ND		ug/kg	99.8	12.7	1	Α
Aroclor 1268	ND		ug/kg	99.8	10.3	1	Α
PCBs, Total	16.5	J	ug/kg	99.8	8.87	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	Α
Decachlorobiphenyl	57		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	62		30-150	В
Decachlorobiphenyl	63		30-150	В



Project Name:FORMER TRICO PLANTLab Number:L2009474

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 03/09/20 00:10

Analyst: CW

Extraction Method: EPA 3540C
Extraction Date: 03/07/20 11:40
Cleanup Method: EPA 3665A
Cleanup Date: 03/08/20
Cleanup Date: 03/08/20
Cleanup Date: 03/08/20

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC	- Westborough	n Lab for s	ample(s):	01-02	Batch:	WG13	48389-1
Aroclor 1016	ND		ug/kg	96.7		8.59	А
Aroclor 1221	ND		ug/kg	96.7		9.69	Α
Aroclor 1232	ND		ug/kg	96.7		20.5	Α
Aroclor 1242	ND		ug/kg	96.7		13.0	Α
Aroclor 1248	ND		ug/kg	96.7		14.5	Α
Aroclor 1254	ND		ug/kg	96.7		10.6	Α
Aroclor 1260	ND		ug/kg	96.7		17.9	Α
Aroclor 1262	ND		ug/kg	96.7		12.3	Α
Aroclor 1268	ND		ug/kg	96.7		10.0	Α
PCBs, Total	ND		ug/kg	96.7		8.59	Α

		Acceptance					
Surrogate	%Recovery Qualif	ier Criteria	Column				
2,4,5,6-Tetrachloro-m-xylene	62	30-150	Α				
Decachlorobiphenyl	60	30-150	Α				
2,4,5,6-Tetrachloro-m-xylene	63	30-150	В				
Decachlorobiphenyl	63	30-150	В				



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** FORMER TRICO PLANT

**Project Number:** 

B0092-016-001-006-06

Lab Number:

L2009474

Report Date:

03/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westbo	orough Lab Associa	ated sample(s)	: 01-02 Batch	: WG1348	8389-2 WG134838	39-3			
Aroclor 1016	71		73		40-140	3		50	А
Aroclor 1260	64		69		40-140	8		50	Α

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	65	68	30-150 A
Decachlorobiphenyl	65	69	30-150 A
2,4,5,6-Tetrachloro-m-xylene	67	67	30-150 B
Decachlorobiphenyl	69	70	30-150 B

# INORGANICS & MISCELLANEOUS



Serial\_No:03102010:28

 Project Name:
 FORMER TRICO PLANT
 Lab Number:
 L2009474

 Project Number:
 B0092-016-001-006-06
 Report Date:
 03/10/20

**SAMPLE RESULTS** 

Lab ID:L2009474-01Date Collected:03/03/20 10:50Client ID:LS-NORTH 3/3/20Date Received:03/03/20Sample Location:BUFFALOField Prep:Not Specified

Sample Depth:

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
General Chemistry - Westborough Lab											
Solids, Total	97.5		%	0.100	NA	1	-	03/05/20 04:51	121,2540G	PR	



Serial\_No:03102010:28

**Project Name:** Lab Number: FORMER TRICO PLANT L2009474 Report Date: **Project Number:** B0092-016-001-006-06

Date Collected:

03/10/20

03/03/20 11:00

**SAMPLE RESULTS** 

Lab ID: L2009474-02 Client ID: LS-SOUTH 3/3/20

Date Received: 03/03/20

Sample Location: BUFFALO

Not Specified Field Prep:

Sample Depth:

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	97.8		%	0.100	NA	1	-	03/05/20 04:51	121,2540G	PR



Lab Duplicate Analysis

Batch Quality Control

Lab Number: **Project Name:** FORMER TRICO PLANT L2009474 **Project Number:** Report Date: 03/10/20 B0092-016-001-006-06

Parameter	Native Sam	iple l	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated samp	ole(s): 01-02	QC Batch ID	: WG1347385-1	QC Sample:	L2009796-03	Client ID:	DUP Sample
Solids, Total	82.0		81.7	%	0		20



Serial\_No:03102010:28

FORMER TRICO PLANT Lab Number: L2009474 **Project Number:** B0092-016-001-006-06

**Report Date:** 03/10/20

### Sample Receipt and Container Information

YES Were project specific reporting limits specified?

**Cooler Information** 

Project Name:

Custody Seal Cooler

Absent Α

Container Information			Initial	Final	Temp			Frozen		
	Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
	L2009474-01A	Glass 120ml/4oz unpreserved	Α	NA		5.3	Υ	Absent		TS(7),NYTCL-8082-3540C(14)
	L2009474-02A	Glass 120ml/4oz unpreserved	Α	NA		5.3	Υ	Absent		TS(7) NYTCL-8082-3540C(14)



**Project Name:** Lab Number: FORMER TRICO PLANT L2009474 **Project Number:** B0092-016-001-006-06 **Report Date:** 03/10/20

#### GLOSSARY

#### Acronyms

LOD

LOQ

MS

RPD

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** 

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.

Environmental Protection Agency.

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.

- 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.) - 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

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

MDI - 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.

> - 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.

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.

- 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.

- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - 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.

#### **Footnotes**

Report Format: DU Report with 'J' Qualifiers



Project Name:FORMER TRICO PLANTLab Number:L2009474Project Number:B0092-016-001-006-06Report Date:03/10/20

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

#### **Terms**

1

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.

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'.

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, Benza(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. If a 'Total' result is requested, the results of its individual components will also be reported.

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.)

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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- 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.
- 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 Identified Compounds (TICs).
- $\label{eq:main_equation} \textbf{M} \qquad \text{-Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.}$
- 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.
- ${f P}$  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

Report Format: DU Report with 'J' Qualifiers



Project Name:FORMER TRICO PLANTLab Number:L2009474Project Number:B0092-016-001-006-06Report Date:03/10/20

#### Data Qualifiers

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.

Report Format: DU Report with 'J' Qualifiers



Serial\_No:03102010:28

Project Name:FORMER TRICO PLANTLab Number:L2009474Project Number:B0092-016-001-006-06Report Date:03/10/20

#### REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

#### **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.



Serial\_No:03102010:28

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873

Revision 16

Page 1 of 1

Published Date: 2/17/2020 10:46:05 AM

#### 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

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-

Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; 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.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

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, SM4500CI-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 II, 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.

#### 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.

#### 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.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

ДСРНА	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitne Albany, NY 12205: 14 Walker Tonawanda, NY 14150: 275 Co	05	Page L of		D	ate Rec'		ho			ALPHA Job # L2009474		
Westborough, MA 01581 8 Walkup Dr.	Mansfield, MA 02048 320 Forbes Blvd	Project Information	De la Maria de La Caractería de la Carac								Billing Information			
TEL: 508-898-9220	TEL: 508-822-9300	Project Name:	Forme	Trice.	Plank			ASP-A			ASP-E	3	Same as Client	Info
FAX: 508-898-9193	FAX: 508-822-3288	Project Location:	Bulh	4			□ 6	QuIS (1 F	File)		EQuI5	(4 File)	PO#	
Client Information		Project # '300	192-01	6-001-	000-06	A		Other						
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Preservative Code: A = None B = HCI C = HNO <sub>3</sub>	None P = Plastic Westboro: Certification No: MA935 Container T  HCI A = Amber Glass Mansfield: Certification No: MA015						A						Please print clear and completely. S not be logged in a	amples can
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Form No: 01-25 HC (rev.	30-Sept-2013)								)				(See reverse side	.)

## **APPENDIX D**

**GROUNDWATER SAMPLING INFORMATION** 



### Chris Z. Boron

From: Walia, Jaspal (DEC) <jaspal.walia@dec.ny.gov>

Sent: Monday, November 16, 2020 9:33 AM

To: Chris Z. Boron
Cc: Michael McGuigan

**Subject:** RE: Trico Groundwater Sampling

Chris,

The groundwater data collected from MW-11 and MW-12 during the last five sampling events does not show exceedances of GWQS for the test parameters. Based upon the past groundwater sampling results, MW-11 and MW-12 can be removed from the on-going sampling program.

Thanks,

Jaspal

From: Chris Z. Boron <cboron@bm-tk.com> Sent: Friday, November 13, 2020 3:00 PM

**To:** Walia, Jaspal (DEC) <jaspal.walia@dec.ny.gov> **Cc:** Michael McGuigan <mmcguigan@kroggrp.com>

**Subject:** Trico Groundwater Sampling

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello Jaspal,

Hope all is well.

We are going to be scheduling the next groundwater sampling event at Trico later this month. The attached table summarizes the groundwater results to date, which includes our July 2020 (1<sup>st</sup> post COC sampling event).

We would like to request that the two (2) deep off-site monitoring wells, MW-11 and MW-12, be removed from the sampling program. According to the Remedial Action Work Plan (page 15, Section 3.2.3, 2<sup>nd</sup> bullet), "If the off-site monitoring wells do not indicated the present of VOCs above the groundwater quality standards for two (2) consecutive monitoring events, they can be removed from the groundwater sampling program." These two (2) wells have been sampled a total of five (5) times each, with no groundwater quality standard exceedances. We feel that the time from the 1<sup>st</sup> sample event (November 2016) to the 5<sup>th</sup> sample event (July 2020) represent pre- and post-injection conditions for these wells and provide enough separation in time between events, along with the subsequent events, with no exceedances. Please let us know if we can removed these wells from the sampling program.

Similar to the July 2020 event, MW-7 is still inaccessible due to the present of debris over the top of the well. Therefore we will sample MW-2, -4, -6, -9, and MW-10, assuming we can remove MW-11 and 12 from the sampling program.

Let me know if you have any questions or would like to discuss. Have a nice weekend.

Regards,

### Christopher Boron, P.G.

Sr. Project Manager



Strong Advocates | Effective Solutions | Integrated Implementation 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218 Phone: (716) 856-0599, Cell Phone: (716) 864-2726

www.benchmarkturnkey.com

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## **Environment Testing America**

## **ANALYTICAL REPORT**

Eurofins TestAmerica, Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

Laboratory Job ID: 480-184398-1

Client Project/Site: Benchmark-791 Washington St. (Trico site)

Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Lackawanna, New York 14218

Attn: Mr. Christopher Z Boron

Authorized for release by: 5/13/2021 6:02:50 PM Rebecca Jones, Project Management Assistant I Rebecca.Jones@Eurofinset.com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

Brian.Fischer@Eurofinset.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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### **Definitions/Glossary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

#### **Qualifiers**

#### **GC/MS VOA**

Qualifier **Qualifier Description** 

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### **Glossary**

DLC

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Decision Level Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

5/13/2021

#### **Case Narrative**

Client: Turnkey Environmental Restoration, LLC

Job ID: 480-184398-1 Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-184398-1

#### Comments

No additional comments.

The samples were received on 5/7/2021 3:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

#### GC/MS VOA

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: RI-MW-2 (480-184398-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: RI-MW-4 (480-184398-2) and RI-MW-9 (480-184398-3). pH is 7.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## **Detection Summary**

Client: Turnkey Environmental Restoration, LLC

Client Sample ID: RI-MW-2

Project/Site: Benchmark-791 Washington St.(Trico site)

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Trichloroethene	4.3	4.0	1.8 ug/L	4	8260C	Total/NA

## Client Sample ID: RI-MW-4 Lab Sample ID: 480-184398-2

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.4 J	10	3.0	ug/L	1	_ ;	8260C	Total/NA
Carbon disulfide	0.37 J	1.0	0.19	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.7	1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.8	1.0	0.16	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	50	1.0	0.90	ug/L	1		8260C	Total/NA
Vinyl chloride	8.0	1.0	0.90	ug/L	1		8260C	Total/NA

## Client Sample ID: RI-MW-9 Lab Sample ID: 480-184398-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	10	3.0	ug/L	1	_	8260C	Total/NA
Carbon disulfide	0.34	J	1.0	0.19	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.5		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	0.88	J	1.0	0.46	ug/L	1		8260C	Total/NA

## Client Sample ID: RI-MW-10 Lab Sample ID: 480-184398-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.9		1.0	0.46	ug/L	1	_	8260C	Total/NA

## Client Sample ID: TRIP BLANK Lab Sample ID: 480-184398-5

No Detections.

This Detection Summary does not include radiochemical test results.

5/13/2021

Job ID: 480-184398-1

Lab Sample ID: 480-184398-1

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4.0

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2

Lab Sample ID: 480-184398-1

**Matrix: Water** 

Job ID: 480-184398-1

Date Collected: 05/07/21 09:31 Date Received: 05/07/21 15:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			05/09/21 01:42	
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			05/09/21 01:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			05/09/21 01:42	
I,1,2-Trichloroethane	ND		4.0	0.92	ug/L			05/09/21 01:42	
1,1-Dichloroethane	ND		4.0	1.5	ug/L			05/09/21 01:42	
1,1-Dichloroethene	ND		4.0	1.2	ug/L			05/09/21 01:42	
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			05/09/21 01:42	
I,2,4-Trimethylbenzene	ND		4.0		ug/L			05/09/21 01:42	
I,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			05/09/21 01:42	
1,2-Dibromoethane	ND		4.0	2.9	ug/L			05/09/21 01:42	
1,2-Dichlorobenzene	ND		4.0		ug/L			05/09/21 01:42	
I,2-Dichloroethane	ND		4.0		ug/L			05/09/21 01:42	
1,2-Dichloropropane	ND		4.0		ug/L			05/09/21 01:42	
1,3,5-Trimethylbenzene	ND		4.0		ug/L			05/09/21 01:42	
1,3-Dichlorobenzene	ND		4.0		ug/L			05/09/21 01:42	
1,4-Dichlorobenzene	ND		4.0		ug/L ug/L			05/09/21 01:42	
2-Butanone (MEK)	ND		40		ug/L			05/09/21 01:42	
2-Hexanone	ND		20		ug/L			05/09/21 01:42	
4-Isopropyltoluene	ND		4.0		ug/L ug/L			05/09/21 01:42	
	ND		20		ug/L ug/L			05/09/21 01:42	
I-Methyl-2-pentanone (MIBK)					-			05/09/21 01:42	
Acetone	ND		40		ug/L				
Benzene	ND		4.0		ug/L			05/09/21 01:42	
Bromodichloromethane	ND		4.0		ug/L			05/09/21 01:42	
Bromoform	ND		4.0		ug/L			05/09/21 01:42	
Bromomethane	ND		4.0		ug/L			05/09/21 01:42	
Carbon disulfide	ND		4.0	0.76				05/09/21 01:42	
Carbon tetrachloride	ND		4.0		ug/L			05/09/21 01:42	
Chlorobenzene	ND		4.0		ug/L			05/09/21 01:42	
Chloroethane	ND		4.0		ug/L			05/09/21 01:42	
Chloroform	ND		4.0		ug/L			05/09/21 01:42	
Chloromethane	ND		4.0		ug/L			05/09/21 01:42	
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			05/09/21 01:42	
sis-1,3-Dichloropropene	ND		4.0		ug/L			05/09/21 01:42	
Cyclohexane	ND		4.0	0.72				05/09/21 01:42	
Dibromochloromethane	ND		4.0	1.3	ug/L			05/09/21 01:42	
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			05/09/21 01:42	
Ethylbenzene	ND		4.0	3.0	ug/L			05/09/21 01:42	
sopropylbenzene	ND		4.0	3.2	ug/L			05/09/21 01:42	
n,p-Xylene	ND		8.0	2.6	ug/L			05/09/21 01:42	
Methyl acetate	ND		10	5.2	ug/L			05/09/21 01:42	
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			05/09/21 01:42	
Methylcyclohexane	ND		4.0	0.64	ug/L			05/09/21 01:42	
Methylene Chloride	ND		4.0	1.8	ug/L			05/09/21 01:42	
n-Butylbenzene	ND		4.0	2.6	ug/L			05/09/21 01:42	
N-Propylbenzene	ND		4.0		ug/L			05/09/21 01:42	
p-Xylene	ND		4.0	3.0	ug/L			05/09/21 01:42	
sec-Butylbenzene	ND		4.0		ug/L			05/09/21 01:42	
Styrene	ND		4.0		ug/L			05/09/21 01:42	
tert-Butylbenzene	ND		4.0		ug/L ug/L			05/09/21 01:42	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2

Lab Sample ID: 480-184398-1 Date Collected: 05/07/21 09:31

**Matrix: Water** 

Job ID: 480-184398-1

Date Received: 05/07/21 15:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		4.0	1.4	ug/L			05/09/21 01:42	4
Toluene	ND		4.0	2.0	ug/L			05/09/21 01:42	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			05/09/21 01:42	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			05/09/21 01:42	4
Trichloroethene	4.3		4.0	1.8	ug/L			05/09/21 01:42	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			05/09/21 01:42	4
Vinyl chloride	ND		4.0	3.6	ug/L			05/09/21 01:42	4
Xylenes, Total	ND		8.0	2.6	ug/L			05/09/21 01:42	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120			-		05/09/21 01:42	4
4-Bromofluorobenzene (Surr)	99		73 - 120					05/09/21 01:42	4
Toluene-d8 (Surr)	95		80 - 120					05/09/21 01:42	4

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-4

Date Collected: 05/07/21 12:59 Date Received: 05/07/21 15:15

Lab Sample ID: 480-184398-2

Matrix: Water

Job ID: 480-184398-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			05/09/21 02:04	
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			05/09/21 02:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			05/09/21 02:04	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			05/09/21 02:04	
1,1-Dichloroethane	ND	1.0	0.38	ug/L			05/09/21 02:04	
1,1-Dichloroethene	ND	1.0	0.29	ug/L			05/09/21 02:04	
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			05/09/21 02:04	
1,2,4-Trimethylbenzene	ND	1.0	0.75	ug/L			05/09/21 02:04	
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			05/09/21 02:04	
1,2-Dibromoethane	ND	1.0	0.73	ug/L			05/09/21 02:04	
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			05/09/21 02:04	
1,2-Dichloroethane	ND	1.0	0.21	ug/L			05/09/21 02:04	
1,2-Dichloropropane	ND	1.0	0.72	ug/L			05/09/21 02:04	
1,3,5-Trimethylbenzene	ND	1.0	0.77	ug/L			05/09/21 02:04	
1,3-Dichlorobenzene	ND	1.0		ug/L			05/09/21 02:04	
1,4-Dichlorobenzene	ND	1.0		ug/L			05/09/21 02:04	
2-Butanone (MEK)	ND	10	1.3	ug/L			05/09/21 02:04	
2-Hexanone	ND	5.0	1.2	ug/L			05/09/21 02:04	
4-Isopropyltoluene	ND	1.0		ug/L			05/09/21 02:04	
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			05/09/21 02:04	
Acetone	5.4 J	10		ug/L			05/09/21 02:04	
Benzene	ND	1.0		ug/L			05/09/21 02:04	
Bromodichloromethane	ND	1.0		ug/L			05/09/21 02:04	
Bromoform	ND	1.0		ug/L			05/09/21 02:04	
Bromomethane	ND	1.0		ug/L			05/09/21 02:04	
Carbon disulfide	0.37 J	1.0		ug/L			05/09/21 02:04	
Carbon tetrachloride	ND	1.0		ug/L			05/09/21 02:04	
Chlorobenzene	ND	1.0		ug/L			05/09/21 02:04	
Chloroethane	ND	1.0		ug/L			05/09/21 02:04	
Chloroform	ND	1.0		ug/L			05/09/21 02:04	
Chloromethane	ND	1.0		ug/L			05/09/21 02:04	
cis-1,2-Dichloroethene	7.7	1.0		ug/L			05/09/21 02:04	
cis-1,3-Dichloropropene	ND	1.0		ug/L			05/09/21 02:04	
Cyclohexane	ND	1.0		ug/L			05/09/21 02:04	
Dibromochloromethane	ND	1.0		ug/L			05/09/21 02:04	
Dichlorodifluoromethane	ND	1.0		ug/L			05/09/21 02:04	
Ethylbenzene	ND	1.0		ug/L			05/09/21 02:04	
Isopropylbenzene	ND	1.0		ug/L			05/09/21 02:04	
m,p-Xylene	ND	2.0		ug/L			05/09/21 02:04	
Methyl acetate	ND	2.5		ug/L			05/09/21 02:04	
Methyl tert-butyl ether	1.8	1.0		ug/L			05/09/21 02:04	
Methylcyclohexane	ND	1.0		ug/L			05/09/21 02:04	
Methylene Chloride	ND	1.0		ug/L			05/09/21 02:04	
n-Butylbenzene	ND	1.0		ug/L			05/09/21 02:04	
N-Propylbenzene	ND	1.0		ug/L			05/09/21 02:04	
o-Xylene	ND	1.0		ug/L			05/09/21 02:04	
sec-Butylbenzene	ND	1.0		ug/L			05/09/21 02:04	
Styrene	ND	1.0		ug/L			05/09/21 02:04	
tert-Butylbenzene	ND	1.0		ug/L			05/09/21 02:04	

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Eurofins TestAmerica, Buffalo

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-4

Lab Sample ID: 480-184398-2 Date Collected: 05/07/21 12:59

Date Received: 05/07/21 15:15

Method: 8260C - Volatile Orga	nic Compounds I	by GC/MS (	Continued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/21 02:04	1
Toluene	ND		1.0	0.51	ug/L			05/09/21 02:04	1
trans-1,2-Dichloroethene	50		1.0	0.90	ug/L			05/09/21 02:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/21 02:04	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/21 02:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/21 02:04	1
Vinyl chloride	8.0		1.0	0.90	ug/L			05/09/21 02:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/21 02:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		77 - 120					05/09/21 02:04	1
4-Bromofluorobenzene (Surr)	95		73 - 120					05/09/21 02:04	1
Toluene-d8 (Surr)	98		80 - 120					05/09/21 02:04	1

Job ID: 480-184398-1

**Matrix: Water** 

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-9

Lab Sample ID: 480-184398-3

Date Collected: 05/07/21 13:12 Matrix: Water Date Received: 05/07/21 15:15

Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			05/09/21 02:27	
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			05/09/21 02:27	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			05/09/21 02:27	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			05/09/21 02:27	
1,1-Dichloroethane	ND	1.0	0.38	ug/L			05/09/21 02:27	
1,1-Dichloroethene	ND	1.0	0.29	ug/L			05/09/21 02:27	
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			05/09/21 02:27	
1,2,4-Trimethylbenzene	ND	1.0	0.75	ug/L			05/09/21 02:27	
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			05/09/21 02:27	
1,2-Dibromoethane	ND	1.0	0.73	ug/L			05/09/21 02:27	
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			05/09/21 02:27	
1,2-Dichloroethane	ND	1.0	0.21	ug/L			05/09/21 02:27	
1,2-Dichloropropane	ND	1.0	0.72	ug/L			05/09/21 02:27	
1,3,5-Trimethylbenzene	ND	1.0	0.77	ug/L			05/09/21 02:27	
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			05/09/21 02:27	
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			05/09/21 02:27	
2-Butanone (MEK)	ND	10		ug/L			05/09/21 02:27	
2-Hexanone	ND	5.0		ug/L			05/09/21 02:27	
4-Isopropyltoluene	ND	1.0		ug/L			05/09/21 02:27	
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			05/09/21 02:27	
Acetone	3.6 J	10		ug/L			05/09/21 02:27	
Benzene	ND	1.0		ug/L			05/09/21 02:27	
Bromodichloromethane	ND	1.0		ug/L			05/09/21 02:27	
Bromoform	ND	1.0		ug/L			05/09/21 02:27	
Bromomethane	ND	1.0		ug/L			05/09/21 02:27	
Carbon disulfide	0.34 J	1.0		ug/L			05/09/21 02:27	
Carbon tetrachloride	ND	1.0		ug/L			05/09/21 02:27	
Chlorobenzene	ND	1.0		ug/L			05/09/21 02:27	
Chloroethane	ND	1.0		ug/L			05/09/21 02:27	
Chloroform	ND	1.0		ug/L			05/09/21 02:27	
Chloromethane	ND	1.0		ug/L			05/09/21 02:27	
cis-1,2-Dichloroethene	2.5	1.0		ug/L			05/09/21 02:27	
cis-1,3-Dichloropropene	ND	1.0		ug/L			05/09/21 02:27	
Cyclohexane	ND	1.0		ug/L			05/09/21 02:27	
Dibromochloromethane	ND	1.0		ug/L			05/09/21 02:27	
Dichlorodifluoromethane	.15			-				
	ND	1.0		ug/L			05/09/21 02:27	
Ethylbenzene	ND	1.0		ug/L			05/09/21 02:27	
Isopropylbenzene	ND	1.0		ug/L			05/09/21 02:27	
m,p-Xylene	ND	2.0		ug/L			05/09/21 02:27	
Methyl acetate	ND	2.5		ug/L			05/09/21 02:27	
Methyl tert-butyl ether	ND	1.0		ug/L			05/09/21 02:27	
Methylcyclohexane	ND	1.0		ug/L			05/09/21 02:27	
Methylene Chloride	ND	1.0		ug/L			05/09/21 02:27	
n-Butylbenzene	ND	1.0		ug/L			05/09/21 02:27	
N-Propylbenzene	ND	1.0		ug/L			05/09/21 02:27	
o-Xylene	ND	1.0		ug/L			05/09/21 02:27	
sec-Butylbenzene	ND	1.0		ug/L			05/09/21 02:27	
Styrene tert-Butylbenzene	ND	1.0		ug/L ug/L			05/09/21 02:27 05/09/21 02:27	

Eurofins TestAmerica, Buffalo

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Job ID: 480-184398-1

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-9

Lab Sample ID: 480-184398-3

Matrix: Water

Job ID: 480-184398-1

Date Collected: 05/07/21 13:12 Date Received: 05/07/21 15:15

Method: 8260C - Volatile Organ	ic Compounds b	y GC/MS (	Continued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/21 02:27	1
Toluene	ND		1.0	0.51	ug/L			05/09/21 02:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/21 02:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/21 02:27	1
Trichloroethene	0.88	J	1.0	0.46	ug/L			05/09/21 02:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/21 02:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/21 02:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/21 02:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120			_		05/09/21 02:27	1
4-Bromofluorobenzene (Surr)	98		73 - 120					05/09/21 02:27	1
Toluene-d8 (Surr)	97		80 - 120					05/09/21 02:27	1

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: RI-MW-10** 

Lab Sample ID: 480-184398-4

Matrix: Water

Job ID: 480-184398-1

Date Collected: 05/07/21 10:50 Date Received: 05/07/21 15:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/09/21 02:49	
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/09/21 02:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			05/09/21 02:49	
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/21 02:49	
1,1-Dichloroethane	ND		1.0		ug/L			05/09/21 02:49	
1,1-Dichloroethene	ND		1.0		ug/L			05/09/21 02:49	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/09/21 02:49	
1,2,4-Trimethylbenzene	ND		1.0	0.75				05/09/21 02:49	
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			05/09/21 02:49	
1,2-Dibromoethane	ND		1.0		ug/L			05/09/21 02:49	
1,2-Dichlorobenzene	ND		1.0		ug/L			05/09/21 02:49	
1,2-Dichloroethane	ND		1.0		ug/L			05/09/21 02:49	
1,2-Dichloropropane	ND		1.0		ug/L			05/09/21 02:49	
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/09/21 02:49	
1,3-Dichlorobenzene	ND		1.0		ug/L			05/09/21 02:49	
1,4-Dichlorobenzene	ND		1.0		ug/L			05/09/21 02:49	
2-Butanone (MEK)	ND		10		-			05/09/21 02:49	
2-Hexanone	ND		5.0		ug/L			05/09/21 02:49	
4-Isopropyltoluene	ND		1.0		ug/L			05/09/21 02:49	
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/09/21 02:49	
Acetone	ND		10					05/09/21 02:49	
Benzene	ND		1.0		ug/L			05/09/21 02:49	
Bromodichloromethane	ND		1.0		ug/L			05/09/21 02:49	
Bromoform	ND		1.0		ug/L			05/09/21 02:49	
Bromomethane	ND		1.0		ug/L			05/09/21 02:49	
Carbon disulfide	ND		1.0		ug/L			05/09/21 02:49	
Carbon tetrachloride	ND		1.0		ug/L			05/09/21 02:49	
Chlorobenzene	ND		1.0		ug/L			05/09/21 02:49	
Chloroethane	ND		1.0		ug/L			05/09/21 02:49	
Chloroform	ND		1.0		ug/L			05/09/21 02:49	
Chloromethane	ND		1.0		ug/L			05/09/21 02:49	
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/09/21 02:49	
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/09/21 02:49	
Cyclohexane	ND		1.0		ug/L			05/09/21 02:49	
Dibromochloromethane	ND		1.0		ug/L			05/09/21 02:49	
Dichlorodifluoromethane	ND		1.0		ug/L			05/09/21 02:49	
Ethylbenzene	ND		1.0		ug/L			05/09/21 02:49	
Isopropylbenzene	ND		1.0		ug/L			05/09/21 02:49	
m,p-Xylene	ND		2.0		ug/L			05/09/21 02:49	
Methyl acetate	ND		2.5		ug/L			05/09/21 02:49	
Methyl tert-butyl ether	ND		1.0		ug/L			05/09/21 02:49	
Methylcyclohexane	ND		1.0		ug/L			05/09/21 02:49	
Methylene Chloride	ND		1.0		ug/L			05/09/21 02:49	
n-Butylbenzene	ND		1.0		ug/L			05/09/21 02:49	
N-Propylbenzene	ND		1.0		ug/L			05/09/21 02:49	
o-Xylene	ND		1.0		ug/L			05/09/21 02:49	
sec-Butylbenzene	ND		1.0		ug/L			05/09/21 02:49	
	ND		1.0		ug/L			05/09/21 02:49	
Styrene tert-Butylbenzene	ND		1.0		ug/L ug/L			05/09/21 02:49	

Eurofins TestAmerica, Buffalo

5/13/2021

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-10

Lab Sample ID: 480-184398-4 Date Collected: 05/07/21 10:50 Matrix: Water

Date Received: 05/07/21 15:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/21 02:49	1
Toluene	ND		1.0	0.51	ug/L			05/09/21 02:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/21 02:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/21 02:49	1
Trichloroethene	1.9		1.0	0.46	ug/L			05/09/21 02:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/21 02:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/21 02:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/21 02:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		77 - 120			_		05/09/21 02:49	1
4-Bromofluorobenzene (Surr)	91		73 - 120					05/09/21 02:49	1
Toluene-d8 (Surr)	95		80 - 120					05/09/21 02:49	1

Job ID: 480-184398-1

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: TRIP BLANK** 

Date Collected: 05/07/21 00:00 Date Received: 05/07/21 15:15 Job ID: 480-184398-1

Lab Sample ID: 480-184398-5

Matrix: Water

					Prepared	Analyzed	Dil Fa
ND	1.0	0.82	ug/L			05/09/21 03:12	
ND	1.0	0.21	ug/L			05/09/21 03:12	
ND	1.0	0.31	ug/L			05/09/21 03:12	
ND	1.0	0.23	ug/L			05/09/21 03:12	
ND	1.0	0.38	ug/L			05/09/21 03:12	
ND	1.0	0.29	ug/L			05/09/21 03:12	
ND	1.0	0.41	ug/L			05/09/21 03:12	
ND	1.0	0.75	ug/L			05/09/21 03:12	
ND	1.0	0.39	ug/L			05/09/21 03:12	
ND	1.0	0.73	ug/L			05/09/21 03:12	
ND	1.0	0.79	ug/L			05/09/21 03:12	
ND	1.0	0.21	ug/L			05/09/21 03:12	
ND	1.0	0.72	ug/L			05/09/21 03:12	
ND	1.0					05/09/21 03:12	
ND	1.0		-			05/09/21 03:12	
ND							
ND	10		-			05/09/21 03:12	
			-				
			-				
			-				
			-				
			-				
			-				
			-				
			_				
	1.0					05/09/21 03:12	
	1.0		ug/L			05/09/21 03:12	
	1.0	0.79	ug/L			05/09/21 03:12	
ND	2.0	0.66	ug/L			05/09/21 03:12	
ND	2.5	1.3	ug/L			05/09/21 03:12	
ND	1.0	0.16	ug/L			05/09/21 03:12	
ND	1.0	0.16	ug/L			05/09/21 03:12	
ND	1.0	0.44	ug/L			05/09/21 03:12	
ND	1.0	0.64	ug/L			05/09/21 03:12	
ND	1.0	0.69	ug/L			05/09/21 03:12	
ND	1.0	0.76	ug/L			05/09/21 03:12	
ND	1.0					05/09/21 03:12	
ND	1.0					05/09/21 03:12	
	ND N	ND       1.0         ND       1.0 <td< td=""><td>ND 1.0 0.21 ND 1.0 0.33 ND 1.0 0.33 ND 1.0 0.23 ND 1.0 0.29 ND 1.0 0.29 ND 1.0 0.41 ND 1.0 0.41 ND 1.0 0.75 ND 1.0 0.75 ND 1.0 0.73 ND 1.0 0.79 ND 1.0 0.77 ND 1.0 0.77 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.31 ND 1.0 0.39 ND 1.0 0.30 ND 1.0 0.31 ND 1.0 0.39 ND 1.0 0.26 ND 1.0 0.39 ND 1.0 0.39 ND 1.0 0.32 ND 1.0 0.35 ND 1.0 0.36 ND 1.0 0.38 ND 1.0 0.35 ND 1.0 0.36 ND 1.0 0.37 ND 1.0 0.38 ND 1.0 0.36 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.76 ND 1.0 0.64 ND 1.0 0.64 ND 1.0 0.66 ND 1.0 0.64 ND 1.0 0.66 ND 1.0 0.66</td><td>ND 1.0 0.21 ug/L ND 1.0 0.31 ug/L ND 1.0 0.33 ug/L ND 1.0 0.38 ug/L ND 1.0 0.29 ug/L ND 1.0 0.29 ug/L ND 1.0 0.41 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.84 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.39 ug/L ND 1.0 0.79 ug/L ND 1.0 0.69 ug/L ND 1.0 0.69 ug/L</td><td>ND 1.0 0.21 ug/L ND 1.0 0.31 ug/L ND 1.0 0.32 ug/L ND 1.0 0.38 ug/L ND 1.0 0.29 ug/L ND 1.0 0.29 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.84 ug/L ND 1.0 0.30 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.39 ug/L ND 1.0 0.30 ug/L ND 1.0 0.31 ug/L ND 1.0 0.32 ug/L ND 1.0 0.32 ug/L ND 1.0 0.33 ug/L ND 1.0 0.34 ug/L ND 1.0 0.35 ug/L ND 1.0 0.36 ug/L ND 1.0 0.37 ug/L ND 1.0 0.38 ug/L ND 1.0 0.38 ug/L ND 1.0 0.38 ug/L ND 1.0 0.39 ug/L ND 1.0 0.30 ug/L ND 1.0 0.39 ug/L ND 1.0 0.44 ug/L ND 1.0 0.77 ug/L</td><td>ND 1.0 0.21 ug/L ND 1.0 0.31 ug/L ND 1.0 0.33 ug/L ND 1.0 0.38 ug/L ND 1.0 0.38 ug/L ND 1.0 0.29 ug/L ND 1.0 0.79 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.84 ug/L ND 1.0 0.84 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.39 ug/L ND 1.0 0.79 ug/L ND 1.0 0.36 ug/L ND 1.0 0.38 ug/L ND 1.0 0.39 ug/L ND 1.0 0.40 ug/L ND 1.0 0.60 ug/L</td><td>ND 1.0 0.21 ug/L 05/09/21 03:12 ND 1.0 0.33 ug/L 05/09/21 03:12 ND 1.0 0.33 ug/L 05/09/21 03:12 ND 1.0 0.38 ug/L 05/09/21 03:12 ND 1.0 0.38 ug/L 05/09/21 03:12 ND 1.0 0.29 ug/L 05/09/21 03:12 ND 1.0 0.41 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.79 ug/L 05/09/21 03:12 ND 1.0 0.77 ug/L 05/09/21 03:12 ND 1.0 0.78 ug/L 05/09/21 03:12 ND 1.0 0.78 ug/L 05/09/21 03:12 ND 1.0 0.84 ug/L 05/09/21 03:12 ND 1.0 0.84 ug/L 05/09/21 03:12 ND 1.0 0.31 ug/L 05/09/21 03:12 ND 1.0 0.39 ug/L 05/09/21 03:1</td></td<>	ND 1.0 0.21 ND 1.0 0.33 ND 1.0 0.33 ND 1.0 0.23 ND 1.0 0.29 ND 1.0 0.29 ND 1.0 0.41 ND 1.0 0.41 ND 1.0 0.75 ND 1.0 0.75 ND 1.0 0.73 ND 1.0 0.79 ND 1.0 0.77 ND 1.0 0.77 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.77 ND 1.0 0.78 ND 1.0 0.31 ND 1.0 0.39 ND 1.0 0.30 ND 1.0 0.31 ND 1.0 0.39 ND 1.0 0.26 ND 1.0 0.39 ND 1.0 0.39 ND 1.0 0.32 ND 1.0 0.35 ND 1.0 0.36 ND 1.0 0.38 ND 1.0 0.35 ND 1.0 0.36 ND 1.0 0.37 ND 1.0 0.38 ND 1.0 0.36 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.74 ND 1.0 0.76 ND 1.0 0.64 ND 1.0 0.64 ND 1.0 0.66 ND 1.0 0.64 ND 1.0 0.66	ND 1.0 0.21 ug/L ND 1.0 0.31 ug/L ND 1.0 0.33 ug/L ND 1.0 0.38 ug/L ND 1.0 0.29 ug/L ND 1.0 0.29 ug/L ND 1.0 0.41 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.75 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 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1.0 0.38 ug/L ND 1.0 0.38 ug/L ND 1.0 0.29 ug/L ND 1.0 0.79 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.73 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.77 ug/L ND 1.0 0.77 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.78 ug/L ND 1.0 0.79 ug/L ND 1.0 0.79 ug/L ND 1.0 0.84 ug/L ND 1.0 0.84 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.31 ug/L ND 1.0 0.39 ug/L ND 1.0 0.79 ug/L ND 1.0 0.36 ug/L ND 1.0 0.38 ug/L ND 1.0 0.39 ug/L ND 1.0 0.40 ug/L ND 1.0 0.60 ug/L	ND 1.0 0.21 ug/L 05/09/21 03:12 ND 1.0 0.33 ug/L 05/09/21 03:12 ND 1.0 0.33 ug/L 05/09/21 03:12 ND 1.0 0.38 ug/L 05/09/21 03:12 ND 1.0 0.38 ug/L 05/09/21 03:12 ND 1.0 0.29 ug/L 05/09/21 03:12 ND 1.0 0.41 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.75 ug/L 05/09/21 03:12 ND 1.0 0.79 ug/L 05/09/21 03:12 ND 1.0 0.77 ug/L 05/09/21 03:12 ND 1.0 0.78 ug/L 05/09/21 03:12 ND 1.0 0.78 ug/L 05/09/21 03:12 ND 1.0 0.84 ug/L 05/09/21 03:12 ND 1.0 0.84 ug/L 05/09/21 03:12 ND 1.0 0.31 ug/L 05/09/21 03:12 ND 1.0 0.39 ug/L 05/09/21 03:1

Eurofins TestAmerica, Buffalo

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: TRIP BLANK** 

Lab Sample ID: 480-184398-5 Date Collected: 05/07/21 00:00

Date Received: 05/07/21 15:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/21 03:12	1
Toluene	ND		1.0	0.51	ug/L			05/09/21 03:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/21 03:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/21 03:12	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/21 03:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/21 03:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/21 03:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/21 03:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120			_		05/09/21 03:12	1
4-Bromofluorobenzene (Surr)	99		73 - 120					05/09/21 03:12	1
Toluene-d8 (Surr)	95		80 - 120					05/09/21 03:12	1

Job ID: 480-184398-1

Matrix: Water

## **Surrogate Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water Prep Type: Total/NA

				Percent Su
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-184398-1	RI-MW-2	99	99	95
480-184398-2	RI-MW-4	95	95	98
480-184398-3	RI-MW-9	99	98	97
480-184398-4	RI-MW-10	95	91	95
480-184398-5	TRIP BLANK	96	99	95
LCS 480-580011/6	Lab Control Sample	92	99	98
MB 480-580011/8	Method Blank	98	97	94

#### **Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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## **QC Sample Results**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-580011/8

**Matrix: Water** 

Analysis Batch: 580011

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/09/21 01:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/09/21 01:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/09/21 01:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/21 01:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/09/21 01:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/09/21 01:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/09/21 01:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			05/09/21 01:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/09/21 01:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/09/21 01:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/09/21 01:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/09/21 01:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/09/21 01:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			05/09/21 01:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/09/21 01:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/09/21 01:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/09/21 01:20	1
2-Hexanone	ND		5.0		ug/L			05/09/21 01:20	1
4-Isopropyltoluene	ND		1.0	0.31				05/09/21 01:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			05/09/21 01:20	1
Acetone	ND		10		ug/L			05/09/21 01:20	1
Benzene	ND		1.0	0.41				05/09/21 01:20	1
Bromodichloromethane	ND		1.0	0.39	_			05/09/21 01:20	1
Bromoform	ND		1.0	0.26	-			05/09/21 01:20	1
Bromomethane	ND		1.0	0.69				05/09/21 01:20	1
Carbon disulfide	ND		1.0	0.19	_			05/09/21 01:20	1
Carbon tetrachloride	ND		1.0	0.27				05/09/21 01:20	1
Chlorobenzene	ND		1.0	0.75				05/09/21 01:20	1
Chloroethane	ND		1.0	0.32	-			05/09/21 01:20	1
Chloroform	ND		1.0	0.34	_			05/09/21 01:20	1
Chloromethane	ND		1.0	0.35				05/09/21 01:20	
cis-1,2-Dichloroethene	ND		1.0	0.81	-			05/09/21 01:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	_			05/09/21 01:20	1
Cyclohexane	ND		1.0	0.18				05/09/21 01:20	 1
Dibromochloromethane	ND		1.0	0.32				05/09/21 01:20	1
Dichlorodifluoromethane	ND		1.0	0.68	_			05/09/21 01:20	1
Ethylbenzene	ND		1.0	0.74				05/09/21 01:20	
Isopropylbenzene	ND		1.0	0.79				05/09/21 01:20	. 1
m,p-Xylene	ND		2.0	0.66				05/09/21 01:20	1
Methyl acetate	ND		2.5		ug/L			05/09/21 01:20	· · · · · · · · · · · · · · · · · · ·
Methyl tert-butyl ether	ND		1.0	0.16				05/09/21 01:20	1
Methylcyclohexane	ND		1.0	0.16	_			05/09/21 01:20	1
Methylene Chloride	ND ND		1.0 1.0	0.44 0.64	_			05/09/21 01:20 05/09/21 01:20	1
n-Butylbenzene					_				
N-Propylbenzene	ND ND		1.0	0.69				05/09/21 01:20	1
o-Xylene	ND ND		1.0	0.76				05/09/21 01:20	1
sec-Butylbenzene	ND		1.0	0.75				05/09/21 01:20	1
Styrene	ND		1.0	0.73	ug/L			05/09/21 01:20	1

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-580011/8

**Matrix: Water** 

Analysis Batch: 580011

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Job ID: 480-184398-1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	MD		1.0	0.81	ug/L			05/09/21 01:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/21 01:20	1
Toluene	ND		1.0	0.51	ug/L			05/09/21 01:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/21 01:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/21 01:20	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/21 01:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/21 01:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/21 01:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/21 01:20	1

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	98		77 - 120			05/09/21 01:20	1
	4-Bromofluorobenzene (Surr)	97		73 - 120			05/09/21 01:20	1
l	Toluene-d8 (Surr)	94		80 - 120			05/09/21 01:20	1

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA** 

Analysis Batch: 580011

**Matrix: Water** 

Lab Sample ID: LCS 480-580011/6

Analysis Batch: 580011	<u> </u>				
	Spike		LCS		%Rec.
Analyte	Added		Qualifier Unit	D %Rec	Limits
1,1,1-Trichloroethane	25.0	22.4	ug/L	89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3	ug/L	93	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.9	ug/L	92	61 - 148
ne					
1,1,2-Trichloroethane	25.0	25.2	ug/L	101	76 - 122
1,1-Dichloroethane	25.0	23.0	ug/L	92	77 - 120
1,1-Dichloroethene	25.0	23.2	ug/L	93	66 - 127
1,2,4-Trichlorobenzene	25.0	23.1	ug/L	92	79 - 122
1,2,4-Trimethylbenzene	25.0	25.3	ug/L	101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	18.5	ug/L	74	56 <sub>-</sub> 134
1,2-Dibromoethane	25.0	24.0	ug/L	96	77 - 120
1,2-Dichlorobenzene	25.0	23.6	ug/L	94	80 - 124
1,2-Dichloroethane	25.0	22.4	ug/L	90	75 - 120
1,2-Dichloropropane	25.0	23.4	ug/L	93	76 - 120
1,3,5-Trimethylbenzene	25.0	25.8	ug/L	103	77 <sub>-</sub> 121
1,3-Dichlorobenzene	25.0	24.8	ug/L	99	77 - 120
1,4-Dichlorobenzene	25.0	24.1	ug/L	96	80 - 120
2-Butanone (MEK)	125	107	ug/L	86	57 <sub>-</sub> 140
2-Hexanone	125	133	ug/L	106	65 - 127
4-Isopropyltoluene	25.0	25.3	ug/L	101	73 - 120
4-Methyl-2-pentanone (MIBK)	125	120	ug/L	96	71 - 125
Acetone	125	97.6	ug/L	78	56 - 142
Benzene	25.0	23.2	ug/L	93	71 - 124
Bromodichloromethane	25.0	23.8	ug/L	95	80 - 122
Bromoform	25.0	23.0	ug/L	92	61 - 132
Bromomethane	25.0	22.5	ug/L	90	55 - 144
Carbon disulfide	25.0	24.0	ug/L	96	59 <sub>-</sub> 134
Carbon tetrachloride	25.0	21.2	ug/L	85	72 - 134
Chlorobenzene	25.0	24.3	ug/L	97	80 - 120

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5/13/2021

## **QC Sample Results**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-580011/6

**Matrix: Water** 

Analysis Batch: 580011

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA** 

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloroethane	25.0	22.9		ug/L		92	69 - 136
Chloroform	25.0	22.5		ug/L		90	73 - 127
Chloromethane	25.0	20.9		ug/L		83	68 _ 124
cis-1,2-Dichloroethene	25.0	22.2		ug/L		89	74 - 124
cis-1,3-Dichloropropene	25.0	23.5		ug/L		94	74 - 124
Cyclohexane	25.0	23.8		ug/L		95	59 _ 135
Dibromochloromethane	25.0	24.3		ug/L		97	75 - 125
Dichlorodifluoromethane	25.0	20.0		ug/L		80	59 <sub>-</sub> 135
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122
m,p-Xylene	25.0	25.8		ug/L		103	76 - 122
Methyl acetate	50.0	37.3		ug/L		75	74 - 133
Methyl tert-butyl ether	25.0	22.6		ug/L		90	77 - 120
Methylcyclohexane	25.0	24.7		ug/L		99	68 - 134
Methylene Chloride	25.0	22.1		ug/L		88	75 - 124
n-Butylbenzene	25.0	25.2		ug/L		101	71 - 128
N-Propylbenzene	25.0	25.7		ug/L		103	75 - 127
o-Xylene	25.0	25.4		ug/L		102	76 - 122
sec-Butylbenzene	25.0	25.6		ug/L		103	74 - 127
Styrene	25.0	26.5		ug/L		106	80 - 120
tert-Butylbenzene	25.0	24.9		ug/L		100	75 - 123
Tetrachloroethene	25.0	23.9		ug/L		95	74 - 122
Toluene	25.0	25.9		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	22.1		ug/L		88	73 _ 127
trans-1,3-Dichloropropene	25.0	26.4		ug/L		106	80 _ 120
Trichloroethene	25.0	23.3		ug/L		93	74 <sub>-</sub> 123
Trichlorofluoromethane	25.0	21.5		ug/L		86	62 - 150
Vinyl chloride	25.0	23.0		ug/L		92	65 - 133

LCS LCS

Surrogate	%Recovery Qua	nlifier Limits
1,2-Dichloroethane-d4 (Surr)	92	77 - 120
4-Bromofluorobenzene (Surr)	99	73 - 120
Toluene-d8 (Surr)	98	80 - 120

# **QC Association Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

#### Job ID: 480-184398-1

#### **GC/MS VOA**

#### Analysis Batch: 580011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-184398-1	RI-MW-2	Total/NA	Water	8260C	
480-184398-2	RI-MW-4	Total/NA	Water	8260C	
480-184398-3	RI-MW-9	Total/NA	Water	8260C	
480-184398-4	RI-MW-10	Total/NA	Water	8260C	
480-184398-5	TRIP BLANK	Total/NA	Water	8260C	
MB 480-580011/8	Method Blank	Total/NA	Water	8260C	
LCS 480-580011/6	Lab Control Sample	Total/NA	Water	8260C	

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Job ID: 480-184398-1

Client: Turnkey Environmental Restoration, LLC Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2

Lab Sample ID: 480-184398-1 Date Collected: 05/07/21 09:31

**Matrix: Water** 

Date Received: 05/07/21 15:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	580011	05/09/21 01:42	WJD	TAL BUF

Client Sample ID: RI-MW-4

Lab Sample ID: 480-184398-2

Date Collected: 05/07/21 12:59 **Matrix: Water** 

Date Received: 05/07/21 15:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	580011	05/09/21 02:04	WJD	TAL BUF

Client Sample ID: RI-MW-9

Total/NA

Lab Sample ID: 480-184398-3

Date Collected: 05/07/21 13:12 **Matrix: Water** Date Received: 05/07/21 15:15

Batch Batch Dilution Batch Prepared **Prep Type** Туре Method Run Factor Number or Analyzed Analyst Lab

Client Sample ID: RI-MW-10 Lab Sample ID: 480-184398-4

Date Collected: 05/07/21 10:50 **Matrix: Water** 

580011

05/09/21 02:27

WJD

TAL BUF

Date Received: 05/07/21 15:15

8260C

Analysis

Dilution Batch Batch Batch Prepared Method or Analyzed Prep Type Туре Run Factor Number Analyst Lab 05/09/21 02:49 WJD TAL BUF 8260C 580011 Total/NA Analysis

Client Sample ID: TRIP BLANK Lab Sample ID: 480-184398-5

Date Collected: 05/07/21 00:00 **Matrix: Water** 

Date Received: 05/07/21 15:15

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	8260C		1	580011	05/09/21 03:12	WJD	TAL BUF	

**Laboratory References:** 

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# **Accreditation/Certification Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

#### Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-22

# **Method Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

#### **Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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# **Sample Summary**

Client: Turnkey Environmental Restoration, LLC Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-184398-1

Asset ID
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# Chain of Custody Record

10 Hazelwood Drive Amherst, NY 14228-2298 Phone: 716-691-2600 Fax: 716-691-7991	Chain of Custody Record	ıstody Re	cord		🔆 eurofins	Environment Testing America
Client Information	Sampler: Sentra	Lab PM: Fische	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No:	
Client Confact: Mr. Christopher Boron	Prohe: CHC Systems	E-Mail:	moc to suitour	State of Origin:	Page:	
Company: Turnkey Environmental Restoration, LLC	PWSID:		Analysis Dans		Page 1 of 1 Job #:	
Address: 2558 Hamburg Turnpike	Due Date Requested:		Alialysis Requested	sied	Preservation Codes:	
city. Lackawanna	TAT Requested (days):					· Hexane
State, Zip: NY, 14218	Compliance Project: A Yes A No				e n	0 - AsnaO2 P - Na2O4S
Phone: 716-856-0635(Tel) 716-856-0583(Fax)					eOH R- mchlor S-	Na2SO3 Na2S2O3 H2SO4
Email: cboron@bm-tk.com	WO#:	OF NO	ns + z.		Acid	TSP Dodecahydrate Acetone
Project Name: Benchmark-791 Washington St. (Trico site)	Project #: 48013685	SeX)	N 10 a	ain of Custody	Water V- DTA W	MCAA - pH 4-5 other (specify)
Site:	SSOW#:	eldma	) 1sil Tc		~uler:	(Apode) page
	Sample	Matrix	SWS		190 L90	
	Sample (C=comp	(W=water, S=solid,	M mio		quinN	
Sample Identification	-	O=waste/oil, BT=Tissue, A=Air)	Her			- Alono inches
	X	Preservation Code:	A		X Secretarian mental me	cuons/Note:
V	5/7/21 73 800	Water	*			
الم	1253	Water	P		3	
LT-MM & S	71/21	Water	X		150	
ストーダング	↑ 0501 ↑	Water	*		1 2	
Trip Blank		Water	×		2	
		Water			1	
		Water				
ŀ			Sample Disnosal ( A fee may be need			
Non-Hazard Flammable Skin Irritant Deliverable Recuested 1.11 III N. Othor (capacity)	8	ica/	Return To Client Disposal By Lab Archive For	ssed if samples are reta	ained longer than 1 mo rchive For	onth) Months
Empt. Kit Deliamited (1, 11, 11, 11, 12, Ottler (specify)	CATE		Special Instructions/QC Requirements:			Months
Relinquished by	Date:	П	Time:	Method of Shipment:		
Relinguished by Contract A Contract	S and a second	Company	Received by:	Date/Time:	S	Company
Palinoniehad hv	Date/Time:	Company	Received by:	Date/Time:	3	Company
	Date/Time:	Company	Received by:	Date/Time: 7	3	Company
Custody Seal No:  A Yes A No			Cooler Temperature(s) °C and Other Remarks:	7	1CE	
					Ne	Ver: 11/01/2020

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-184398-1

Login Number: 184398 List Source: Eurofins TestAmerica, Buffalo

List Number: 1 Creator: Stopa, Erik S

	_	
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TURNKEY
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Eurofins TestAmerica, Buffalo



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins TestAmerica, Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

Laboratory Job ID: 480-192182-1

Client Project/Site: Benchmark-791 Washington St.(Trico site)

#### For:

Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Lackawanna, New York 14218

Attn: Mr. Christopher Z Boron

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Authorized for release by: 11/23/2021 10:03:21 AM Rebecca Jones, Project Management Assistant I Rebecca.Jones@Eurofinset.com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

Brian.Fischer@Eurofinset.com

LINKS .....

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# **Definitions/Glossary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### **Qualifiers**

#### **GC/MS VOA**

(	Qualifier	Qualifier Description
,	·+	LCS and/or LCSD is outside acceptance limits, high biased.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present
PQL Practical Quantitation Limit

PRES Presumptive

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

#### Case Narrative

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-192182-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/10/2021 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

#### GC/MS VOA

Method 8260C: The following samples were collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: RI-MW-4 (480-192182-2) and RI-MW-9 (480-192182-4).

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: RI-MW-2 (480-192182-1), RI-MW-6 (480-192182-3), RI-MW-9 (480-192182-4), (480-192182-A-1 MS) and (480-192182-A-1 MSD). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-604907 recovered above the upper control limit for Dibromochloromethane. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The associated samples are impacted: RI-MW-2 (480-192182-1), RI-MW-4 (480-192182-2), RI-MW-6 (480-192182-3), RI-MW-9 (480-192182-4), RI-ME-10 (480-192182-5) and TB (480-192182-6).

Method 8260C: The laboratory control sample (LCS) for analytical batch 480-604907 recovered outside control limits for the following analytes: Dibromochloromethane and Bromodichloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-192182-1

3

4

5

6

0

9

10

4.0

13

14

Job ID: 480-192182-1

Lab Sample ID: 480-192182-4

Lab Sample ID: 480-192182-5

Lab Sample ID: 480-192182-6

Project/Site: Benchmark-791	Washington St.(Trico	site

Client Sample ID: RI-MW-2	2					Lat	s S	ample ID:	480-192182-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.4		4.0	1.8	ug/L	4	_	8260C	Total/NA
Client Sample ID: RI-MW-4	ļ					Lal	s S	ample ID:	480-192182-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.0	J	10	3.0	ug/L	1	_	8260C	Total/NA
cis-1,2-Dichloroethene	8.9		1.0	0.81	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.5		1.0	0.16	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	39		1.0	0.90	ug/L	1		8260C	Total/NA
Vinyl chloride	9.6		1.0	0.90	ug/L	1		8260C	Total/NA
Client Sample ID: RI-MW-6	3					Lat	s S	ample ID:	480-192182-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.4		2.0	1.6	ug/L	2	_	8260C	Total/NA
trans-1,2-Dichloroethene	2.1		2.0	1.8	ug/L	2		8260C	Total/NA

Client S	Sample	ID: RI	-MW-9
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Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep	Туре
Acetone	19	J	20	6.0	ug/L	2		8260C	Total	/NA
cis-1,2-Dichloroethene	2.7		2.0	1.6	ug/L	2		8260C	Total	/NA

#### Client Sample ID: RI-ME-10

		Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
l	Trichloroethene	2.0		1.0	0.46	ug/L	1	_	8260C	 Total/NA

#### **Client Sample ID: TB**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2

Lab Sample ID: 480-192182-1

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 08:23 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			11/15/21 17:21	
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			11/15/21 17:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			11/15/21 17:21	
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			11/15/21 17:21	
1,1-Dichloroethane	ND		4.0		ug/L			11/15/21 17:21	
1,1-Dichloroethene	ND		4.0		ug/L			11/15/21 17:21	
1,2,4-Trichlorobenzene	ND		4.0		ug/L			11/15/21 17:21	
I,2,4-Trimethylbenzene	ND		4.0		ug/L			11/15/21 17:21	
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/15/21 17:21	
1,2-Dibromoethane	ND		4.0		ug/L			11/15/21 17:21	
1,2-Dichlorobenzene	ND		4.0		ug/L			11/15/21 17:21	
1,2-Dichloroethane	ND		4.0		ug/L			11/15/21 17:21	
1,2-Dichloropropane	ND		4.0		ug/L			11/15/21 17:21	
1,3,5-Trimethylbenzene	ND		4.0		ug/L ug/L			11/15/21 17:21	
1,3-Dichlorobenzene	ND		4.0		ug/L ug/L			11/15/21 17:21	
I,4-Dichlorobenzene	ND ND		4.0		ug/L ug/L			11/15/21 17:21	
,	ND		4.0		-			11/15/21 17:21	
2-Butanone (MEK) 2-Hexanone	ND ND		20		ug/L			11/15/21 17:21	
					ug/L				
4-Isopropyltoluene	ND		4.0		ug/L			11/15/21 17:21	
I-Methyl-2-pentanone (MIBK)	ND		20		ug/L			11/15/21 17:21	
Acetone	ND		40		ug/L			11/15/21 17:21	
Benzene	ND		4.0		ug/L			11/15/21 17:21	
Bromodichloromethane	ND	*+	4.0		ug/L			11/15/21 17:21	
Bromoform	ND		4.0		ug/L			11/15/21 17:21	
Bromomethane	ND		4.0		ug/L			11/15/21 17:21	
Carbon disulfide	ND		4.0	0.76	ug/L			11/15/21 17:21	
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/15/21 17:21	
Chlorobenzene	ND		4.0	3.0	ug/L			11/15/21 17:21	
Chloroethane	ND		4.0	1.3	ug/L			11/15/21 17:21	
Chloroform	ND		4.0	1.4	ug/L			11/15/21 17:21	
Chloromethane	ND		4.0	1.4	ug/L			11/15/21 17:21	
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			11/15/21 17:21	
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			11/15/21 17:21	
Cyclohexane	ND		4.0	0.72	ug/L			11/15/21 17:21	
Dibromochloromethane	ND	*+	4.0	1.3	ug/L			11/15/21 17:21	
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			11/15/21 17:21	
Ethylbenzene	ND		4.0	3.0	ug/L			11/15/21 17:21	
sopropylbenzene	ND		4.0	3.2	ug/L			11/15/21 17:21	
m,p-Xylene	ND		8.0		ug/L			11/15/21 17:21	
Methyl acetate	ND		10		ug/L			11/15/21 17:21	
Methyl tert-butyl ether	ND		4.0		ug/L			11/15/21 17:21	
Methylcyclohexane	ND		4.0		ug/L			11/15/21 17:21	
Methylene Chloride	ND		4.0		ug/L			11/15/21 17:21	
n-Butylbenzene	ND		4.0		ug/L			11/15/21 17:21	
N-Propylbenzene	ND		4.0		ug/L			11/15/21 17:21	
o-Xylene	ND ND		4.0		ug/L ug/L			11/15/21 17:21	
sec-Butylbenzene	ND ND		4.0		ug/L ug/L			11/15/21 17:21	
					_				•
Styrene tert-Butylbenzene	ND ND		4.0		ug/L ug/L			11/15/21 17:21 11/15/21 17:21	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2 Lab Sample ID: 480-192182-1

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Job ID: 480-192182-1

Date Collected: 11/09/21 08:23 Date Received: 11/10/21 10:45

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Method: 8260C - Volatile Organic	Compounds I	by GC/MS (	Continued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		4.0	1.4	ug/L			11/15/21 17:21	4
Toluene	ND		4.0	2.0	ug/L			11/15/21 17:21	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			11/15/21 17:21	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			11/15/21 17:21	4
Trichloroethene	6.4		4.0	1.8	ug/L			11/15/21 17:21	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			11/15/21 17:21	4
Vinyl chloride	ND		4.0	3.6	ug/L			11/15/21 17:21	4
Xylenes, Total	ND		8.0	2.6	ug/L			11/15/21 17:21	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120			-		11/15/21 17:21	4
4-Bromofluorobenzene (Surr)	92		73 - 120					11/15/21 17:21	4
Toluene-d8 (Surr)	99		80 - 120					11/15/21 17:21	4

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-4

Lab Sample ID: 480-192182-2 Date Collected: 11/09/21 13:11

Matrix: Water

Job ID: 480-192182-1

Date Received: 11/10/21 10:45

Analyte	Result Qualifier	RL	MDL		<u>D</u> _	Prepared	Analyzed	Dil F
,1,1-Trichloroethane	ND	1.0	0.82	ug/L			11/15/21 17:43	
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			11/15/21 17:43	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			11/15/21 17:43	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/15/21 17:43	
1,1-Dichloroethane	ND	1.0	0.38	ug/L			11/15/21 17:43	
I,1-Dichloroethene	ND	1.0	0.29	ug/L			11/15/21 17:43	
I,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/15/21 17:43	
I,2,4-Trimethylbenzene	ND	1.0	0.75	ug/L			11/15/21 17:43	
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			11/15/21 17:43	
I,2-Dibromoethane	ND	1.0	0.73	ug/L			11/15/21 17:43	
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			11/15/21 17:43	
1,2-Dichloroethane	ND	1.0	0.21	ug/L			11/15/21 17:43	
1,2-Dichloropropane	ND	1.0	0.72	ug/L			11/15/21 17:43	
1,3,5-Trimethylbenzene	ND	1.0	0.77	ug/L			11/15/21 17:43	
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			11/15/21 17:43	
I,4-Dichlorobenzene	ND	1.0	0.84	ug/L			11/15/21 17:43	
2-Butanone (MEK)	ND	10	1.3	ug/L			11/15/21 17:43	
2-Hexanone	ND	5.0	1.2	ug/L			11/15/21 17:43	
I-Isopropyltoluene	ND	1.0	0.31	ug/L			11/15/21 17:43	
1-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/15/21 17:43	
Acetone	6.0 J	10		ug/L			11/15/21 17:43	
Benzene	ND	1.0		ug/L			11/15/21 17:43	
Bromodichloromethane	ND *+	1.0	0.39	-			11/15/21 17:43	
Bromoform	ND	1.0	0.26				11/15/21 17:43	
Bromomethane	ND	1.0		ug/L			11/15/21 17:43	
Carbon disulfide	ND	1.0		ug/L			11/15/21 17:43	
Carbon tetrachloride	ND	1.0	0.27	-			11/15/21 17:43	
Chlorobenzene	ND	1.0	0.75				11/15/21 17:43	
Chloroethane	ND	1.0	0.32				11/15/21 17:43	
Chloroform	ND	1.0	0.34	-			11/15/21 17:43	
Chloromethane	ND	1.0		ug/L			11/15/21 17:43	
cis-1,2-Dichloroethene	8.9	1.0	0.81	-			11/15/21 17:43	
sis-1,3-Dichloropropene	ND	1.0	0.36	•			11/15/21 17:43	
Cyclohexane	ND	1.0		ug/L			11/15/21 17:43	
Dibromochloromethane	ND *+	1.0		ug/L			11/15/21 17:43	
Dichlorodifluoromethane	ND	1.0	0.68	_			11/15/21 17:43	
Ethylbenzene	ND	1.0		ug/L			11/15/21 17:43	
sopropylbenzene	ND	1.0		ug/L			11/15/21 17:43	
n,p-Xylene	ND	2.0		ug/L			11/15/21 17:43	
Methyl acetate	ND	2.5		ug/L			11/15/21 17:43	
Methyl tert-butyl ether	1.5	1.0		ug/L			11/15/21 17:43	
Methylcyclohexane	ND	1.0		ug/L			11/15/21 17:43	
Methylene Chloride	ND	1.0		ug/L			11/15/21 17:43	
-Butylbenzene	ND ND	1.0		ug/L ug/L			11/15/21 17:43	
I-Butylbenzene I-Propylbenzene	ND ND	1.0		ug/L ug/L			11/15/21 17:43	
	ND		0.69					
p-Xylene		1.0		-			11/15/21 17:43	
sec-Butylbenzene	ND	1.0	0.75	-			11/15/21 17:43	
Styrene ert-Butylbenzene	ND ND	1.0	0.73	ug/L ug/L			11/15/21 17:43 11/15/21 17:43	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-4

Lab Sample ID: 480-192182-2

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 13:11 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	MD		1.0	0.36	ug/L			11/15/21 17:43	1
Toluene	ND		1.0	0.51	ug/L			11/15/21 17:43	1
trans-1,2-Dichloroethene	39		1.0	0.90	ug/L			11/15/21 17:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/21 17:43	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/21 17:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/21 17:43	1
Vinyl chloride	9.6		1.0	0.90	ug/L			11/15/21 17:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/15/21 17:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120			_		11/15/21 17:43	1
4-Bromofluorobenzene (Surr)	92		73 - 120					11/15/21 17:43	1
Toluene-d8 (Surr)	99		80 <sub>-</sub> 120					11/15/21 17:43	1

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-6

Lab Sample ID: 480-192182-3

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 12:12 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			11/15/21 18:05	
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			11/15/21 18:05	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			11/15/21 18:05	
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			11/15/21 18:05	
1,1-Dichloroethane	ND		2.0		ug/L			11/15/21 18:05	:
1,1-Dichloroethene	ND		2.0		ug/L			11/15/21 18:05	
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/15/21 18:05	
1,2,4-Trimethylbenzene	ND		2.0		ug/L			11/15/21 18:05	
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/15/21 18:05	
1,2-Dibromoethane	ND		2.0		ug/L			11/15/21 18:05	
1,2-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:05	:
1,2-Dichloroethane	ND		2.0		ug/L			11/15/21 18:05	
1,2-Dichloropropane	ND		2.0		ug/L			11/15/21 18:05	
1,3,5-Trimethylbenzene	ND		2.0		ug/L			11/15/21 18:05	
1,3-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:05	
1,4-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:05	
2-Butanone (MEK)	ND		20		ug/L			11/15/21 18:05	
2-Hexanone	ND		10		ug/L ug/L			11/15/21 18:05	
	ND		2.0		ug/L ug/L			11/15/21 18:05	
4-Isopropyltoluene			10		-			11/15/21 18:05	
4-Methyl-2-pentanone (MIBK)	ND				ug/L				
Acetone	ND		20		ug/L			11/15/21 18:05	
Benzene	ND		2.0		ug/L			11/15/21 18:05	
Bromodichloromethane	ND	*+	2.0		ug/L			11/15/21 18:05	
Bromoform	ND		2.0		ug/L			11/15/21 18:05	
Bromomethane	ND		2.0		ug/L			11/15/21 18:05	
Carbon disulfide	ND		2.0		ug/L			11/15/21 18:05	
Carbon tetrachloride	ND		2.0		ug/L			11/15/21 18:05	
Chlorobenzene	ND		2.0		ug/L			11/15/21 18:05	
Chloroethane	ND		2.0		ug/L			11/15/21 18:05	
Chloroform	ND		2.0		ug/L			11/15/21 18:05	
Chloromethane	ND		2.0	0.70	ug/L			11/15/21 18:05	
cis-1,2-Dichloroethene	4.4		2.0	1.6	ug/L			11/15/21 18:05	
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			11/15/21 18:05	
Cyclohexane	ND		2.0	0.36	ug/L			11/15/21 18:05	
Dibromochloromethane	ND	*+	2.0	0.64	ug/L			11/15/21 18:05	
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			11/15/21 18:05	
Ethylbenzene	ND		2.0	1.5	ug/L			11/15/21 18:05	:
Isopropylbenzene	ND		2.0	1.6	ug/L			11/15/21 18:05	
m,p-Xylene	ND		4.0	1.3	ug/L			11/15/21 18:05	
Methyl acetate	ND		5.0	2.6	ug/L			11/15/21 18:05	
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			11/15/21 18:05	
Methylcyclohexane	ND		2.0	0.32	ug/L			11/15/21 18:05	
Methylene Chloride	ND		2.0	0.88	ug/L			11/15/21 18:05	
n-Butylbenzene	ND		2.0		ug/L			11/15/21 18:05	
N-Propylbenzene	ND		2.0		ug/L			11/15/21 18:05	
p-Xylene	ND		2.0		ug/L			11/15/21 18:05	
sec-Butylbenzene	ND		2.0		ug/L			11/15/21 18:05	
Styrene	ND		2.0		ug/L			11/15/21 18:05	:
tert-Butylbenzene	ND		2.0		ug/L			11/15/21 18:05	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-6

Lab Sample ID: 480-192182-3

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 12:12 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		2.0	0.72	ug/L			11/15/21 18:05	2
Toluene	ND		2.0	1.0	ug/L			11/15/21 18:05	2
trans-1,2-Dichloroethene	2.1		2.0	1.8	ug/L			11/15/21 18:05	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			11/15/21 18:05	2
Trichloroethene	ND		2.0	0.92	ug/L			11/15/21 18:05	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			11/15/21 18:05	2
Vinyl chloride	ND		2.0	1.8	ug/L			11/15/21 18:05	2
Xylenes, Total	ND		4.0	1.3	ug/L			11/15/21 18:05	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120			-		11/15/21 18:05	2
4-Bromofluorobenzene (Surr)	103		73 - 120					11/15/21 18:05	2
Toluene-d8 (Surr)	103		80 <sub>-</sub> 120					11/15/21 18:05	2

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-9

Lab Sample ID: 480-192182-4 Date Collected: 11/09/21 11:04

Matrix: Water

Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			11/15/21 18:28	
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			11/15/21 18:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			11/15/21 18:28	
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			11/15/21 18:28	
1,1-Dichloroethane	ND		2.0	0.76				11/15/21 18:28	
1,1-Dichloroethene	ND		2.0	0.58				11/15/21 18:28	
1,2,4-Trichlorobenzene	ND		2.0	0.82				11/15/21 18:28	
1,2,4-Trimethylbenzene	ND		2.0		ug/L			11/15/21 18:28	
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78				11/15/21 18:28	
1,2-Dibromoethane	ND		2.0		ug/L			11/15/21 18:28	
1,2-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:28	
1,2-Dichloroethane	ND		2.0	0.42				11/15/21 18:28	
1,2-Dichloropropane	ND		2.0		ug/L			11/15/21 18:28	
1,3,5-Trimethylbenzene	ND		2.0		ug/L			11/15/21 18:28	
1,3-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:28	
1,4-Dichlorobenzene	ND		2.0		ug/L			11/15/21 18:28	
2-Butanone (MEK)	ND		2.0		ug/L ug/L			11/15/21 18:28	
2-Hexanone	ND ND		10		ug/L ug/L				
								11/15/21 18:28	
4-Isopropyltoluene	ND		2.0		ug/L			11/15/21 18:28	
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/15/21 18:28	
Acetone	19	. <b>.</b>	20		ug/L			11/15/21 18:28	
Benzene	ND		2.0	0.82				11/15/21 18:28	
Bromodichloromethane	ND	*+	2.0	0.78				11/15/21 18:28	
3romoform	ND		2.0	0.52				11/15/21 18:28	
Bromomethane	ND		2.0		ug/L			11/15/21 18:28	
Carbon disulfide	ND		2.0	0.38				11/15/21 18:28	
Carbon tetrachloride	ND		2.0	0.54				11/15/21 18:28	
Chlorobenzene	ND		2.0	1.5	ug/L			11/15/21 18:28	
Chloroethane	ND		2.0	0.64	ug/L			11/15/21 18:28	
Chloroform	ND		2.0	0.68	ug/L			11/15/21 18:28	
Chloromethane	ND		2.0	0.70	ug/L			11/15/21 18:28	
cis-1,2-Dichloroethene	2.7		2.0	1.6	ug/L			11/15/21 18:28	
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			11/15/21 18:28	
Cyclohexane	ND		2.0	0.36	ug/L			11/15/21 18:28	
Dibromochloromethane	ND	*+	2.0	0.64	ug/L			11/15/21 18:28	
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			11/15/21 18:28	
Ethylbenzene	ND		2.0	1.5	ug/L			11/15/21 18:28	
sopropylbenzene	ND		2.0		ug/L			11/15/21 18:28	
n,p-Xylene	ND		4.0	1.3	ug/L			11/15/21 18:28	
Methyl acetate	ND		5.0		ug/L			11/15/21 18:28	
Methyl tert-butyl ether	ND		2.0		ug/L			11/15/21 18:28	
Methylcyclohexane	ND		2.0		ug/L			11/15/21 18:28	
Methylene Chloride	ND		2.0		ug/L			11/15/21 18:28	
n-Butylbenzene	ND		2.0		ug/L			11/15/21 18:28	
N-Propylbenzene	ND		2.0		ug/L			11/15/21 18:28	
o-Xylene	ND ND		2.0		ug/L			11/15/21 18:28	
sec-Butylbenzene	ND ND		2.0		ug/L ug/L			11/15/21 18:28	
					-				
Styrene ert-Butylbenzene	ND ND		2.0		ug/L ug/L			11/15/21 18:28 11/15/21 18:28	

Eurofins TestAmerica, Buffalo

11/23/2021

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-9

Lab Sample ID: 480-192182-4

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 11:04 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	MD		2.0	0.72	ug/L			11/15/21 18:28	2
Toluene	ND		2.0	1.0	ug/L			11/15/21 18:28	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			11/15/21 18:28	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			11/15/21 18:28	2
Trichloroethene	ND		2.0	0.92	ug/L			11/15/21 18:28	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			11/15/21 18:28	2
Vinyl chloride	ND		2.0	1.8	ug/L			11/15/21 18:28	2
Xylenes, Total	ND		4.0	1.3	ug/L			11/15/21 18:28	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120			_		11/15/21 18:28	2
4-Bromofluorobenzene (Surr)	91		73 - 120					11/15/21 18:28	2
Toluene-d8 (Surr)	98		80 - 120					11/15/21 18:28	2

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: RI-ME-10** 

Date Collected: 11/09/21 09:30 Date Received: 11/10/21 10:45 Lab Sample ID: 480-192182-5

**Matrix: Water** 

Job ID: 480-192182-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane		1.0	0.82	ug/L		-	11/15/21 18:49	
1,1,2,2-Tetrachloroethane	ND	1.0		ug/L			11/15/21 18:49	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0		ug/L			11/15/21 18:49	
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			11/15/21 18:49	
1,1-Dichloroethane	ND	1.0		ug/L			11/15/21 18:49	
1,1-Dichloroethene	ND	1.0		ug/L			11/15/21 18:49	
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			11/15/21 18:49	
1,2,4-Trimethylbenzene	ND	1.0		ug/L			11/15/21 18:49	
1,2-Dibromo-3-Chloropropane	ND	1.0		ug/L			11/15/21 18:49	
1,2-Dibromoethane	ND	1.0		ug/L			11/15/21 18:49	
1,2-Dichlorobenzene	ND	1.0		ug/L			11/15/21 18:49	
1,2-Dichloroethane	ND	1.0		ug/L			11/15/21 18:49	
1,2-Dichloropropane	ND	1.0		ug/L			11/15/21 18:49	
1,3,5-Trimethylbenzene	ND	1.0		ug/L			11/15/21 18:49	
1,3-Dichlorobenzene	ND	1.0		ug/L			11/15/21 18:49	
1,4-Dichlorobenzene	ND	1.0		ug/L			11/15/21 18:49	
2-Butanone (MEK)	ND	10		ug/L			11/15/21 18:49	
2-Hexanone	ND	5.0		ug/L			11/15/21 18:49	
4-Isopropyltoluene	ND	1.0		ug/L			11/15/21 18:49	
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			11/15/21 18:49	
Acetone	ND	10		ug/L			11/15/21 18:49	
Benzene	ND	1.0		ug/L			11/15/21 18:49	
Bromodichloromethane	ND *+	1.0		ug/L			11/15/21 18:49	
Bromoform	ND	1.0		ug/L			11/15/21 18:49	
Bromomethane	ND	1.0		ug/L			11/15/21 18:49	
Carbon disulfide	ND	1.0		ug/L			11/15/21 18:49	
Carbon tetrachloride	ND	1.0		ug/L			11/15/21 18:49	
Chlorobenzene	ND	1.0		ug/L			11/15/21 18:49	
Chloroethane	ND	1.0		ug/L			11/15/21 18:49	
Chloroform	ND	1.0		ug/L			11/15/21 18:49	
Chloromethane	ND	1.0		ug/L			11/15/21 18:49	
cis-1,2-Dichloroethene	ND	1.0		ug/L			11/15/21 18:49	
cis-1,3-Dichloropropene	ND	1.0		ug/L			11/15/21 18:49	
Cyclohexane	ND	1.0		ug/L			11/15/21 18:49	
Dibromochloromethane	ND *+	1.0		ug/L			11/15/21 18:49	
Dichlorodifluoromethane	ND	1.0		ug/L			11/15/21 18:49	
Ethylbenzene	ND	1.0		ug/L			11/15/21 18:49	
Isopropylbenzene	ND	1.0		ug/L			11/15/21 18:49	
m,p-Xylene	ND	2.0		ug/L			11/15/21 18:49	
Methyl acetate	ND	2.5		ug/L			11/15/21 18:49	
Methyl tert-butyl ether	ND	1.0		ug/L			11/15/21 18:49	
Methylcyclohexane	ND	1.0		ug/L			11/15/21 18:49	
Methylene Chloride	ND	1.0		ug/L			11/15/21 18:49	
n-Butylbenzene	ND	1.0		ug/L			11/15/21 18:49	
N-Propylbenzene	ND	1.0		ug/L			11/15/21 18:49	
o-Xylene	ND ND	1.0		ug/L			11/15/21 18:49	
sec-Butylbenzene	ND	1.0		ug/L			11/15/21 18:49	
Styrene	ND	1.0		ug/L			11/15/21 18:49	
tert-Butylbenzene	ND	1.0		ug/L			11/15/21 18:49	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: RI-ME-10** 

Lab Sample ID: 480-192182-5

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 09:30 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/21 18:49	1
Toluene	ND		1.0	0.51	ug/L			11/15/21 18:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/21 18:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/21 18:49	1
Trichloroethene	2.0		1.0	0.46	ug/L			11/15/21 18:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/21 18:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/21 18:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/15/21 18:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120			_		11/15/21 18:49	1
4-Bromofluorobenzene (Surr)	101		73 - 120					11/15/21 18:49	1
Toluene-d8 (Surr)	102		80 - 120					11/15/21 18:49	1

Eurofins TestAmerica, Buffalo

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: TB** 

Lab Sample ID: 480-192182-6

Matrix: Water

Job ID: 480-192182-1

Date Collected: 11/09/21 00:00 Date Received: 11/10/21 10:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L		-	11/15/21 19:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/21 19:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/21 19:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/21 19:11	1
1,1-Dichloroethane	ND		1.0		ug/L			11/15/21 19:11	1
1,1-Dichloroethene	ND		1.0		ug/L			11/15/21 19:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41				11/15/21 19:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/21 19:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/15/21 19:11	1
1,2-Dibromoethane	ND		1.0		ug/L			11/15/21 19:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	_			11/15/21 19:11	1
1,2-Dichloroethane	ND		1.0	0.21	•			11/15/21 19:11	1
1,2-Dichloropropane	ND		1.0		ug/L			11/15/21 19:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	-			11/15/21 19:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/15/21 19:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/15/21 19:11	1
2-Butanone (MEK)	ND		10		ug/L			11/15/21 19:11	1
2-Hexanone	ND		5.0		ug/L			11/15/21 19:11	1
4-Isopropyltoluene	ND		1.0		ug/L			11/15/21 19:11	· · · · · · · · · · · · · · · · · · ·
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/15/21 19:11	
Acetone (MBR)	ND		10		ug/L			11/15/21 19:11	
Benzene	ND		1.0		ug/L			11/15/21 19:11	
Bromodichloromethane	ND	*+	1.0		ug/L			11/15/21 19:11	
Bromoform	ND	•	1.0		ug/L			11/15/21 19:11	1
Bromomethane	ND		1.0		ug/L			11/15/21 19:11	1
Carbon disulfide	ND		1.0	0.09	=			11/15/21 19:11	1
Carbon distillide  Carbon tetrachloride	ND ND		1.0	0.19	•			11/15/21 19:11	1
Chlorobenzene Chloroethane	ND		1.0		ug/L			11/15/21 19:11	1
	ND ND		1.0		ug/L			11/15/21 19:11	1
Chloroform			1.0		ug/L			11/15/21 19:11	
Chloromethane	ND		1.0		ug/L			11/15/21 19:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/15/21 19:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/15/21 19:11	
Cyclohexane	ND		1.0		ug/L			11/15/21 19:11	1
Dibromochloromethane	ND	*+	1.0		ug/L			11/15/21 19:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/21 19:11	
Ethylbenzene	ND		1.0		ug/L			11/15/21 19:11	1
Isopropylbenzene	ND		1.0		ug/L			11/15/21 19:11	1
m,p-Xylene	ND		2.0		ug/L			11/15/21 19:11	
Methyl acetate	ND		2.5		ug/L			11/15/21 19:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/15/21 19:11	1
Methylcyclohexane	ND		1.0		ug/L			11/15/21 19:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/21 19:11	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/21 19:11	1
N-Propylbenzene	ND		1.0		ug/L			11/15/21 19:11	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/21 19:11	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/21 19:11	1
Styrene	ND		1.0	0.73	ug/L			11/15/21 19:11	1
tert-Butylbenzene	ND		1.0		ug/L			11/15/21 19:11	

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11/23/2021

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

**Client Sample ID: TB** Date Collected: 11/09/21 00:00

Date Received: 11/10/21 10:45

Lab	Sample	ID:	480-	1921	82-6
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**Matrix: Water** 

Job ID: 480-192182-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/21 19:11	1
Toluene	ND		1.0	0.51	ug/L			11/15/21 19:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/21 19:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/21 19:11	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/21 19:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/21 19:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/21 19:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/15/21 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120			-		11/15/21 19:11	1
4-Bromofluorobenzene (Surr)	99		73 - 120					11/15/21 19:11	1
Toluene-d8 (Surr)	105		80 - 120					11/15/21 19:11	1

# **Surrogate Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water Prep Type: Total/NA

				Percent Surroga	te Recovery (Acceptance Limits)
		DCA	BFB	TOL	
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)	
480-192182-1	RI-MW-2	102	92	99	
480-192182-1 MS	RI-MW-2	100	96	96	
480-192182-1 MSD	RI-MW-2	100	98	100	
480-192182-2	RI-MW-4	101	92	99	
480-192182-3	RI-MW-6	103	103	103	
480-192182-4	RI-MW-9	100	91	98	
480-192182-5	RI-ME-10	103	101	102	
480-192182-6	ТВ	106	99	105	
LCS 480-604907/15	Lab Control Sample	98	97	97	
MB 480-604907/8	Method Blank	101	101	103	

#### **Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Eurofins TestAmerica, Buffalo

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

# Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-604907/8

**Matrix: Water** Analysis Batch: 604907 **Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Analyte	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND		1.0	0.82			Trepared	11/15/21 11:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21				11/15/21 11:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/15/21 11:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/15/21 11:19	·
1,1-Dichloroethane	ND		1.0		ug/L			11/15/21 11:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/15/21 11:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/15/21 11:19	
1,2,4-Trimethylbenzene	ND		1.0	0.75	_			11/15/21 11:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/15/21 11:19	1
1,2-Dibromoethane	ND		1.0		ug/L			11/15/21 11:19	
1,2-Dichlorobenzene	ND		1.0	0.79	-			11/15/21 11:19	1
1,2-Dichloroethane	ND		1.0	0.73				11/15/21 11:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/15/21 11:19	
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/15/21 11:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/15/21 11:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/15/21 11:19	
2-Butanone (MEK)	ND		10		ug/L			11/15/21 11:19	1
2-Hexanone	ND		5.0		ug/L			11/15/21 11:19	1
4-Isopropyltoluene	ND		1.0		ug/L			11/15/21 11:19	
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			11/15/21 11:19	1
Acetone	ND		10		ug/L			11/15/21 11:19	1
Benzene	ND		1.0		ug/L			11/15/21 11:19	1
Bromodichloromethane	ND		1.0		ug/L			11/15/21 11:19	1
Bromoform	ND		1.0		ug/L			11/15/21 11:19	1
Bromomethane	ND		1.0		ug/L			11/15/21 11:19	
Carbon disulfide	ND		1.0		ug/L			11/15/21 11:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/15/21 11:19	1
Chlorobenzene	ND		1.0		ug/L			11/15/21 11:19	
Chloroethane	ND		1.0		ug/L			11/15/21 11:19	1
Chloroform	ND		1.0		ug/L			11/15/21 11:19	1
Chloromethane	ND		1.0		ug/L			11/15/21 11:19	
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/15/21 11:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/15/21 11:19	1
Cyclohexane	ND		1.0		ug/L			11/15/21 11:19	
Dibromochloromethane	ND		1.0		ug/L			11/15/21 11:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/15/21 11:19	1
Ethylbenzene	ND		1.0		ug/L			11/15/21 11:19	
Isopropylbenzene	ND		1.0		ug/L			11/15/21 11:19	1
m,p-Xylene	ND		2.0		ug/L			11/15/21 11:19	1
Methyl acetate	ND		2.5		ug/L			11/15/21 11:19	
Methyl tert-butyl ether	ND		1.0		ug/L			11/15/21 11:19	1
Methylcyclohexane	ND		1.0		ug/L			11/15/21 11:19	1
Methylene Chloride	ND		1.0		ug/L			11/15/21 11:19	'
n-Butylbenzene	ND ND		1.0		ug/L ug/L			11/15/21 11:19	1
N-Propylbenzene	ND ND		1.0		ug/L ug/L			11/15/21 11:19	1
o-Xylene	ND		1.0		ug/L ug/L			11/15/21 11:19	'
o-Aylerie sec-Butylbenzene	ND ND		1.0		ug/L ug/L			11/15/21 11:19	1
Styrene	ND ND		1.0		ug/L ug/L			11/15/21 11:19	1

Eurofins TestAmerica, Buffalo

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

мв мв Result

ND

ND

ND

ND

ND

Qualifier

Lab Sample ID: MB 480-604907/8

**Matrix: Water** 

tert-Butylbenzene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Analyte

Toluene

Analysis Batch: 604907

Client Sample ID: Method Blank

Prep Type: Total/NA

RL MDL Unit Dil Fac D Prepared Analyzed 1.0 0.81 ug/L 11/15/21 11:19 1.0 0.36 ug/L 11/15/21 11:19 0.51 11/15/21 11:19 1.0 ug/L 1.0 11/15/21 11:19 0.90 ug/L 1.0 0.37 ug/L 11/15/21 11:19

ND 1.0 0.46 ug/L 11/15/21 11:19 ND Trichlorofluoromethane 1.0 0.88 ug/L 11/15/21 11:19 ND 1.0 0.90 ug/L 11/15/21 11:19 ND 2.0 0.66 ug/L 11/15/21 11:19

MB MB

Dil Fac %Recovery Qualifier Surrogate Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 101 77 - 120 11/15/21 11:19 4-Bromofluorobenzene (Surr) 101 73 - 120 11/15/21 11:19 Toluene-d8 (Surr) 103 80 - 120 11/15/21 11:19

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 604907

**Matrix: Water** 

Lab Sample ID: LCS 480-604907/15

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 1,1,1-Trichloroethane 25.0 29.5 ug/L 118 73 - 126 1,1,2,2-Tetrachloroethane 25.0 26.7 ug/L 107 76 - 120 1,1,2-Trichloro-1,2,2-trifluoroetha 25.0 32.0 128 61 - 148 ug/L 25.0 1,1,2-Trichloroethane 27.4 ug/L 109 76 - 1221,1-Dichloroethane 25.0 29.4 118 77 - 120 ug/L 1,1-Dichloroethene 25.0 29.6 ug/L 118 66 - 127 1,2,4-Trichlorobenzene 25.0 24.2 ug/L 97 79 - 1221,2,4-Trimethylbenzene 25.0 27 4 ug/L 110 76 - 1211,2-Dibromo-3-Chloropropane 25.0 21.5 ug/L 86 56 - 134 1,2-Dibromoethane 77 - 120 25.0 28.3 113 ug/L 25.0 25.7 103 80 - 124 1.2-Dichlorobenzene ug/L 1,2-Dichloroethane ug/L 25.0 27.2 109 75 - 1201,2-Dichloropropane 25.0 29.9 ug/L 120 76 - 120 1.3.5-Trimethylbenzene 25.0 27.8 ug/L 111 77 - 121 1,3-Dichlorobenzene 25.0 26.5 ug/L 106 77 - 120 ug/L 1,4-Dichlorobenzene 25.0 26.0 104 80 - 120 2-Butanone (MEK) 125 139 ug/L 111 57 - 1402-Hexanone 125 140 ug/L 112 65 - 127 25.0 4-Isopropyltoluene 28.7 ug/L 115 73 - 1204-Methyl-2-pentanone (MIBK) 125 134 ug/L 107 71 - 125 Acetone 125 139 111 56 - 142 ug/L 25.0 29.8 119 71 - 124 Benzene ug/L Bromodichloromethane 25.0 30.7 123 80 \_ 122 ug/L Bromoform 25.0 29.9 ug/L 119 61 - 132 ug/L 25.0 23.5 94 Bromomethane 55 - 144Carbon disulfide 25.0 32.5 ug/L 130 59 - 134 Carbon tetrachloride 25.0 31.1 ug/L 124 72 - 134 Chlorobenzene 25.0 27.7 ug/L 111 80 - 120

Eurofins TestAmerica, Buffalo

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11/23/2021

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-604907/15

**Matrix: Water** 

Analysis Batch: 604907

Client Sample ID: Lab Control Sample

**Prep Type: Total/NA** 

	Spike	LCS I	LCS				%Rec.	
Analyte	Added	Result (	Qualifier U	nit	D	%Rec	Limits	
Chloroethane	25.0	23.6	uį	ı/L		95	69 - 136	
Chloroform	25.0	27.2	uģ	ı/L		109	73 - 127	
Chloromethane	25.0	25.3	uį	ı/L		101	68 - 124	
cis-1,2-Dichloroethene	25.0	28.5	uç	ı/L		114	74 - 124	
cis-1,3-Dichloropropene	25.0	28.2	uç	ı/L		113	74 - 124	
Cyclohexane	25.0	31.7	uį	ı/L		127	59 <sub>-</sub> 135	
Dibromochloromethane	25.0	32.4	*+ u(	ı/L		130	75 - 125	
Dichlorodifluoromethane	25.0	28.6	uç	ı/L		114	59 - 135	
Ethylbenzene	25.0	28.5	uį	ı/L		114	77 - 123	
Isopropylbenzene	25.0	28.5	uģ	ı/L		114	77 - 122	
m,p-Xylene	25.0	28.7	ug	ı/L		115	76 - 122	
Methyl acetate	50.0	52.5	uį	ı/L		105	74 - 133	
Methyl tert-butyl ether	25.0	29.2	ug	ı/L		117	77 - 120	
Methylcyclohexane	25.0	31.7	uç	ı/L		127	68 - 134	
Methylene Chloride	25.0	27.4	uç	ı/L		110	75 - 124	
n-Butylbenzene	25.0	28.2	uç	ı/L		113	71 - 128	
N-Propylbenzene	25.0	28.6	uç	ı/L		115	75 - 127	
o-Xylene	25.0	27.7	uç	ı/L		111	76 - 122	
sec-Butylbenzene	25.0	28.2	uç	ı/L		113	74 - 127	
Styrene	25.0	28.0	uç	ı/L		112	80 - 120	
tert-Butylbenzene	25.0	27.7	u(	ı/L		111	75 - 123	
Tetrachloroethene	25.0	29.4	uģ	ı/L		117	74 - 122	
Toluene	25.0	28.3	ug	ı/L		113	80 - 122	
trans-1,2-Dichloroethene	25.0	29.7	u(	ı/L		119	73 - 127	
trans-1,3-Dichloropropene	25.0	26.7	uç	ı/L		107	80 - 120	
Trichloroethene	25.0	29.6	ug	ı/L		118	74 - 123	
Trichlorofluoromethane	25.0	28.5	uç	ı/L		114	62 - 150	
Vinyl chloride	25.0	24.7	uç	ı/L		99	65 _ 133	

LCS LCS

Surrogate	%Recovery Qualific	er Limits
1,2-Dichloroethane-d4 (Surr)	98	77 - 120
4-Bromofluorobenzene (Surr)	97	73 - 120
Toluene-d8 (Surr)	97	80 - 120

Lab Sample ID: 480-192182-1 MS

**Matrix: Water** 

Analysis Batch: 604907

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	ND		100	108		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	ND		100	98.7		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		100	116		ug/L		116	61 - 148
ne									
1,1,2-Trichloroethane	ND		100	103		ug/L		103	76 - 122
1,1-Dichloroethane	ND		100	111		ug/L		111	77 - 120
1,1-Dichloroethene	ND		100	107		ug/L		107	66 - 127
1,2,4-Trichlorobenzene	ND		100	83.1		ug/L		83	79 - 122
1,2,4-Trimethylbenzene	ND		100	98.6		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	ND		100	71.5		ug/L		72	56 - 134

Eurofins TestAmerica, Buffalo

11/23/2021

Client Sample ID: RI-MW-2

Prep Type: Total/NA

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

Client Sample ID: RI-MW-2 Prep Type: Total/NA

# Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-192182-1 MS

**Matrix: Water** 

Vinyl chloride

Analysis Batch: 604907	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte		Qualifier	Added	Result		Unit	D	%Rec	Limits	
1,2-Dibromoethane	ND		100	102		ug/L	— <u> </u>	102	77 - 120	
1,2-Dichlorobenzene	ND		100	93.2		ug/L		93	80 - 124	
1,2-Dichloroethane	ND		100	102		ug/L		102	75 <sub>-</sub> 120	
1,2-Dichloropropane	ND		100	114		ug/L		114	76 - 120	
1,3,5-Trimethylbenzene	ND		100	100		ug/L		100	77 <sub>-</sub> 121	
1,3-Dichlorobenzene	ND		100	95.7		ug/L		96	77 <sub>-</sub> 120	
1,4-Dichlorobenzene	ND		100	94.7		ug/L		95	78 - 124	
2-Butanone (MEK)	ND		500	498		ug/L		100	57 <sub>-</sub> 140	
2-Hexanone	ND		500	515		ug/L		103	65 - 127	
4-Isopropyltoluene	ND		100	102		ug/L		102	73 - 120	
4-Methyl-2-pentanone (MIBK)	ND		500	503		ug/L		101	71 <sub>-</sub> 125	
Acetone	ND		500	453		ug/L		91	56 - 142	
Benzene	ND		100	113		ug/L		113	71 - 124	
Bromodichloromethane	ND	*+	100	108		ug/L		108	80 - 122	
Bromoform	ND		100	94.3		ug/L		94	61 - 132	
Bromomethane	ND		100	105		ug/L		105	55 - 144	
Carbon disulfide	ND		100	92.0		ug/L		92	59 - 134	
Carbon tetrachloride	ND		100	109		ug/L		109	72 <sub>-</sub> 134	
Chlorobenzene	ND		100	103		ug/L		103	80 - 120	
Chloroethane	ND		100	97.7		ug/L		98	69 - 136	
Chloroform	ND		100	102		ug/L		102	73 <sub>-</sub> 127	
Chloromethane	ND		100	99.1		ug/L		99	68 - 124	
cis-1,2-Dichloroethene	ND		100	105		ug/L		105	74 - 124	
cis-1,3-Dichloropropene	ND		100	96.3		ug/L		96	74 - 124	
Cyclohexane	ND		100	116		ug/L		116	59 _ 135	
Dibromochloromethane	ND	*+	100	107		ug/L		107	75 <sub>-</sub> 125	
Dichlorodifluoromethane	ND		100	105		ug/L		105	59 - 135	
Ethylbenzene	ND		100	106		ug/L		106	77 - 123	
Isopropylbenzene	ND		100	101		ug/L		101	77 - 122	
m,p-Xylene	ND		100	105		ug/L		105	76 - 122	
Methyl acetate	ND		200	198		ug/L		99	74 - 133	
Methyl tert-butyl ether	ND		100	103		ug/L		103	77 - 120	
Methylcyclohexane	ND		100	113		ug/L		113	68 - 134	
Methylene Chloride	ND		100	103		ug/L		103	75 - 124	
n-Butylbenzene	ND		100	101		ug/L		101	71 - 128	
N-Propylbenzene	ND		100	103		ug/L		103	75 - 127	
o-Xylene	ND		100	101		ug/L		101	76 - 122	
sec-Butylbenzene	ND		100	102		ug/L		102	74 - 127	
Styrene	ND		100	102		ug/L		102	80 - 120	
tert-Butylbenzene	ND		100	99.0		ug/L		99	75 - 123	
Tetrachloroethene	ND		100	107		ug/L		107	74 - 122	
Toluene	ND		100	106		ug/L		106	80 - 122	
trans-1,2-Dichloroethene	ND		100	110		ug/L		110	73 - 127	
trans-1,3-Dichloropropene	ND		100	92.0		ug/L		92	80 - 120	
Trichloroethene	6.4		100	113		ug/L		107	74 <sub>-</sub> 123	
Trichlorofluoromethane	ND		100	110		ug/L		110	62 - 150	

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65 - 133

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93.9

ug/L

100

ND

2

3

5

7

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10

12

14

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

#### Job ID: 480-192182-1

#### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-192182-1 MS

**Matrix: Water** 

Analysis Batch: 604907

Client Sample ID: RI-MW-2

Client Sample ID: RI-MW-2

Prep Type: Total/NA

**Prep Type: Total/NA** 

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 480-192182-1 MSD

**Matrix: Water** 

Analysis Batch: 604907

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		100	107		ug/L		107	73 - 126	0	15
1,1,2,2-Tetrachloroethane	ND		100	101		ug/L		101	76 - 120	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha	ND		100	118		ug/L		118	61 - 148	2	20
ne											
1,1,2-Trichloroethane	ND		100	99.9		ug/L		100	76 - 122	3	15
1,1-Dichloroethane	ND		100	111		ug/L		111	77 - 120	0	20
1,1-Dichloroethene	ND		100	110		ug/L		110	66 - 127	3	16
1,2,4-Trichlorobenzene	ND		100	92.3		ug/L		92	79 - 122	11	20
1,2,4-Trimethylbenzene	ND		100	102		ug/L		102	76 - 121	4	20
1,2-Dibromo-3-Chloropropane	ND		100	78.0		ug/L		78	56 - 134	9	15
1,2-Dibromoethane	ND		100	100		ug/L		100	77 - 120	2	15
1,2-Dichlorobenzene	ND		100	97.3		ug/L		97	80 - 124	4	20
1,2-Dichloroethane	ND		100	99.8		ug/L		100	75 <sub>-</sub> 120	2	20
1,2-Dichloropropane	ND		100	107		ug/L		107	76 - 120	6	20
1,3,5-Trimethylbenzene	ND		100	103		ug/L		103	77 <sub>-</sub> 121	3	20
1,3-Dichlorobenzene	ND		100	96.9		ug/L		97	77 <sub>-</sub> 120	1	20
1,4-Dichlorobenzene	ND		100	94.7		ug/L		95	78 - 124	0	20
2-Butanone (MEK)	ND		500	465		ug/L		93	57 <sub>-</sub> 140	7	20
2-Hexanone	ND		500	474		ug/L		95	65 - 127	8	15
4-Isopropyltoluene	ND		100	105		ug/L		105	73 _ 120	2	20
4-Methyl-2-pentanone (MIBK)	ND		500	502		ug/L		100	71 - 125	0	35
Acetone	ND		500	467		ug/L		93	56 - 142	3	15
Benzene	ND		100	109		ug/L		109	71 - 124	4	13
Bromodichloromethane	ND	*+	100	105		ug/L		105	80 - 122	3	15
Bromoform	ND	•	100	92.2		ug/L		92	61 - 132	2	15
Bromomethane	ND ND		100	101		ug/L		101	55 <sub>-</sub> 144	4	15
Carbon disulfide	ND		100	101		ug/L ug/L		102	59 - 134	10	15
Carbon tetrachloride	ND ND		100	102		ug/L ug/L		102	72 - 134	0	15
Chlorobenzene	ND		100	109		ug/L ug/L		100	80 - 120	2	25
Chloroethane						-					
	ND		100	92.1		ug/L		92	69 <sub>-</sub> 136	6 0	15
Chloroform	ND		100	102		ug/L		102	73 - 127		20
Chloromethane	ND		100	95.6		ug/L		96	68 - 124	4	15
cis-1,2-Dichloroethene	ND		100	107		ug/L		107	74 - 124	2	15
cis-1,3-Dichloropropene	ND		100	88.9		ug/L			74 _ 124		
Cyclohexane	ND		100	116		ug/L		116	59 <sub>-</sub> 135	0	20
Dibromochloromethane	ND	*+	100	107		ug/L		107	75 <sub>-</sub> 125	0	15
Dichlorodifluoromethane	ND		100	110		ug/L		110	59 - 135	5	20
Ethylbenzene	ND		100	104		ug/L		104	77 - 123	2	15
Isopropylbenzene	ND		100	103		ug/L		103	77 - 122	2	20
m,p-Xylene	ND		100	104		ug/L		104	76 - 122	1	16

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-192182-1 MSD

**Matrix: Water** 

Vinyl chloride

Analysis Batch: 604907

Client Sample ID: RI-MW-2

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Methyl acetate	ND		200	198		ug/L		99	74 - 133	0	20
Methyl tert-butyl ether	ND		100	109		ug/L		109	77 - 120	6	37
Methylcyclohexane	ND		100	112		ug/L		112	68 - 134	2	20
Methylene Chloride	ND		100	106		ug/L		106	75 - 124	4	15
n-Butylbenzene	ND		100	103		ug/L		103	71 - 128	2	15
N-Propylbenzene	ND		100	104		ug/L		104	75 - 127	1	15
o-Xylene	ND		100	103		ug/L		103	76 - 122	2	16
sec-Butylbenzene	ND		100	104		ug/L		104	74 - 127	2	15
Styrene	ND		100	99.3		ug/L		99	80 - 120	3	20
tert-Butylbenzene	ND		100	100		ug/L		100	75 - 123	1	15
Tetrachloroethene	ND		100	106		ug/L		106	74 - 122	1	20
Toluene	ND		100	103		ug/L		103	80 - 122	2	15
trans-1,2-Dichloroethene	ND		100	111		ug/L		111	73 - 127	0	20
trans-1,3-Dichloropropene	ND		100	88.5		ug/L		89	80 - 120	4	15
Trichloroethene	6.4		100	110		ug/L		104	74 - 123	3	16
Trichlorofluoromethane	ND		100	109		ug/L		109	62 - 150	1	20

100

89.2

ug/L

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Toluene-d8 (Surr)	100		80 - 120

ND

Eurofins TestAmerica, Buffalo

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# **QC Association Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

#### Job ID: 480-192182-1

#### **GC/MS VOA**

#### Analysis Batch: 604907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192182-1	RI-MW-2	Total/NA	Water	8260C	
480-192182-2	RI-MW-4	Total/NA	Water	8260C	
480-192182-3	RI-MW-6	Total/NA	Water	8260C	
480-192182-4	RI-MW-9	Total/NA	Water	8260C	
480-192182-5	RI-ME-10	Total/NA	Water	8260C	
480-192182-6	ТВ	Total/NA	Water	8260C	
MB 480-604907/8	Method Blank	Total/NA	Water	8260C	
LCS 480-604907/15	Lab Control Sample	Total/NA	Water	8260C	
480-192182-1 MS	RI-MW-2	Total/NA	Water	8260C	
480-192182-1 MSD	RI-MW-2	Total/NA	Water	8260C	

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Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Client Sample ID: RI-MW-2

Date Collected: 11/09/21 08:23 Date Received: 11/10/21 10:45 Lab Sample ID: 480-192182-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	604907	11/15/21 17:21	WJD	TAL BUF

Client Sample ID: RI-MW-4

Date Collected: 11/09/21 13:11

Date Received: 11/10/21 10:45

Lab Sample ID: 480-192182-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	604907	11/15/21 17:43	WJD	TAL BUF

Client Sample ID: RI-MW-6

Date Collected: 11/09/21 12:12

Date Received: 11/10/21 10:45

Lab Sample ID: 480-192182-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			604907	11/15/21 18:05	WJD	TAL BUF

Client Sample ID: RI-MW-9

Date Collected: 11/09/21 11:04

Date Received: 11/10/21 10:45

Lab Sample ID: 480-192182-4

Lab Sample ID: 480-192182-5

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			604907	11/15/21 18:28	WJD	TAL BUF

Client Sample ID: RI-ME-10

Date Collected: 11/09/21 09:30

Date Received: 11/10/21 10:45

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	8260C			604907	11/15/21 18:49	WJD	TAL BUF	_

**Client Sample ID: TB** 

Date Collected: 11/09/21 00:00

Date Collected: 11/09/21 00:00
Date Received: 11/10/21 10:45

Lab Sample ID: 480-192182-6

Matrix: Water

**Matrix: Water** 

Batch Dilution Batch Batch Prepared Method Factor Number or Analyzed Prep Type Туре Run Analyst Lab Total/NA 8260C 604907 11/15/21 19:11 WJD TAL BUF Analysis

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# **Accreditation/Certification Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID: 480-192182-1

#### Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	<b>Expiration Date</b>
New York	NELAP	10026	04-01-22

# **Method Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

#### **Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Job ID: 480-192182-1

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# **Sample Summary**

Client: Turnkey Environmental Restoration, LLC

Project/Site: Benchmark-791 Washington St.(Trico site)

Job ID	: 480-19	92182-1
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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-192182-1	RI-MW-2	Water	11/09/21 08:23	11/10/21 10:45
480-192182-2	RI-MW-4	Water	11/09/21 13:11	11/10/21 10:45
480-192182-3	RI-MW-6	Water	11/09/21 12:12	11/10/21 10:45
480-192182-4	RI-MW-9	Water	11/09/21 11:04	11/10/21 10:45
480-192182-5	RI-ME-10	Water	11/09/21 09:30	11/10/21 10:45
480-192182-6	ТВ	Water	11/09/21 00:00	11/10/21 10:45

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Client information   The Amaron State   The Amaro	10 Hazelwood Drive Amherst, NY 14228-2298 Phone: 716-691-2600 Fax: 716-691-7991	Chain of Custody Record	ody Record	nə ⇔	*** EUrOTINS Environment Testing Americs
Page 11   Page 12   Page 11   Page	Client Information				66928-32966.1
Protection   Pro	Client Contact Mr. Christopher Boron	1818-835	E-Mail: Brian.Fischer@Eurofinset.com		1 of 1
Find the proper   Properties	Company Turnkey Environmental Restoration, LLC		Analysis Request		
10   10   10   10   10   10   10   10	Address 2558 Hamburg Turnpike	Due Date Requested:		Preser	po <sub>C</sub>
Compared to the compared to	City	TAT Requested (days):		A - HCL B - NaC	Σzo
Sample   Nation   Sample   S	State, Ztp. NY, 14218	A Yes A		D - Nitri	
Sample   Mutrix   M	Phone: 716-856-0600(Tel)	PO# B0092-016-002	7B10		R = Na2S203 S - H2S04 T TCD Dodges
Sample Date	nait ooron@bm-tk.com	WO#	(0)		U - Acetone V - MCAA
1   9   21   22   23   24   24   24   24   24   24	oject Name enchmark-791 Washington St (Trico site)	Project # 48013685	OLMO		W - pH 4-5 Z - other (specif)
Sample Date   Time   Gregob)   Green attended for   Time   Green attended for		SSOW#	SD (Ye	- i - i	
1	amole Identification	Sample Type Sample (C=comp.	S betefitered S erform MS/MS		
1   1   1   2   2   2   2   2   2   2		Preserva	X		opecial mounchons/no
12.12   Water   X		19/21 823	Water	8	
1   1   1   1   1   1   1   1   1   1	b-mw-ty		Water	8	
1	•	1212		(4)	
		4104		3	
Water   Wate		930	√/ater ×	w	
Water   Wate	Blon	11/9/21	Water	2	
Flammable   Skin Irritant   Poison B   Unknown   Radiological   Sample Disposal (A fee may be assessed if samples are retained fonger than 1 mo Led. 1, II, III, IV. Other (specify)   Q A			Water		
Februarion   Poison B   Unknown   Radiological   Sample Disposal (A fee may be assessed if samples are retained longer than 1 mo   Poison B   Unknown   Radiological   Secured by   Sample Disposal By Lab   Archive For   Special Instructions/IQC Requirements:   Special Instructions/IQC Requirements:   If me:   Time:   Time:   Method of Shipment.   Company   Received by   Received by   Sample Disposal By Lab   Archive For   Special Instructions/IQC Requirements:   Method of Shipment.   Company   Received by   Received by   Special Instructions/IQC Requirements:   DateTime   Company   Received by   Special Instructions/IQC Requirements:   Company   Received by   Special Instructions/IQC Requirements:   DateTime   Company   Received by   Special Instructions/IQC Requirements:   Company   Special Instructions/IQC Requireme					
Flammable   Skin Irritant   Poison B   Unknown   Radiological   Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo   Poison B   Unknown   Radiological   Semple Disposal By Lab   Archive For   Special Instructions/QC Requirements:   Method of Shipment:   Irime:   Method of Shipment:   Company   Received by   Received by   Company					
Flammable   Skin Irritant   Poison B   Unknown   Radiological   Secretaring   Received by:   Flammable   Skin Irritant   Poison B   Unknown   Radiological   Special Instructions/QC Requirements:   Method of Shipment   Notice   Notice   Special Instructions/QC Requirements:   Method of Shipment   Notice   Notice   Special Instructions/QC Requirements:   Notice   Special Instructions/QC Requirements:   Notice					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 mo   Flammable   Skin Irritant   Poison B   Unknown   Radiological   Special Instructions/QC Requirements:   Special Instructio					
Triantinable Skill Integral Poison B Orknown readological Pecinic Poison B Orknown readological Pecinic Poison B Orknown readological Instructions/OC Requirements:    Post   Pos			Sample Disposal ( A fee may be assess	ed if samples are retained long	ger than 1 month)
hed by:         Date: Time:         Time:         Method of Shipment:           1		R CIRCIONI	Special Instructions/QC Requirements:	ai by Lab Archive For	Months
A SA SCALL Object Time:  Object Time:  Object Time:  Object Time:  Object Time:  Company Received by:  Company Received by:  Company Received by:  Company Received by:  Object Time:  O				Aethod of Shipment;	
act: Cristody Seal No.:  Date/Time: Company Received by: Date/Time: Date/Time	Inquished by Should Brown	121 1560	Received by: FC	Date/Time	Company
Date/Time Company Received by Date/Time Date/Time Company Received by Date/Lind Other Red Skip Seal No.	Bingdished by			Date/Time;	Company
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eurofins Environment Testing America

Eurofins TestAmerica, Buffalo

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-192182-1

Login Number: 192182 List Source: Eurofins TestAmerica, Buffalo

List Number: 1 Creator: Stopa, Erik S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TURNKEY
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	