Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127)

39-26 30th Street, Long Island City, Queens County, New York

Prepared for

Zhong Chuang Properties, LLC
39-26 30th Street
Long Island City, New York 11101

Prepared by

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Acronyms and Abbreviations

µg/L	micrograms per liter
AS	air sparge
AWQS	Class GA Groundwater Ambient Water Quality Standards and Guidance Values
CAMP	*Community Air Monitoring Plan*
Carson Voci	Carson Voci Engineering and Geology, D.P.C.
cDCE	cis-1,2-dicholoroethene
DER	Division of Environmental Remediation
DER-10	*DER 10 / Technical Requirements for Site Investigation and Remediation*
Dhc	*Dehalococcoides ethenogenes*
DPT	direct-push technology
EECC	Environmental Compliance Control Engineering, D.P.C.
EPA	United States Environmental Protection Agency
ERD	enhanced reductive dechlorination
IRM	interim remedial measure
ISCR	in-situ chemical reduction
Interim SMP	*Interim Site Management Plan*
mZVI	microscale zero-valent iron
NYSDEC	New York State Department of Environmental Conservation
PCE	tetrachloroethene
QAPP	*Quality Assurance Project Plan*
SVE	soil-vapor extraction
TCE	trichloroethene
TOGS 1.1.1	Technical and Operational Guidance Series Memorandum 1.1.1, “Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations”
VOC	volatile organic compound

Engineering Certification

I, Nicholas Krasnecky, P.E., certify that I am a New York State registered Professional Engineer and that this *Corrective Measures Work Plan* was prepared in accordance with applicable statutes and regulations and in substantial conformance with the New York State Department of Conservation, Division of Environmental Remediation Program Policy "DER-10 / Technical Guidance for Site Investigation and Remediation."

Nicholas Krasnecky, P.E.
NYS PE License No. 100006

1/30/2024
Date

1 Introduction

Carson Voci Engineering and Geology, D.P.C. (Carson Voci), an affiliate of Terraphase Engineering, Inc., has prepared this *Corrective Measures Work Plan* (CMWP) on behalf of Zhong Chuang Properties, LLC ("Owner") for the Bridge Cleaners site located at 39-26 30th Street, Long Island City, New York (subject site; Figure 1).

During the periodic review process, elevated groundwater concentrations during the April 2023 sampling event indicated a potential deficiency in the air sparge (AS)/soil-vapor extraction (SVE) remedial system at the subject site. The *Record of Decision* (New York State Department of Environmental Conservation [NYSDEC] Division of Environmental Remediation [DER] 2022) required continued operation of the AS/SVE system and continued site monitoring as engineering controls at the subject site in accordance with the *Interim Site Management Plan* (Interim SMP; Environmental Engineering Compliance Control, D.P.C [EECC] 2021a). The Interim SMP is now considered the final SMP, as the *Record of Decision* has been issued and finalized. This CMWP was prepared to address the elevated groundwater concentrations at the subject site per the NYSDEC.

1.1 Site Location and Description

The subject site is currently owned by Zhong Chuang Properties, LLC and is identified by the NYSDEC as Site No. 241127. The subject site is identified as Block 399, Lot 1, on the New York City Tax Map (Figure 2) and is currently being redeveloped via construction of an 11-story residential building with a parking garage on the ground floor. Adjacent buildings to the north and west appear to contain residential units. To the south is a multi-story residential structure. To the east is 30th Street.

1.2 Work Plan Organization

This CMWP is organized by the following sections:

1. **Introduction**
2. **Background.** Presents pertinent information and characteristics of the subject site relevant to the preparation of this CMWP.
3. **Corrective Measures.** Presents a detailed description of the proposed corrective measures at the subject site.
4. **Schedule.** Presents the proposed implementation schedule for the CMWP activities.
5. **Reporting.** Presents the proposed reporting for the activities in this CMWP.
6. **References:** Presents the references utilized in preparation of this CMWP.

This CMWP has been prepared in accordance with paragraphs 6.3(a)6 and 7 of the Program Policy "DER-10 / Technical Requirements for Site Investigation and Remediation" (DER-10; NYSDEC DER 2010).

2 Background

The subject site was previously occupied by a commercial laundry and dry cleaner, Bridge Cleaners, until 2011. Records indicate at least 10 years of use as a commercial dry cleaner. Site investigations were conducted at the subject site and off-site properties from 2009 to 2016. The results of these investigations indicated the presence of dry-cleaning-related compounds tetrachloroethene (PCE) and its breakdown products, including trichloroethene (TCE), in the soil, soil vapor, and groundwater at concentrations exceeding relevant NYSDEC standards and guidelines. The subject site currently has an environmental easement in place, dated March 4, 2019, with an amendment dated April 3, 2023 (Appendix A), and an Interim SMP detailing the institutional and engineering controls and the required inspections, monitoring, maintenance, and reporting activities.

The AS/SVE system was shut down in December 2021 per the *Change of Use Work Plan (*EECC 2021b) to facilitate shut-down monitoring and the demolition of the existing building in preparation for redevelopment of the subject site. The AS/SVE system was intended to be re-started after building demolition per Section 4.2.6 of the *Change of Use Work Plan* yet was not re-started due to the results of the shut-down monitoring and adjustments to the overall redevelopment schedule of the subject site.

The subject site is currently being redeveloped via construction of an 11-story residential building with a parking garage on the ground floor, with activities conducted in accordance with the *Redevelopment Excavation Work Plan* (EECC 2022b) completed in March 2023. The final completed component of the *Redevelopment Excavation Work Plan* activities conducted was the reinstallation and development of the groundwater monitoring well network at the subject site to facilitate groundwater monitoring in accordance with the Interim SMP.

The evaluation of the groundwater data collected from the reinstalled groundwater monitoring well network is the subject of this CMWP.

3 Corrective Measures

A groundwater monitoring event was conducted at the subject site on April 6, 2023, to collect groundwater samples and data in accordance with the Interim SMP and to evaluate the remedial effectiveness of the AS/SVE system after a 16-month shut-down period. Two prior groundwater monitoring events were conducted in January 2022 and April 2022 in accordance with the Interim SMP to also evaluate the effectiveness of the AS/SVE system after a 1-month and 4-month shut-down period, respectively. A second groundwater monitoring event was conducted on August 7, 2023 to confirm the results from the April 2023 groundwater monitoring event.

The results of the April and August 2023 groundwater monitoring events, an evaluation of the current conditions, and the proposed corrective measures to address the on-site groundwater are detailed in this section.

3.1 Groundwater Monitoring – April 2023

Groundwater samples were collected from the on-site groundwater monitoring well network on April 6, 2023, in accordance with Section 4.4.1 of the Interim SMP, and the protocols outlined in the *Quality Assurance Project Plan* (QAPP) included as Appendix 9 of the Interim SMP. A summary of the groundwater monitoring activities and results are presented in the following subsections.

3.1.1 Sampling Procedures

Synoptic water levels were collected from the on-site groundwater monitoring wells prior to sampling and the groundwater flow contours are plotted on Figure 4. The groundwater elevations during the April 2023 sampling event reflected evidence of groundwater at a higher elevation at GW-2R, which flows to both the north and west. Based on the on-site flow direction, groundwater may be flowing on to the subject site from the adjacent property to the southwest.

Groundwater samples were collected from groundwater monitoring wells GW-1R, GW-2R, GW-3R, GW-5R, and GW-6 utilizing low-flow sampling techniques as detailed in the United States Environmental Protection Agency's (EPA) 2022 *Standard Operating Procedure for Low-Stress (Low Flow) / Minimal Drawdown Ground-Water Sample Collection* with dedicated Teflon™-lined tubing for each well. The low-flow purge sheets are included in Appendix B.

The groundwater samples were transported to Alpha Analytical, an Environmental Laboratory Accreditation Program (ELAP) and NYSDEC certified analytical laboratory under chain of custody and analyzed for volatile organic compounds (VOCs) by EPA Method 8260C. The laboratory report (Appendix C) was issued as an Analytical Services Protocol (ASP) Category B deliverable and was validated by a third-party data validator, Alpha Geoscience of Clifton Park, New York (Alpha Geoscience), in accordance with DER-10 requirements. Alpha Geoscience indicated the data was acceptable, with some minor issues identified in the *Data Usability Summary Report* dated June 23, 2023, provided as Appendix D.

The data generated was submitted in an electronic data deliverable that complies with the NYSDEC *Electronic Data Deliverable Manual* (NYSDEC 2018) or as otherwise directed by DER-10.

3.1.2 Analytical Results

The groundwater analytical results were compared to the Class GA Groundwater Ambient Water Quality Standards and Guidance Values (AWQS) in the NYSDEC, Division of Water, 2023 Technical and Operational Guidance Series Memorandum 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1 AWQS). All five wells exceeded TOGS 1.1.1 AWQS criteria of 5 micrograms per liter (µg/L) for PCE. One well, GW-2R, exceeded the TOGS 1.1.1 AWQS criteria of 5 µg/L for TCE. All other reported compounds were below the applicable TOGS 1.1.1 AWQS criteria.

The groundwater analytical results from the April 2023 monitoring event are presented in Table 1 and Figure 5, along with the historical groundwater analytical results at the subject site.

3.1.3 Conclusions

Concentrations of PCE in groundwater monitoring wells GW-1R, GW-3R, GW-5R, and GW-6 exceed the TOGS 1.1.1 AWQS criteria, but appear to be stable with respect to historical groundwater data, both during operation and shut-down of the AS/SVE system.

At GW-2R, the groundwater concentrations of PCE and TCE (380 and 25 µg/L, respectively) have increased to levels observed prior to the AS/SVE interim remedial measure modification. The increase in PCE and TCE concentrations at GW-2R could be indicative of potential rebound (the increase of concentrations after the shut-down of a remedial system) after the 16-month (plus) shut down of the AS/SVE system.

On-site groundwater flow is to the north and east and could indicate groundwater from the adjacent property to the southwest is flowing towards and onto the subject site. The property to the south/southwest (upgradient based on current groundwater flow) is the Former Union Wire Die Corporation Site (NYSDEC Site No. C241163), which contained impacts of PCE and TCE in groundwater at concentrations similar to, or higher than, the current concentrations at GW-2R. Groundwater at the Former Union Wire Die Corporation Site was not remediated, as in past investigations groundwater flow was identified to be towards the south/southeast. Therefore, it was determined the impacts migrated from the Bridge Cleaners Site. The current on-site groundwater flow indicates potential residual off-site impact at GW-2R from the Former Union Wire Die Corporation Site. Groundwater flow should be investigated further during one (at minimum) additional groundwater monitoring event.

3.2 AS/SVE System Evaluation

The AS/SVE system, comprised of a single AS well (AS-1) and two SVE wells (RW-2 and RW-3), was installed and began operation in March 2018. In September 2020, the AS/SVE system was modified with the installation of two additional AS wells (AS-2 and AS-3) in the vicinity of groundwater monitoring well GW-2 (currently GW-2R). To facilitate roof and interior demolition activities, the AS/SVE system was shut down on December 8, 2021, having been operating with AS-1, RW-2, and RW-3 for over 3.5 years and with AS-2 and AS-3 for 15 months.

Post-shut-down sub-slab soil vapor, indoor air quality, and groundwater sampling was conducted in January 2022, approximately 30 days after shut down, and the results were presented in the *AS/SVE Remedial Progress Sampling Report* (EECC 2022a) submitted to the NYSDEC. As presented in the report, the sub-slab soil vapor and indoor air quality sampling results indicated remedial effectiveness with respect to the SVE portion of the system. In addition, the groundwater sampling results provided an initial indicator of the remedial effectiveness of the AS portion of the system.

In April 2022, a second post-shut-down groundwater sampling event was conducted to further evaluate the remedial effectiveness of the AS portion of the system. The analytical results from this event continued to be consistent with the groundwater concentrations and trends from the data collected since the modified AS/SVE system start-up in September 2020. These results continued to indicate remedial effectiveness of the AS portion of the system.

The AS/SVE system had been shut down for approximately 16 months prior to the April 2023 groundwater monitoring event detailed in Section 3.1. The groundwater analytical results indicated stable concentrations of PCE and TCE with respect to historical data in all wells, except GW-2R. The significant increase of PCE and TCE concentrations in GW-2R to pre-system modification levels indicates a potential deficiency with respect to the remedial effectiveness of the AS/SVE system in the vicinity of GW-2R.

3.3 Groundwater Monitoring – August 2023

To confirm the groundwater analytical results from the April 2023 monitoring event, a second groundwater monitoring event was conducted on August 7, 2023. The scope, results, and evaluation of the August 2023 groundwater monitoring event were submitted to the NYSDEC in the letter, *Corrective Measures Work Plan – Second Groundwater Monitoring Event Reporting and In-Situ Remediation Final Design dated October 4, 2023,* and is summarized in the following sections.

3.3.1 Sampling Procedures

Synoptic water levels were collected from the on-site groundwater monitoring wells prior to sampling and the groundwater flow contours are plotted on Figure 5. The groundwater elevations during the August 2023 sampling event reflected evidence of groundwater flow to the northwest.

Groundwater samples were collected from groundwater monitoring wells GW-2R, GW-5R, and GW-6 utilizing EPA low-flow sampling techniques with dedicated Teflon™-lined tubing for each well. The low-flow purge sheets are included in Appendix B. GW-1R was not sampled as a significant amount of equipment and materials from the ongoing building construction were blocking access to the well and could not be moved. GW-3R was not sampled, as multiple attempts to purge the well were unsuccessful due to continued blockages of the sampling pump via silt. GW-3R will need to be redeveloped and/or a different type of sampling pump utilized during the next monitoring event. The August 2023 groundwater monitoring event was to confirm prior results in GW-2R and re-evaluate groundwater flow direction. Therefore, the inability to sample these two wells was deemed to not impact the overall goal of the monitoring event and the data from GW-2R, 5R, and 6 was deemed sufficient.

The groundwater samples were transported to Alpha Analytical, an ELAP and NYSDEC certified analytical laboratory under chain of custody and analyzed for VOCs by EPA Method 8260C. The laboratory report (Appendix C) was issued as an ASP Category B deliverable and was validated by a third-party data validator, Alpha Geoscience, in accordance with DER-10 requirements. Alpha Geoscience indicated the data was acceptable, with some minor issues identified in the *Data Usability Summary Report* dated January 25, 2024, provided as Appendix D.

The data generated will be submitted in an electronic data deliverable that complies with DER-10.

3.3.2 Analytical Results

The groundwater analytical results were compared to the TOGS 1.1.1 AWQS criteria. All three wells exceeded TOGS 1.1.1 AWQS criteria of 5 micrograms per liter (µg/L) for PCE. One well, GW-2R, exceeded the TOGS 1.1.1 AWQS criteria of 5 µg/L for TCE. One well, GW-5, exceeded the TOGS 1.1.1 AWQS criteria of 5 µg/L for 1,2,4-trimethylbenzene. All other reported compounds were below the applicable TOGS 1.1.1 AWQS criteria.

The groundwater analytical results from the August 2023 monitoring event are presented in Table 1 and Figure 5, along with the historical groundwater analytical results at the Site.

3.3.3 Conclusions

Concentrations of PCE in groundwater monitoring wells GW-1R, GW-3R, GW-5R, and GW-6 exceed the TOGS 1.1.1 AWQS criteria, but appear to be stable with respect to historical groundwater data, both during operation and shut-down of the AS/SVE system.

At GW-2R, the groundwater concentrations of PCE and TCE (650 and 49 µg/L, respectively) have increased compared to the April 2023 concentrations and are currently at higher the any historical concentrations. The continued increase in PCE and TCE concentrations at GW-2R indicates the corrective measures presented in Section 3.4 will need to be implemented.

3.4 Corrective Measures

The April 2023 preliminary groundwater analytical data was provided to the NYSDEC, and a teleconference to discuss the data was held on May 25, 2023. During the teleconference, the NYSDEC indicated that based on the elevated PCE and TCE concentrations at GW-2R, the first periodic review report could not be certified as the AS/SVE system is not working as designed. Therefore, the NYSDEC stated corrective measures were required for the elevated groundwater concentrations at GW-2R, upon confirming the groundwater concentrations during the August 2023 groundwater monitoring event. The proposed corrective measures are presented in the following subsections.

3.4.1 In-Situ Chemical Reduction/Enhanced Reductive Dechlorination Injections

An in-situ chemical reduction (ISCR) and enhanced reductive dechlorination (ERD) injection is proposed based on the current groundwater analytical results, and an implementation determination will be made in consultation with NYSDEC based on the results of the second groundwater monitoring event. Details regarding the selected remedial technologies are presented in the following subsections.

3.4.1.1 Enhanced Reductive Dechlorination

ERD is the addition of organic substrates as electron donor amendments with nutrients, pH buffers, and/or microorganisms to enhance the biodegradation processes and sustain and activate microorganisms that degrade dissolved-phase VOCs (i.e., dechlorinating bacteria). These dechlorinating bacteria can be indigenous to the subsurface into which the amendments are delivered (biostimulation) or may be exogenous bacteria that are grown in a laboratory and introduced into the subsurface (bioaugmentation).

The primary biologically mediated degradation process for subject site VOCs is reductive dechlorination, where parent VOCs serve as electron acceptors and are dechlorinated sequentially to produce daughter-product VOCs. For chloroethenes, the parent VOC (e.g., PCE) serves as an electron acceptor and is dechlorinated sequentially to daughter products TCE, cis-1,2-dicholoroethene (cDCE), vinyl chloride (VC) and, finally, ethene. Ethene can be further reduced to ethane (de Bruin et al. 1992).

Most aquifer environments contain bacteria that are capable of reductively dechlorinating PCE and TCE to cDCE. Microorganisms that can mediate this reaction include *Desulfitobacterium, Dehalobacter restrictus, Desulfuromonas, Dehalococcoides ethenogenes* (Dhc), and *Dehalospirillum multivorans* (Sholz-Muramatsu et al. 1995; Gerritse et al. 1996; Krumholz 1996; Löffler et al. 2000; Maymo-Gatell et al. 1997). However, only cultures that contain Dhc have been shown to dechlorinate cDCE and VC to ethene (Maymo-Gatell et al. 1997; Fennell et al. 2001; Duhamel et al 2002; Lendvay et al. 2003). The dechlorinating bacteria are not ubiquitous in the subsurface.

Bioaugmentation is the addition of commercial dechlorinating bacterial cultures that are grown specifically to enhance reductive dechlorination in settings that lack sufficient native dechlorinating bacteria populations. Current subject site conditions, including the aerobic nature of the aquifer and historical groundwater data not containing detectable concentrations of VC, indicate that the bacteria capable of completing reductive dechlorination beyond cDCE are not present in the subject site's aquifer environment; therefore, bioaugmentation is necessary to dechlorinate the chlorinated ethenes present to ethene. The goal of an ERD remedial action at the subject site is to engineer the subsurface environment to optimize and maintain conditions for dechlorinating bacteria to facilitate complete degradation of chlorinated VOCs to harmless end products.

3.4.1.2 In-Situ Chemical Reduction

The most common chemical reductant used for ISCR of dissolved-phase VOCs is microscale zero-valent iron (mZVI). Beta-elimination is the primary abiotic treatment mechanism for mZVI, and it occurs when

VOCs come into direct contact with the mZVI material. One advantage of the beta-elimination pathway is that it avoids the creation of intermediate daughter products (e.g., cDCE and VC) as parent VOCs (e.g., PCE and TCE) are transformed directly to ethene and ethane via the production of short-lived intermediates such as chloroacetylene and acetylene. The primary biotic treatment mechanism for mZVI is hydrogenolysis, a stepwise process in which the parent VOCs serve as electron acceptors and are dechlorinated sequentially to produce daughter-product VOCs. When mZVI is delivered to the subsurface, it produces hydrogen as it reacts (oxidizes) with the groundwater and aquifer media. The hydrogen that is released from the mZVI reactions serves as an electron donor to support reductive dechlorination via hydrogenolysis. Biotic treatment via ERD is enhanced by the reducing conditions created during abiotic mZVI reactions, which produces groundwater REDOX and pH within the ranges optimal for the microorganisms that facilitate biological degradation. The use of chemical reductant mZVI will result in decreasing dissolved oxygen and oxidation reduction potential levels, and reduce iron and sulfate as part of conditioning the aquifer for rapid and complete microbially mediated reductive dechlorination.

3.4.2 In-Situ Injection Design and Application

The proposed in-situ injection consists of the co-application of ISCR and bioaugmentation ERD amendments via direct-push technology (DPT) injections to facilitate both immediate abiotic remediation and long-term ongoing biotic remediation of dissolved-phase chlorinated VOCs via ISCR and ERD, respectively. The application of an ISCR amendment will also provide the benefit of enhancing the reducing conditions of the aquifer for biotic treatment, which is necessary due to the current aquifer conditions being in an aerobic and oxidative state. A bioaugmentation Dhc culture will be added due to the assumption that native Dhc microbes are not present in the aquifer.

The ISCR/ERD injection is proposed to be injected into the subsurface at the openings through the slab-on-grade and mat foundation, where AS-1, AS-2 and AS-3 were to be reinstalled if necessary (herein referred to as AS-1R, AS-2R and AS-3R) to treat elevated PCE and TCE concentrations at, and in the vicinity of groundwater monitoring well GW-2R. Both AS-2R and AS-3R are located within 5 feet of GW-2R and AS-1R is located approximately 20 feet side-gradient. The proposed injection locations are shown on Figure 6.

Up to 4,500 gallons of solution is proposed to be injected into the 20- to 30-foot below ground surface vertical interval (approximately 1,500 gallons each at AS-1R,AS-2R and AS-3R). The preliminary proposed solution will consist of 3,750 gallons of water combined with 1,275 pounds of ERD substrate and 750 pounds of mZVI (or a similar combined emulsified ZVI amendment containing both ERD and nano-scale ZVI), with up to 18 liters of Dhc microbial consortium added.

The following ISCR/ERD amendments are proposed to be utilized:

- Tersus Environmental mZVI™ Glycerol, PART A EDS-ZVI™
- Tersus Environmental EDS-ER™ (Electron Donor Solution – Extended Release)
- SiREM KB-1® - Dehalococcoides (Dhc) microbial consortium

Specification sheets and/or Safety Data Sheets for the selected amendments are provided as part of Appendix E.

The solution will be emplaced via DPT bottom-up injections, injecting solution into 2-foot vertical intervals at a time. The DPT injections rods will be driven to the 30-foot below ground surface target depth by a GeoProbe® or equivalent and subsequently pulled up 2 feet and the expendable tip pushed out or screened portion of the rod exposed. Flow of injection material via a double-diaphragm pump or equivalent will be started simultaneously to limit backfill of the borehole via the fine sands that have a tendency to "flow." Once the target volume is reached in the deepest 2-foot interval, the DPT rods will be raised to the top of the next 2-foot interval and the target volume of solution will be injected. This procedure will continue until the total target solution volume is injected. The proposed injection dosing, target volumes, and vertical intervals are provided in Table 2.

Upon completion of all vertical injection intervals, the DPT rods will be removed, and the boreholes will be backfilled with sand to grade.

3.4.3 Post-Injection Groundwater Monitoring

Groundwater monitoring will be conducted at the subject site 3, 6, and 9 months after the injection event. Groundwater samples will be collected at groundwater monitoring well GW-2R and GW-5R during all three monitoring events. The 3 and 9-month monitoring events will also include sample collection at groundwater monitoring wells GW-1R, GW-3R, and GW-6. The analytical results will be utilized to evaluate the ongoing remedial effectiveness of the ISCR/ERD injections. After the 9-month monitoring event, an evaluation will be conducted to determine if the frequency of groundwater monitoring moving forward may be reduced to be consistent with the Interim SMP.

Prior to the collection of groundwater samples, synoptic water levels at all on-site wells will be collected to determine groundwater table elevation and groundwater flow. All groundwater monitoring wells will be sampled via EPA low-flow sampling techniques with dedicated Teflon™-lined tubing for each well. A sample will be collected from each well and submitted to an ELAP accredited analytical laboratory under chain of custody and analyzed for VOCs by EPA Method 8260D. Quality assurance/quality control samples will be collected in accordance with the QAPP.

Samples for geochemical parameters will also be collected at groundwater monitoring well GW-2R and GW-5R to evaluate the aquifer and ongoing remedial effectiveness of the in-situ injections detailed in Section 3.3.2. The anticipated geochemical parameters to be collected and analyzed include, but are not limited to, total organic carbon, ferrous iron, sulfate, sulfide, nitrate, nitrite, dissolved gases, and Dhc. The proposed sampling plan for the post-injection groundwater monitoring is provided in Table 3.

4 Schedule

The estimated schedule for the implementation of the activities presented within this CMWP are as follows:

Estimated Project Schedule

CMWP Task	Estimated Implementation Timeframe
Submittal and Receipt of Approved U.I.C. Permit	February 2024
Implement ISCR/ERD In-Situ Injections	March 2024
Prepare and Submit CCR	May 2024
3-Month Post-Injection Groundwater Monitoring	June 2024
6-Month Post-Injection Groundwater Monitoring	September 2024
9-Month Post-Injection Groundwater Monitoring	December 2024

The estimated schedule presented above is dependent on the approval of an underground injection control (U.I.C.) permit with the United States Environmental Protection Agency (EPA) Region 2 in February 2024. The estimated schedule would shift accordingly based on the actual date of the U.I.C. permit approval.

5 Reporting

A Construction Completion Report (CCR) will be submitted to the NYSDEC within 60 days after completion of the ISCR/ERD in-situ injection. The CCR will contain a summary of the injection activities including final dosing, injection volumes, daily monitoring, and any licensed professional-approved field changes to the CMWP.

The results of the post-injection groundwater monitoring events will be reported to the NYSDEC via a letter report and/or incorporated into the Periodic Review Report.

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Tables

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-1																												GW-1R			
LAB ID:		JB59477-5				L1628504-06				L1848820-07				L2025069-01				L2103234-01				L2122042-01				L2153072-01				L2201942-01				L2220362-03				L2318419-01			
COLLECTION DATE:		2/8/2014				9/9/2016				11/28/2018				6/15/2020				1/25/2021				4/28/2021				9/29/2021				1/12/2022				4/19/2022				4/6/2023			
SAMPLER:		TechSolutions				Integral				Integral				EECC				EECC				EECC				EECC				EECC				EECC				EECC			
SAMPLE MATRIX:		WATER				WATER				WATER				WATER				WATER				WATER				WATER				Water				Water				Water			
VOLATILE ORGANICS BY GC/MS																																								
ANALYTE	NY-AWQS																																								
	ug/L	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Chloroform	7	**0.99**	J	1	0.25	--		--	--	--		--	--	ND		2.5	0.7	**0.78**		2.5	0.7	**0.8**	J	2.5	0.7	**0.82**	J	2.5	0.7	**1.7**	J	2.5	0.7	**1.9**	J	2.5	0.7	ND		2.5	0.7
Tetrachloroethene	5	**280**		10	2.5	**140**		0.5	0.18	**74**		0.5	0.18	**15**		0.5	0.18	**19**		0.5	0.18	**9.1**		0.5	0.18	**12**		0.5	0.18	**15**		0.5	0.18	**17**		0.5	0.18	**24**		0.5	0.18
Vinyl chloride	2	ND		1	0.41	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.07
trans-1,2-Dichloroethene	5	ND		1	0.38	ND		0.75	0.16	ND		0.75	0.16	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	5	**5.4**		1	0.5	**1.6**		0.5	0.18	**1.4**		0.5	0.18	**0.65**		0.5	0.18	**1.1**		0.5	0.18	**0.59**		0.5	0.18	**0.83**		0.5	0.18	**1.1**		0.5	0.18	**0.96**		0.5	0.18	**0.82**		0.5	0.18
cis-1,2-Dichloroethene	5	**0.34**	J	1	0.24	**0.43**	J	0.5	0.19	**0.3**	J	0.5	0.19	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
1,2-Dichloroethene, Total	--	--		--	--	--		--	--	--		--	--	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Acetone	50	ND		10	3.3	--		--	--	--		--	--	ND		5	1.5	ND		5	1.5	ND		5	1.5	ND		5	1.5	ND		5	1.5	ND		5	1.5	ND		5	1.5
1,2,4-Trimethylbenzene	5	--		--	--	--		--	--	--		--	--	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	--		--	--	ND		2.5	0.7
1,3,5-Trimethylbenzene	5	--		--	--	--		--	--	--		--	--	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	--		--	--	ND		2.5	0.7
Isopropanol	--	--		--	--	ND		100	8.5	**18**	J	100	3.5	--		--	--	--		--	--	--		--	--	--		--	--	--		--	--	--		--	--	--		--	--	--	--
Isopropylbenzene	5	--		--	--	--		--	--	--		--	--	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7

Initial System Start up - March 2018

Post-IRM Modification System Start up - September 2020

System Shut Down - December 2021

Notes

Table only includes contaminants of concern and detections

NY-AWQS: NY - New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

ug/l = Micrograms per liter

Conc = concentration in ug/L

Q = qualifier

RL = Reporting Limit

MDL = Method Detection Limit

ND = Non-detect

J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-2																																		GW-2R							
LAB ID:		JB59477-6				L1628504-04					L1848820-05				L2025069-02					L2103234-02				L2122042-02				L2153072-02					L2201942-02				L2220363-01				L2318419-04				L2345491-02			
COLLECTION DATE:		2/8/2014				9/9/2016					11/28/2018				6/15/2020					1/25/2021				4/28/2021				9/29/2021					1/12/2022				4/19/2022				4/6/2023				8/7/2023			
SAMPLER:		TechSolutions				Integral					Integral				EECC					EECC				EECC				EECC					EECC				EECC				EECC				ECC			
SAMPLE MATRIX:		WATER				WATER					WATER				WATER					WATER				WATER				WATER					WATER				WATER				Water				Water			
VOLATILE ORGANICS BY GC/MS																																														
ANALYTE	NY-AWQS																																													
	ug/L	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Chloroform	7	**4.2**		1	0.25	--		--	--		--		--	--	ND		6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		**10**	2.8	ND		5	1.4
Tetrachloroethene	5	**165**		10	2.5	**200**		0.5	0.18		**240**		1.2	0.45	**300**		1.2	0.45		**18**		0.5	0.18	**0.4**	J	0.5	0.18	**0.29**	J	0.5	0.18		**0.73**		0.5	0.18	**0.86**		0.5	0.18	**380**		2	0.18	**650**		2	0.18
Vinyl chloride	2	ND		1	0.41	ND		1	0.07		ND		2.5	0.18	ND		2.5	0.18		ND		1	0.07	ND		1	0.07	ND		1	0.07		ND		1	0.07	**0.1**	J	1	0.07	ND		**4**	0.28	0.15	J	2	0.14
trans-1,2-Dichloroethene	5	ND		1	0.38	ND		0.75	0.16		ND		1.9	0.41	ND		6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		1	0.07	ND		1	0.07	ND		**10**	2.8	ND		5	1.4
Trichloroethene	5	**2.4**		1	0.5	**14**		0.5	0.18		**5.6**		1.2	0.44	**11**		1.2	0.44		ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18		ND		0.5	0.18	ND		0.5	0.18	**25**		2	0.18	**49**		1	0.35
cis-1,2-Dichloroethene	5	**0.81**	J	1	0.24	**0.31**	J	0.5	0.19		ND		1.2	0.47	ND		6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	**0.81**	J	2.5	0.7	ND		**10**	0.7	ND		5	1.4
1,2-Dichloroethene, Total	--	--		--	--	--		--	--		--		--	--	ND		6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	**0.81**	J	2.5	0.7	ND		**10**	0.7	ND		**5**	1.4
Acetone	50	ND		10	3.3	--		--	--		--		--	--	ND		12	3.6		ND		5	1.5	ND		5	1.5	ND		5	1.5		ND		5	1.5	**19**		5	1.5	ND		20	1.5	ND		10	2.9
1,2,4-Trimethylbenzene	5	--		--	--	**--**		--	--		**--**		--	--	**4.4**	J	6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--	ND		**10**	0.7	ND		5	1.4
1,3,5-Trimethylbenzene	5	--		--	--	**--**		--	--		**--**		--	--	**4.4**	J	6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--	ND		**10**	0.7	ND		5	1.4
Isopropanol	--	--		--	--	**13**	J	100	8.5		ND		250	8.8	--		--	--		--		--	--	--		--	--	--		--	--		--		--	--	--		--	--	--		--	--	--		--	--
Isopropylbenzene	5	--		--	--	--		--	--		--		--	--	ND		6.2	1.8		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		**10**	0.7	ND		5	1.4

Initial System Start up - March 2018

Post-IRM Modification System Start up - September 2020

System Shut Down - December 2021

Notes

Table only includes contaminants of concern and detections

NY-AWQS: NY - New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

ug/l = Micrograms per liter

Conc = concentration in ug/L

Q = qualifier

RL = Reporting Limit

MDL = Method Detection Limit

ND = Non-detect

J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-3																										GW-3R			
LAB ID:		JB59477-3				L1628504-05					--				L2025069-03					L2103234-03				L2122042-03				L2153072-03					L2201942-03				L2220362-04				L2318419-04			
COLLECTION DATE:		2/8/2014				9/9/2016					11/28/2018				6/15/2020					1/25/2021				4/28/2021				9/29/2021					1/12/2022				4/19/2022				4/6/2023			
SAMPLER:		TechSolutions				Integral					Integral				EECC					EECC				EECC				EECC					EECC				EECC				EECC			
SAMPLE MATRIX:		WATER				WATER					WATER				WATER					WATER				WATER				WATER					WATER				WATER				Water			
VOLATILE ORGANICS BY GC/MS																																												
ANALYTE	NY-AWQS																																											
	ug/L	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Chloroform	7	**2.6**		1	0.25	--		--	--		--		--	--	**1.9**	J	2.5	0.7		**1.5**		2.5	0.7	**1.8**	J	2.5	0.7	**1.4**	J	2.5	0.7		**1.2**	J	2.5	0.7	**1.1**	J	2.5	0.7	ND		2.5	0.7
Tetrachloroethene	5	**175**		10	2.5	**44**		0.5	0.18		--		--	--	**25**		0.5	0.18		**23**		0.5	0.18	**23**		0.5	0.18	**29**		0.5	0.18		**23**		0.5	0.18	**24**		0.5	0.18	**22**		0.5	0.18
Vinyl chloride	2	ND		1	0.41	ND		1	0.07		--		--	--	ND		1	0.07		ND		1	0.07	ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07	ND		1	0.07
trans-1,2-Dichloroethene	5	ND		1	0.38	ND		0.75	0.16		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	5	**2**		1	0.5	**1.2**		0.5	0.18		--		--	--	**1.1**		0.5	0.18		**0.87**		0.5	0.18	**0.77**		0.5	0.18	**0.81**		0.5	0.18		**0.76**		0.5	0.18	**0.71**		0.5	0.18	**0.34**	J	0.5	0.18
cis-1,2-Dichloroethene	5	**0.39**	J	1	0.24	**0.25**	J	0.5	0.19		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
1,2-Dichloroethene, Total	--	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Acetone	50	ND		10	3.3	--		--	--		--		--	--	**1.7**	J	5	1.5		ND		5	1.5	ND		5	1.5	ND		5	1.5		ND		5	1.5	ND		5	1.5	ND		5	1.5
1,2,4-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--	ND		2.5	0.7
1,3,5-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--	ND		2.5	0.7
Isopropanol	--	--		--	--	**8.5**	J	100	8.5		--		--	--	--		--	--		--		--	--	--		--	--	--		--	--		--		--	--	--		--	--	--		--	--
Isopropylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7

Initial System Start up - March 2018

Post-IRM Modification System Start up - September 2020

System Shut Down - December 2021

Notes

Table only includes contaminants of concern and detections

NY-AWQS: NY - New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

ug/l = Micrograms per liter

Conc = concentration in ug/L

Q = qualifier

RL = Reporting Limit

MDL = Method Detection Limit

ND = Non-detect

J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-4 (Abandoned)																													
LAB ID:		JB59477-4				L1628504-08					L1848820-09				L2025069-04					L2103234-004				L2122042-04				L2153072-04					L2201942-04				L2220362-02			
COLLECTION DATE:		2/8/2014				9/9/2016					11/28/2018				6/15/2020					1/24/2021				4/28/2021				9/29/2021					1/12/2022				4/19/2022			
SAMPLER:		TechSolutions				Integral					Integral				EECC					EECC				EECC				EECC					EECC				EECC			
SAMPLE MATRIX:		WATER				WATER					WATER				WATER					WATER				WATER				WATER					WATER				WATER			
VOLATILE ORGANICS BY GC/MS																																									
ANALYTE	NY-AWQS																																								
	ug/L	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Initial System Start up - March 2018	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Post-IRM Modification System Start up - September 2020	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	System Shut Down - December 2021	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Chloroform	7	**2.4**		1	0.25	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	**1**	J	2.5	0.7
Tetrachloroethene	5	**254**		10	2.5	**90**		0.5	0.18		**71**		0.5	0.18	**3.2**		0.5	0.18		**1.4**		0.5	0.18	ND		0.5	0.18	**0.18**	J	0.5	0.18		**0.52**		0.5	0.18	**4.9**		0.5	0.18
Vinyl chloride	2	ND		1	0.41	ND		1	0.07		ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07
trans-1,2-Dichloroethene	5	ND		1	0.38	ND		0.75	0.16		ND		0.75	0.16	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	5	**2.6**		1	0.5	**1.5**		0.5	0.18		**1.3**		0.5	0.18	**0.26**	J	0.5	0.18		ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18		ND		0.5	0.18	**0.38**	J	0.5	0.18
cis-1,2-Dichloroethene	5	**1.1**		1	0.24	**0.24**	J	0.5	0.19		**0.23**	J	0.5	0.19	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
1,2-Dichloroethene, Total	--	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
Acetone	50	ND		10	3.3	--		--	--		--		--	--	ND		5	1.5		ND		5	1.5	ND		5	1.5	ND		5	1.5		ND		5	1.5	ND		5	1.5
1,2,4-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--
1,3,5-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	--		--	--
Isopropanol	--	--		--	--	ND		100	8.5		**16**	J	100	3.5	--		--	--		--		--	--	--		--	--	--		--	--		--		--	--	--		--	--
Isopropylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7

Notes

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Q = qualifier

RL = Reporting Limit

MDL = Method Detection Limit

ND = Non-detect

J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-5																												GW-5R							
LAB ID:		JB59477-3				L1628504-09					L1848820-06				L2025069-05					L2103234-05				L2122042-05				L2153072-05					L2201942-05				L2220362-01				L2318419-05				L2345491-03			
COLLECTION DATE:		2/8/2014				9/9/2016					11/28/2018				6/15/2020					1/24/2021				4/28/2021				9/29/2021					1/12/2022				4/19/2022				4/6/2023				8/7/2023			
SAMPLER:		TechSolutions				Integral					Integral				EECC					EECC				EECC				EECC					EECC				EECC				EECC				ECC			
SAMPLE MATRIX:		WATER				WATER					WATER				WATER					WATER				WATER				WATER					WATER				WATER				Water				Water			
VOLATILE ORGANICS BY GC/MS																																																
ANALYTE	NY-AWQS																																															
	ug/L	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Chloroform	7	ND		1	0.25	--		--	--		--		--	--	**1.1**	J	2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		**0.74**	J	2.5	0.7	ND		2.5	0.7	0.78	J	2.5	0.7	1	J	2.5	0.7
Tetrachloroethene	5	**340**		10	2.5	**95**		0.5	0.18		**87**		0.5	0.18	**50**		0.5	0.18		**67**		0.5	0.18	**72**		0.5	0.18	**62**		0.5	0.18		**35**		0.5	0.18	**100**		0.5	0.18	**66**		0.5	0.18	**110**		0.5	0.18
Vinyl chloride	2	ND		1	0.41	ND		1	0.07		ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07	ND		1	0.07	ND		1	0.7
trans-1,2-Dichloroethene	5	ND		1	0.38	ND		0.75	0.16		ND		0.75	0.16	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	5	**6.9**		1	0.5	**2.8**		0.5	0.18		**3.7**		0.5	0.18	**1.9**		0.5	0.18		**2.0**		0.5	0.18	**2.5**		0.5	0.18	**2.8**		0.5	0.18		**1.4**		0.5	0.18	**5**		0.5	0.18	**1.7**		0.5	0.18	**2.4**		0.5	0.18
cis-1,2-Dichloroethene	5	ND		1	0.24	**0.39**	J	0.5	0.19		ND		0.5	0.19	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
1,2-Dichloroethene, Total	--	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7
Acetone	50	ND		10	3.3	--		--	--		--		--	--	ND		5	1.5		ND		5	1.5	ND		5	1.5	ND		5	1.5		ND		5	1.5	ND		5	1.5	ND		5	1.5	ND		5	1.5
1,2,4-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		**0.76**	J	2.5	0.7	--		--	--	**3.8**		2.5	0.7	**6.9**		2.5	0.7
1,3,5-Trimethylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		**0.76**	J	2.5	0.7	--		--	--	**2**	J	2.5	0.7	**3.5**		2.5	0.7
Isopropanol	--	--		--	--	ND		100	8.5		**21**	J	100	3.5	--		--	--		--		--	--	--		--	--	--		--	--		--		--	--	--		--	--	--		--	--	--		--	--
Isopropylbenzene	5	--		--	--	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7	ND		2.5	0.7		ND		2.5	0.7	**1.0**	J	2.5	0.7	**1.4**	J	2.5	0.7	**2.3**	J	2.5	0.7

Initial System Start up - March 2018

Post-IRM Modification System Start up - September 2020

System Shut Down - December 2021

Notes

Table only includes contaminants of concern and detections

NY-AWQS: NY - New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

ug/l = Micrograms per liter

Conc = concentration in ug/L

Q = qualifier

RL = Reporting Limit

MDL = Method Detection Limit

ND = Non-detect

J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 1

Historical Groundwater Sampling Results

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

SAMPLE ID:		GW-6								MW-5 (Missing)															
LAB ID:		L2318419-02				L2345491-01				L1628504-01					L1848820-01				L2103234-06					L2122042-06				L2153072-06			
COLLECTION DATE:		4/6/2023				8/7/2023				9/9/2016					11/28/2018				1/24/2021					4/28/2021				9/29/2021			
SAMPLER:		EECC				ECC				Integral					Integral				EECC					EECC				EECC			
SAMPLE MATRIX:		Water				Water				WATER					WATER				WATER					WATER				WATER			
VOLATILE ORGANICS BY GC/MS																															
ANALYTE	NY-AWQS	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL		Conc	Q	RL	MDL	Conc	Q	RL	MDL
	ug/L													Initial System Start up - March 2018									Post-IRM Modification System Start up - September 2020								
Chloroform	7	1	J	2.5	0.7	0.95	J	2.5	0.7	--		--	--		--		--	--	**1.6**		2.5	0.7		**0.86**	J	2.5	0.7	ND		2.5	0.7
Tetrachloroethene	5	**7.9**		0.5	0.18	**14**		0.5	0.18	**22**		0.5	0.18		**31**		0.5	0.18	**5.8**		0.5	0.18		**7.4**		0.5	0.18	**4.5**		0.5	0.18
Vinyl chloride	2	ND		1	0.07	ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07		ND		1	0.07	ND		1	0.07
trans-1,2-Dichloroethene	5	ND		2.5	0.7	ND		2.5	0.7	ND		0.75	0.16		ND		0.75	0.16	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
Trichloroethene	5	**0.64**		0.5	0.18	**0.64**		0.5	0.18	**0.59**		0.5	0.18		**0.73**		0.5	0.18	**0.24**		0.5	0.18		**0.19**	J	0.5	0.18	ND		0.5	0.18
cis-1,2-Dichloroethene	5	ND		2.5	0.7	ND		2.5	0.7	ND		0.5	0.19		**0.2**	J	0.5	0.19	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
1,2-Dichloroethene, Total	--	ND		2.5	0.7	ND		2.5	0.7	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
Acetone	50	ND		5	1.5	ND		5	1.5	--		--	--		--		--	--	ND		5	1.5		ND		5	1.5	ND		5	1.5
1,2,4-Trimethylbenzene	5	ND		2.5	0.7	ND		2.5	0.7	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
1,3,5-Trimethylbenzene	5	ND		2.5	0.7	ND		2.5	0.7	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7
Isopropanol	--	--		--	--	--		--	--	ND		100	8.5		ND		100	3.5	--		--	--		--		--	--	--		--	--
Isopropylbenzene	5	ND		2.5	0.7	ND		2.5	0.7	--		--	--		--		--	--	ND		2.5	0.7		ND		2.5	0.7	ND		2.5	0.7

Notes

Table only includes contaminants of concern and detections

NY-AWQS: NY - New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

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J = Estimated value

-- = Not sampled

Bold Highlighted = Exceeds AWQS

Bold Grey = Detection below AWQS

Table 2
In-Situ Injection Dosing
Corrective Measures Work Plan
Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

Injection Location	Target Treatment Depth (feet bgs)	Treatment Zone Thickness (feet)	Vertical Treatment Injection Interval Thickness (feet)	Number of Vertical Treatment Injection Intervals	Total Solution per Vertical Treatment Injection Interval (gallons)	mZVI Mass per Vertical Treatment Injection Intervals (pounds)	ERD Mass per Vertical Treatment Injection Intervals (pounds)	Dhc Volume per Vertical Treatment Injection Intervals (Liters)
AS-1R	20 - 30	10	2.0	5	250	50	85	1.2
AS-2R	20 - 30	10	2.0	5	250	50	85	1.2
AS-3R	20 - 30	10	2.0	5	250	50	85	1.2

Notes:

bgs = below ground surface

Dhc = *Dehalococcoides ethenogenes* (SiREM KB-1®)

ERD = Enhanced Reductive Dechlorination Amendment (Tersus EDS-ER™)

mZVI = microscale zero valent iron (Tersus mZVI™, PART A EDS-ZVI™)

Table 3

Proposed Groundwater Monitoring Plan

Corrective Measures Work Plan

Bridge Cleaners (NYSDEC Site No. 241127), 39-26 30th St., Long Island City, New York

Groundwater Monitoring Well	Screened Interval	Second Monitoring Event (Completed)								3-Month Post-Injection								6-Month Post-Injection								9-Month Post-Injection							
		FP	VOCs	DHGs	Anions	TOC	Sulfide	Ferrous Iron [FM]	DHC	FP	VOCs	DHGs	Anions	TOC	Sulfide	Ferrous Iron [FM]	DHC	FP	VOCs	DHGs	Anions	TOC	Sulfide	Ferrous Iron [FM]	DHC	FP	VOCs	DHGs	Anions	TOC	Sulfide	Ferrous Iron [FM]	DHC
GW-1R	20-30	X	X							X	X							X								X	X						
GW-2R	20-30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GW-3R	20-30	X	X							X	X							X								X	X						
GW-5R	20-30	X	X							X	X	X	X	X	X	X	X	X	X	X*	X*	X*	X*	X*	X*	X	X	X*	X*	X*	X*	X*	X*
GW-6	20-30	X	X							X	X							X								X	X						

Notes:

Post-injection groundwater monitoring events are contingent on the application of the proposed injections

Abbreviations:

Anions = sulfate, nitrate, nitrite

DHC = assay for dehalococcoides

DHGs = dissolved hydrocarbon gases: methane, ethane, ethene

[FM] = field measurement

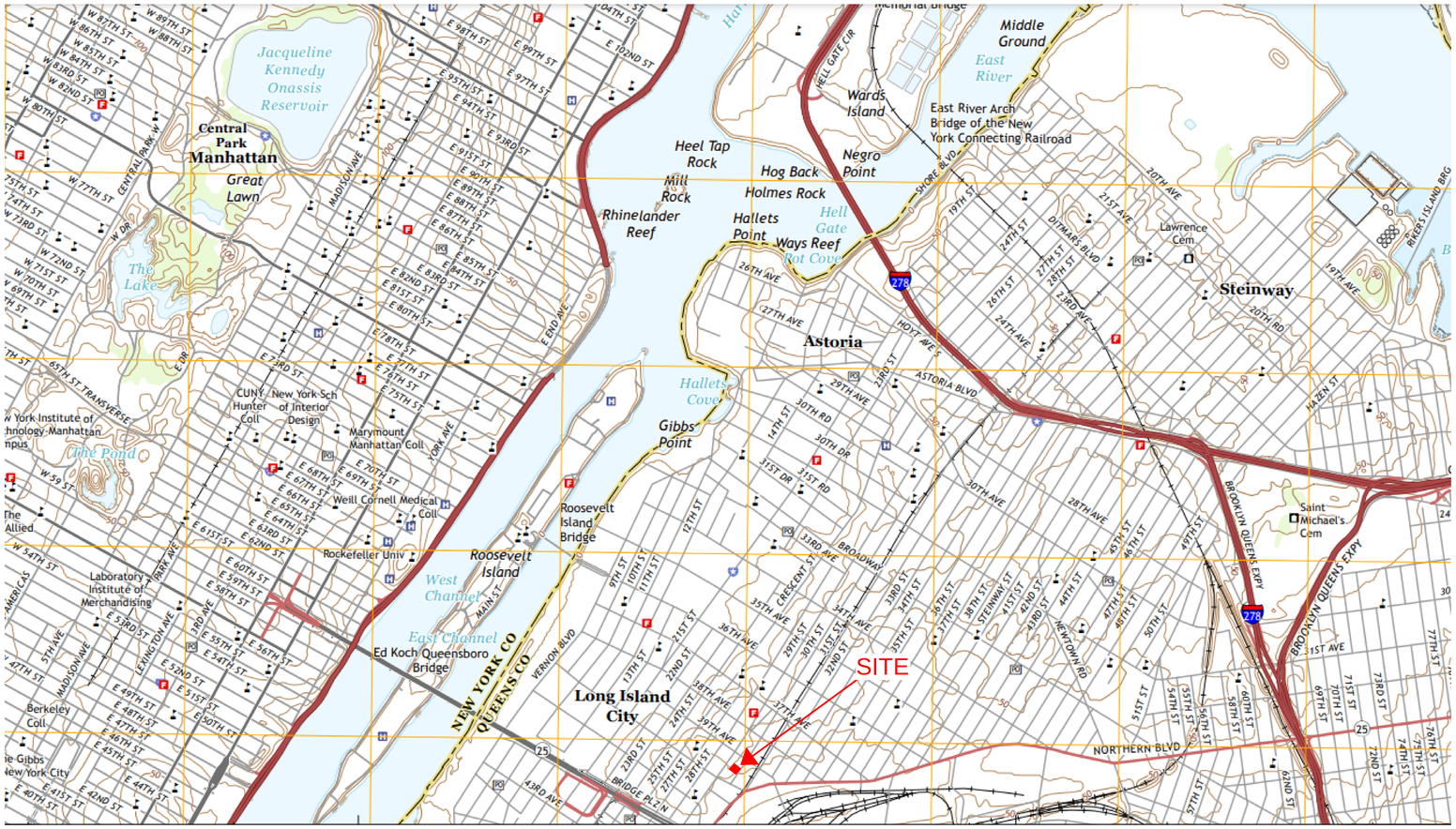
FP = field parameters: pH, dissolved oxygen, oxidation reduction potential, specific conductance, temperature, turbidity, and depth to water

TOC = total organic carbon

VOCs = chlorinated volatile organic compounds by EPA Method 8260D

X* = Post-injection sample analysis to be collected based on prior quarter sample results

Figures



SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

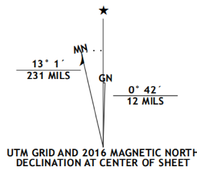
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.19

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 18T
10 000-foot ticks: New York Coordinate System of 1983 (long island zone), New Jersey Coordinate System of 1983

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, August 2013
Roads..... U.S. Census Bureau, 2015 - 2016
Names.....GNIS, 2016
Hydrography.....National Hydrography Dataset, 2013
Contours.....National Elevation Dataset, 2015
Boundaries.....Multiple sources; see metadata file 1972 - 2016

Wetlands.....FWS National Wetlands Inventory 1977 - 2014



UTM GRID AND 2016 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
WL
Grid Zone Designation
18T

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Hackensack
2 Yonkers
3 Mount Vernon
4 Weehawken
5 Flushing
6 Jersey City
7 Brooklyn
8 Jamaica

ADJOINING QUADRANGLES

CENTRAL PARK, NY-NJ
2016

LEGEND

Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD

State Route
Interstate Route
US Route

Zhong Chuang Properties, LLC
BRIDGE CLEANERS SITE
39-26 30th ST
LONG ISLAND CITY NEW YORK

DRN NC	DATE 5/23/2023
DES NK	DATE 5/23/2023
CHK NK	DATE 5/23/2023
SCALE AS NOTED	PROJECT NO. BRIDGE CLEANERS

SITE LOCATION - TOPO MAP

FIGURE
1

LEGEND

- Borough Boundary
- Tax Block Boundary
- 50 Tax Block Number
- Tax Lot Boundary
- 50 Tax Lot Number
- 50 Condo FKA Tax Lot Number
- 50.5 Tax Lot Dimension
- +/-5.5 Approximate Tax Lot Dimension
- 1000 - 1100 Condo Units Range Label
- Building Footprint
- Subject Property
- C50 Condo Flag/Condo Nunber
- A50 Air Right Flag/Lot Number
- S50 Subterranean Right Flag/Lot Number
- R REUC Flag
- Under Water Tax Lot Boundary
- Other Boundary
- Possession Hook
- Misc Miscelaneous Text
- Small Tax Lot Dimension
- Surface Water
- Site and Property Boundary

Source: BRIDGE CLEANERS TAX MAP - Digital Tax Map - New York City Dept. of Finance (1/31/2020)

Zhong Chuang Properties, LLC

BRIDGE CLEANERS SITE
39-26 30th ST

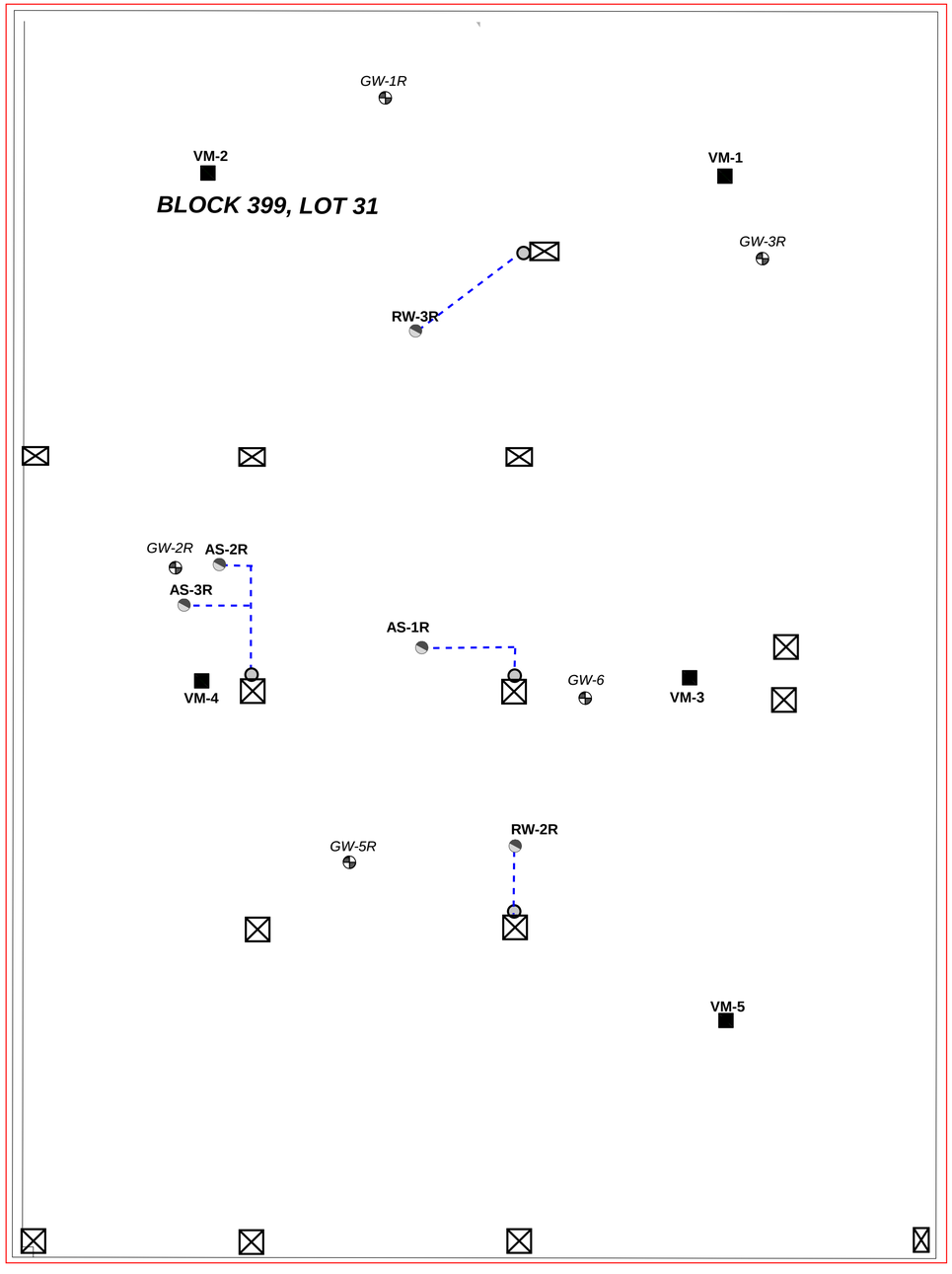
LONG ISLAND CITY NEW YORK

DRN NC	DATE 5/23/2023
DES NK	DATE 5/23/2023
CHK NK	DATE 5/23/2023
SCALE AS NOTED	PROJECT NO. BRIDGE CLEANERS

SITE LAYOUT - TAX MAP

FIGURE

2



LEGEND

- EXTENT OF EXCAVATION / APPROXIMATE BUILDING FOOTPRINT
- CONCRETE COVER
- SUB-GRADE PVC PIPING
- GROUNDWATER MONITORING WELL
- VACUUM MONITORING POINTS
- AS/SVE REPLACEMENT WELL LOCATIONS (IF REQUIRED)
- VERTICAL RISER STUB-UP LOCATION
- APPROXIMATE CONCRETE COLUMN LOCATIONS

0 3 6 12 Feet

THIS SHEET PLOTS FULL SCALE AT 11X17 IN.

SOURCES:

1. BASEMAP: WELL ELEVATION SURVEY, BRIDGE CLEANERS, 39-26 30th STREET, LONG ISLAND CITY, NEW YORK, DONALD R. STEDGE, P.L.S., OCTOBER 30, 2015.

Zhong Chuang Properties, LLC

BRIDGE CLEANERS SITE
39-26 30th ST

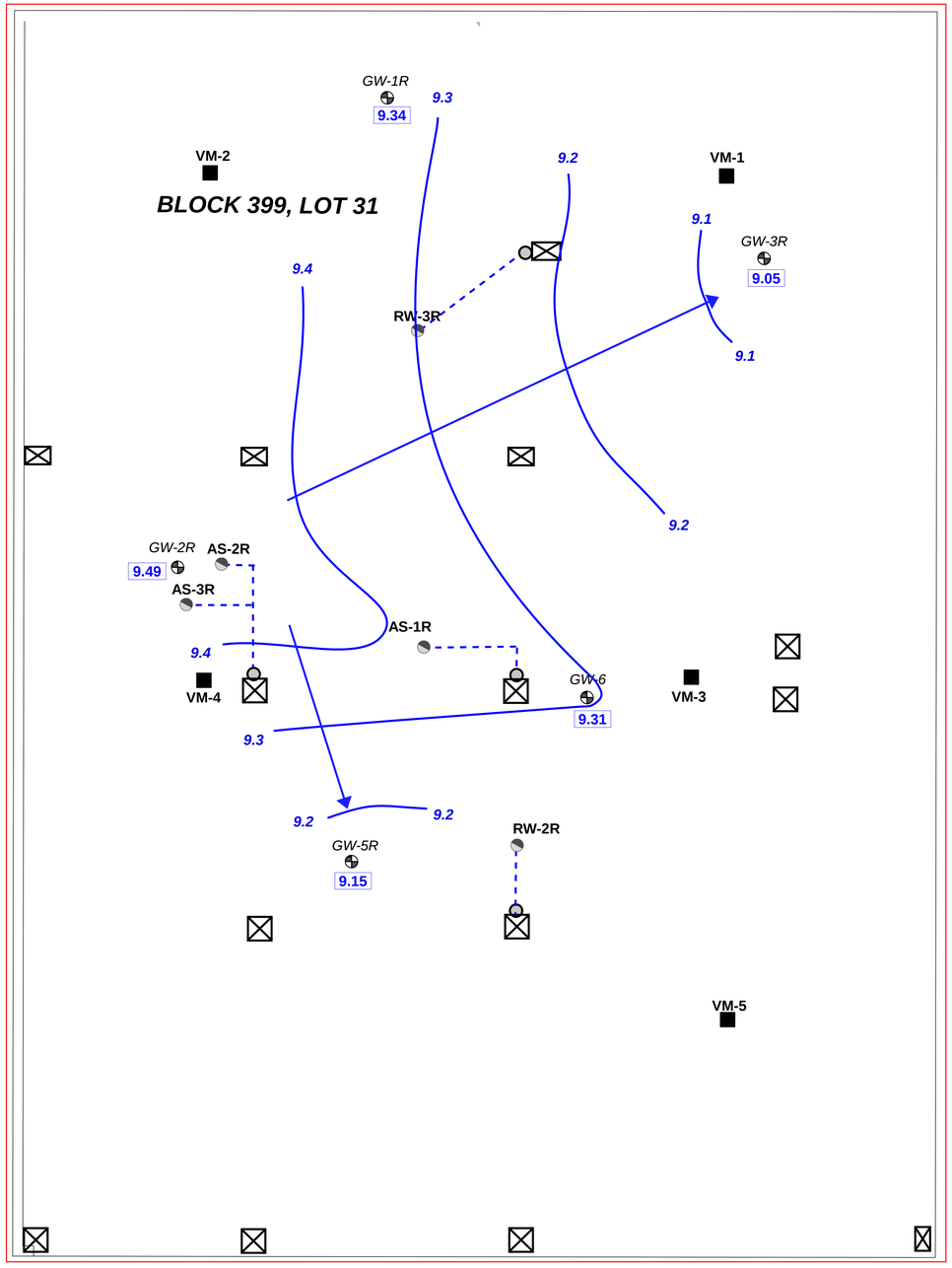
LONG ISLAND CITY NEW YORK

DRN NC	DATE 5/23/2023
DES NK	DATE 5/23/2023
CHK NK	DATE 5/23/2023
SCALE AS NOTED	PROJECT NO. BRIDGE CLEANERS

CURRENT SITE LAYOUT

FIGURE

3



LEGEND

- EXTENT OF EXCAVATION / APPROXIMATE BUILDING FOOTPRINT
- CONCRETE COVER
- SUB-GRADE PVC PIPING
- FORMER GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL
- VACUUM MONITORING POINTS
- AS/SVE REPLACEMENT WELL LOCATIONS (IF REQUIRED)
- VERTICAL RISER STUB-UP LOCATION
- APPROXIMATE CONCRETE COLUMN LOCATIONS
- 9.05 GROUNDWATER ELEVATION (ft. AMSL)
- GROUNDWATER FLOW DIRECTION
- 9.1 GROUNDWATER CONTOUR WITH ELEVATION (ft. AMSL)

0 3 6 12 Feet

THIS SHEET PLOTS FULL SCALE AT 11X17 IN.

SOURCES:

1. BASEMAP: WELL ELEVATION SURVEY, BRIDGE CLEANERS, 39-26 30th STREET, LONG ISLAND CITY, NEW YORK, DONALD R. STEDGE, P.L.S., OCTOBER 30, 2015.

ZHONG CHUANG PROPERTIES, LLC

BRIDGE CLEANERS SITE
39-26 30th ST

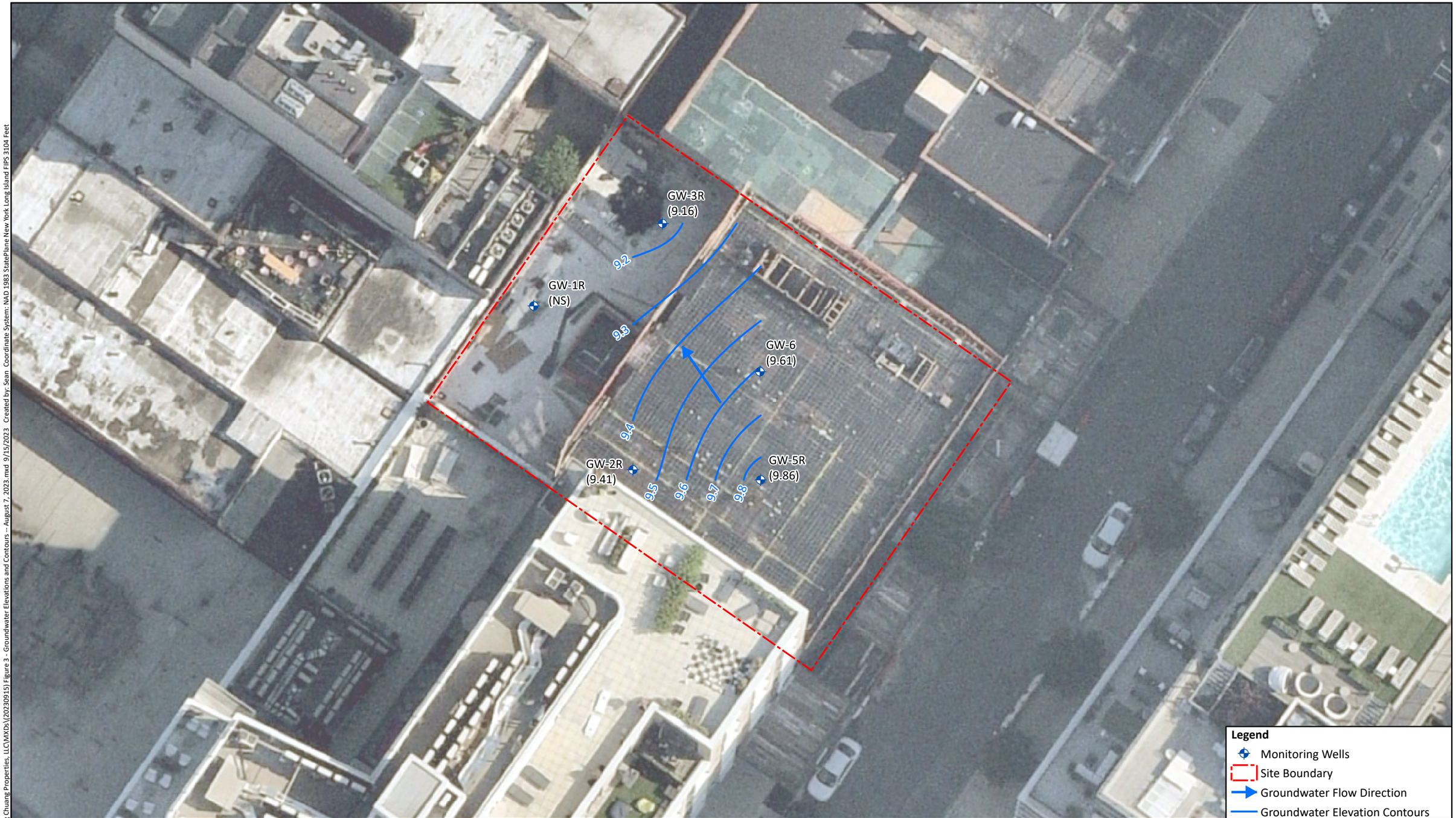
LONG ISLAND CITY NEW YORK

DRN NC	DATE 6/22/2023
DES NK	DATE 6/22/2023
CHK NK	DATE 6/22/2023
SCALE AS NOTED	PROJECT NO. BRIDGE CLEANERS

APRIL 2023 GROUNDWATER FLOW MAP

FIGURE

4a



Legend
- Monitoring Wells
- Site Boundary
- Groundwater Flow Direction
- Groundwater Elevation Contours

Notes:
- Aerial Imagery Source: Nearmap (May 28, 2023)
- Elevations are in Feet Above Mean Sea Level
- NS = Not Sampled

0 10 20 30 40 Feet

1 inch = 20 feet

N

SAFETY FIRST

carsonvoci
engineering and geology dpc
an affiliate of Terraphase Engineering Inc.

CLIENT: Zhong Chuang Properties, LLC

PROJECT: Bridge Cleaners, NYSDEC Site No. 241127 39-26 30th Street., Long Island City, NY

PROJECT NUMBER: CV01.001.001

August 2023 Groundwater Flow Map

FIGURE 4b

File: N:\GIS\Prj\CV01.001_Zhong Chuang Properties, LLC\MXDs\(20230915) Figure 3 - Groundwater Elevations and Contours -- August 7, 2023.mxd 9/15/2023 Created by: Sean Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet

ANALYTE	GW-1 (µg/L)											GW-1R (µg/L)
	TechSolutions	Integral			EECC							
	2/8/2014	09/09/16	11/18/18	05/17/19	06/15/20	01/25/21	04/28/21	09/29/21	01/12/22	04/19/22	04/06/23	08/07/23
PCE	280	140	74	7.8	15	19	9.1	12	15	17	24	NS
TCE	5.4	1.6	1.4	0.34 J	0.65	1.1	0.59	0.83	1.1	0.96	0.82	
cis-1,2-DCE	0.34 J	0.43 J	0.30 J	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Isopropanol	--	ND	18 J	170 B	--	--	--	--	--	--	--	

ANALYTE	GW-3 (µg/L)											GW-3R (µg/L)
	TechSolutions	Integral			EECC							
	2/8/2014	09/09/16	11/18/18	05/17/19	06/15/20	01/25/21	04/28/21	09/29/21	01/12/22	04/19/22	04/06/23	08/07/23
PCE	175	44	NS	10	25	23	23	29	23	24	22	NS
TCE	2	1.2		0.87	1.1	0.87	0.77	0.81	0.76	0.71	0.34 J	
cis-1,2-DCE	0.39 J	0.25 J		0.23 J	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-DCE	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl chloride	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	
Isopropanol	--	8.5 J		160 B	--	--	--	--	--	--	--	

ANALYTE	GW-6 (µg/L)	
	EECC	
	04/06/23	08/07/23
PCE	7.9	14
TCE	0.64	0.64
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
Vinyl chloride	ND	ND
Isopropanol	--	--

ANALYTE	GW-2 (µg/L)											GW-2R (µg/L)
	TechSolutions	Integral			EECC							
	2/8/2014	09/09/16	11/18/18	05/17/19	06/15/20	01/25/21	04/28/21	09/29/21	01/12/22	04/19/22	04/06/23	08/07/23
PCE	165	200	240	210	300	18	0.4	0.29J	0.73	0.86	380	650
TCE	2.4	14	5.6	4.1	11	ND	ND	ND	ND	ND	25	49
cis-1,2-DCE	0.81 J	0.31 J	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	ND
trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	0.15 J
Isopropanol	--	13 J	ND	130 BJ	--	--	--	--	--	--	--	--

ANALYTE	GW-5 (µg/L)											GW-5R (µg/L)
	TechSolutions	Integral			EECC							
	2/8/2014	09/09/16	11/18/18	05/17/19	06/15/20	01/25/21	04/28/21	09/29/21	01/12/22	04/19/22	04/06/23	08/07/23
PCE	340	95	87	48	50	67	72	62	35	100	66	110
TCE	6.9	2.8	3.7	1.9	1.9	2	2.5	2.8	1.4	5	1.7	2.4
cis-1,2-DCE	ND	0.39 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Isopropanol	--	ND	21 J	190 B	--	--	--	--	--	--	--	--

GW-3R
GW-1R
GW-6
GW-2R
GW-5R

Legend
- Monitoring Wells
- Site Boundary

Notes:
- Data presented in micrograms per liter (µg/L)
- J = estimated value
- PCE = tetrachloroethene
- TCE = trichloroethene
- DCE = dichloroethene
- Aerial Imagery Source: Nearmap (May 28, 2023)

0 10 20 30 40 Feet

1 inch = 20 feet

N

SAFETY FIRST

carsonvoci
engineering and geology dpc
an affiliate of Terraphase Engineering Inc.

CLIENT: Zhong Chuang Properties, LLC

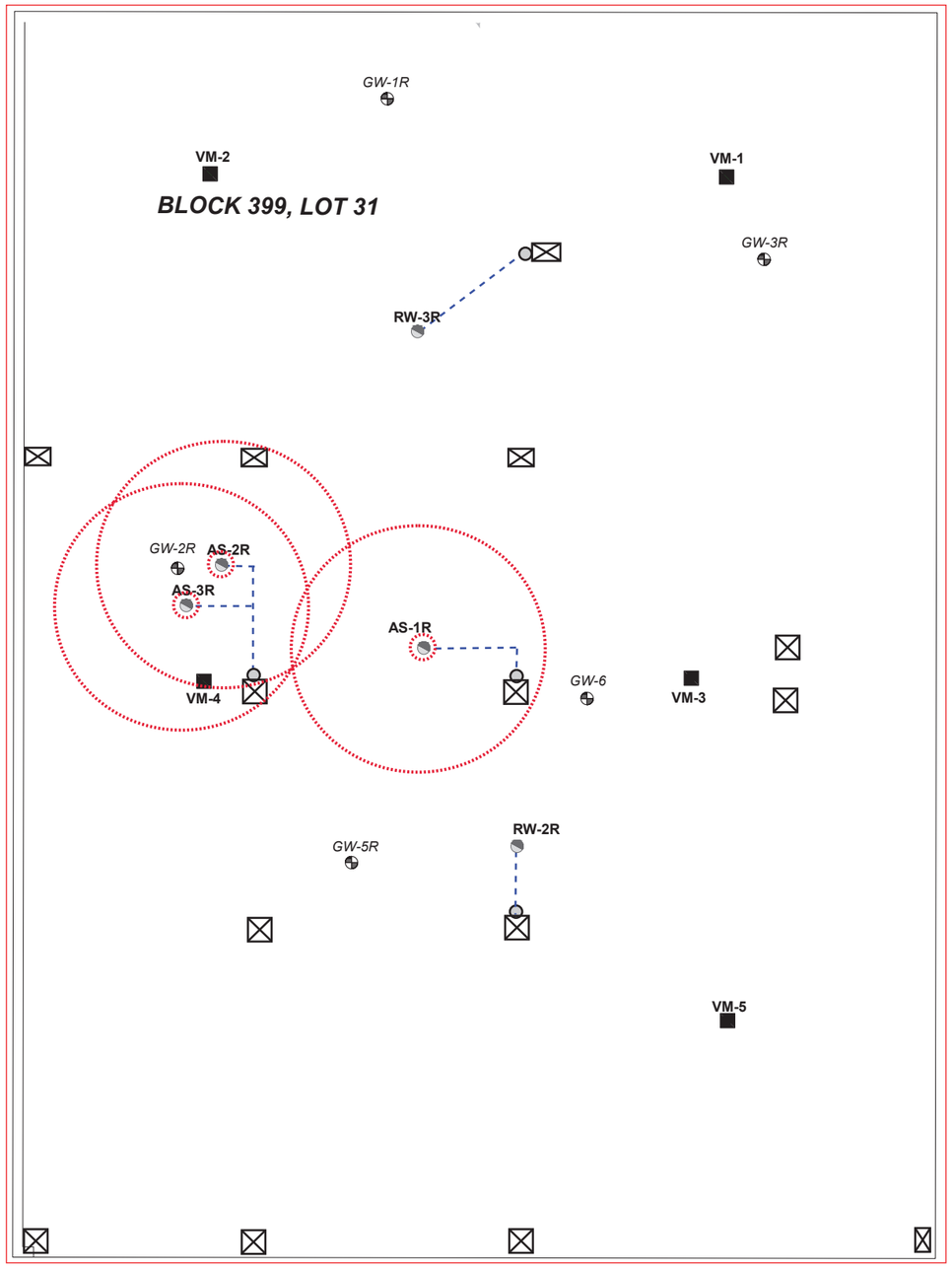
PROJECT: Bridge Cleaners, NYSDEC Site No. 241127, 39-26 30th Street., Long Island City, NY

PROJECT NUMBER: CV01.001.001

Historical Groundwater Analytical Data

FIGURE 5

File: N:\GIS\Prj\CV01.001_Zhong Chuang Properties, LLC\MXDs\[20230915] Figure 1 - Groundwater Analytical Data.mxd 9/15/2023 Created by: Sean Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet



LEGEND

- EXTENT OF EXCAVATION / APPROXIMATE BUILDING FOOTPRINT
- CONCRETE COVER
- SUB-GRADE PVC PIPING
- GROUNDWATER MONITORING WELL
- VACUUM MONITORING POINTS
- AS/SVE REPLACEMENT WELL LOCATIONS (IF REQUIRED)
- VERTICAL RISER STUB-UP LOCATION
- APPROXIMATE CONCRETE COLUMN LOCATIONS
- PROPOSED INJECTION LOCATION AND ESTIMATED RADIUS OF influence

0 3 6 12 Feet

THIS SHEET PLOTS FULL SCALE AT 11X17 IN

SOURCES:

1. BASEMAP: WELL ELEVATION SURVEY, BRIDGE CLEANERS, 39-26 30th STREET, LONG ISLAND CITY, NEW YORK, DONALD R. STEDGE, P.L.S., OCTOBER 30, 2015.

ZHONG CHUANG PROPERTIES, LLC

BRIDGE CLEANERS SITE
39-26 30th ST

LONG ISLAND CITY NEW YORK

DRN NC	DATE 6/22/2023
DES NK	DATE 6/22/2023
CHK NK	DATE 6/22/2023
SCALE AS NOTED	PROJECT NO. BRIDGE CLEANERS

PROPOSED INJECTION LOCATIONS

FIGURE

6

Appendix A

Environmental Easement (March 4, 2019) and Amendment (April 3, 2023)

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 4th day of March, 2019, between Owner(s) Zhong Chuang Properties, LLC, having an office at 37-24 30th Street, Long Island City, New York 11101, County of Queens, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 39-26 30th Street in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 399 Lot 31, being the same as that property conveyed to Grantor by deed dated March 9, 2012 and recorded in the City Register of the City of New York as CRFN # 2012000122920. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.17 +/- acres, and is hereinafter more fully described in the Land Title Survey dated November 27, 2018 prepared by Gerald T. O'Buckley, P.L.S., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: C●2–20170509-174, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) 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 this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by

Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: 241127
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Zhong Chuang Properties, LLC:

By: _____

Print Name: Steve Lin

Title: member Date: 01/25/19

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF New York)

On the 25th day of January, in the year 2019, before me, the undersigned, personally appeared Steve Lin, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

SAMMIE HUANG
Notary Public, State of New York
Qualified in New York County
No. 01HU6114472
Commission Expires 8/16/ 2020

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Michael J. Ryan, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 4th day of March, in the year 2019, before me, the undersigned, personally appeared Michael J. Ryan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2022

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, WITH THE BUILDINGS AND IMPROVEMENTS THEREON ERECTED, SITUATE, LYING AND BEING IN THE BOROUGH AND COUNTY OF QUEENS, CITY AND STATE OF NEW Y●RK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY SIDE OF 30TH STREET, DISTANT 133.72 FEET (DEED) (133.73 FEET ●N TAX MAP) NORTHERLY FROM THE C●RNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF 30TH STREET WITH THE NORTHERLY SIDE OF 40TH AVENUE AS SAID STREET AND AVENUE ARE SHOWN AND LAID OUT ON THE FINAL T●POGRAPHICAL MAP OF THE CITY OF NEW YORK FOR THE BOROUGH OF QUEENS;

RUNNING THENCE WESTERLY AT RIGHT ANGLES TO THE WESTERLY SIDE OF 30TH STREET, 100.10 FEET;

THENCE NORTHERLY PARALLEL WITH THE WESTERLY SIDE OF 30TH STREET, 75.06 FEET;

THENCE EASTERLY AGAIN AT RIGHT ANGLES T● THE WESTERLY SIDE ●F 30TH STREET, 100.10 FEET TO THE WESTERLY SIDE OF 30TH STREET;

THENCE SOUTHERLY ALONG THE WESTERLY SIDE OF 30TH STREET, 75.06 FEET TO THE POINT OR PLACE OF BEGINNING.

CONTAINING APPROXIMATELY 0.17 ACRES MORE OR LESS.

FOR INFORMATION ONLY: SAID PREMISES BEING KNOWN AS 39-28 30TH STREET, LONG ISLAND CITY, NEW YORK 11101. BLOCK: 399 LOT: 31

AMENDMENT TO ENVIRONMENTAL EASEMENT

This Amendment to Environmental Easement is made as of this 3rd day of April 2023 between Owner(s) Zhong Chuang Properties, LLC, having an office at 37-24 30th Street, Long Island City, New York 11101, County of Queens, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation ("NYSDEC" or the "Department") with its headquarters located at 625 Broadway, Albany, New York 12233.

RECITALS

1. Grantor is the owner of certain land known and designated on the tax map of the New York City Department of Finance, County of Queens and State of New York as tax map parcel number: Block 399 Lot 31, being the same as the property conveyed to Grantor by deed dated March 9, 2012 and recorded in the City Register of the City of New York as CRFN # 2012000122920.

2. The Department and Grantor entered into that certain Environmental Easement ("Easement Agreement") dated as of March 4, 2019.and recorded in the NYC Department of Finance Office of the City Register on March 4, 2019 as CRFN # 2019000081445. Capitalized terms used herein without definition have the meanings ascribed to them in the Environmental Easement Agreement.

3. Pursuant to Section 1, 2, 3, 4, and 5 of the Easement Agreement, Grantor granted the Department rights and interests that run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of the Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of certain maintenance, monitoring or operation requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the stated purpose.

4. This Amendment to Environmental Easement is filed solely in order to revise Section 2 A of the Easement Agreement, the use of the Controlled Property.

5. Pursuant to Section 8 of the Easement Agreement, the Department agrees to amend the Easement Agreement in the manner prescribed by Article 9 of the Real Property Law.

AMENDMENT OF ENVIRONMENTAL EASEMENT

A. The above recitals are hereby incorporated into this Amendment of Environmental Easement.

B. The Department and Grantor hereby agree Section 2 A of the Easement Agreement is hereby amended to read as follows:

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

C. The Department and Grantor hereby agree Section B of the Easement Agreement is hereby amended to read as follows:

B. The Controlled Property shall not be used for Residential purposes as defined in 6 NYCRR 375-1.8(g)(2)(i) and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

D. All other terms of the March 4, 2019 Environmental Easement shall remain in effect.

E. This Amendment of Environmental Easement inures to and binds the parties hereto and their respective successors and assigns.

F. This Amendment of Environmental Easement shall be governed by and interpreted in accordance with the laws of the State of New York.

IN WITNESS WHEREOF, Grantor has caused this Amendment to Environmental Easement to be signed in its name.

Zhong Chuang Properties, LLC:

By: _____

Print Name: Qi HONG LIN

Title: President Date: 01/26/23

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF New York)

On the 26th day of January, in the year 2023, before me, the undersigned, personally appeared Qi Hong Lin, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

SAMMIE HUANG
Notary Public, State of New York
Qualified in New York County
No. 01HUG114472
Commission Expires 8/16/ 2024

THIS AMENDMENT OF THE ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: Andrew Guglielmi
Andrew Guglielmi, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 3rd day of April, in the year 2023 before me, the undersigned, personally appeared Andrew Guglielmi, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Jennifer Andaloro
Notary Public - State of New York

JENNIFER ANDALORO
Notary Public, State of New York
No. 02AN6098246
Qualified in Albany County
Commission Expires January 14, 2024

Appendix B

Low Flow Purge Logs - Groundwater Sampling

Low Flow Purge Sheet

GW-1R

Date: 4-6-2023 Well ID: ~~MW-1R~~ MW1

Client: _____ Project: Bridge Cleaners Analyzer Mike Huston & Brandon Cresnecia

PID: 0.0 Well Diam: 2.0" DOW: ~~20.62~~ 23.72 DTW: 20.62

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	~~800~~	~~17.20~~		~~7.29~~		327		~~3.67~~		—		~~7.24~~		Brown	No Sheen	20.62	135
1	805	14.96		~~7.21~~		367		~~3.67~~		1000		8.24		"	"	20.67	"
2	810	15.03		7.18		310		~~3.65~~		892		8.22		clear	NOSH	20.66	"
3	815	15.24		7.15		306		3.64		544		7.63		clear	NOSH	20.71	"
4	820	15.03		7.13		304		3.62		522		7.38		clear	NOSH	20.72	"
5	825	14.73		7.14		302		3.61		493		7.67		clear	NOSH	"	"
6	830	14.83		7.14		301		3.61		452		7.22		clear	NOSH	"	"
7	835	14.35		7.14		299		3.64		342		6.94		clear	NOSH	"	"
8	840	14.32		7.15		299		3.62		338		~~8.92~~		clear	NOSH	"	"
9	845	14.29	✓	7.15	✓	300	✓	3.59	✓	330	✓	6.91	✓	clear	NOSH	"	"
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	800
End Time	845
Volume	3.5
Pump Intake	22.06
Sample Start	845
Sample End	850

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes Clear NOM WOOD

Low Flow Purge Sheet

Date: 4/6/23 Well ID: GW-2R

Client: _____ Project: Bridge Cleaners Analyzer MH + BC

PID: 0.0 Well Diam: 2" DOW: 26.11 DTW: 20.42

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	1050	16.34		7.17		272		3.27		888		8.46		Brown	NOSH	20.42	135
1	1055	16.40		7.15		267		3.28		732		9.30		Brown	NOSH	20.44	4
2	1100	16.43		7.11		264		3.30		701		8.27		Brown	NOSH	20.46	"
3	1105	16.46		7.13		254		3.31		622		8.53		Brown	NOSH	20.49	"
4	1110	16.42		7.12		253		3.31		543		8.43		Brown	NOSH	20.52	"
5	1115	16.50		7.05		240		3.31		442		7.45		clear	NOSH	"	"
6	1120	16.49		7.04		234		3.32		305		7.50		clear	NOSH	"	"
7	1125	16.53		7.02		237		3.33		298		8.93		clear	NOSH	"	"
8	1130	16.54		7.03		236		3.34		297		6.58		clear	NOSH	"	"
9	1135	16.58	✓	7.03	✓	235	✓	3.33	✓	292	✓	6.81	✓	clear	NOSH	"	"
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	1050
End Time	1135
Volume	3.5
Pump Intake	24.50
Sample Start	1135
Sample End	1140

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes: clear, NOSH, NOOD

Low Flow Purge Sheet

Date: 4-6-2023 Well ID: GW-3R

Client: _____ Project: Bridge Clearance Analyzer Mike Huston

PID: 0.0 Well Diam: 2" DOW: 24.42 DTW: 20.61

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	955	15.24		7.50		297		1.89		576		7.22		Clear	NO Sheen	20.61	135
1	900	15.30		7.30		301		1.90		423		7.32		"	"	20.63	"
2	905	15.42		7.30		303		1.95		284		6.86		"	"	20.65	"
3	910	15.33		7.27		304		1.97		302		6.65		"	"	20.67	"
4	915	15.42		7.25		305		2.00		204		6.60		"	"	20.69	"
5	920	15.51		7.23		306		2.05		193		6.45		"	"	"	"
6	925	15.54		7.22		306		2.09		161		6.30		"	"	"	"
7	930	15.61		7.22		306		2.12		150		6.65		"	"	"	"
8	935	15.58		7.22		306		2.12		142		6.20		"	"	"	"
9	940	15.51		7.23		307		2.12		138		6.15		"	"	"	"
10	945	15.50	✓	7.22	✓	307	✓	2.12	✓	133	✓	6.16	✓	"	"	"	"
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	935
End Time	945
Volume	3.5
Pump Intake	23.50
Sample Start	945
Sample End	950

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

Notes * Sediment settled in bottle so NTU high But discharge was clear

Clear, NOSH, NOD

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

DUPLICATE

Low Flow Purge Sheet

Date: 4/6/23 Well ID: GW-5R

Client: _____ Project: Bridge Cleaners Analyzer Mike Huston & Brandon Cresnecka

PID: 0.0 Well Diam: 2" DOW: 26.02 DTW: 20.51

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	1150	15.34		7.52		251		2.17		782		4.66		Brown	Cloudy NOSH	20.51	135
1	1155	15.44		7.57		256		2.17		842		8.16		Brown	NOSH	20.55	"
2	1200	15.75		7.58		261		2.19		501		7.80		"	"	20.59	"
3	1205	15.71		7.56		263		2.21		334		7.66		"	"	20.63	"
4	1210	15.75		7.55		263		2.24		234		8.53		Clear	"	"	"
5	1215	15.79		7.54		260		2.26		242		7.21		"	"	"	"
6	1220	15.80		7.52		258		2.27		206		6.77		"	"	"	"
7	1225	15.80		7.53		253		2.29		184		6.58		"	"	"	"
8	1230	15.79		7.53		250		2.29		203		6.52		"	"	"	"
9	1235	15.80	✓	7.53	✓	247	✓	2.30	✓	205	✓	6.42	✓	"	"	"	"
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	1150
End Time	1235
Volume	3.5
Pump Intake	24.50
Sample Start	1235
Sample End	1240

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

Notes Clear NOSH NOBO

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Low Flow Purge Sheet

Date: 4/6/23 Well ID: GW-6

Client: _____ Project: Bridge Cleaners Analyzer Mike Huston

PID: 0.0 Well Diam: 2" DOW: 23.30 DTW: 20.55

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	0955	15.21		7.93		291		2.90		811		8.12		Brown	NOSH	20.55	135
1	1000	15.62		7.91		291		2.91		792		~~8.55~~		Brown	NOSH	20.62	135
2	1005	15.66		7.77		292		2.91		635		8.31		Brown	NOSH	20.67	135
3	1010	15.61		7.75		292		2.91		412		8.20		clear	NOSH	"	135
4	1015	15.62		7.73		291		2.91		403		8.17		clear	NOSH	"	135
5	1020	15.63		7.72		2.91		288		302		8.26		clear	NOSH	"	135
6	1025	15.62		7.67		2.91		279		266		8.13		clear	NOSH	"	135
7	1030	15.66		7.67		2.91		278		210		8.09		clear	NOSH	"	135
8	1035	15.70		7.68		2.91		2.91		207		8.18		clear	NOSH	"	135
9	1040	15.69	✓	7.67	✓	~~993~~	✓	2.92	✓	198	✓	8.19	✓	clear	NOSH	"	135
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	0955
End Time	1040
Volume	7.5
Pump Intake	22.00
Sample Start	1040
Sample End	1045

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes clear NOSH NOOD

DUPLICATE

Low Flow Purge Sheet

Date: 8-7-2023 Well ID: GW-2R

Client: Project: Bridge Cleaners Analyzer Mike Huston

PID: 0.0 Well Diam: 2.0 DOW: 25.60' DTW: 20.50'

	Time	Temperature Deg C	Temperature Change %	pH S.U.	pH Change	ORP mV	ORP Change	Specilfc Cond. ms/cm	Specilfc Cond. Change %	Turbidity NTU	Turbidity Change	Dissolved Oxygen mg/L	Dissolved Oxygen Change %	Visual Color	Visual Clarity	DTW ft BTOC	Purge Rate mL/min
0	1000	19.01		7.10		198		0.001									
1	1005	18.95		6.93		191		2.80		917		8.28		clear	Moderate		
2	1010	19.39		6.83		185		3.91		613		7.56		"	"		
3	1015	19.70		6.85		178		2.81		429		7.05		"	"		
4	1020	19.02		6.72		170		2.81		342		6.88		"	"		
5	1025	19.22		6.82		162		2.82		280		6.36		"	"		
6	1030	19.20		6.81		240		2.83		264		7.22		"	"		
7	1035	19.31		6.82		149		2.82		194		5.93		"	"		
8	1040	19.36		6.81		143		2.78		157		5.44		"	"		
9	1045	19.45		6.83		139		2.82		142		5.21		"	"		
10	1050	19.40		6.81		137		2.82		129		4.92		"	"		
11	1055	19.54		6.82		135		2.82		111		4.66		"	"		
12	1100	19.56		6.82		135		2.83		97.8		4.80		"	"		
13																	
14																	
15																	
16																	

Start Time	1005
End Time	1100
Volume	2.0± Gallons
Pump Intake	24.0
Sample Start	1100
Sample End	1120

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes Post Sample DTW 20.60

Low Flow Purge Sheet

Date: 8-7-2023 Well ID: GW-5

Client: _____ Project: Bridge Cleaners Analyzer Mike Huston

PID: 0.0 Well Diam: 2.0 DOW: 26.00 DTW: 19.80

	Time	Temperature		pH		ORP		Specilfc Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	1125	19.27		7.60		153		1.72				8.36		Clear	No Sheen		
1	1130	18.24		7.53		161		1.63		616		5.72		"	"		
2	1135	17.80		7.49		163		1.64		420		7.30		"	"		
3	1140	17.60		7.47		163		1.65		273		7.00		"	"		
4	1145	17.72		7.46		164		1.65		208		6.78		"	"		
5	1150	17.63		7.46		164		1.66		165		6.50		"	"		
6	1155	17.67		7.45		163		1.66		132		6.28		"	"		
7	1200	17.62		7.44		161		1.66		96		6.12		"	"		
8	1205	17.54		7.44		159		1.66		97		5.72		"	"		
9	1210	17.59		7.44		157		1.66		79		5.54		"	"		
10	~~1215~~																
11		Purge															
12																	
13																	
14																	
15																	
16																	

Start Time	1125
End Time	1210
Volume	25 gallons +
Pump Intake	24.0' +
Sample Start	1210
Sample End	1210

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
in = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes Post Sample DTW 19.83'

Low Flow Purge Sheet

Date: 8-7-2023 Well ID: GW-6

Client: Project: Bridge Cleaners Analyzer Brandon

PID: 0.0 Well Diam: 20" DOW: 20.25 DTW: ~~20.25~~ 23.35'

Med Brown

	Time	Temperature		pH		ORP		Specific Cond.		Turbidity		Dissolved Oxygen		Visual		DTW	Purge Rate
		Deg C	Change %	S.U.	Change	mV	Change	ms/cm	Change %	NTU*	Change	mg/L	Change %	Color	Clarity	ft BTOC	mL/min
0	905	23.01		~~8.48~~		95		2.21		0.0		10.10		~~Clear~~	No Sheen		
1	910	18.90		7.82		132		2.24		—		6.89		Lt. Brn	" "		
2	915	18.56		7.60		149		2.23		—		6.42		"	" "		
3	920	18.38		7.56		161		2.29		—		6.42		"	"		
4	925	17.95		7.53		167		2.29		—		6.40		"	"		
5	930	17.77		7.52		172		2.31		137		6.35		Clear	"		
6	935	17.75		7.52		177		2.30		114		7.54		"	"		
7	940	17.53		7.52		178		2.30		89		6.39		"	"		
8	945	17.59		7.53		180		2.30		97		6.22		"	"		
9	950	17.65		7.53		182		2.30		88		6.24		"	"		
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Start Time	905
End Time	950
Volume	1.5 gallons
Pump Intake	22.0'
Sample Start	950
Sample End	950

Parameter	Change Allowance	OR
Temp	3%	
pH	0.1	
ORP	10	
Spec Cond	3%	
Turbidity	10%	<5 NTU
DO	10%	<0.5 mg/L

PID = Photoionization detector
PPM - parts per million
In = inches
ft = feet
DOW = depth of well
DTW = Depth to water
Deg C = Degrees Celcius
S.U. = Standard Units
ORP = Oxidation-Reduction Potential
mV = Millivolts
Specific Cond = Specific Conductivity
mS/cm = Milli Siemens per centimeter
NTU = Nephelometric Turbidity Units
mg/L = milligrams per Liter
BTOC = Below top of casing
mL/min = Milliliters per minute

Notes * Turbidity Sensor Not Working
Post Sample DTW 20.40'

Appendix C

Laboratory Analytical Reports - Groundwater Sampling

ANALYTICAL REPORT

Lab Number:	L2318419
Client:	Environmental Compliance & Control, Inc. 1 Emery Avenue Unit 2 Randolph, NJ 07869
ATTN:	Nick Carlo
Phone:	(973) 927-1111
Project Name:	BRIDGE CLEANERS
Project Number:	BRIDGE CLEANERS
Report Date:	04/13/23

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

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

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2318419-01	GW-1R	WATER	QUEENS, NY	04/06/23 08:45	04/06/23
L2318419-02	GW-6	WATER	QUEENS, NY	04/06/23 10:40	04/06/23
L2318419-03	GW-2R	WATER	QUEENS, NY	04/06/23 11:35	04/06/23
L2318419-04	GW-3R	WATER	QUEENS, NY	04/06/23 09:45	04/06/23
L2318419-05	GW-5R	WATER	QUEENS, NY	04/06/23 12:35	04/06/23
L2318419-06	DUP	WATER	QUEENS, NY	04/06/23 00:00	04/06/23
L2318419-07	FB	WATER	QUEENS, NY	04/06/23 11:30	04/06/23
L2318419-08	TB	WATER	QUEENS, NY	04/06/23 00:00	04/06/23

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

Case Narrative

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

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

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

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

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

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

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 04/13/23

ORGANICS

VOLATILES

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-01
Client ID: GW-1R
Sample Location: QUEENS, NY

Date Collected: 04/06/23 08:45
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/13/23 00:33
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	24		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-01 Date Collected: 04/06/23 08:45

Client ID: GW-1R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.82		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-01 Date Collected: 04/06/23 08:45

Client ID: GW-1R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-02
Client ID: GW-6
Sample Location: QUEENS, NY

Date Collected: 04/06/23 10:40
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 11:57
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.0	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	7.9		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-02 Date Collected: 04/06/23 10:40

Client ID: GW-6 Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.64		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-02 Date Collected: 04/06/23 10:40

Client ID: GW-6 Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-03 D
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 04/06/23 11:35
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 12:18
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	10	2.8	4
1,1-Dichloroethane	ND		ug/l	10	2.8	4
Chloroform	ND		ug/l	10	2.8	4
Carbon tetrachloride	ND		ug/l	2.0	0.54	4
1,2-Dichloropropane	ND		ug/l	4.0	0.55	4
Dibromochloromethane	ND		ug/l	2.0	0.60	4
1,1,2-Trichloroethane	ND		ug/l	6.0	2.0	4
Tetrachloroethene	380		ug/l	2.0	0.72	4
Chlorobenzene	ND		ug/l	10	2.8	4
Trichlorofluoromethane	ND		ug/l	10	2.8	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
1,1,1-Trichloroethane	ND		ug/l	10	2.8	4
Bromodichloromethane	ND		ug/l	2.0	0.77	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	0.66	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	0.58	4
1,3-Dichloropropene, Total	ND		ug/l	2.0	0.58	4
1,1-Dichloropropene	ND		ug/l	10	2.8	4
Bromoform	ND		ug/l	8.0	2.6	4
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	0.67	4
Benzene	ND		ug/l	2.0	0.64	4
Toluene	ND		ug/l	10	2.8	4
Ethylbenzene	ND		ug/l	10	2.8	4
Chloromethane	ND		ug/l	10	2.8	4
Bromomethane	ND		ug/l	10	2.8	4
Vinyl chloride	ND		ug/l	4.0	0.28	4
Chloroethane	ND		ug/l	10	2.8	4
1,1-Dichloroethene	ND		ug/l	2.0	0.68	4
trans-1,2-Dichloroethene	ND		ug/l	10	2.8	4

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-03 D
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 04/06/23 11:35
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	25		ug/l	2.0	0.70	4
1,2-Dichlorobenzene	ND		ug/l	10	2.8	4
1,3-Dichlorobenzene	ND		ug/l	10	2.8	4
1,4-Dichlorobenzene	ND		ug/l	10	2.8	4
Methyl tert butyl ether	ND		ug/l	10	2.8	4
p/m-Xylene	ND		ug/l	10	2.8	4
o-Xylene	ND		ug/l	10	2.8	4
Xylenes, Total	ND		ug/l	10	2.8	4
cis-1,2-Dichloroethene	ND		ug/l	10	2.8	4
1,2-Dichloroethene, Total	ND		ug/l	10	2.8	4
Dibromomethane	ND		ug/l	20	4.0	4
1,2,3-Trichloropropane	ND		ug/l	10	2.8	4
Acrylonitrile	ND		ug/l	20	6.0	4
Styrene	ND		ug/l	10	2.8	4
Dichlorodifluoromethane	ND		ug/l	20	4.0	4
Acetone	ND		ug/l	20	5.8	4
Carbon disulfide	ND		ug/l	20	4.0	4
2-Butanone	ND		ug/l	20	7.8	4
Vinyl acetate	ND		ug/l	20	4.0	4
4-Methyl-2-pentanone	ND		ug/l	20	4.0	4
2-Hexanone	ND		ug/l	20	4.0	4
Bromochloromethane	ND		ug/l	10	2.8	4
2,2-Dichloropropane	ND		ug/l	10	2.8	4
1,2-Dibromoethane	ND		ug/l	8.0	2.6	4
1,3-Dichloropropane	ND		ug/l	10	2.8	4
1,1,1,2-Tetrachloroethane	ND		ug/l	10	2.8	4
Bromobenzene	ND		ug/l	10	2.8	4
n-Butylbenzene	ND		ug/l	10	2.8	4
sec-Butylbenzene	ND		ug/l	10	2.8	4
tert-Butylbenzene	ND		ug/l	10	2.8	4
o-Chlorotoluene	ND		ug/l	10	2.8	4
p-Chlorotoluene	ND		ug/l	10	2.8	4
1,2-Dibromo-3-chloropropane	ND		ug/l	10	2.8	4
Hexachlorobutadiene	ND		ug/l	10	2.8	4
Isopropylbenzene	ND		ug/l	10	2.8	4
p-Isopropyltoluene	ND		ug/l	10	2.8	4
Naphthalene	ND		ug/l	10	2.8	4

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-03 D
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 04/06/23 11:35
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	10	2.8	4
1,2,3-Trichlorobenzene	ND		ug/l	10	2.8	4
1,2,4-Trichlorobenzene	ND		ug/l	10	2.8	4
1,3,5-Trimethylbenzene	ND		ug/l	10	2.8	4
1,2,4-Trimethylbenzene	ND		ug/l	10	2.8	4
1,4-Dioxane	ND		ug/l	1000	240	4
p-Diethylbenzene	ND		ug/l	8.0	2.8	4
p-Ethyltoluene	ND		ug/l	8.0	2.8	4
1,2,4,5-Tetramethylbenzene	ND		ug/l	8.0	2.2	4
Ethyl ether	ND		ug/l	10	2.8	4
trans-1,4-Dichloro-2-butene	ND		ug/l	10	2.8	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-04
Client ID: GW-3R
Sample Location: QUEENS, NY

Date Collected: 04/06/23 09:45
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 12:39
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	22		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-04 Date Collected: 04/06/23 09:45

Client ID: GW-3R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.34	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-04 Date Collected: 04/06/23 09:45

Client ID: GW-3R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	104		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-05
Client ID: GW-5R
Sample Location: QUEENS, NY
Date Collected: 04/06/23 12:35
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 13:00
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	0.78	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	66		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-05 Date Collected: 04/06/23 12:35

Client ID: GW-5R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.7		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.4	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-05 Date Collected: 04/06/23 12:35

Client ID: GW-5R Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	1.3	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	2.0	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	3.8		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	2.2		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	102		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-06
Client ID: DUP
Sample Location: QUEENS, NY
Date Collected: 04/06/23 00:00
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 13:21
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	0.81	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	67		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-06 Date Collected: 04/06/23 00:00

Client ID: DUP Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.7		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.6	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-06 Date Collected: 04/06/23 00:00

Client ID: DUP Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	1.4	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	2.1	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	4.2		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	2.4		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-07
Client ID: FB
Sample Location: QUEENS, NY
Date Collected: 04/06/23 11:30
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 13:42
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.31	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-07 Date Collected: 04/06/23 11:30

Client ID: FB Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-07 Date Collected: 04/06/23 11:30

Client ID: FB Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	109		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-08
Client ID: TB
Sample Location: QUEENS, NY

Date Collected: 04/06/23 00:00
Date Received: 04/06/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 04/12/23 14:02
Analyst: LAC

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

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-08 Date Collected: 04/06/23 00:00

Client ID: TB Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

SAMPLE RESULTS

Lab ID: L2318419-08 Date Collected: 04/06/23 00:00

Client ID: TB Date Received: 04/06/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	112		70-130

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 08:29
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG1765771-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 08:29
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG1765771-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 08:29
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG1765771-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 19:00
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1766227-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2318419
Report Date: 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 19:00
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1766227-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BRIDGE CLEANERS **Lab Number:** L2318419

Project Number: BRIDGE CLEANERS **Report Date:** 04/13/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 04/12/23 19:00
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1766227-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	111		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG1765771-3 WG1765771-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	96		94		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	94		98		70-130	4		20
cis-1,3-Dichloropropene	99		100		70-130	1		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	97		100		54-136	3		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	110		110		64-130	0		20
Bromomethane	90		92		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG1765771-3 WG1765771-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		110		70-130	0		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	97		110		63-130	13		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	105		110		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	97		94		70-130	3		20
Styrene	110		115		70-130	4		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	97		110		58-148	13		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	110		120		63-138	9		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	100		110		57-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2318419

Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG1765771-3 WG1765771-4								
Bromochloromethane	100		100		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Hexachlorobutadiene	100		100		63-130	0		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	99		100		70-130	1		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	99		100		70-130	1		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	110		118		56-162	7		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG1765771-3 WG1765771-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	96		99		70-130	3		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	98		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2318419

Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1766227-3 WG1766227-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	110		92		70-130	18		20
Chloroform	110		90		70-130	20		20
Carbon tetrachloride	110		96		63-132	14		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		93		67-130	17		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	93		95		70-130	2		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
1,1-Dichloropropene	100		96		70-130	4		20
Bromoform	92		97		54-136	5		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	110		110		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	120		120		64-130	0		20
Bromomethane	120		110		39-139	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2318419

Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1766227-3 WG1766227-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		105		70-130	5		20
cis-1,2-Dichloroethene	110		88		70-130	**22**	Q	20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	100		90		70-130	11		20
Styrene	115		115		70-130	0		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	120		110		58-148	9		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	100		110		63-138	10		20
Vinyl acetate	120		110		70-130	9		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	100		110		57-130	10		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1766227-3 WG1766227-4								
Bromochloromethane	110		85		70-130	**26**	Q	20
2,2-Dichloropropane	120		100		63-133	18		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	96		100		70-130	4		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	96		98		41-144	2		20
Hexachlorobutadiene	96		96		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		110		70-130	10		20
Naphthalene	92		98		70-130	6		20
n-Propylbenzene	100		110		69-130	10		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20
1,2,4-Trichlorobenzene	95		98		70-130	3		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	106		106		56-162	0		20
p-Diethylbenzene	99		100		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1766227-3 WG1766227-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	92		95		70-130	3		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	100		110		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	94		99		70-130
Dibromofluoromethane	99		82		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
Report Date: 04/13/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2318419-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-02A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-02B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-02C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-03A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-03B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-03C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-04A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-04B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-04C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-05A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-05B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-05C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-06A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-06B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-06C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-07A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-07B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-07C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-08A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L2318419-08B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2318419
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

*Values in parentheses indicate holding time in days

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

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

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

Data Qualifiers

Identified Compounds (TICs).

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2318419
Project Number:	BRIDGE CLEANERS	**Report Date:**	04/13/23

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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

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

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

Page 1 of 1

Date Rec'd in Lab 04/06/23

ALPHA Job # L2318419

Client Information

Client: FCC Horizon
Address: 1 Emery Ave
Randolph, NJ, 07869
Phone: 973-897-6898
Fax:
Email: ncarlo@ecchor.com

Project Information

Project Name: BRIDGE CLEANERS
Project Location: Queens, NY
Project #
(Use Project name as Project #) ☒
Project Manager: Nick Krasnecky
ALPHAQuote #:

Turn-Around Time

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

Deliverables

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

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

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

Disposal Site Information

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

VOC 8260 (NY)

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260 (NY)	Sample Specific Comments	Total Bottle
84 19-01	GW-1R	4/6/23	0845	GW	BC	X		3
-02	GW-6		1040		BC	X		3
-03	GW-2R		1135		BC	X		3
-04	GW-3R		0945		BC	X		3
-05	GW-5R		1235		BC	X		3
-06	DUP		—		—	X		3
-07	FB		1130	AQ	BC	X		3
-08	TB	4/5/23	—		—	X		2

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

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

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

Container Type	V												
Preservative	B												

Relinquished By:	Date/Time	Received By:	Date/Time
	4/6/23	(AAD)	4/6/23 1710
(AAC)	4-6-23 1824		4/6/23 1849
	4/6/23	AAC	4/6/23 2140
AAC	4/6/23 2350		4/6/23 2350

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

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

ANALYTICAL REPORT

Lab Number:	L2345491
Client:	Environmental Compliance & Control, Inc. 1 Emery Avenue Unit 2 Randolph, NJ 07869
ATTN:	Nick Carlo
Phone:	(973) 927-1111
Project Name:	BRIDGE CLEANERS
Project Number:	BRIDGE CLEANERS
Report Date:	08/22/23

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2345491-01	GW-6	WATER	QUEENS, NY	08/07/23 09:50	08/07/23
L2345491-02	GW-2R	WATER	QUEENS, NY	08/07/23 11:00	08/07/23
L2345491-03	GW-5	WATER	QUEENS, NY	08/07/23 12:10	08/07/23
L2345491-04	DUP	WATER	QUEENS, NY	08/07/23 00:00	08/07/23
L2345491-05	FB	WATER	QUEENS, NY	08/07/23 13:30	08/07/23
L2345491-06	TB	WATER	QUEENS, NY	08/07/23 00:00	08/07/23

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

Case Narrative

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

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

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

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

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

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

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

Case Narrative (continued)

Report Submission

August 22, 2023: This final report includes the results of all requested analyses.

August 21, 2023: This is a preliminary report.

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

The analysis of Sulfide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Dissolved Gases

The WG1817385-5 MS recovery, performed on L2345491-02, is outside the acceptance criteria for methane (126%). The unacceptable percent recovery is attributed to the elevated concentrations of target compounds present in the native sample.

Iron, Ferrous

The WG1813003-4 MS recovery, performed on L2345491-02, is outside the acceptance criteria for iron, ferrous (127%); however, the associated LCS recovery is within criteria. No further action was taken.

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: Kelly O'Neill

Title: Technical Director/Representative Date: 08/22/23

ORGANICS

VOLATILES

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-01
Client ID: GW-6
Sample Location: QUEENS, NY

Date Collected: 08/07/23 09:50
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 04:20
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	0.95	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	14		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-01 Date Collected: 08/07/23 09:50

Client ID: GW-6 Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.64		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-01 Date Collected: 08/07/23 09:50

Client ID: GW-6 Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	100		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02
Client ID: GW-2R
Sample Location: QUEENS, NY
Date Collected: 08/07/23 11:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 08/18/23 08:10
Analyst: SRO

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	ND		ug/l	2.00	2.00	1	A
Ethene	ND		ug/l	0.500	0.500	1	A
Ethane	ND		ug/l	0.500	0.500	1	A

Project Name: BRIDGE CLEANERS
Lab Number: L2345491
Project Number: BRIDGE CLEANERS
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02 D2
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 08/07/23 11:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/15/23 21:12
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	650		ug/l	5.0	1.8	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: BRIDGE CLEANERS
Lab Number: L2345491
Project Number: BRIDGE CLEANERS
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02 D
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 08/07/23 11:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 03:54
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	720	E	ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	ND		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	0.15	J	ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02 D Date Collected: 08/07/23 11:00
Client ID: GW-2R Date Received: 08/07/23
Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	49		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
Xylenes, Total	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	ND		ug/l	5.0	1.4	2
sec-Butylbenzene	2.7	J	ug/l	5.0	1.4	2
tert-Butylbenzene	2.8	J	ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	ND		ug/l	5.0	1.4	2

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02 D
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 08/07/23 11:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	ND		ug/l	4.0	1.4	2
p-Ethyltoluene	ND		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	ND		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-03
Client ID: GW-5
Sample Location: QUEENS, NY

Date Collected: 08/07/23 12:10
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 03:27
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.0	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	110		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-03 Date Collected: 08/07/23 12:10

Client ID: GW-5 Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	2.4		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	1.0	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	2.3	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-03 Date Collected: 08/07/23 12:10

Client ID: GW-5 Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	2.3	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	3.5		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	6.9		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	3.6		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-04 D2
Client ID: DUP
Sample Location: QUEENS, NY
Date Collected: 08/07/23 00:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/15/23 21:34
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	660		ug/l	5.0	1.8	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: BRIDGE CLEANERS
Lab Number: L2345491
Project Number: BRIDGE CLEANERS
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-04 D
Client ID: DUP
Sample Location: QUEENS, NY

Date Collected: 08/07/23 00:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 03:01
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	710	E	ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	ND		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-04 D
Client ID: DUP
Sample Location: QUEENS, NY

Date Collected: 08/07/23 00:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	48		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
Xylenes, Total	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	ND		ug/l	5.0	1.4	2
sec-Butylbenzene	2.6	J	ug/l	5.0	1.4	2
tert-Butylbenzene	2.7	J	ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	ND		ug/l	5.0	1.4	2

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-04 D
Client ID: DUP
Sample Location: QUEENS, NY

Date Collected: 08/07/23 00:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	ND		ug/l	4.0	1.4	2
p-Ethyltoluene	ND		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	ND		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-05
Client ID: FB
Sample Location: QUEENS, NY
Date Collected: 08/07/23 13:30
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 02:34
Analyst: MKS

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

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-05 Date Collected: 08/07/23 13:30

Client ID: FB Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.0	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-05 Date Collected: 08/07/23 13:30

Client ID: FB Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-06
Client ID: TB
Sample Location: QUEENS, NY

Date Collected: 08/07/23 00:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 08/12/23 02:08
Analyst: MKS

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

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-06 Date Collected: 08/07/23 00:00

Client ID: TB Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-06 Date Collected: 08/07/23 00:00

Client ID: TB Date Received: 08/07/23

Sample Location: QUEENS, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/11/23 21:17
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1816118-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/11/23 21:17
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1816118-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/11/23 21:17
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1816118-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: BRIDGE CLEANERS **Lab Number:** L2345491

Project Number: BRIDGE CLEANERS **Report Date:** 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/15/23 19:10
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1816898-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/15/23 19:10
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1816898-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/15/23 19:10
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG1816898-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 08/18/23 06:56
Analyst: SRO

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 02 Batch: WG1817385-3						
Methane	ND		ug/l	2.00	2.00	A
Ethene	ND		ug/l	0.500	0.500	A
Ethane	ND		ug/l	0.500	0.500	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1816118-3 WG1816118-4								
Methylene chloride	100		97		70-130	3		20
1,1-Dichloroethane	99		97		70-130	2		20
Chloroform	100		99		70-130	1		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	96		94		70-130	2		20
Dibromochloromethane	89		90		63-130	1		20
1,1,2-Trichloroethane	89		88		70-130	1		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	98		97		75-130	1		20
Trichlorofluoromethane	84		82		62-150	2		20
1,2-Dichloroethane	91		89		70-130	2		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	98		97		67-130	1		20
trans-1,3-Dichloropropene	91		89		70-130	2		20
cis-1,3-Dichloropropene	100		99		70-130	1		20
1,1-Dichloropropene	110		100		70-130	10		20
Bromoform	86		85		54-136	1		20
1,1,2,2-Tetrachloroethane	94		92		67-130	2		20
Benzene	110		100		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	91		87		64-130	4		20
Bromomethane	**140**	Q	**140**	Q	39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1816118-3 WG1816118-4								
Vinyl chloride	78		75		55-140	4		20
Chloroethane	67		62		55-138	8		20
1,1-Dichloroethene	78		76		61-145	3		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	95		93		63-130	2		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	98		96		70-130	2		20
1,2,3-Trichloropropane	84		83		64-130	1		20
Acrylonitrile	86		84		70-130	2		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	95		93		36-147	2		20
Acetone	73		82		58-148	12		20
Carbon disulfide	70		73		51-130	4		20
2-Butanone	77		78		63-138	1		20
Vinyl acetate	100		97		70-130	3		20
4-Methyl-2-pentanone	71		75		59-130	5		20
2-Hexanone	69		71		57-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1816118-3 WG1816118-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	110		100		63-133	10		20
1,2-Dibromoethane	89		88		70-130	1		20
1,3-Dichloropropane	90		90		70-130	0		20
1,1,1,2-Tetrachloroethane	96		95		64-130	1		20
Bromobenzene	99		98		70-130	1		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		100		70-130	10		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	80		79		41-144	1		20
Hexachlorobutadiene	100		97		63-130	3		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	87		85		70-130	2		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	83		79		70-130	5		20
1,2,4-Trichlorobenzene	93		89		70-130	4		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
1,4-Dioxane	100		90		56-162	11		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1816118-3 WG1816118-4								
p-Ethyltoluene	110		100		70-130	10		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	64		63		59-134	2		20
trans-1,4-Dichloro-2-butene	**69**	Q	71		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		89		70-130
Toluene-d8	96		97		70-130
4-Bromofluorobenzene	102		101		70-130
Dibromofluoromethane	99		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1816898-3 WG1816898-4								
Methylene chloride	89		92		70-130	3		20
1,1-Dichloroethane	94		96		70-130	2		20
Chloroform	94		97		70-130	3		20
Carbon tetrachloride	97		98		63-132	1		20
1,2-Dichloropropane	94		96		70-130	2		20
Dibromochloromethane	89		93		63-130	4		20
1,1,2-Trichloroethane	92		95		70-130	3		20
Tetrachloroethene	90		93		70-130	3		20
Chlorobenzene	92		94		75-130	2		20
Trichlorofluoromethane	120		120		62-150	0		20
1,2-Dichloroethane	94		96		70-130	2		20
1,1,1-Trichloroethane	93		95		67-130	2		20
Bromodichloromethane	91		94		67-130	3		20
trans-1,3-Dichloropropene	90		94		70-130	4		20
cis-1,3-Dichloropropene	91		92		70-130	1		20
1,1-Dichloropropene	92		94		70-130	2		20
Bromoform	88		88		54-136	0		20
1,1,2,2-Tetrachloroethane	95		95		67-130	0		20
Benzene	94		96		70-130	2		20
Toluene	92		95		70-130	3		20
Ethylbenzene	92		94		70-130	2		20
Chloromethane	99		100		64-130	1		20
Bromomethane	100		100		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1816898-3 WG1816898-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	120		120		55-138	0		20
1,1-Dichloroethene	91		94		61-145	3		20
trans-1,2-Dichloroethene	91		94		70-130	3		20
Trichloroethene	91		92		70-130	1		20
1,2-Dichlorobenzene	95		95		70-130	0		20
1,3-Dichlorobenzene	96		96		70-130	0		20
1,4-Dichlorobenzene	96		96		70-130	0		20
Methyl tert butyl ether	88		89		63-130	1		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	92		93		70-130	1		20
Dibromomethane	91		93		70-130	2		20
1,2,3-Trichloropropane	90		92		64-130	2		20
Acrylonitrile	91		96		70-130	5		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	98		99		36-147	1		20
Acetone	93		100		58-148	7		20
Carbon disulfide	96		98		51-130	2		20
2-Butanone	91		97		63-138	6		20
Vinyl acetate	100		98		70-130	2		20
4-Methyl-2-pentanone	81		87		59-130	7		20
2-Hexanone	80		90		57-130	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1816898-3 WG1816898-4								
Bromochloromethane	93		94		70-130	1		20
2,2-Dichloropropane	95		98		63-133	3		20
1,2-Dibromoethane	91		95		70-130	4		20
1,3-Dichloropropane	92		95		70-130	3		20
1,1,1,2-Tetrachloroethane	93		95		64-130	2		20
Bromobenzene	92		94		70-130	2		20
n-Butylbenzene	99		99		53-136	0		20
sec-Butylbenzene	97		98		70-130	1		20
tert-Butylbenzene	94		94		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	94		95		70-130	1		20
1,2-Dibromo-3-chloropropane	83		85		41-144	2		20
Hexachlorobutadiene	89		90		63-130	1		20
Isopropylbenzene	93		94		70-130	1		20
p-Isopropyltoluene	95		94		70-130	1		20
Naphthalene	86		88		70-130	2		20
n-Propylbenzene	96		96		69-130	0		20
1,2,3-Trichlorobenzene	87		89		70-130	2		20
1,2,4-Trichlorobenzene	88		90		70-130	2		20
1,3,5-Trimethylbenzene	94		95		64-130	1		20
1,2,4-Trimethylbenzene	94		95		70-130	1		20
1,4-Dioxane	106		110		56-162	4		20
p-Diethylbenzene	96		95		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG1816898-3 WG1816898-4								
p-Ethyltoluene	97		97		70-130	0		20
1,2,4,5-Tetramethylbenzene	91		92		70-130	1		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	92		92		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02 Batch: WG1817385-2									
Methane	102		-		80-120	-		25	A
Ethene	90		-		80-120	-		25	A
Ethane	93		-		80-120	-		25	A

Matrix Spike Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS

Project Number: BRIDGE CLEANERS

Lab Number: L2345491

Report Date: 08/22/23

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1817385-5 QC Sample: L2345491-02 Client ID: GW-2R													
Methane	ND	109	138	**126**	Q	-	-		80-120	-		25	A
Ethene	ND	191	211	110		-	-		80-120	-		25	A
Ethane	ND	205	221	108		-	-		80-120	-		25	A

INORGANICS
&
MISCELLANEOUS

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

SAMPLE RESULTS

Lab ID: L2345491-02
Client ID: GW-2R
Sample Location: QUEENS, NY

Date Collected: 08/07/23 11:00
Date Received: 08/07/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrite	ND		mg/l	0.050	0.013	1	-	08/08/23 07:23	121,4500NO3-F	KAF
Nitrogen, Nitrate	0.297		mg/l	0.100	0.022	1	-	08/08/23 07:23	121,4500NO3-F	KAF
Sulfate	12.		mg/l	10	1.4	1	08/22/23 10:30	08/22/23 10:30	1,9038	MRW
Total Organic Carbon	2.6		mg/l	1.0	0.19	2	-	08/17/23 10:13	1,9060A	DEW
Iron, Ferrous	0.21	J	mg/l	0.50	0.056	1	-	08/08/23 09:29	121,3500FE-B	OCF

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS
Lab Number: L2345491
Report Date: 08/22/23

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1812953-1										
Nitrogen, Nitrate	ND		mg/l	0.100	0.022	1	-	08/08/23 02:22	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1813003-1										
Iron, Ferrous	ND		mg/l	0.50	0.056	1	-	08/08/23 09:28	121,3500FE-B	OCF
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1813058-1										
Nitrogen, Nitrite	ND		mg/l	0.050	0.013	1	-	08/08/23 02:19	121,4500NO3-F	KAF
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1816798-1										
Total Organic Carbon	ND		mg/l	0.50	0.10	1	-	08/17/23 04:18	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1818603-1										
Sulfate	ND		mg/l	10	1.4	1	08/22/23 10:30	08/22/23 10:30	1,9038	MRW

Lab Control Sample Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1812953-2								
Nitrogen, Nitrate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1813003-2								
Iron, Ferrous	105		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1813058-2								
Nitrogen, Nitrite	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1816798-2								
Total Organic Carbon	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1818603-2								
Sulfate	95		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1812953-4 QC Sample: L2345412-01 Client ID: MS Sample												
Nitrogen, Nitrate	1.23	4	5.04	95		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1813003-4 QC Sample: L2345491-02 Client ID: GW-2R												
Iron, Ferrous	0.21J	1	1.3	**127**	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1813058-4 QC Sample: L2345491-02 Client ID: GW-2R												
Nitrogen, Nitrite	ND	4	3.81	95		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1816798-4 QC Sample: L2345570-01 Client ID: MS Sample												
Total Organic Carbon	25000	64000	95000	110		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1818603-4 QC Sample: L2346929-02 Client ID: MS Sample												
Sulfate	5.6J	20	27	135		-	-		55-147	-		14

Lab Duplicate Analysis

Batch Quality Control

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1812953-3 QC Sample: L2345412-01 Client ID: DUP Sample						
Nitrogen, Nitrate	1.23	1.23	mg/l	0		17
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1813003-3 QC Sample: L2345491-02 Client ID: GW-2R						
Iron, Ferrous	0.21J	0.31J	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1813058-3 QC Sample: L2345491-02 Client ID: GW-2R						
Nitrogen, Nitrite	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1816798-3 QC Sample: L2345570-01 Client ID: DUP Sample						
Total Organic Carbon	25000	24000	mg/l	4		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1818603-3 QC Sample: L2346929-02 Client ID: DUP Sample						
Sulfate	5.6J	5.4J	mg/l	NC		14

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2345491-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-02D	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2345491-02E	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2345491-02F	Vial H2SO4 preserved	A	NA		2.5	Y	Absent		TOC-9060(28)
L2345491-02G	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2345491-02H	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2345491-02I	Plastic 250ml unpreserved	A	7	7	2.5	Y	Absent		SO4-9038(28),NO3-4500(2),NO2-4500NO3(2),FERROUS(1)
L2345491-02J	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.5	Y	Absent		SUB-SULFIDE()
L2345491-02K	Plastic 250ml Zn Acetate/NaOH preserved	A	>9	>9	2.5	Y	Absent		SUB-SULFIDE()
L2345491-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-04A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-04B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-04C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-05A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-05B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-05C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: BRIDGE CLEANERS
Project Number: BRIDGE CLEANERS

Lab Number: L2345491
Report Date: 08/22/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2345491-06A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2345491-06B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

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

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Project Name:	BRIDGE CLEANERS	**Lab Number:**	L2345491
Project Number:	BRIDGE CLEANERS	**Report Date:**	08/22/23

REFERENCES

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

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

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.

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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TEL: 508-898-9220
FAX: 508-898-9193

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320 Forbes Blvd
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FAX: 508-822-3288

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

Page 1 of 1

Date Rec'd in Lab: 8/7/23

ALPHA Job #: L2345491

Client Information

Client: ECS Horizon
Address: 1 Emery Ave
Randolph, NJ, 07869
Phone: 518-569-8654
Fax:
Email: cmazur@ecshorizon.com

Project Information

Project Name: BRIDGE CLEANERS
Project Location: Queens, NY
Project #
(Use Project name as Project #) [X]
Project Manager: Nick Krasnecky
ALPHAQuote #: Q17178

Turn-Around Time

Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

Deliverables

[ ] ASP-A [X] ASP-B
[ ] EQuIS (1 File) [X] EQuIS (4 File)
[ ] Other

Regulatory Requirement

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

Billing Information

[X] Same as Client Info
PO #

Disposal Site Information

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

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

Please advise max TAT will not exceed 10-Days

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
[ ] Done
[ ] Lab to do
Preservation
[ ] Lab to do
(Please Specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs	0,2,4 Gases - Methane Ethane Ethene	Nitrate, Nitrite, Sulfate	Total Organic Carbon	Sulfide	Ferrous Iron			Total # Bottles
45491-01	GW-6	8/7/23	0950	GW	MH	X								3
-02	GW-2R		1100			X	X	X	X	X	X			11
-03	GW-5		1210			X								3
~~-03A~~						X								3
-04	DUP		—			X								3
-05	FB		1330	AQ		X								3
-06	TB		—			X								2

Container Type: B V P V P P
Preservative: ~~B~~ B A D K/E A

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

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
	8/7/23	Anna (AM)	8/7/23 1500
Anna (AM)	8/7/23 1500	Paul Mazzella	8/7/23 16
Paul Mazzella	8/7/23	Chris Allen	8/7/23 2025
Chris Allen	8/7/23 2225		8/7/23 22:25

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

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Cynthia Romero
Alpha Analytical Inc
8 Walkup Drive
Westborough, Massachusetts 01581

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JOB DESCRIPTION

L2345491

JOB NUMBER

460-285793-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

Eurofins Edison

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Designee for
Kristyn Tempe, Manager of Project Management
Kristyn.Tempe@et.eurofinsus.com
(732)549-3900

Table of Contents

Definitions/Glossary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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)
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: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Job ID: 460-285793-1

Laboratory: Eurofins Edison

Narrative

CASE NARRATIVE

Client: Alpha Analytical Inc

Project: L2345491

Report Number: 460-285793-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 08/09/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

SULFIDE
Sample GW-2R (460-285793-1) was analyzed for sulfide in accordance with SM 4500 S2 F. The samples were analyzed on 08/14/2023.

No difficulties were encountered during the sulfide analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Client Sample ID: GW-2R

Lab Sample ID: 460-285793-1

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Edison

Client Sample Results

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Client Sample ID: GW-2R

Date Collected: 08/07/23 11:00
Date Received: 08/09/23 10:30

Lab Sample ID: 460-285793-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SM 4500 S2 F-2011)	0.85	U	1.0	0.85	mg/L			08/14/23 16:15	1

QC Sample Results

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Method: 4500 S2 F-2011 - Sulfide, Total

Lab Sample ID: MB 460-926485/1
Matrix: Water
Analysis Batch: 926485

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.85	U	1.0	0.85	mg/L			08/14/23 16:15	1

Lab Sample ID: LCSSRM 460-926485/3
Matrix: Water
Analysis Batch: 926485

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	5.07	4.24		mg/L		83.6	41.2 - 146.9

Lab Sample ID: MRL 460-926485/4
Matrix: Water
Analysis Batch: 926485

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	1.20	1.04		mg/L		87	50 - 150

Lab Sample ID: 460-285853-K-2 MS
Matrix: Water
Analysis Batch: 926485

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.85	U	5.84	5.84		mg/L		100	60 - 107

Lab Sample ID: 460-285853-K-2 MSD
Matrix: Water
Analysis Batch: 926485

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	0.85	U	5.84	5.84		mg/L		100	60 - 107	0	18

QC Association Summary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

General Chemistry

Analysis Batch: 926485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-285793-1	GW-2R	Total/NA	Water	4500 S2 F-2011	
MB 460-926485/1	Method Blank	Total/NA	Water	4500 S2 F-2011	
LCSSRM 460-926485/3	Lab Control Sample	Total/NA	Water	4500 S2 F-2011	
MRL 460-926485/4	Lab Control Sample	Total/NA	Water	4500 S2 F-2011	
460-285853-K-2 MS	Matrix Spike	Total/NA	Water	4500 S2 F-2011	
460-285853-K-2 MSD	Matrix Spike Duplicate	Total/NA	Water	4500 S2 F-2011	

Lab Chronicle

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Client Sample ID: GW-2R
Date Collected: 08/07/23 11:00
Date Received: 08/09/23 10:30

Lab Sample ID: 460-285793-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 S2 F-2011		1	926485	HTV	EET EDI	08/14/23 16:15

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Laboratory: Eurofins Edison

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

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	12028	06-30-24

Method Summary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Method	Method Description	Protocol	Laboratory
4500 S2 F-2011	Sulfide, Total	SM	EET EDI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Alpha Analytical Inc
Project/Site: L2345491

Job ID: 460-285793-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-285793-1	GW-2R	Water	08/07/23 11:00	08/09/23 10:30

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Eurofins Test America Edison
777 New Durham Road
Edison NJ 08817

285793

Alpha Job Number
L2345491

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone 201 812.9072 Email cromero@alphalab.com	Project Location NY Project Manager: Cynthia Romero **Turnaround & Deliverables Information** Due Date: Deliverables.	State/Federal Program Regulatory Criteria

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables. L2345491

Report to include Method Blank, LCS/LCSD

Additional Comments. Send all results/reports to subreports@alphalab com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	GW-2R	08-07-23 11:00	WATER	Sulfide	

460-285793 Chain of Custody

	Relinquished By:	Date/Time.	Received By:	Date/Time
		8/8/23		8/8 17.30
		8/8 2200		8/8/23 22 05
Form No AL_subcoc		8/9/23 8/11/23		8/9/23 10 30

IR-9-1 1c 11.2c

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 25793

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.1 °C	1.2e	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1									>9						

If pH adjustments are required record the information below*

Sample No(s). adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials [signature] **Date:** 8/9/23

Login Sample Receipt Checklist

Client: Alpha Analytical Inc

Job Number: 460-285793-1

Login Number: 285793
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix D

Data Usability Summary Reports – Groundwater Sampling

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

June 23, 2023

Mr. Nick Carlo
Project Manager
ECC Horizon
NY/NJ Metro Regional Office
One Emery Avenue, Unit 2
Randolph, New Jersey 07869

Re: Data Usability Summary Reports
Bridge Cleaners, NY
April 2023 Ground Water Sampling Event

Dear Mr. Carlo:

The data usability summary report (DUSR) and supporting documentation for April 2023 ground water sampling event are attached to this letter for the Bridge Cleaners site. The data for Alpha Analytical SDG number L2318419 are acceptable, with some minor issues that are identified in the DUSR and validation summary. There are no data that were either rejected, unusable (R) or estimated in data pack.

A list of data validation acronyms and qualifiers is attached to assist you in interpreting the data validation reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist ECC Horizon.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA/bms
Via email

z:\projects\2023\23600-23620\23607-bridge cleaners\task 1 dusr\temp-review\bridge cleaners-233.ltr.docx

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
for Alpha Analytical, SDG Number: L2318419

5 Ground Water Samples, 1 Field Duplicate,
1 Rinse Blank, and 1 Trip Blank
Collected April 5-6, 2023

Prepared by: Donald Anné
June 23, 2023

The data package contains the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contains the results of volatile analyses for 5 ground water sample, 1 field duplicate, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical labs did fulfill the requirements of the analytical method.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. There were no data qualified as either estimated or rejected (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation review.

z:\projects\2023\23600-23620\23607-bridge cleaners\task 1 dusr\temp-review\l2318419.dus.docx

Qualified Data Section

(No Data Qualified)

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-01	Date Collected	: 04/06/23 08:45
Client ID	: GW-1R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/13/23 00:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V08230412N21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	24	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-01	Date Collected	: 04/06/23 08:45
Client ID	: GW-1R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/13/23 00:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V08230412N21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.82	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-01	Date Collected	: 04/06/23 08:45
Client ID	: GW-1R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/13/23 00:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V08230412N21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-01	**Date Collected**	: 04/06/23 08:45
Client ID	: GW-1R	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/13/23 00:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V08230412N21	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-02	Date Collected	: 04/06/23 10:40
Client ID	: GW-6	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 11:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A15	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	1.0	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	7.9	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-02	Date Collected	: 04/06/23 10:40
Client ID	: GW-6	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 11:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A15	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.64	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-02	Date Collected	: 04/06/23 10:40
Client ID	: GW-6	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 11:57
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A15	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-02	**Date Collected**	: 04/06/23 10:40
Client ID	: GW-6	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 11:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A15	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-03D	Date Collected	: 04/06/23 11:35
Client ID	: GW-2R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:18
Sample Matrix	: WATER	Dilution Factor	: 4
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A16	Instrument ID	: VOA108
Sample Amount	: 2.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	10	2.8	U
75-34-3	1,1-Dichloroethane	ND	10	2.8	U
67-66-3	Chloroform	ND	10	2.8	U
56-23-5	Carbon tetrachloride	ND	2.0	0.54	U
78-87-5	1,2-Dichloropropane	ND	4.0	0.55	U
124-48-1	Dibromochloromethane	ND	2.0	0.60	U
79-00-5	1,1,2-Trichloroethane	ND	6.0	2.0	U
127-18-4	Tetrachloroethene	380	2.0	0.72	
108-90-7	Chlorobenzene	ND	10	2.8	U
75-69-4	Trichlorofluoromethane	ND	10	2.8	U
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	U
71-55-6	1,1,1-Trichloroethane	ND	10	2.8	U
75-27-4	Bromodichloromethane	ND	2.0	0.77	U
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.66	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.58	U
542-75-6	1,3-Dichloropropene, Total	ND	2.0	0.58	U
563-58-6	1,1-Dichloropropene	ND	10	2.8	U
75-25-2	Bromoform	ND	8.0	2.6	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.67	U
71-43-2	Benzene	ND	2.0	0.64	U
108-88-3	Toluene	ND	10	2.8	U
100-41-4	Ethylbenzene	ND	10	2.8	U
74-87-3	Chloromethane	ND	10	2.8	U
74-83-9	Bromomethane	ND	10	2.8	U
75-01-4	Vinyl chloride	ND	4.0	0.28	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-03D	Date Collected	: 04/06/23 11:35
Client ID	: GW-2R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:18
Sample Matrix	: WATER	Dilution Factor	: 4
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A16	Instrument ID	: VOA108
Sample Amount	: 2.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	10	2.8	U
75-35-4	1,1-Dichloroethene	ND	2.0	0.68	U
156-60-5	trans-1,2-Dichloroethene	ND	10	2.8	U
79-01-6	Trichloroethene	25	2.0	0.70	
95-50-1	1,2-Dichlorobenzene	ND	10	2.8	U
541-73-1	1,3-Dichlorobenzene	ND	10	2.8	U
106-46-7	1,4-Dichlorobenzene	ND	10	2.8	U
1634-04-4	Methyl tert butyl ether	ND	10	2.8	U
179601-23-1	p/m-Xylene	ND	10	2.8	U
95-47-6	o-Xylene	ND	10	2.8	U
1330-20-7	Xylenes, Total	ND	10	2.8	U
156-59-2	cis-1,2-Dichloroethene	ND	10	2.8	U
540-59-0	1,2-Dichloroethene, Total	ND	10	2.8	U
74-95-3	Dibromomethane	ND	20	4.0	U
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	U
107-13-1	Acrylonitrile	ND	20	6.0	U
100-42-5	Styrene	ND	10	2.8	U
75-71-8	Dichlorodifluoromethane	ND	20	4.0	U
67-64-1	Acetone	ND	20	5.8	U
75-15-0	Carbon disulfide	ND	20	4.0	U
78-93-3	2-Butanone	ND	20	7.8	U
108-05-4	Vinyl acetate	ND	20	4.0	U
108-10-1	4-Methyl-2-pentanone	ND	20	4.0	U
591-78-6	2-Hexanone	ND	20	4.0	U
74-97-5	Bromochloromethane	ND	10	2.8	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-03D	Date Collected	: 04/06/23 11:35
Client ID	: GW-2R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:18
Sample Matrix	: WATER	Dilution Factor	: 4
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A16	Instrument ID	: VOA108
Sample Amount	: 2.5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	10	2.8	U
106-93-4	1,2-Dibromoethane	ND	8.0	2.6	U
142-28-9	1,3-Dichloropropane	ND	10	2.8	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	2.8	U
108-86-1	Bromobenzene	ND	10	2.8	U
104-51-8	n-Butylbenzene	ND	10	2.8	U
135-98-8	sec-Butylbenzene	ND	10	2.8	U
98-06-6	tert-Butylbenzene	ND	10	2.8	U
95-49-8	o-Chlorotoluene	ND	10	2.8	U
106-43-4	p-Chlorotoluene	ND	10	2.8	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.8	U
87-68-3	Hexachlorobutadiene	ND	10	2.8	U
98-82-8	Isopropylbenzene	ND	10	2.8	U
99-87-6	p-Isopropyltoluene	ND	10	2.8	U
91-20-3	Naphthalene	ND	10	2.8	U
103-65-1	n-Propylbenzene	ND	10	2.8	U
87-61-6	1,2,3-Trichlorobenzene	ND	10	2.8	U
120-82-1	1,2,4-Trichlorobenzene	ND	10	2.8	U
108-67-8	1,3,5-Trimethylbenzene	ND	10	2.8	U
95-63-6	1,2,4-Trimethylbenzene	ND	10	2.8	U
123-91-1	1,4-Dioxane	ND	1000	240	U
105-05-5	p-Diethylbenzene	ND	8.0	2.8	U
622-96-8	p-Ethyltoluene	ND	8.0	2.8	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	8.0	2.2	U
60-29-7	Ethyl ether	ND	10	2.8	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-03D	**Date Collected**	: 04/06/23 11:35
Client ID	: GW-2R	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 4
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A16	**Instrument ID**	: VOA108
Sample Amount	: 2.5 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	10	2.8	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-04	Date Collected	: 04/06/23 09:45
Client ID	: GW-3R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:39
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A17	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	22	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-04	Date Collected	: 04/06/23 09:45
Client ID	: GW-3R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:39
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A17	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.34	0.50	0.18	J
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-04	Date Collected	: 04/06/23 09:45
Client ID	: GW-3R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 12:39
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A17	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-04	**Date Collected**	: 04/06/23 09:45
Client ID	: GW-3R	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 12:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A17	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-05	Date Collected	: 04/06/23 12:35
Client ID	: GW-5R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:00
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A18	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	0.78	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	66	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-05	Date Collected	: 04/06/23 12:35
Client ID	: GW-5R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:00
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A18	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	1.7	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-05	Date Collected	: 04/06/23 12:35
Client ID	: GW-5R	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:00
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A18	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	1.4	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	1.3	2.5	0.70	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	2.0	2.5	0.70	J
95-63-6	1,2,4-Trimethylbenzene	3.8	2.5	0.70	
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	2.2	2.0	0.70	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-05	**Date Collected**	: 04/06/23 12:35
Client ID	: GW-5R	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 13:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A18	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-06	Date Collected	: 04/06/23 00:00
Client ID	: DUP	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:21
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A19	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	0.81	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	67	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-06	Date Collected	: 04/06/23 00:00
Client ID	: DUP	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:21
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A19	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	1.7	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-06	Date Collected	: 04/06/23 00:00
Client ID	: DUP	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:21
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A19	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	1.6	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	1.4	2.5	0.70	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	2.1	2.5	0.70	J
95-63-6	1,2,4-Trimethylbenzene	4.2	2.5	0.70	
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	2.4	2.0	0.70	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-06	**Date Collected**	: 04/06/23 00:00
Client ID	: DUP	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 13:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A19	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-07	Date Collected	: 04/06/23 11:30
Client ID	: FB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A20	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.31	0.50	0.18	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-07	Date Collected	: 04/06/23 11:30
Client ID	: FB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A20	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-07	Date Collected	: 04/06/23 11:30
Client ID	: FB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 13:42
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A20	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-07	**Date Collected**	: 04/06/23 11:30
Client ID	: FB	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 13:42
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A20	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-08	Date Collected	: 04/06/23 00:00
Client ID	: TB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 14:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-08	Date Collected	: 04/06/23 00:00
Client ID	: TB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 14:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2318419-08	Date Collected	: 04/06/23 00:00
Client ID	: TB	Date Received	: 04/06/23
Sample Location	: QUEENS, NY	Date Analyzed	: 04/12/23 14:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: LAC
Lab File ID	: V08230412A21	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2318419-08	**Date Collected**	: 04/06/23 00:00
Client ID	: TB	**Date Received**	: 04/06/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 04/12/23 14:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: LAC
Lab File ID	: V08230412A21	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

VOC Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2318419

5 Ground Water Samples, 1 Field Duplicate,
1 Rinse Blank, and 1 Trip Blank
Collected April 5-6, 2023

Prepared by: Donald Anné
June 23, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for acetone, 2-butanone, 4-methyl-2-pentanone, 1,1,2-trichloroethane, and 2-hexanone were below the method minimums, but not below 0.010 for VOA108 on 04-05-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone, 2-butanone, 4-methyl-2-pentanone, 1,1,2-trichloroethane, and 2-hexanone were below the method minimums, but not below 0.010 on 04-12-23 (V08230412A01). The RRFs for acetone, 2-butanone, 4-methyl-2-pentanone, 1,1,2-trichloroethane, and 2-hexanone were below the method minimums, but not below 0.010 on 04-12-23 (V08230412N01). The %Ds for dichlorodifluoromethane, vinyl chloride, freon-113, and acetone were above the method maximum on 04-12-23 (V08230412N01). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds), as required.

The %D for vinyl acetate was above the allowable maximum (20%) on 04-12-23 (V08230412A01). The %Ds for dichlorodifluoromethane, vinyl chloride, freon-113, and acetone were above the allowable maximum (20%) on 04-12-23 (V08230412N01). Positive results for these compounds should be considered estimated (J) in associated samples.

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Blanks: The analyses of the method and trip blanks reported target compounds as not detected. Field blank FB contained a trace of tetrachloroethene (0.31 ug/L). Positive results for tetrachloroethene that are less than 5 times the field blank level should be reported as not detected (U) in associated samples.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, and trip blank.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1765771-3/4.

The %Rs for target compounds were within QC limits, but the RPDs for cis-1,2-dichloroethene and bromochloromethane were above the allowable maximum for aqueous samples WG1766227-3/4. Positive results for cis-1,2-dichloroethene and bromochloromethane should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for aqueous field duplicate pair GW-5R/DUP (attached table), as required.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Environmental Compliance & Control,	Lab Number	: L2318419
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1766227-3	Analysis Date : 04/12/23 17:37	File ID : V08230412N01
LCSD Sample ID	: WG1766227-4	Analysis Date : 04/12/23 17:58	File ID : V08230412N02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	11	110	10	11	110	0	70-130	20
1,1-Dichloroethane	10	11	110	10	9.2	92	18	70-130	20
Chloroform	10	11	110	10	9.0	90	20	70-130	20
Carbon tetrachloride	10	11	110	10	9.6	96	14	63-132	20
1,2-Dichloropropane	10	11	110	10	11	110	0	70-130	20
Dibromochloromethane	10	9.9	99	10	10	100	1	63-130	20
1,1,2-Trichloroethane	10	11	110	10	11	110	0	70-130	20
Tetrachloroethene	10	11	110	10	11	110	0	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	12	120	10	11	110	9	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	11	110	10	9.3	93	17	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	9.3	93	10	9.5	95	2	70-130	20
cis-1,3-Dichloropropene	10	9.7	97	10	9.9	99	2	70-130	20
1,1-Dichloropropene	10	10	100	10	9.6	96	4	70-130	20
Bromoform	10	9.2	92	10	9.7	97	5	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	11	110	10	67-130	20
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	10	11	110	10	11	110	0	70-130	20
Chloromethane	10	12	120	10	12	120	0	64-130	20
Bromomethane	10	12	120	10	11	110	9	39-139	20
Vinyl chloride	10	12	120	10	12	120	0	55-140	20
Chloroethane	10	11	110	10	11	110	0	55-138	20
1,1-Dichloroethene	10	11	110	10	11	110	0	61-145	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client : Environmental Compliance & Control, Lab Number : L2318419
Project Name : BRIDGE CLEANERS Project Number : BRIDGE CLEANERS
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1766227-3 Analysis Date : 04/12/23 17:37 File ID : V08230412N01
LCSD Sample ID : WG1766227-4 Analysis Date : 04/12/23 17:58 File ID : V08230412N02

	Laboratory Control Sample			Laboratory Control Duplicate						
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD		Recovery Limits	RPD Limit
trans-1,2-Dichloroethene	10	11	110	10	11	110	0		70-130	20
Trichloroethene	10	11	110	10	11	110	0		70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0		70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0		70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0		70-130	20
Methyl tert butyl ether	10	10	100	10	11	110	10		63-130	20
p/m-Xylene	20	22	110	20	22	110	0		70-130	20
o-Xylene	20	22	110	20	21	105	5		70-130	20
cis-1,2-Dichloroethene	10	11	110	10	8.8	88	22	Q	70-130	20
Dibromomethane	10	11	110	10	11	110	0		70-130	20
1,2,3-Trichloropropane	10	10	100	10	11	110	10		64-130	20
Acrylonitrile	10	10	100	10	9.0	90	11		70-130	20
Styrene	20	23	115	20	23	115	0		70-130	20
Dichlorodifluoromethane	10	12	120	10	12	120	0		36-147	20
Acetone	10	12	120	10	11	110	9		58-148	20
Carbon disulfide	10	11	110	10	11	110	0		51-130	20
2-Butanone	10	10	100	10	11	110	10		63-138	20
Vinyl acetate	10	12	120	10	11	110	9		70-130	20
4-Methyl-2-pentanone	10	10	100	10	11	110	10		59-130	20
2-Hexanone	10	10	100	10	11	110	10		57-130	20
Bromochloromethane	10	11	110	10	8.5	85	26	Q	70-130	20
2,2-Dichloropropane	10	12	120	10	10	100	18		63-133	20
1,2-Dibromoethane	10	11	110	10	11	110	0		70-130	20
1,3-Dichloropropane	10	11	110	10	11	110	0		70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	10	100	0		64-130	20
Bromobenzene	10	9.6	96	10	10	100	4		70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1766227-3 **Analysis Date** : 04/12/23 17:37	**File ID**	: V08230412N01
LCSD Sample ID	: WG1766227-4 **Analysis Date** : 04/12/23 17:58	**File ID**	: V08230412N02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
n-Butylbenzene	10	11	110	10	11	110	0	53-136	20
sec-Butylbenzene	10	11	110	10	11	110	0	70-130	20
tert-Butylbenzene	10	10	100	10	10	100	0	70-130	20
o-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
p-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
1,2-Dibromo-3-chloropropane	10	9.6	96	10	9.8	98	2	41-144	20
Hexachlorobutadiene	10	9.6	96	10	9.6	96	0	63-130	20
Isopropylbenzene	10	10	100	10	10	100	0	70-130	20
p-Isopropyltoluene	10	10	100	10	11	110	10	70-130	20
Naphthalene	10	9.2	92	10	9.8	98	6	70-130	20
n-Propylbenzene	10	10	100	10	11	110	10	69-130	20
1,2,3-Trichlorobenzene	10	9.8	98	10	10	100	2	70-130	20
1,2,4-Trichlorobenzene	10	9.5	95	10	9.8	98	3	70-130	20
1,3,5-Trimethylbenzene	10	11	110	10	11	110	0	64-130	20
1,2,4-Trimethylbenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dioxane	500	530	106	500	530	106	0	56-162	20
p-Diethylbenzene	10	9.9	99	10	10	100	1	70-130	20
p-Ethyltoluene	10	10	100	10	10	100	0	70-130	20
1,2,4,5-Tetramethylbenzene	10	9.2	92	10	9.5	95	3	70-130	20
Ethyl ether	10	11	110	10	11	110	0	59-134	20
trans-1,4-Dichloro-2-butene	10	10	100	10	11	110	10	70-130	20

Initial Calibration Summary
Form 6
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA108	**Ical Ref**	: ICAL19890
Calibration dates	: 04/05/23 22:11 04/06/23 01:18		

Calibration Files

L11 =V08230405N04.d L1 =V08230405N06.d L2 =V08230405N08.d L3 =V08230405N09.d L4 =V08230405N10.d

L6 =V08230405N11.d L8 =V08230405N12.d L10 =V08230405N13.d

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.170	0.234	0.233	0.207	0.209	0.213	0.213	0.211	10.10
3)	TP	Chloromethane		0.282	0.351	0.307	0.266	0.261	0.252	0.246	0.281	13.17
4)	TC	Vinyl chloride	0.204	0.212	0.308	0.273	0.249	0.252	0.254	0.252	0.250	13.04
5)	TP	Bromomethane		0.167	0.187	0.153	0.149	0.170	0.174	0.187	0.170	8.77
6)	TP	Chloroethane		0.195	0.235	0.199	0.178	0.182	0.189	0.192	0.196	9.54
7)	TP	Trichlorofluor		0.317	0.411	0.420	0.376	0.386	0.394	0.394	0.385	8.72
8)	TP	Ethyl ether		0.069	0.113	0.097	0.095	0.104	0.102	0.100	0.097	14.03
10)	TC	1,1-Dichloroet		0.226	0.264	0.247	0.222	0.229	0.233	0.232	0.236	6.20
11)	TP	Carbon disulfide		0.663	0.826	0.745	0.689	0.705	0.709	0.704	0.720	7.31
12)	TP	Freon-113		0.189	0.261	0.267	0.240	0.244	0.247	0.249	0.242	10.50
13)	TP	Iodomethane			0.187	0.228	0.263	0.317	0.331	0.319	*L	0.9971
14)	TP	Acrolein			0.033	0.029	0.027	0.027	0.026	0.026	0.028	9.13
15)	TP	Methylene chlo		0.310	0.334	0.271	0.244	0.251	0.242	0.239	0.270	13.87
17)	TP	Acetone			0.073	0.050	0.045	0.049	0.046	0.048	0.052	19.95
18)	TP	trans-1,2-Dich		0.253	0.329	0.279	0.252	0.259	0.259	0.258	0.270	10.18
19)	TP	Methyl acetate		0.144	0.143	0.111	0.106	0.112	0.108	0.106	0.118	14.44
20)	TP	Methyl tert butyl ether		0.373	0.436	0.420	0.437	0.487	0.486	0.490	0.447	9.80
21)	TP	tert-Butyl alc		0.012	0.013	0.013	0.013	0.014	0.014	0.014	0.013	6.90
22)	TP	Diisopropyl ether		0.721	0.780	0.691	0.692	0.761	0.754	0.751	0.736	4.75
23)	TP	1,1-Dichloroet		0.519	0.602	0.495	0.447	0.456	0.444	0.437	0.486	12.27
24)	TP	Halothane		0.192	0.257	0.231	0.208	0.211	0.212	0.211	0.217	9.52
25)	TP	Acrylonitrile		0.089	0.076	0.059	0.058	0.059	0.056	0.055	0.065	19.96
26)	TP	Ethyl tert-but		0.555	0.638	0.605	0.645	0.725	0.701	0.724	0.656	9.78
27)	TP	Vinyl acetate			0.369	0.348	0.402	0.400	0.412	0.379	0.385	6.28
28)	TP	cis-1,2-Dichlo		0.306	0.334	0.291	0.277	0.284	0.283	0.284	0.294	6.75
29)	TP	2,2-Dichloropr		0.295	0.368	0.315	0.310	0.338	0.333	0.336	0.328	7.25
30)	TP	Bromochloromet		0.159	0.193	0.162	0.150	0.151	0.151	0.141	0.158	10.51
31)	TP	Cyclohexane		0.257	0.354	0.376	0.368	0.411	0.403	0.407	0.368	14.56
32)	TC	Chloroform		0.513	0.593	0.487	0.450	0.459	0.450	0.442	0.485	11.13
33)	TP	Ethyl acetate		0.131	0.135	0.118	0.121	0.134	0.132	0.134	0.129	5.37
34)	TP	Carbon tetrachloride	0.237	0.276	0.373	0.366	0.347	0.364	0.379	0.386	0.341	15.92
35)	TP	Tetrahydrofuran			0.043	0.031	0.032	0.036	0.036	0.036	0.036	11.55
36)	S	Dibromofluoromethane	0.409	0.405	0.404	0.371	0.342	0.335	0.320	0.324	0.364	10.47
37)	TP	1,1,1-Trichlor		0.323	0.441	0.405	0.374	0.387	0.396	0.395	0.389	9.18
39)	TP	2-Butanone			0.068	0.059	0.061	0.067	0.063	0.064	0.064	5.30

Initial Calibration Summary
Form 6
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA108	**Ical Ref**	: ICAL19890
Calibration dates	: 04/05/23 22:11 04/06/23 01:18		

Calibration Files

L11 =V08230405N04.d L1 =V08230405N06.d L2 =V08230405N08.d L3 =V08230405N09.d L4 =V08230405N10.d

L6 =V08230405N11.d L8 =V08230405N12.d L10 =V08230405N13.d

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40)	TP	1,1-Dichloropr		0.208	0.276	0.280	0.285	0.306	0.314	0.316	0.284	13.06
41)	TP	Benzene	0.681	0.797	0.952	0.895	0.897	0.956	0.951	0.937	0.883	11.01
42)	TP	Tertiary-Amyl Methyl Ether		0.341	0.401	0.398	0.442	0.528	0.536	0.550	0.457	17.93
43)	S	1,2-Dichloroethane-d4	0.364	0.368	0.357	0.333	0.319	0.309	0.296	0.297	0.330	8.97
44)	TP	1,2-Dichloroet		0.374	0.389	0.334	0.317	0.328	0.319	0.316	0.339	8.72
47)	TP	Methyl cyclohe		0.247	0.309	0.347	0.354	0.397	0.408	0.418	0.354	17.27
48)	TP	Trichloroethene	0.154	0.221	0.278	0.270	0.272	0.289	0.282	0.286	0.256	18.10
50)	TP	Dibromomethane		0.133	0.174	0.148	0.142	0.149	0.145	0.145	0.148	8.59
51)	TC	1,2-Dichloropr		0.240	0.266	0.242	0.243	0.257	0.255	0.251	0.251	3.80
53)	TP	2-Chloroethyl		0.080	0.096	0.089	0.101	0.121	0.121	0.126	0.105	17.03
54)	TP	Bromodichlorom		0.300	0.371	0.330	0.321	0.350	0.347	0.347	0.338	6.82
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	5.55
58)	TP	cis-1,3-Dichlo		0.281	0.301	0.300	0.334	0.383	0.384	0.390	0.339	13.68
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.152	1.150	1.178	1.164	1.176	1.164	1.177	1.157	1.165	0.96
61)	TC	Toluene		0.572	0.729	0.662	0.650	0.690	0.709	0.695	0.672	7.68
62)	TP	4-Methyl-2-pen		0.037	0.048	0.047	0.052	0.060	0.061	0.060	0.052	17.44
63)	TP	Tetrachloroethene		0.258	0.373	0.330	0.319	0.335	0.352	0.349	0.331	11.07
65)	TP	trans-1,3-Dich		0.221	0.257	0.265	0.310	0.367	0.375	0.375	*Q	0.9980
67)	TP	Ethyl methacry		0.146	0.180	0.170	0.191	0.221	0.225	0.221	0.193	15.62
68)	TP	1,1,2-Trichlor		0.139	0.182	0.164	0.169	0.182	0.181	0.178	0.171#	9.17
69)	TP	Chlorodibromom		0.217	0.281	0.263	0.279	0.314	0.325	0.322	0.286	13.51
70)	TP	1,3-Dichloropr		0.306	0.365	0.332	0.346	0.377	0.378	0.368	0.353	7.56
71)	TP	1,2-Dibromoethane		0.197	0.222	0.209	0.221	0.234	0.239	0.232	0.222	6.70
72)	TP	2-Hexanone		0.098	0.092	0.085	0.086	0.098	0.098	0.098	0.094	6.40
73)	TP	Chlorobenzene		0.768	0.976	0.819	0.798	0.855	0.874	0.847	0.848	7.88
74)	TC	Ethylbenzene		1.022	1.335	1.241	1.271	1.334	1.356	1.285	1.264	9.02
75)	TP	1,1,1,2-Tetrac		0.223	0.290	0.275	0.293	0.331	0.340	0.336	0.298	14.01
76)	TP	p/m Xylene		0.396	0.554	0.537	0.532	0.558	0.567	0.535	0.525	11.13
77)	TP	o Xylene		0.392	0.543	0.521	0.517	0.539	0.547	0.520	0.511	10.54
78)	TP	Styrene		0.657	0.931	0.899	0.877	0.909	0.893	0.737	0.843	12.34
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.215	0.240	0.221	0.253	0.305	0.327	0.319	0.269	17.65
82)	TP	Isopropylbenzene		1.606	2.387	2.099	2.184	2.386	2.532	2.263	2.208	13.67
83)	S	4-Bromofluorobenzene	0.788	0.765	0.756	0.720	0.727	0.727	0.746	0.727	0.745	3.18
84)	TP	Bromobenzene		0.671	0.788	0.605	0.611	0.657	0.696	0.651	0.668	9.21

Initial Calibration Summary
Form 6
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA108	**Ical Ref**	: ICAL19890
Calibration dates	: 04/05/23 22:11 04/06/23 01:18		

Calibration Files
L11 =V08230405N04.d L1 =V08230405N06.d L2 =V08230405N08.d L3 =V08230405N09.d L4 =V08230405N10.d
L6 =V08230405N11.d L8 =V08230405N12.d L10 =V08230405N13.d

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		2.133	2.898	2.539	2.597	2.784	2.917		2.645	11.12
86) TP	1,4-Dichlorobu		0.572	0.576	0.488	0.504	0.556	0.580	0.550	0.547	6.67
87) TP	1,1,2,2-Tetrac		0.408	0.449	0.354	0.373	0.401	0.427	0.393	0.401	7.93
88) TP	4-Ethyltoluene		1.782	2.407	2.160	2.282	2.482	2.615	2.267	2.285	11.73
89) TP	2-Chlorotoluene		1.628	2.139	1.785	1.796	1.910	2.004	1.837	1.871	8.84
90) TP	1,3,5-Trimethy		1.383	1.926	1.788	1.869	2.083	2.198	2.003	1.893	13.88
91) TP	1,2,3-Trichlor		0.307	0.340	0.279	0.284	0.316	0.327	0.308	0.309	7.11
92) TP	trans-1,4-Dich		0.111	0.116	0.092	0.100	0.115	0.120	0.108	0.109	9.07
93) TP	4-Chlorotoluene		1.480	1.864	1.592	1.610	1.730	1.817	1.649	1.678	8.02
94) TP	tert-Butylbenzene		1.275	1.844	1.659	1.761	1.905	2.028	1.874	1.764	13.86
97) TP	1,2,4-Trimethy		1.324	1.845	1.706	1.855	2.065	2.185	1.994	1.854	15.21
98) TP	sec-Butylbenzene		1.656	2.584	2.412	2.465	2.647	2.780	2.357	2.414	15.10
99) TP	p-Isopropyltol		1.492	2.252	2.120	2.285	2.522	2.646	2.250	2.224	16.60
100) TP	1,3-Dichlorobe		1.282	1.611	1.267	1.269	1.355	1.398	1.299	1.354	9.10
101) TP	1,4-Dichlorobe		1.263	1.635	1.264	1.266	1.348	1.412	1.311	1.357	9.89
102) TP	p-Diethylbenzene		1.005	1.355	1.256	1.373	1.553	1.654	1.586	1.397	16.07
103) TP	n-Butylbenzene		1.407	1.948	1.793	1.844	2.003	2.116	1.931	1.863	12.17
104) TP	1,2-Dichlorobe		1.226	1.325	1.157	1.165	1.248	1.296	1.216	1.233	5.04
105) TP	1,2,4,5-Tetram		1.491	1.911	1.713	2.010	2.344	2.543	2.188	2.029	17.91
106) TP	1,2-Dibromo-3-		0.067	0.071	0.058	0.068	0.074	0.079	0.080	0.071	10.58
107) TP	1,3,5-Trichlor		0.948	1.079	0.904	0.931	1.020	1.104	1.062	1.007	7.86
108) TP	Hexachlorobuta		0.371	0.463	0.382	0.389	0.419	0.457	0.440	0.417	8.96
109) TP	1,2,4-Trichlor		0.843	0.993	0.771	0.810	0.886	0.960	0.926	0.884	9.16
110) TP	Naphthalene		1.368	1.551	1.329	1.529	1.715	1.839	1.707	1.577	11.93
111) TP	1,2,3-Trichlor		0.744	0.904	0.743	0.761	0.820	0.874	0.834	0.811	7.92

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2318419	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA108		Calibration Date	: 04/12/23 07:06	
Lab File ID	: V08230412A01		Init. Calib. Date(s)	: 04/05/23	04/06/23
Sample No	: WG1765771-2		Init. Calib. Times	: 22:11	01:18
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	92	0
Dichlorodifluoromethane	0.211	0.252	-	-19.4	20	100	0
Chloromethane	0.281	0.301	-	-7.1	20	91	0
Vinyl chloride	0.25	0.292	-	-16.8	20	99	0
Bromomethane	0.17	0.152	-	10.6	20	91	0
Chloroethane	0.196	0.196	-	0	20	91	0
Trichlorofluoromethane	0.385	0.426	-	-10.6	20	94	0
Ethyl ether	0.097	0.107	-	-10.3	20	102	0
1,1-Dichloroethene	0.236	0.257	-	-8.9	20	96	0
Carbon disulfide	0.72	0.776	-	-7.8	20	96	0
Freon-113	0.242	0.277	-	-14.5	20	96	0
Acrolein	0.028	0.032	-	-14.3	20	104	0
Methylene chloride	0.27	0.272	-	-0.7	20	93	0
Acetone	0.052	0.051	-	1.9	20	93	0
trans-1,2-Dichloroethene	0.27	0.271	-	-0.4	20	89	0
Methyl acetate	0.118	0.123	-	-4.2	20	102	0
Methyl tert-butyl ether	0.447	0.435	-	2.7	20	95	0
tert-Butyl alcohol	0.013	0.014	-	-7.7	20	104	0
Diisopropyl ether	0.736	0.714	-	3	20	95	0
1,1-Dichloroethane	0.486	0.468	-	3.7	20	87	0
Halothane	0.217	0.22	-	-1.4	20	88	0
Acrylonitrile	0.065	0.062	-	4.6	20	97	0
Ethyl tert-butyl ether	0.656	0.684	-	-4.3	20	104	0
Vinyl acetate	0.385	0.468	-	-21.6*	20	124	0
cis-1,2-Dichloroethene	0.294	0.311	-	-5.8	20	99	0
2,2-Dichloropropane	0.328	0.375	-	-14.3	20	110	0
Bromochloromethane	0.158	0.162	-	-2.5	20	93	0
Cyclohexane	0.368	0.412	-	-12	20	101	0
Chloroform	0.485	0.5	-	-3.1	20	95	0
Ethyl acetate	0.129	0.14	-	-8.5	20	110	0
Carbon tetrachloride	0.341	0.366	-	-7.3	20	92	0
Tetrahydrofuran	0.036	0.043	-	-19.4	20	126	0
Dibromofluoromethane	0.364	0.356	-	2.2	20	89	0
1,1,1-Trichloroethane	0.389	0.401	-	-3.1	20	91	0
2-Butanone	0.064	0.072	-	-12.5	20	112	.01
1,1-Dichloropropene	0.284	0.297	-	-4.6	20	98	0
Benzene	0.883	0.955	-	-8.2	20	98	0
tert-Amyl methyl ether	0.457	0.458	-	-0.2	20	106	0
1,2-Dichloroethane-d4	0.33	0.327	-	0.9	20	91	0
1,2-Dichloroethane	0.339	0.345	-	-1.8	20	95	0
Methyl cyclohexane	0.354	0.363	-	-2.5	20	96	0
Trichloroethene	0.256	0.282	-	-10.2	20	96	0
Dibromomethane	0.148	0.154	-	-4.1	20	96	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2318419	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA108		Calibration Date	: 04/12/23 07:06	
Lab File ID	: V08230412A01		Init. Calib. Date(s)	: 04/05/23	04/06/23
Sample No	: WG1765771-2		Init. Calib. Times	: 22:11	01:18
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.251	0.266	-	-6	20	101	0
2-Chloroethyl vinyl ether	0.105	0.094	-	10.5	20	96	0
Bromodichloromethane	0.338	0.352	-	-4.1	20	98	0
1,4-Dioxane	0.00137	0.00151*	-	-10.2	20	107	0
cis-1,3-Dichloropropene	0.339	0.335	-	1.2	20	103	0
Chlorobenzene-d5	1	1	-	0	20	91	0
Toluene-d8	1.165	1.181	-	-1.4	20	92	0
Toluene	0.672	0.694	-	-3.3	20	95	0
4-Methyl-2-pentanone	0.052	0.055	-	-5.8	20	106	0
Tetrachloroethene	0.331	0.348	-	-5.1	20	95	0
trans-1,3-Dichloropropene	10	9.405	-	6	20	105	0
Ethyl methacrylate	0.193	0.201	-	-4.1	20	107	0
1,1,2-Trichloroethane	0.171	0.184*	-	-7.6	20	102	0
Chlorodibromomethane	0.286	0.283	-	1	20	97	0
1,3-Dichloropropane	0.353	0.372	-	-5.4	20	102	0
1,2-Dibromoethane	0.222	0.233	-	-5	20	101	0
2-Hexanone	0.094	0.093	-	1.1	20	100	0
Chlorobenzene	0.848	0.874	-	-3.1	20	97	0
Ethylbenzene	1.264	1.306	-	-3.3	20	95	0
1,1,1,2-Tetrachloroethane	0.298	0.3	-	-0.7	20	99	0
p/m Xylene	0.525	0.557	-	-6.1	20	94	0
o Xylene	0.511	0.537	-	-5.1	20	93	0
Styrene	0.843	0.947	-	-12.3	20	95	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	84	0
Bromoform	0.269	0.26	-	3.3	20	99	0
Isopropylbenzene	2.208	2.38	-	-7.8	20	95	0
4-Bromofluorobenzene	0.745	0.738	-	0.9	20	86	0
Bromobenzene	0.668	0.67	-	-0.3	20	93	0
n-Propylbenzene	2.645	2.849	-	-7.7	20	94	0
1,4-Dichlorobutane	0.547	0.595	-	-8.8	20	102	0
1,1,2,2-Tetrachloroethane	0.401	0.437	-	-9	20	104	0
4-Ethyltoluene	2.285	2.448	-	-7.1	20	95	0
2-Chlorotoluene	1.871	2.01	-	-7.4	20	95	0
1,3,5-Trimethylbenzene	1.893	2.052	-	-8.4	20	96	0
1,2,3-Trichloropropane	0.309	0.333	-	-7.8	20	100	0
trans-1,4-Dichloro-2-buten	0.109	0.118	-	-8.3	20	107	0
4-Chlorotoluene	1.678	1.801	-	-7.3	20	95	0
tert-Butylbenzene	1.764	1.841	-	-4.4	20	93	0
1,2,4-Trimethylbenzene	1.854	1.995	-	-7.6	20	98	0
sec-Butylbenzene	2.414	2.67	-	-10.6	20	93	0
p-Isopropyltoluene	2.224	2.397	-	-7.8	20	95	0
1,3-Dichlorobenzene	1.354	1.401	-	-3.5	20	93	0
1,4-Dichlorobenzene	1.357	1.44	-	-6.1	20	96	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA108	**Calibration Date**	: 04/12/23 07:06
Lab File ID	: V08230412A01	**Init. Calib. Date(s)**	: 04/05/23 04/06/23
Sample No	: WG1765771-2	**Init. Calib. Times**	: 22:11 01:18
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.397	1.416	-	-1.4	20	95	0
n-Butylbenzene	1.863	2.099	-	-12.7	20	98	0
1,2-Dichlorobenzene	1.233	1.314	-	-6.6	20	95	0
1,2,4,5-Tetramethylbenzene	2.029	1.954	-	3.7	20	96	0
1,2-Dibromo-3-chloropropan	0.071	0.072	-	-1.4	20	105	0
1,3,5-Trichlorobenzene	1.007	1.021	-	-1.4	20	95	0
Hexachlorobutadiene	0.417	0.415	-	0.5	20	91	0
1,2,4-Trichlorobenzene	0.884	0.872	-	1.4	20	95	0
Naphthalene	1.577	1.556	-	1.3	20	98	0
1,2,3-Trichlorobenzene	0.811	0.823	-	-1.5	20	93	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2318419	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA108		Calibration Date	: 04/12/23 17:37	
Lab File ID	: V08230412N01		Init. Calib. Date(s)	: 04/05/23	04/06/23
Sample No	: WG1766227-2		Init. Calib. Times	: 22:11	01:18
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	89	0
Dichlorodifluoromethane	0.211	0.262	-	-24.2*	20	100	0
Chloromethane	0.281	0.335	-	-19.2	20	97	0
Vinyl chloride	0.25	0.309	-	-23.6*	20	101	0
Bromomethane	0.17	0.203	-	-19.4	20	118	0
Chloroethane	0.196	0.21	-	-7.1	20	94	0
Trichlorofluoromethane	0.385	0.446	-	-15.8	20	94	0
Ethyl ether	0.097	0.11	-	-13.4	20	101	0
1,1-Dichloroethene	0.236	0.262	-	-11	20	94	0
Carbon disulfide	0.72	0.812	-	-12.8	20	97	0
Freon-113	0.242	0.293	-	-21.1*	20	97	0
Iodomethane	10	10.079	-	-0.8	20	109	0
Acrolein	0.028	0.031	-	-10.7	20	96	0
Methylene chloride	0.27	0.295	-	-9.3	20	97	0
Acetone	0.052	0.063	-	-21.2*	20	112	0
trans-1,2-Dichloroethene	0.27	0.295	-	-9.3	20	94	0
Methyl acetate	0.118	0.134	-	-13.6	20	107	0
Methyl tert-butyl ether	0.447	0.463	-	-3.6	20	98	0
tert-Butyl alcohol	0.013	0.015	-	-15.4	20	103	0
Diisopropyl ether	0.736	0.792	-	-7.6	20	102	-.01
1,1-Dichloroethane	0.486	0.541	-	-11.3	20	97	0
Halothane	0.217	0.239	-	-10.1	20	92	0
Acrylonitrile	0.065	0.068	-	-4.6	20	102	0
Ethyl tert-butyl ether	0.656	0.687	-	-4.7	20	101	0
Vinyl acetate	0.385	0.456	-	-18.4	20	117	0
cis-1,2-Dichloroethene	0.294	0.325	-	-10.5	20	99	0
2,2-Dichloropropane	0.328	0.384	-	-17.1	20	108	0
Bromochloromethane	0.158	0.17	-	-7.6	20	93	0
Cyclohexane	0.368	0.416	-	-13	20	98	0
Chloroform	0.485	0.524	-	-8	20	96	0
Ethyl acetate	0.129	0.145	-	-12.4	20	109	0
Carbon tetrachloride	0.341	0.389	-	-14.1	20	94	0
Tetrahydrofuran	0.036	0.036	-	0	20	103	0
Dibromofluoromethane	0.364	0.362	-	0.5	20	87	0
1,1,1-Trichloroethane	0.389	0.43	-	-10.5	20	94	0
2-Butanone	0.064	0.067	-	-4.7	20	100	0
1,1-Dichloropropene	0.284	0.299	-	-5.3	20	95	0
Benzene	0.883	0.97	-	-9.9	20	96	0
tert-Amyl methyl ether	0.457	0.425	-	7	20	95	0
1,2-Dichloroethane-d4	0.33	0.325	-	1.5	20	87	0
1,2-Dichloroethane	0.339	0.362	-	-6.8	20	96	0
Methyl cyclohexane	0.354	0.367	-	-3.7	20	94	0
Trichloroethene	0.256	0.291	-	-13.7	20	96	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2318419	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA108		Calibration Date	: 04/12/23 17:37	
Lab File ID	: V08230412N01		Init. Calib. Date(s)	: 04/05/23	04/06/23
Sample No	: WG1766227-2		Init. Calib. Times	: 22:11	01:18
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.148	0.158	-	-6.8	20	95	0
1,2-Dichloropropane	0.251	0.274	-	-9.2	20	101	0
2-Chloroethyl vinyl ether	0.105	0.088	-	16.2	20	88	0
Bromodichloromethane	0.338	0.352	-	-4.1	20	95	0
1,4-Dioxane	0.00137	0.00146*	-	-6.6	20	99	0
cis-1,3-Dichloropropene	0.339	0.33	-	2.7	20	98	0
Chlorobenzene-d5	1	1	-	0	20	87	0
Toluene-d8	1.165	1.191	-	-2.2	20	89	0
Toluene	0.672	0.721	-	-7.3	20	95	0
4-Methyl-2-pentanone	0.052	0.054	-	-3.8	20	100	0
Tetrachloroethene	0.331	0.36	-	-8.8	20	95	0
trans-1,3-Dichloropropene	10	9.338	-	6.6	20	100	0
Ethyl methacrylate	0.193	0.195	-	-1	20	100	0
1,1,2-Trichloroethane	0.171	0.187*	-	-9.4	20	100	0
Chlorodibromomethane	0.286	0.284	-	0.7	20	94	0
1,3-Dichloropropane	0.353	0.383	-	-8.5	20	101	0
1,2-Dibromoethane	0.222	0.238	-	-7.2	20	99	0
2-Hexanone	0.094	0.096	-	-2.1	20	100	0
Chlorobenzene	0.848	0.891	-	-5.1	20	95	0
Ethylbenzene	1.264	1.343	-	-6.2	20	95	0
1,1,1,2-Tetrachloroethane	0.298	0.298	-	0	20	95	0
p/m Xylene	0.525	0.573	-	-9.1	20	93	0
o Xylene	0.511	0.559	-	-9.4	20	94	0
Styrene	0.843	0.968	-	-14.8	20	94	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
Bromoform	0.269	0.248	-	7.8	20	97	0
Isopropylbenzene	2.208	2.291	-	-3.8	20	94	0
4-Bromofluorobenzene	0.745	0.702	-	5.8	20	84	0
Bromobenzene	0.668	0.641	-	4	20	92	0
n-Propylbenzene	2.645	2.778	-	-5	20	95	0
1,4-Dichlorobutane	0.547	0.561	-	-2.6	20	99	0
1,1,2,2-Tetrachloroethane	0.401	0.423	-	-5.5	20	103	0
4-Ethyltoluene	2.285	2.398	-	-4.9	20	96	0
2-Chlorotoluene	1.871	1.965	-	-5	20	95	0
1,3,5-Trimethylbenzene	1.893	2.045	-	-8	20	99	0
1,2,3-Trichloropropane	0.309	0.313	-	-1.3	20	97	0
trans-1,4-Dichloro-2-buten	0.109	0.109	-	0	20	102	0
4-Chlorotoluene	1.678	1.758	-	-4.8	20	95	0
tert-Butylbenzene	1.764	1.79	-	-1.5	20	93	0
1,2,4-Trimethylbenzene	1.854	1.957	-	-5.6	20	99	0
sec-Butylbenzene	2.414	2.61	-	-8.1	20	94	0
p-Isopropyltoluene	2.224	2.34	-	-5.2	20	95	0
1,3-Dichlorobenzene	1.354	1.385	-	-2.3	20	95	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2318419
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA108	**Calibration Date**	: 04/12/23 17:37
Lab File ID	: V08230412N01	**Init. Calib. Date(s)**	: 04/05/23 04/06/23
Sample No	: WG1766227-2	**Init. Calib. Times**	: 22:11 01:18
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.357	1.395	-	-2.8	20	95	0
p-Diethylbenzene	1.397	1.378	-	1.4	20	95	0
n-Butylbenzene	1.863	2.038	-	-9.4	20	98	0
1,2-Dichlorobenzene	1.233	1.264	-	-2.5	20	94	0
1,2,4,5-Tetramethylbenzene	2.029	1.864	-	8.1	20	94	0
1,2-Dibromo-3-chloropropan	0.071	0.068	-	4.2	20	101	0
1,3,5-Trichlorobenzene	1.007	0.984	-	2.3	20	94	0
Hexachlorobutadiene	0.417	0.401	-	3.8	20	91	0
1,2,4-Trichlorobenzene	0.884	0.838	-	5.2	20	94	0
Naphthalene	1.577	1.46	-	7.4	20	95	0
1,2,3-Trichlorobenzene	0.811	0.797	-	1.7	20	93	0

* Value outside of QC limits.

Field Duplicate Calculation Section

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2318419

S1= GW-5R **S2=** DUP

Analyte	S1	S2	RPD (%)
chloroform	**0.78**	**0.81**	NC
Tetrachloroethene	66	67	2%
Trichloroethylene	1.7	1.7	0%
Isopropylbenzene	**1.4**	**1.6**	NC
n-Propylbenzene	**1.3**	**1.4**	NC
1,2,4-Trimethylbenzene	**2.0**	**2.1**	NC
1,2,4-Trimethylbenzene	3.8	4.2	10%
p-Ethyltoluene	2.2	2.4	9%

* RPD is above the allowable maximum waters 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high andassociated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Geology
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Remediation
Water Supply

January 25, 2024

Mr. Nick Krasnecky, P.E.
Associate Engineer
Terraphase Engineering
222 International Drive
Portsmouth, New Hampshire 03801

Re: Data Usability Summary Reports
Bridge Cleaners
August 2023 Ground Water Sample Event

Dear Mr. Krasnecky:

The data usability summary report (DUSR) and supporting documentation for August 2023 ground water sampling event are attached to this letter for Bridge Cleaners. The data for Alpha Analytical Labs SDG number L2345491 are acceptable, with some minor issues that are identified in the DUSR and validation summary. There are no data that were rejected, unusable (R) in the data pack.

A list of data validation acronyms and qualifiers is attached to assist you in interpreting the data validation reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist ECC Horizon.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA/bms
Via email

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ALPHA GEOSCIENCE

Geology

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Water Supply

Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2345491

3 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, and 1 Trip Blank
Collected August 7, 2023

Prepared by: Donald Anné
January 25, 2024

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatiles for 3 ground water samples, 1 field duplicate, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical method.

The data are mostly acceptable with some issues that are identified in the accompanying data validation review. The following data were qualified:

- The volatile results for tetrachloroethene in samples GW-2R and DUP were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for tetrachloroethene marked "E" in the undiluted samples were qualified as estimated (J).

- The volatile result for vinyl chloride was qualified as estimated (J) for sample GW-2R because the %D for vinyl chloride was above the allowable maximum in the associated continuing calibration verification.

- The volatile result for acetone was qualified as estimated (J) for sample FB because the %D for acetone was above the allowable maximum in the associated continuing calibration verification.

- The "not detected" volatile results for trans-1,4-dichloro-2-butene were qualified as "estimated" (UJ) for all 3 ground water samples, DUP, FB, and TB because 1 of 2 percent recoveries for trans-1,4-dichloro-2-butene was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.

679 Plank Road ● Clifton Park, New York 12065 ● (518) 348-6995 ● Fax (518) 348-6966
www.alphageoscience.com

All data are considered usable with estimated (J or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-01	Date Collected	: 08/07/23 09:50
Client ID	: GW-6	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 04:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N21	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	0.95	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	14	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-01	Date Collected	: 08/07/23 09:50
Client ID	: GW-6	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 04:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N21	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.64	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-01	Date Collected	: 08/07/23 09:50
Client ID	: GW-6	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 04:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N21	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-01	Date Collected	: 08/07/23 09:50
Client ID	: GW-6	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 04:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N21	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U	UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-02D	Date Collected	: 08/07/23 11:00
Client ID	: GW-2R	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:54
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N20	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
75-09-2	Methylene chloride	ND	5.0	1.4	U	
75-34-3	1,1-Dichloroethane	ND	5.0	1.4	U	
67-66-3	Chloroform	ND	5.0	1.4	U	
56-23-5	Carbon tetrachloride	ND	1.0	0.27	U	
78-87-5	1,2-Dichloropropane	ND	2.0	0.27	U	
124-48-1	Dibromochloromethane	ND	1.0	0.30	U	
79-00-5	1,1,2-Trichloroethane	ND	3.0	1.0	U	
127-18-4	Tetrachloroethene	720	1.0	0.36	E	J
108-90-7	Chlorobenzene	ND	5.0	1.4	U	
75-69-4	Trichlorofluoromethane	ND	5.0	1.4	U	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	U	
75-27-4	Bromodichloromethane	ND	1.0	0.38	U	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.33	U	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	U	
542-75-6	1,3-Dichloropropene, Total	ND	1.0	0.29	U	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	U	
75-25-2	Bromoform	ND	4.0	1.3	U	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	U	
71-43-2	Benzene	ND	1.0	0.32	U	
108-88-3	Toluene	ND	5.0	1.4	U	
100-41-4	Ethylbenzene	ND	5.0	1.4	U	
74-87-3	Chloromethane	ND	5.0	1.4	U	
74-83-9	Bromomethane	ND	5.0	1.4	U	
75-01-4	Vinyl chloride	0.15	2.0	0.14	J	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-02D	Date Collected	: 08/07/23 11:00
Client ID	: GW-2R	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:54
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N20	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	5.0	1.4	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	U
156-60-5	trans-1,2-Dichloroethene	ND	5.0	1.4	U
79-01-6	Trichloroethene	49	1.0	0.35	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.4	U
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.4	U
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.4	U
1634-04-4	Methyl tert butyl ether	ND	5.0	1.4	U
179601-23-1	p/m-Xylene	ND	5.0	1.4	U
95-47-6	o-Xylene	ND	5.0	1.4	U
1330-20-7	Xylenes, Total	ND	5.0	1.4	U
156-59-2	cis-1,2-Dichloroethene	ND	5.0	1.4	U
540-59-0	1,2-Dichloroethene, Total	ND	5.0	1.4	U
74-95-3	Dibromomethane	ND	10	2.0	U
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	U
107-13-1	Acrylonitrile	ND	10	3.0	U
100-42-5	Styrene	ND	5.0	1.4	U
75-71-8	Dichlorodifluoromethane	ND	10	2.0	U
67-64-1	Acetone	ND	10	2.9	U
75-15-0	Carbon disulfide	ND	10	2.0	U
78-93-3	2-Butanone	ND	10	3.9	U
108-05-4	Vinyl acetate	ND	10	2.0	U
108-10-1	4-Methyl-2-pentanone	ND	10	2.0	U
591-78-6	2-Hexanone	ND	10	2.0	U
74-97-5	Bromochloromethane	ND	5.0	1.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-02D	Date Collected	: 08/07/23 11:00
Client ID	: GW-2R	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:54
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N20	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	5.0	1.4	U
106-93-4	1,2-Dibromoethane	ND	4.0	1.3	U
142-28-9	1,3-Dichloropropane	ND	5.0	1.4	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.4	U
108-86-1	Bromobenzene	ND	5.0	1.4	U
104-51-8	n-Butylbenzene	ND	5.0	1.4	U
135-98-8	sec-Butylbenzene	2.7	5.0	1.4	J
98-06-6	tert-Butylbenzene	2.8	5.0	1.4	J
95-49-8	o-Chlorotoluene	ND	5.0	1.4	U
106-43-4	p-Chlorotoluene	ND	5.0	1.4	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	U
87-68-3	Hexachlorobutadiene	ND	5.0	1.4	U
98-82-8	Isopropylbenzene	ND	5.0	1.4	U
99-87-6	p-Isopropyltoluene	ND	5.0	1.4	U
91-20-3	Naphthalene	ND	5.0	1.4	U
103-65-1	n-Propylbenzene	ND	5.0	1.4	U
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.4	U
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.4	U
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.4	U
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	U
123-91-1	1,4-Dioxane	ND	500	120	U
105-05-5	p-Diethylbenzene	ND	4.0	1.4	U
622-96-8	p-Ethyltoluene	ND	4.0	1.4	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	4.0	1.1	U
60-29-7	Ethyl ether	ND	5.0	1.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-02D	Date Collected	: 08/07/23 11:00
Client ID	: GW-2R	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:54
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N20	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	1.4	U	UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-02D2	Date Collected	: 08/07/23 11:00
Client ID	: GW-2R	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/15/23 21:12
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V08230815N10	Instrument ID	: VOA108
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
127-18-4	Tetrachloroethene	650	5.0	1.8	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-03	Date Collected	: 08/07/23 12:10
Client ID	: GW-5	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N19	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	1.0	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	110	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-03	Date Collected	: 08/07/23 12:10
Client ID	: GW-5	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N19	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	2.4	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-03	Date Collected	: 08/07/23 12:10
Client ID	: GW-5	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N19	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	1.0	2.5	0.70	J
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	2.3	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	2.3	2.5	0.70	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	3.5	2.5	0.70	
95-63-6	1,2,4-Trimethylbenzene	6.9	2.5	0.70	
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	3.6	2.0	0.70	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-03	Date Collected	: 08/07/23 12:10
Client ID	: GW-5	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N19	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U	UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-04D	Date Collected	: 08/07/23 00:00
Client ID	: DUP	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:01
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N18	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
75-09-2	Methylene chloride	ND	5.0	1.4	U	
75-34-3	1,1-Dichloroethane	ND	5.0	1.4	U	
67-66-3	Chloroform	ND	5.0	1.4	U	
56-23-5	Carbon tetrachloride	ND	1.0	0.27	U	
78-87-5	1,2-Dichloropropane	ND	2.0	0.27	U	
124-48-1	Dibromochloromethane	ND	1.0	0.30	U	
79-00-5	1,1,2-Trichloroethane	ND	3.0	1.0	U	
127-18-4	Tetrachloroethene	710	1.0	0.36	E	J
108-90-7	Chlorobenzene	ND	5.0	1.4	U	
75-69-4	Trichlorofluoromethane	ND	5.0	1.4	U	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	U	
75-27-4	Bromodichloromethane	ND	1.0	0.38	U	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.33	U	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	U	
542-75-6	1,3-Dichloropropene, Total	ND	1.0	0.29	U	
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	U	
75-25-2	Bromoform	ND	4.0	1.3	U	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	U	
71-43-2	Benzene	ND	1.0	0.32	U	
108-88-3	Toluene	ND	5.0	1.4	U	
100-41-4	Ethylbenzene	ND	5.0	1.4	U	
74-87-3	Chloromethane	ND	5.0	1.4	U	
74-83-9	Bromomethane	ND	5.0	1.4	U	
75-01-4	Vinyl chloride	ND	2.0	0.14	U	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-04D	Date Collected	: 08/07/23 00:00
Client ID	: DUP	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:01
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N18	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	5.0	1.4	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	U
156-60-5	trans-1,2-Dichloroethene	ND	5.0	1.4	U
79-01-6	Trichloroethene	48	1.0	0.35	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.4	U
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.4	U
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.4	U
1634-04-4	Methyl tert butyl ether	ND	5.0	1.4	U
179601-23-1	p/m-Xylene	ND	5.0	1.4	U
95-47-6	o-Xylene	ND	5.0	1.4	U
1330-20-7	Xylenes, Total	ND	5.0	1.4	U
156-59-2	cis-1,2-Dichloroethene	ND	5.0	1.4	U
540-59-0	1,2-Dichloroethene, Total	ND	5.0	1.4	U
74-95-3	Dibromomethane	ND	10	2.0	U
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	U
107-13-1	Acrylonitrile	ND	10	3.0	U
100-42-5	Styrene	ND	5.0	1.4	U
75-71-8	Dichlorodifluoromethane	ND	10	2.0	U
67-64-1	Acetone	ND	10	2.9	U
75-15-0	Carbon disulfide	ND	10	2.0	U
78-93-3	2-Butanone	ND	10	3.9	U
108-05-4	Vinyl acetate	ND	10	2.0	U
108-10-1	4-Methyl-2-pentanone	ND	10	2.0	U
591-78-6	2-Hexanone	ND	10	2.0	U
74-97-5	Bromochloromethane	ND	5.0	1.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-04D	Date Collected	: 08/07/23 00:00
Client ID	: DUP	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:01
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N18	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	5.0	1.4	U
106-93-4	1,2-Dibromoethane	ND	4.0	1.3	U
142-28-9	1,3-Dichloropropane	ND	5.0	1.4	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.4	U
108-86-1	Bromobenzene	ND	5.0	1.4	U
104-51-8	n-Butylbenzene	ND	5.0	1.4	U
135-98-8	sec-Butylbenzene	2.6	5.0	1.4	J
98-06-6	tert-Butylbenzene	2.7	5.0	1.4	J
95-49-8	o-Chlorotoluene	ND	5.0	1.4	U
106-43-4	p-Chlorotoluene	ND	5.0	1.4	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	U
87-68-3	Hexachlorobutadiene	ND	5.0	1.4	U
98-82-8	Isopropylbenzene	ND	5.0	1.4	U
99-87-6	p-Isopropyltoluene	ND	5.0	1.4	U
91-20-3	Naphthalene	ND	5.0	1.4	U
103-65-1	n-Propylbenzene	ND	5.0	1.4	U
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.4	U
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.4	U
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.4	U
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	U
123-91-1	1,4-Dioxane	ND	500	120	U
105-05-5	p-Diethylbenzene	ND	4.0	1.4	U
622-96-8	p-Ethyltoluene	ND	4.0	1.4	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	4.0	1.1	U
60-29-7	Ethyl ether	ND	5.0	1.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-04D	Date Collected	: 08/07/23 00:00
Client ID	: DUP	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 03:01
Sample Matrix	: WATER	Dilution Factor	: 2
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N18	Instrument ID	: VOA101
Sample Amount	: 5 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	1.4	U	UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	**Lab Number**	: L2345491
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Lab ID	: L2345491-04D2	**Date Collected**	: 08/07/23 00:00
Client ID	: DUP	**Date Received**	: 08/07/23
Sample Location	: QUEENS, NY	**Date Analyzed**	: 08/15/23 21:34
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V08230815N11	**Instrument ID**	: VOA108
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
127-18-4	Tetrachloroethene	660	5.0	1.8	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-05	Date Collected	: 08/07/23 13:30
Client ID	: FB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:34
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N17	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-05	Date Collected	: 08/07/23 13:30
Client ID	: FB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:34
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N17	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
75-00-3	Chloroethane	ND	2.5	0.70	U	
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U	
79-01-6	Trichloroethene	ND	0.50	0.18	U	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U	
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U	
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U	
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U	
95-47-6	o-Xylene	ND	2.5	0.70	U	
1330-20-7	Xylenes, Total	ND	2.5	0.70	U	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U	
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U	
74-95-3	Dibromomethane	ND	5.0	1.0	U	
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U	
107-13-1	Acrylonitrile	ND	5.0	1.5	U	
100-42-5	Styrene	ND	2.5	0.70	U	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U	
67-64-1	Acetone	2.0	5.0	1.5	J	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U	
78-93-3	2-Butanone	ND	5.0	1.9	U	
108-05-4	Vinyl acetate	ND	5.0	1.0	U	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U	
591-78-6	2-Hexanone	ND	5.0	1.0	U	
74-97-5	Bromochloromethane	ND	2.5	0.70	U	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-05	Date Collected	: 08/07/23 13:30
Client ID	: FB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:34
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N17	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-05	Date Collected	: 08/07/23 13:30
Client ID	: FB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:34
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N17	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U	UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-06	Date Collected	: 08/07/23 00:00
Client ID	: TB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N16	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-06	Date Collected	: 08/07/23 00:00
Client ID	: TB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N16	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-06	Date Collected	: 08/07/23 00:00
Client ID	: TB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N16	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Lab ID	: L2345491-06	Date Collected	: 08/07/23 00:00
Client ID	: TB	Date Received	: 08/07/23
Sample Location	: QUEENS, NY	Date Analyzed	: 08/12/23 02:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V01230811N16	Instrument ID	: VOA101
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U	UJ

VOC Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2345491

3 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, and 1 Trip Blank
Collected August 7, 2023

Prepared by: Donald Anné
January 25, 2024

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for bromomethane, acetone, 4-methyl-2-pentanone, and 1,1,2-trichloroethane were below the method minimums, but not below 0.010 for VOA101 on 07-27-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The average RRFs for acetone, 2-butanone, 4-methyl-2-pentanone, and 1,1,2-trichloroethane were below the method minimums, but not below 0.010 on 08-11-23 (V01230811N02). The %Ds for 10 compounds (highlighted yellow on attached Form 7) were above the method maximum on 08-11-23 (V01230811N02). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRF for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds), as required.

The %Ds for 10 compounds (highlighted yellow on attached Form 7), ethyl ether, and trans-1,4-dichloro-2-butene were above the allowable maximum (20%) on 08-11-23 (V01230811N02). Positive results for these compounds should be considered estimated (J) in associated samples.

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Blanks: The analyses of the method and trip blanks reported target compounds as not detected. Field blank FB contained a trace of acetone (2.0 ug/L). Positive results for acetone that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, and trip blank.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1816898-3/4.

The RPDs for target compounds were below the allowable maximum, but 2 of 2 %Rs for bromomethane were above QC limits for aqueous samples WG1816118-3/4. Positive results for bromomethane should be considered estimated, biased high (J+) in associated aqueous samples.

One of two %Rs for trans-1,4-dichloro-2-butene was below QC limits, but not below 30% for aqueous samples WG1816118-3/4. Positive results for trans-1,4-dichloro-2-butene should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated aqueous samples.

Field Duplicates: The relative percent differences for trichloroethene and tetrachloroethene were below the allowable maximum (20%) for aqueous field duplicate pair GW-2R/DUP (attached table), as required.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

The results for tetrachloroethene in samples GW-2R and DUP were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The samples were diluted by the laboratory and re-analyzed; therefore, the results that are flagged as 'E' in the undiluted samples should be considered estimated (J). The use of the diluted results for tetrachloroethene is recommended for samples GW-2r and DUP. It is recommended that the undiluted results be used for all other compounds.

Laboratory Control Sample Summary
Form 3
Volatiles

Client : Environmental Compliance & Control, Lab Number : L2345491
Project Name : BRIDGE CLEANERS Project Number : BRIDGE CLEANERS
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1816118-3 Analysis Date : 08/11/23 19:58 File ID : V01230811N02
LCSD Sample ID : WG1816118-4 Analysis Date : 08/11/23 20:24 File ID : V01230811N03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	10	100	10	9.7	97	3	70-130	20
1,1-Dichloroethane	10	9.9	99	10	9.7	97	2	70-130	20
Chloroform	10	10	100	10	9.9	99	1	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	9.6	96	10	9.4	94	2	70-130	20
Dibromochloromethane	10	8.9	89	10	9.0	90	1	63-130	20
1,1,2-Trichloroethane	10	8.9	89	10	8.8	88	1	70-130	20
Tetrachloroethene	10	10	100	10	9.8	98	2	70-130	20
Chlorobenzene	10	9.8	98	10	9.7	97	1	75-130	20
Trichlorofluoromethane	10	8.4	84	10	8.2	82	2	62-150	20
1,2-Dichloroethane	10	9.1	91	10	8.9	89	2	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	9.8	98	10	9.7	97	1	67-130	20
trans-1,3-Dichloropropene	10	9.1	91	10	8.9	89	2	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	9.9	99	1	70-130	20
1,1-Dichloropropene	10	11	110	10	10	100	10	70-130	20
Bromoform	10	8.6	86	10	8.5	85	1	54-136	20
1,1,2,2-Tetrachloroethane	10	9.4	94	10	9.2	92	2	67-130	20
Benzene	10	11	110	10	10	100	10	70-130	20
Toluene	10	10	100	10	10	100	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Chloromethane	10	9.1	91	10	8.7	87	4	64-130	20
Bromomethane	10	14	140 Q	10	14	140 Q	0	39-139	20
Vinyl chloride	10	7.8	78	10	7.5	75	4	55-140	20
Chloroethane	10	6.7	67	10	6.2	62	8	55-138	20
1,1-Dichloroethene	10	7.8	78	10	7.6	76	3	61-145	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Environmental Compliance & Control,	Lab Number	: L2345491
Project Name	: BRIDGE CLEANERS	Project Number	: BRIDGE CLEANERS
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1816118-3	Analysis Date : 08/11/23 19:58	File ID : V01230811N02
LCSD Sample ID	: WG1816118-4	Analysis Date : 08/11/23 20:24	File ID : V01230811N03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
trans-1,2-Dichloroethene	10	11	110	10	11	110	0	70-130	20
Trichloroethene	10	10	100	10	10	100	0	70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	9.5	95	10	9.3	93	2	63-130	20
p/m-Xylene	20	21	105	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	11	110	10	11	110	0	70-130	20
Dibromomethane	10	9.8	98	10	9.6	96	2	70-130	20
1,2,3-Trichloropropane	10	8.4	84	10	8.3	83	1	64-130	20
Acrylonitrile	10	8.6	86	10	8.4	84	2	70-130	20
Styrene	20	20	100	20	20	100	0	70-130	20
Dichlorodifluoromethane	10	9.5	95	10	9.3	93	2	36-147	20
Acetone	10	7.3	73	10	8.2	82	12	58-148	20
Carbon disulfide	10	7.0	70	10	7.3	73	4	51-130	20
2-Butanone	10	7.7	77	10	7.8	78	1	63-138	20
Vinyl acetate	10	10	100	10	9.7	97	3	70-130	20
4-Methyl-2-pentanone	10	7.1	71	10	7.5	75	5	59-130	20
2-Hexanone	10	6.9	69	10	7.1	71	3	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
2,2-Dichloropropane	10	11	110	10	10	100	10	63-133	20
1,2-Dibromoethane	10	8.9	89	10	8.8	88	1	70-130	20
1,3-Dichloropropane	10	9.0	90	10	9.0	90	0	70-130	20
1,1,1,2-Tetrachloroethane	10	9.6	96	10	9.5	95	1	64-130	20
Bromobenzene	10	9.9	99	10	9.8	98	1	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client : Environmental Compliance & Control, Lab Number : L2345491
Project Name : BRIDGE CLEANERS Project Number : BRIDGE CLEANERS
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1816118-3 Analysis Date : 08/11/23 19:58 File ID : V01230811N02
LCSD Sample ID : WG1816118-4 Analysis Date : 08/11/23 20:24 File ID : V01230811N03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
n-Butylbenzene	10	11	110	10	11	110	0	53-136	20
sec-Butylbenzene	10	11	110	10	10	100	10	70-130	20
tert-Butylbenzene	10	11	110	10	11	110	0	70-130	20
o-Chlorotoluene	10	10	100	10	10	100	0	70-130	20
p-Chlorotoluene	10	11	110	10	10	100	10	70-130	20
1,2-Dibromo-3-chloropropane	10	8.0	80	10	7.9	79	1	41-144	20
Hexachlorobutadiene	10	10	100	10	9.7	97	3	63-130	20
Isopropylbenzene	10	11	110	10	10	100	10	70-130	20
p-Isopropyltoluene	10	11	110	10	11	110	0	70-130	20
Naphthalene	10	8.7	87	10	8.5	85	2	70-130	20
n-Propylbenzene	10	11	110	10	11	110	0	69-130	20
1,2,3-Trichlorobenzene	10	8.3	83	10	7.9	79	5	70-130	20
1,2,4-Trichlorobenzene	10	9.3	93	10	8.9	89	4	70-130	20
1,3,5-Trimethylbenzene	10	10	100	10	10	100	0	64-130	20
1,2,4-Trimethylbenzene	10	11	110	10	10	100	10	70-130	20
1,4-Dioxane	500	500	100	500	450	90	11	56-162	20
p-Diethylbenzene	10	11	110	10	11	110	0	70-130	20
p-Ethyltoluene	10	11	110	10	10	100	10	70-130	20
1,2,4,5-Tetramethylbenzene	10	11	110	10	10	100	10	70-130	20
Ethyl ether	10	6.4	64	10	6.3	63	2	59-134	20
trans-1,4-Dichloro-2-butene	10	6.9	69 Q	10	7.1	71	3	70-130	20

Initial Calibration Summary
Form 6
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2345491
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA101	**Ical Ref**	: ICAL20213
Calibration dates	: 07/27/23 17:16 07/27/23 21:43		

Calibration Files

L11 =V01230727N03.D L1 =V01230727N05.D L2 =V01230727N07.D L3 =V01230727N09.D L4 =V01230727N10.D

L6 =V01230727N11.D L8 =V01230727N12.D L10 =V01230727N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.225	0.325	0.347	0.344	0.346	0.354	0.348	0.327	14.07
3)	TP	Chloromethane		0.343	0.384	0.411	0.370	0.410	0.448	0.493	0.408	12.29
4)	TC	Vinyl chloride	0.319	0.258	0.392	0.383	0.360	0.425	0.457	0.474	0.383	18.69
5)	TP	Bromomethane		0.066	0.059	0.058	0.071	0.120	0.159		*Q	0.9999
6)	TP	Chloroethane		0.205	0.224	0.230	0.217	0.225	0.227	0.191	0.217	6.48
7)	TP	Trichlorofluor		0.290	0.386	0.411	0.388	0.417	0.436	0.442	0.396	12.95
8)	TP	Ethyl ether		0.130	0.130	0.133	0.120	0.140	0.141	0.148	0.135	6.77
10)	TC	1,1-Dichloroet		0.192	0.234	0.245	0.222	0.254	0.265	0.272	0.241	11.49
11)	TP	Carbon disulfide		0.703	0.746	0.774	0.718	0.845	0.877	0.896	0.794	9.82
12)	TP	Freon-113		0.195	0.256	0.268	0.249	0.278	0.291	0.296	0.262	12.96
14)	TP	Acrolein		0.047	0.039	0.038	0.034	0.042	0.040	0.040	0.040	10.05
15)	TP	Methylene chlo		0.335	0.285	0.263	0.236	0.259	0.258	0.253	0.270	11.92
17)	TP	Acetone			0.088	0.068	0.064	0.071	0.068	0.068	0.071	11.99
18)	TP	trans-1,2-Dich		0.208	0.258	0.272	0.241	0.271	0.273	0.268	0.256	9.42
19)	TP	Methyl acetate		0.215	0.190	0.185	0.157	0.196	0.186	0.187	0.188	9.13
20)	TP	Methyl tert butyl ether		0.631	0.647	0.657	0.622	0.695	0.683	0.688	0.661	4.37
21)	TP	tert-Butyl alc		0.021	0.021	0.021	0.020	0.023	0.022	0.023	0.022	5.09
22)	TP	Diisopropyl ether		0.974	1.116	1.166	0.971	1.206	1.202	1.174	1.116	9.16
23)	TP	1,1-Dichloroet		0.468	0.564	0.590	0.533	0.592	0.595	0.578	0.560	8.19
24)	TP	Halothane		0.156	0.206	0.214	0.187	0.217	0.218	0.214	0.202	11.31
25)	TP	Acrylonitrile		0.076	0.084	0.086	0.072	0.094	0.088	0.090	0.084	9.18
26)	TP	Ethyl tert-but		0.846	0.909	0.960	0.876	1.001	0.996	0.990	0.940	6.70
27)	TP	Vinyl acetate		0.376	0.406	0.346	0.357	0.358	0.313	0.293	0.350	10.78
28)	TP	cis-1,2-Dichlo		0.235	0.280	0.291	0.289	0.294	0.294	0.287	0.281	7.42
29)	TP	2,2-Dichloropr		0.310	0.370	0.361	0.437	0.375	0.376	0.367	0.371	10.01
30)	TP	Bromochloromet		0.127	0.129	0.131	0.128	0.127	0.124	0.118	0.126	3.49
31)	TP	Cyclohexane		0.429	0.606	0.667	0.678	0.677	0.687	0.672	0.631	14.72
32)	TC	Chloroform		0.410	0.458	0.467	0.472	0.474	0.474	0.466	0.460	4.93
33)	TP	Ethyl acetate		0.229	0.235	0.240	0.251	0.259	0.244	0.245	0.243	4.03
34)	TP	Carbon tetrachloride	0.297	0.269	0.370	0.397	0.402	0.406	0.415	0.411	0.371	15.21
35)	TP	Tetrahydrofuran		0.062	0.073	0.072	0.075	0.077	0.072	0.074	0.072	6.53
36)	S	Dibromofluoromethane	0.275	0.283	0.287	0.294	0.295	0.302	0.302	0.299	0.292	3.30
37)	TP	1,1,1-Trichlor		0.304	0.404	0.436	0.433	0.435	0.440	0.435	0.412	11.91
39)	TP	2-Butanone			0.095	0.102	0.108	0.112	0.107	0.107	0.105	5.65
40)	TP	1,1-Dichloropr		0.283	0.358	0.387	0.397	0.398	0.402	0.397	0.374	11.52

Initial Calibration Summary
Form 6
Volatiles

Client	: Environmental Compliance & Control,	**Lab Number**	: L2345491
Project Name	: BRIDGE CLEANERS	**Project Number**	: BRIDGE CLEANERS
Instrument ID	: VOA101	**Ical Ref**	: ICAL20213
Calibration dates	: 07/27/23 17:16 07/27/23 21:43		

Calibration Files

L11 =V01230727N03.D L1 =V01230727N05.D L2 =V01230727N07.D L3 =V01230727N09.D L4 =V01230727N10.D

L6 =V01230727N11.D L8 =V01230727N12.D L10 =V01230727N13.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
41)	TP	Benzene	0.906	0.849	1.033	1.082	1.086	1.083	1.082	1.060	1.023	9.05
42)	TP	Tertiary-Amyl Methyl Ether		0.592	0.648	0.682	0.695	0.722	0.713	0.713	0.681	6.82
43)	S	1,2-Dichloroethane-d4	0.300	0.310	0.313	0.320	0.321	0.334	0.334	0.336	0.321	4.10
44)	TP	1,2-Dichloroet		0.360	0.374	0.367	0.369	0.373	0.367	0.361	0.367	1.51
47)	TP	Methyl cyclohe		0.300	0.432	0.466	0.480	0.479	0.482	0.475	0.445	14.89
48)	TP	Trichloroethene	0.271	0.232	0.301	0.326	0.325	0.328	0.332	0.325	0.305	11.81
50)	TP	Dibromomethane		0.135	0.143	0.146	0.148	0.152	0.150	0.149	0.146	4.01
51)	TC	1,2-Dichloropr		0.259	0.320	0.319	0.325	0.328	0.334	0.325	0.316	8.09
53)	TP	2-Chloroethyl		0.101	0.118	0.133	0.147	0.146	0.140	0.136	0.131	12.56
54)	TP	Bromodichlorom		0.296	0.332	0.348	0.358	0.366	0.373	0.367	0.349	7.75
57)	TP	1,4-Dioxane		0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	8.60
58)	TP	cis-1,3-Dichlo		0.331	0.382	0.411	0.428	0.440	0.445	0.436	0.410	9.99
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.161	1.171	1.180	1.200	1.195	1.199	1.201	1.222	1.191	1.64
61)	TC	Toluene		0.573	0.710	0.732	0.739	0.733	0.733	0.734	0.708	8.49
62)	TP	4-Methyl-2-pen			0.081	0.092	0.098	0.103	0.099	0.102	0.096	8.58
63)	TP	Tetrachloroethene		0.271	0.339	0.357	0.360	0.356	0.357	0.356	0.342	9.42
65)	TP	trans-1,3-Dich		0.291	0.342	0.391	0.405	0.420	0.416	0.422	0.384	12.89
67)	TP	Ethyl methacry		0.178	0.240	0.277	0.303	0.315	0.309	0.315	0.277	18.48
68)	TP	1,1,2-Trichlor		0.190	0.199	0.197	0.197	0.196	0.192	0.192	0.195#	1.74
69)	TP	Chlorodibromom		0.244	0.259	0.275	0.285	0.293	0.292	0.298	0.278	7.22
70)	TP	1,3-Dichloropr		0.349	0.393	0.403	0.404	0.410	0.401	0.405	0.395	5.32
71)	TP	1,2-Dibromoethane		0.208	0.219	0.232	0.235	0.243	0.237	0.242	0.231	5.54
72)	TP	2-Hexanone			0.129	0.154	0.174	0.186	0.178	0.183	0.167	13.08
73)	TP	Chlorobenzene		0.676	0.789	0.815	0.814	0.811	0.811	0.808	0.789	6.42
74)	TC	Ethylbenzene		1.025	1.258	1.410	1.427	1.425	1.429	1.427	1.343	11.43
75)	TP	1,1,1,2-Tetrac		0.248	0.287	0.302	0.306	0.309	0.312	0.313	0.297	7.78
76)	TP	p/m Xylene		0.359	0.501	0.556	0.560	0.556	0.552	0.542	0.518	14.11
77)	TP	o Xylene		0.388	0.481	0.524	0.533	0.522	0.520	0.509	0.497	10.27
78)	TP	Styrene		0.579	0.756	0.864	0.875	0.876	0.872	0.854	0.811	13.65
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.271	0.287	0.297	0.313	0.333	0.329	0.332	0.309	7.91
82)	TP	Isopropylbenzene		1.604	2.105	2.335	2.388	2.432	2.472	2.445	2.254	13.85
83)	S	4-Bromofluorobenzene	0.845	0.841	0.825	0.830	0.820	0.828	0.840	0.834	0.833	1.06
84)	TP	Bromobenzene		0.513	0.594	0.594	0.594	0.600	0.605	0.596	0.585	5.46
85)	TP	n-Propylbenzene		1.820	2.440	2.641	2.700	2.733	2.755	2.708	2.542	13.20

Initial Calibration Summary
Form 6
Volatiles

Client	**: Environmental Compliance & Control,**	**Lab Number**	**: L2345491**
Project Name	**: BRIDGE CLEANERS**	**Project Number**	**: BRIDGE CLEANERS**
Instrument ID	**: VOA101**	**Ical Ref**	**: ICAL20213**
Calibration dates	**: 07/27/23 17:16 07/27/23 21:43**		

Calibration Files
L11 =V01230727N03.D L1 =V01230727N05.D L2 =V01230727N07.D L3 =V01230727N09.D L4 =V01230727N10.D
L6 =V01230727N11.D L8 =V01230727N12.D L10 =V01230727N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
86) TP	1,4-Dichlorobu		0.749	0.794	0.828	0.830	0.852	0.834	0.831	0.817	4.24
87) TP	1,1,2,2-Tetrac		0.453	0.439	0.411	0.413	0.420	0.396	0.394	0.418	5.15
88) TP	4-Ethyltoluene		1.558	2.027	2.252	2.314	2.346	2.383	2.351	2.176	13.68
89) TP	2-Chlorotoluene		1.275	1.524	1.612	1.598	1.610	1.636	1.602	1.551	8.16
90) TP	1,3,5-Trimethy		1.372	1.715	1.893	1.928	1.965	1.982	1.956	1.830	12.10
91) TP	1,2,3-Trichlor		0.372	0.358	0.360	0.357	0.371	0.358	0.358	0.362	1.87
92) TP	trans-1,4-Dich			0.136	0.145	0.157	0.169	0.161	0.162	0.155	7.77
93) TP	4-Chlorotoluene		1.166	1.475	1.598	1.631	1.654	1.676	1.653	1.550	11.76
94) TP	tert-Butylbenzene		1.021	1.399	1.532	1.586	1.615	1.637	1.613	1.486	14.83
97) TP	1,2,4-Trimethy		1.227	1.655	1.826	1.867	1.905	1.937	1.901	1.760	14.36
98) TP	sec-Butylbenzene		1.429	1.972	2.177	2.263	2.331	2.362	2.314	2.121	15.68
99) TP	p-Isopropyltol		1.107	1.610	1.822	1.906	1.953	1.982	1.941	1.760	17.87
100) TP	1,3-Dichlorobe		0.859	1.011	1.044	1.059	1.072	1.081	1.047	1.025	7.47
101) TP	1,4-Dichlorobe		1.011	1.044	1.058	1.068	1.085	1.085	1.059	1.059	2.43
102) TP	p-Diethylbenzene		0.617	0.884	1.031	1.084	1.128	1.141	1.118	1.000	19.08
103) TP	n-Butylbenzene		0.853	1.229	1.401	1.477	1.547	1.559	1.541	1.373	18.71
104) TP	1,2-Dichlorobe		0.804	0.954	0.973	0.980	0.999	0.999	0.970	0.954	7.14
105) TP	1,2,4,5-Tetram		0.944	1.235	1.487	1.609	1.693	1.729	1.703	1.486	19.83
106) TP	1,2-Dibromo-3-		0.048	0.061	0.065	0.070	0.076	0.075	0.075	0.067	14.96
107) TP	1,3,5-Trichlor		0.485	0.575	0.634	0.660	0.692	0.702	0.688	0.634	12.43
108) TP	Hexachlorobuta		0.156	0.211	0.217	0.231	0.252	0.258	0.256	0.226	16.09
109) TP	1,2,4-Trichlor		0.430	0.499	0.541	0.588	0.630	0.636	0.628	0.564	13.91
110) TP	Naphthalene		0.831	0.970	1.090	1.209	1.305	1.260	1.276	1.134	15.73
111) TP	1,2,3-Trichlor		0.391	0.447	0.468	0.502	0.532	0.530	0.526	0.485	10.88

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2345491	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA101		Calibration Date	: 08/11/23 19:58	
Lab File ID	: V01230811N02		Init. Calib. Date(s)	: 07/27/23	07/27/23
Sample No	: WG1816118-2		Init. Calib. Times	: 17:16	21:43
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	83	0
Dichlorodifluoromethane	0.327	0.31	-	5.2	20	74	0
Chloromethane	0.408	0.373	-	8.6	20	75	0
Vinyl chloride	0.383	0.3	-	21.7*	20	65	0
Bromomethane	10	14.35	-	-43.5*	20	120	0
Chloroethane	0.217	0.146	-	32.7*	20	53	0
Trichlorofluoromethane	0.396	0.332	-	16.2	20	67	0
Ethyl ether	0.135	0.086	-	36.3*	20	54	0
1,1-Dichloroethene	0.241	0.188	-	22*	20	64	0
Carbon disulfide	0.794	0.554	-	30.2*	20	59	0
Freon-113	0.262	0.211	-	19.5	20	66	0
Acrolein	0.04	0.033	-	17.5	20	71	0
Methylene chloride	0.27	0.269	-	0.4	20	85	0
Acetone	0.071	0.052	-	26.8*	20	63	0
trans-1,2-Dichloroethene	0.256	0.288	-	-12.5	20	88	0
Methyl acetate	0.188	0.155	-	17.6	20	70	0
Methyl tert-butyl ether	0.661	0.627	-	5.1	20	79	0
tert-Butyl alcohol	0.022	0.017	-	22.7*	20	67	0
Diisopropyl ether	1.116	1.054	-	5.6	20	75	0
1,1-Dichloroethane	0.56	0.553	-	1.3	20	78	0
Halothane	0.202	0.232	-	-14.9	20	90	0
Acrylonitrile	0.084	0.072	-	14.3	20	70	0
Ethyl tert-butyl ether	0.94	0.855	-	9	20	74	0
Vinyl acetate	0.35	0.354	-	-1.1	20	85	0
cis-1,2-Dichloroethene	0.281	0.309	-	-10	20	88	0
2,2-Dichloropropane	0.371	0.4	-	-7.8	20	92	0
Bromochloromethane	0.126	0.139	-	-10.3	20	88	0
Cyclohexane	0.631	0.632	-	-0.2	20	79	0
Chloroform	0.46	0.461	-	-0.2	20	82	0
Ethyl acetate	0.243	0.198	-	18.5	20	68	0
Carbon tetrachloride	0.371	0.394	-	-6.2	20	82	0
Tetrahydrofuran	0.072	0.052	-	27.8*	20	60	0
Dibromofluoromethane	0.292	0.29	-	0.7	20	82	0
1,1,1-Trichloroethane	0.412	0.428	-	-3.9	20	82	0
2-Butanone	0.105	0.081	-	22.9*	20	66	0
1,1-Dichloropropene	0.374	0.397	-	-6.1	20	85	0
Benzene	1.023	1.106	-	-8.1	20	85	0
tert-Amyl methyl ether	0.681	0.647	-	5	20	79	0
1,2-Dichloroethane-d4	0.321	0.291	-	9.3	20	76	0
1,2-Dichloroethane	0.367	0.334	-	9	20	76	0
Methyl cyclohexane	0.445	0.501	-	-12.6	20	89	0
Trichloroethene	0.305	0.323	-	-5.9	20	82	0
Dibromomethane	0.146	0.144	-	1.4	20	82	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2345491	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA101		Calibration Date	: 08/11/23 19:58	
Lab File ID	: V01230811N02		Init. Calib. Date(s)	: 07/27/23	07/27/23
Sample No	: WG1816118-2		Init. Calib. Times	: 17:16	21:43
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.316	0.304	-	3.8	20	79	0
Bromodichloromethane	0.349	0.342	-	2	20	81	0
1,4-Dioxane	0.00175	0.00173*	-	1.1	20	85	0
cis-1,3-Dichloropropene	0.41	0.411	-	-0.2	20	83	0
Chlorobenzene-d5	1	1	-	0	20	91	0
Toluene-d8	1.191	1.14	-	4.3	20	86	0
Toluene	0.708	0.717	-	-1.3	20	89	0
4-Methyl-2-pentanone	0.096	0.068	-	29.2*	20	67	0
Tetrachloroethene	0.342	0.341	-	0.3	20	87	0
trans-1,3-Dichloropropene	0.384	0.35	-	8.9	20	81	0
Ethyl methacrylate	0.277	0.241	-	13	20	79	0
1,1,2-Trichloroethane	0.195	0.174*	-	10.8	20	80	0
Chlorodibromomethane	0.278	0.248	-	10.8	20	82	0
1,3-Dichloropropane	0.395	0.358	-	9.4	20	81	0
1,2-Dibromoethane	0.231	0.206	-	10.8	20	81	0
2-Hexanone	0.167	0.115	-	31.1*	20	68	0
Chlorobenzene	0.789	0.777	-	1.5	20	87	0
Ethylbenzene	1.343	1.362	-	-1.4	20	88	0
1,1,1,2-Tetrachloroethane	0.297	0.284	-	4.4	20	85	0
p/m Xylene	0.518	0.536	-	-3.5	20	87	0
o Xylene	0.497	0.506	-	-1.8	20	88	0
Styrene	0.811	0.827	-	-2	20	87	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	85	0
Bromoform	0.309	0.265	-	14.2	20	76	0
Isopropylbenzene	2.254	2.434	-	-8	20	89	0
4-Bromofluorobenzene	0.833	0.852	-	-2.3	20	87	0
Bromobenzene	0.585	0.582	-	0.5	20	83	0
n-Propylbenzene	2.542	2.783	-	-9.5	20	90	0
1,4-Dichlorobutane	0.817	0.695	-	14.9	20	71	0
1,1,2,2-Tetrachloroethane	0.418	0.395	-	5.5	20	82	0
4-Ethyltoluene	2.176	2.332	-	-7.2	20	88	0
2-Chlorotoluene	1.551	1.608	-	-3.7	20	85	0
1,3,5-Trimethylbenzene	1.83	1.936	-	-5.8	20	87	0
1,2,3-Trichloropropane	0.362	0.306	-	15.5	20	72	0
trans-1,4-Dichloro-2-buten	0.155	0.107	-	31*	20	62	0
4-Chlorotoluene	1.55	1.663	-	-7.3	20	89	0
tert-Butylbenzene	1.486	1.656	-	-11.4	20	92	0
1,2,4-Trimethylbenzene	1.76	1.875	-	-6.5	20	87	0
sec-Butylbenzene	2.121	2.33	-	-9.9	20	91	0
p-Isopropyltoluene	1.76	1.983	-	-12.7	20	93	0
1,3-Dichlorobenzene	1.025	1.08	-	-5.4	20	88	0
1,4-Dichlorobenzene	1.059	1.083	-	-2.3	20	87	0
p-Diethylbenzene	1	1.125	-	-12.5	20	93	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Environmental Compliance & Control,		Lab Number	: L2345491	
Project Name	: BRIDGE CLEANERS		Project Number	: BRIDGE CLEANERS	
Instrument ID	: VOA101		Calibration Date	: 08/11/23 19:58	
Lab File ID	: V01230811N02		Init. Calib. Date(s)	: 07/27/23	07/27/23
Sample No	: WG1816118-2		Init. Calib. Times	: 17:16	21:43
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.373	1.546	-	-12.6	20	94	0
1,2-Dichlorobenzene	0.954	0.991	-	-3.9	20	87	0
1,2,4,5-Tetramethylbenzene	1.486	1.593	-	-7.2	20	91	0
1,2-Dibromo-3-chloropropan	0.067	0.053	-	20.9*	20	70	0
1,3,5-Trichlorobenzene	0.634	0.636	-	-0.3	20	85	0
Hexachlorobutadiene	0.226	0.227	-	-0.4	20	89	0
1,2,4-Trichlorobenzene	0.564	0.524	-	7.1	20	82	0
Naphthalene	1.134	0.989	-	12.8	20	77	0
1,2,3-Trichlorobenzene	0.485	0.403	-	16.9	20	73	0

* Value outside of QC limits.

Field Duplicate Calculation Section

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2345491

S1= GW-2R **S2=** DUP

Analyte	S1	S2	RPD (%)
Vinyl chloride	**0.15**	ND	NC
Trichloroethene	49	48	2%
sec-Butylbenzene	**2.7**	**2.6**	NC
tert-Butylbenzene	**2.8**	**2.7**	NC
Tetrachloroethene	650	660	2%

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high andassociated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Appendix E

ISCR/ERD Amendment Specifications/Safety Data Sheets

SAFETY DATA SHEET
mZVI™

Creation Date: 02/16/2021
Revision Date:08/21/2023
Version 1.1
SDS # 04A

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Trade Name: mZVI™ Glycerol, PART A EDS-ZVI™

Product Code: mZVI™

Synonyms: In Situ Chemical Reduction Product, Sulfidated ZVI Colloidal Suspension

Product Form: Mixture

Recommended use of the chemical and restrictions on use

Recommended Use: Remediation of contaminated groundwater and soils.

Restrictions on Use: Use as recommended by the label.

Details of the supplier and of the safety data sheet

Supplier
Tersus Environmental, LLC
1116 Colonial Club Rd
Wake Forest, NC 27587
Phone: +1-919-453-5577
Email: info@tersusenv.com

Emergency telephone number

For leak, fire, spill or accident emergencies, call:

+1-919-453-5577 (Tersus Office Hours, 8:00 AM to 5:00 PM Eastern)
+1-800-424-9300 (Chemtrec, 24 Hour Service – Emergency Only)
+1-919-638-7892 Gary M. Birk (Outside office hours)

2. HAZARD IDENTIFICATION

Classification

Physical Hazards Not classified.
Health Hazards Not classified.
OSHA defined Hazards Not classified.

GHS Label elements, including precautionary statements

Label elements

Hazard Symbol None

Signal Word None.
Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention	Observe good industrial hygiene practice.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazards not otherwise classified (HNOC)

None known.

Supplemental information Contact with acids liberates very toxic gas.

NFPA Ratings (scale 0-4)

Health =1
Flammability =1
Reactivity =0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula Mixture

Hazardous components

Chemical Name	CAS Number	Concentration (wt. %)
Glycerin	56-81-5	40-50
Zero Valent Iron	7439-89-6	30-50
Iron (II) sulfide	1317-37-9	1-4

** All concentrations are in percent by weight unless otherwise indicated. Components not listed are either non-hazardous or are below reportable limits.

4. FIRST AID MEASURES

First-aid Measures General	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves
Eye Contact	Rinse with water. Get medical attention if irritation develops and persists.
Skin Contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. Get medical attention if symptoms occur
Most important	Direct contact with eyes may cause temporary irritation.

Symptoms and Effects, both Acute and Delayed	Symptoms/injuries after inhalation: Difficulty in breathing. Dry/sore throat. Symptoms may be delayed. Symptoms/injuries after skin contact: May cause skin irritation. Symptoms/injuries after eye contact: May cause eye irritation. Symptoms/injuries after ingestion: If a large quantity has been ingested: Abdominal pain. Diarrhea. Nausea. Vomiting.
Indication of any Immediate Medical Attention and Special Treatment Needed	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable Extinguishing Media	None known.
Special Hazard Arising From the Chemical	During fire, gases hazardous to health may be formed. Combustion products may include carbon oxides and iron oxides.
Advice for firefighters	
Firefighting instructions	Move containers from fire area if you can do so without risk
Protection during firefighting	Self-contained breathing apparatus and full protective clothing must be worn in case of fire
General fire hazards	This material will not burn until the water has evaporated. Residue can burn. When dry may form combustible dust concentrations in air

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures	Keep unnecessary personnel away. For personal protection, see Section 8 of the SDS
Environmental Precautions	Avoid discharge into drains, water courses or onto the ground
Methods for Containment and Clean Up	Large Spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see Section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe handling	• Avoid prolonged exposure. Observe good industrial hygiene practices
Conditions for Safe Storage, including any Incompatibilities	• Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	**Type**	**Value**	**Form**
mZVI™ Glycerol (CAS 56-81-5)	OSHA PEL (TWA) (mg/m^3)	5 mg/m^3	Respirable fraction
		15 mg/m^3	Total dust

8.2 Exposure Control

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection	Wear safety glasses with side shields (or googles).
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Skin and body protection	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear suitable protective clothing. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	Ensure adequate ventilation, especially in confined areas.
Thermal hazards	Wear appropriate thermal protective chloring, when necessary.
Biological limits	No biological exposure limits noted for the ingredient(s).
General Hygiene Considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. HANDLING AND STORAGE

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous metallic suspension
Molecular mass	Not available.
Color	Dark gray
Odor	Slight
Odor threshold	Not available.
pH	10 (As shipped) 7-8 (When mixed with water)
Relative evaporation rate (butylacetate=1)	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	Not available.
Self-ignition temperature	Not flammable
Decomposition temperature	Not available.
Flammability (solid, gas)	Not flammable
Vapour pressure	Not available.
Relative vapor density at 20 °C	Not available.
Relative density	Not available.
Density	Not available.
Bulk Density	Not available.
Solubility	Not available.
Log Pow	Not available.
Log Kow	Not available.
Viscosity	3,000 cP (77°F (25°C))
Explosive properties	Not explosive
Oxidizing properties	No oxidizing properties
Explosive limits	Not available.

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Chemical Stability	Material is stable under normal conditions.
Possibility of Hazardous Reactions	Contact with acids will release highly flammable and highly toxic hydrogen sulfide gas. Can react with some acids with the evolution of hydrogen.
Conditions to Avoid	Contact with incompatible materials. Avoid drying out product. May generate combustible dust if material dries.
Incompatible Materials	Strong oxidizing agents. Acids.
Hazardous Decomposition Products	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

Not expected to be acutely toxic

Ingredient	Oral LD50, mg/L	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Glycerol $C_3H_8O_3$ (56-81-5)	Oral - Species: Rat = 27200 mg/kg	Species: Rat > 18700 mg/kg	No data available	No data available	No data available

Skin corrosion/irritation — Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation — Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization — Not a respiratory sensitizer. This product is not expected to cause skin sensitization.

Germ cell mutagenicity — No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity — Not classifiable as to carcinogenicity to humans.

Reproductive toxicity — This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity (single exposure) — Not classified.

Specific target organ toxicity (repeated exposure) — Not classified.

Aspiration hazard — Not an aspiration hazard.

Further information — Contains an ingredient known to produce adverse effects in a small percentage of hypersensitive individuals exhibited as respiratory distress and allergic skin reactions.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ingredient	Crustacea EC50, mg/L
Glycerol (CAS 56-81-5)	Species: Daphnia magma > 10000 mg/l - Duration: 24 hours

Persistence and degradability	No data is available on the degradability of this product
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	None known.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local Disposal Regulations	Dispose in accordance with all applicable regulations.
Hazardous Waste Code	The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORTATION INFORMATION

DOT
Not regulated as dangerous goods.
IATA
Not regulated as dangerous goods.
IMDG
Not regulated as dangerous goods.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
Not Applicable.

Shipping Name: Zero-Valent Iron (ZVI) in Glycerol, Chemicals Not Otherwise Indexed (NOI), Nonhazardous

H.S. Number: 7205.10.0000 in 2905.45.0000

15. REGULATORY INFORMATION

U.S. Federal Regulations
This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA - Toxic Substances Control Act
Not regulated.
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
No listed.
SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053
No regulated.

SARA Superfund Amendments and Reauthorization Act.
Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard Categories
SARA 302 Extremely hazardous substance
Not listed
SARA 311/312 Hazardous
Not listed
SARA 313 (TRI reporting)
Not regulated.

Other Federal Regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) Lis
Not regulated.
Clean Water Act (CWA) Section 112(r) Accidental Release Prevention (40 CFT 68.130)
Not regulated.
Safe Drinking Water Act (SDWA)
Not regulated.

US State Regulations
US. Massachusetts RTK – Substance list
Glycerol (CAS 56-81-5)
US. New Jersey Worker and Community Right-to-Know Act
Glycerol (CAS 56-81-5)
US. Pennsylvania Worker and Community Right-to-Know Law
Glycerol (CAS 56-81-5)
US. Rhode Island RTK
Glycerol (CAS 56-81-5)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Zero valent iron (CAS 7439-89-6)

16. OTHER INFORMATION

Disclaimer: The information contained in this Safety Data Sheet (SDS), as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty, express or implied, or guarantee. Tersus Environmental, LLC urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the

data contained in this SDS and any hazards associated with the product. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since we cannot control the application, use or processing of the product, we do not accept responsibility. Therefore, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product and ensure that the intended use of the product will not infringe any party's intellectual property right. The information presented here pertains only to the product as shipped.

All recommendations for the use of our products, whether given by us, orally or to be implied from data or lab tests results by us, are based on the current state of our knowledge at the time those recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding such recommendation the user is responsible for ensuring that the product supplied by us is suitable for the process or purpose he/she intends to use it.

Due to the proliferation of sources for information such as manufacturer specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

919.453.5577 • info@tersusenv.com • tersusenv.com

End of Safety Data Sheet

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SAFETY DATA SHEET
EDS-ER™

Creation Date: 2/1/2019
Revision Date: 5/29/2023
Version 1.2
SDS # 01A

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: EDS-ER™

Synonyms: Electron Donor Solution – Extended Release

Product Form: Mixture

1.2 Recommended use of the chemical and restrictions on use

Recommended Use: Remediation of contaminated groundwater and soils.
Restrictions on Use: Use as recommended by the label.

1.3 Details of the supplier and of the safety data sheet

Supplier
Tersus Environmental, LLC
1116 Colonial Club Rd
Wake Forest, NC 27587
Phone: +1-919-453-5577
Email: info@tersusenv.com

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:

+1-919-453-5577 (Tersus Office Hours, 8:00 AM to 5:00 PM Eastern)
+1-800-424-9300 (Chemtrec 24 Hour Service – Emergency Only)

2. HAZARD IDENTIFICATION

2.1 Relevant identified uses of the substance or mixture

No applicable GHS categories. This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Other hazards None known.

2.2 Label element The product does not require a hazard warning label in accordance with GHS. The normal safety precautions for the handling of chemicals must be observed.

Hazard statement Non-Regulated Material

Precautionary statement

Prevention No GHS prevention statements
Response No GHS response statements
Storage No GHS storage statements
Disposal No GHS disposal statements

2.3 Classification system

NFPA Ratings (scale 0-4)
Health = 0
Fire = 1
Reactivity = 0

HMIS Ratings (scale 0-4)
Health = 0 Flammability = 1 Reactivity = 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Formula Mixture

3.2 Hazardous components

Chemical Name	Concentration (%)	CAS Number
None	None	None

3.3 Nonhazardous components

Chemical Name	Concentration (%)	CAS Number
Soybean Oil	90 to 93	8001-22-7
Emulsifiers	7 to 10	Proprietary

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Synonyms are provided in Section 1.
Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

4.1 General Information

Check the vital functions. If unconscious place in recovery position and seek medical advice. In case of respiratory arrest, administer artificial respiration. Cardiac arrest, perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Take the victim to a doctor if irritation persists.

Remove affected person from source of contamination.

Eye Contact

Promptly wash eye with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Do not apply (chemical) neutralizing agents. In case of eye irritation consult an ophthalmologist. Remove any contact lenses and open eyelids wide apart.

Skin Contact

Wash off promptly and flush contaminated skin with water. Promptly remove clothing of soaked through and flush skin with water. Get medical attention if irritation persists after washing. Do not apply (chemical) neutralizing agents.

Inhalation

Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion	Drink plenty of water. DO NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person. Keep the affected person warm and at rest.
4.2 Important symptoms and effects (acute and delayed)	Symptoms/injuries after skin contact: Causes skin irritation. Symptoms/injuries after eye contact: Eye damage / irritation.

5. FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media	Alcohol resistant foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite, etc. Water spray
5.2 Specific Hazards Arising from the chemical or mixture	Fire hazard: high. Explosion hazard: Not known. Oxides of the following substances: Carbon, Sulfurous gases (SOx)
5.3 Special Fire Fighting Procedures	Cool containers exposed to flames with water until well after the fire is out. Use water spray to reduce vapors. If the risk of water pollution occurs, notify appropriate authorities. Avoid water in straight hose stream; will scatter and spread fire. Keep upwind. Do not inhale explosions and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cool containers exposed to flames with water until well after the fire is out. Use water spray to reduce vapor. If the risk of water pollution occurs, notify appropriate authorities. Avoid water in straight hose stream; will scatter and spread fire. Wear positive-pressure, self-contained breathing apparatus (SCBA) and chemical protective clothing.
5.4 Unusual Fire and Explosion Hazards	Rags containing this material may heat and burn spontaneously. If a material with a large surface area, like rags, filters etc., is saturated with vegetable oils spontaneous combustion has been known to happen

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke or use open fire or other sources of ignition. Contact with walking surface may result in formation of slippery film/falling hazard.
6.2 First Aid	In case of contact with skin, wash with soap and water. If symptoms occur, seek medical attention. In case of contact with eyes, rinse with plenty of water for at least 15 minutes and see an eye specialist if irritation persists. In case of inhalation, remove to fresh air. In case of ingestion, drink water. If symptoms occur, seek medical assistance.
6.3 Environmental Precautions	Do not discharge into drains, sewers, or watercourses or onto the ground. Inform the relevant authorities if this occurs.
6.4 Methods for Containment and Clean Up	Spilled product should be removed immediately. Provide enough ventilation. Recover product for reuse if possible. Avoid contamination of waterways and (if large quantity) vegetation. Absorb in non-

combustible material, vermiculite, dry sand or earth and place into containers. If in mist form and levels are above 12mg/m3(total), an air purifying respirator (APR) and goggles are recommended Avoid runoff into storm sewers and ditches which lead to waterway.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Contain with applicable regulations. Avoid contact with eyes. Avoid inhalation of vapors and spray/mist. Remove contaminated clothing immediately. Clean contaminated objects and areas thoroughly observing environmental regulations. Keep away from sources of ignition – No smoking. Handle in accordance with good industrial hygiene and safety procedures. Discharge into the environment must be avoided. Keep container tightly closed. Either local exhaust or general room ventilation is usually required.

7.2 Hygiene measures

Handle in accordance with good industrial hygiene and safety procedures. Use good personal hygiene practices.

7.3 Conditions for safe storage (with incompatibilities)

Technical measures: Clean bulk tanks periodically to prevent accumulation of bacteria
Storage conditions: Store in tightly closed, original container in a well-ventilated place. Protect against frost. Protect against direct sunlight.
Storage temperature: See technical datasheet. Above 10°C (50°F) and away from heat or flame.
Storage area: Store in a dry area. Comply with applicable regulations. Collect spillage.
Packaging materials: Stainless steel. Plastic.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

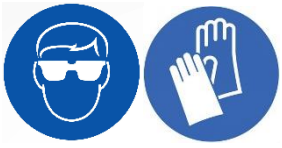
8.1 Control parameters

Exposure guidelines, ingredients with workplace control parameters.

Components with occupational exposure limits

Soybean Oil (8001-22-7)
TWA Short-term value: 5 mg/m3
Long-term value: 15 mg/m3

8.2 Exposure Control



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Do not allow uncontrolled discharge of product into the environment.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Respiratory protection	An approved NIOSH respirator must be worn if exposed to excessive oil vapors
Hand protection	Neoprene. Vinyl, Rubber (natural, latex), Butyl rubber. Wear protective gloves made of the following material: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Polyvinyl chloride (PVC). Manufactured/tested in accordance with EN 374, Avoid the following conditions: Polyvinyl alcohol (PVA).
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. If using hot oil, insulated gloves may be required
Hygiene measures	Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking, and using the toilet. When using do not eat, drink, or smoke.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear yellow to clear brown, amber
Odor	Light Vegetable Oil
Odor threshold	Not determined.
pH	Not determined. Natural when diluted with water.
Melting point /Freezing Point	-2°C
Initial Boiling point and boiling point range	Not determined.
Flash Point	282°C (540°F)
Evaporation rate	Not determined.
Flammability (solid; gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapor pressure	Not determined.
Vapor density	Not determined.
Relative density	0.925 g/cm3 (7.719 lbs/gal)
Solubility (ies)	Dispersible
Partition coefficient: n-octanol/water	Not determined.
Initial Boiling point and boiling point range	Not determined.
Auto-ignition temperature	Unknown
Decomposition temperature	Unknown
Viscosity	80 cP at 24°C; 35 cSt at 40°C

10. STABILITY AND REACTIVITY

10.1 Reactivity No further relevant information available.

10.2 Chemical stability	Stable under normal conditions and use.
10.3 Possibility of hazardous reactions	No dangerous reactions known.
10.4 Conditions to avoid	No further relevant information available.
10.5 Incompatible materials	No further relevant information available.
10.6 Hazardous decomposition products	Oxides of carbon (CO_x).
10.7 Hazardous Polymerization	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

Acute toxicity (oral)	LD50 Species: Rat (male/female) Dose: >2.000 mg/kg Method: OECD 423
Skin	Acute toxicity estimate: 3,571 mg/kg Method: Calculation method
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Ingestion	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
General Remarks	Not classified
Repeated does toxicity	> 5000 mg/Kg bw/day [OECD 422, CAS# 8001-30-7]
Reproductive toxicity	> 2000 mg/Kg bw/day [OECD 422, CAS# 8001-30-7]

11.2 Additional Toxicological Information

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

11.3 Carcinogenic Categories

11.3.1 IRAC (International Agency for Research on Cancer): No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

11.3.2 ACGIH (American Conference of Governmental Industrial Hygienists): No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.

11.3.3 NTP (National Toxicology Program): No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

11.3.4 OSHA (Occupational Safety & Health Administration): No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

12. ECOLOGICAL INFORMATION

12.1 Chemical Fate Information
Product is readily biodegradable in wastewater treatment systems.

12.2 Biodegradability
Slow, not readily degradable Method: OECD 301 D
Chemical Oxygen Demand: 2.324 mg/g DIN 38409 T.31

12.3 Toxicity
Acute toxicity to fish- LC0: >100 mh/L 96h (no data, OCED 203, s-s)
Acute toxicity to aquatic invertebrates: No data
Toxicity to aquatic algae: No data
Toxicity to microorganisms- EC50: >100 mg/L 3 h (a.s. bacteria, OCED 209, s)

12.4 Bioaccumulative potential
No data available

12.5 Aquatoxicity, invertebrates
Species: *Daphnia magna*
Exposure duration: 48 h
EC50: > 100 mg/l
Method: OECD 202

12.6 Aquatoxicity, algae / aquatic plants
Species: *Scenedesmus subspicatus*
Exposure duration: 72 h
EbC50: 341 mg/l
Method: OECD 201

12.7 Mobility in soil
Adsorption coefficient in soil (log Koc): no data

12.8 Results of PBT and vPvB assessment
The substance is not PBT or vPvB

12.9 Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Methods Dispose according to federal, state, and local laws. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Authority. Waste is suitable for incineration.

14. TRANSPORTATION INFORMATION

14.1 U.S. (D.O.T.)

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	N/A
UN/NA:	N/A
Labels:	N/A

14.2 Canada (T.D.G.)

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	N/A
UN/NA:	N/A
Labels	N/A

14.3 IMDG

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	N/A
UN/NA:	N/A
Labels:	N/A

14.4 IATA

Proper Shipping Name:	Chemicals not otherwise indexed (NOI) nonhazardous.
Hazard Class:	N/A
UN/NA:	N/A
Labels:	N/A

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

N/A for product as supplied.

15. REGULATORY INFORMATION

15.1 EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

15.2 SARA 311/312 Hazards No SARA Hazards

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

15.3 California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15.4 The components of this product are reported in the following inventories

CH INV:	On the inventory, or in compliance with the inventory
DSL:	All components of this product are on the Canadian DSL
AICS:	On the inventory, or in compliance with the inventory

NZIoC:	On the inventory, or in compliance with the inventory
ENCS:	On the inventory, or in compliance with the inventory
KECI:	Not in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory
IECSC:	On the inventory, or in compliance with the inventory
TCSI:	On the inventory, or in compliance with the inventory
TSCA:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

16.1 Abbreviation/acronyms used

UVCB (substance)- Chemical substances of Unknown or Variable Composition, complex reaction products and biological materials
CAS (number)- Chemical Abstracts Service
EC (number)- Ref. EINECS/ELINCS number
R.E.A.Ch.- Registration, Evaluation, Authorisation and Restriction of Chemicals
TARIC - Tariffa Integrata della Comunità (Integrated Community Tariff code)
GHS - Globally Harmonised System of Classification and Labelling of Chemicals
CLP - Classification, Labelling and Packaging regulation
n/a - not apllicable
PPE - Personal Protection Equipment
(Q)SAR - (Quantitative) Structure-Activity Relationship
bw – body weight
NOAEL - No Observed Adverse Effect Levels
STOT - Specific Target Organ Toxicity
BCF - Bioconcentration Factor
PBT (substance) - Persistent Bioaccumulative Toxic
vPvB (substance) - very Persistent, Very Bioaccumulative
SVHC (substance) - Substances of Very High Concern

Components not precisely identified are proprietary or non-hazardous.

Mixture classified as not dangerous according to Regulation (EC) 1272/2008.

Observe employment restrictions for people.

Product is not listed with IARC, NTP, ACGIH or OSHA as a carcinogen.

Disclaimer: The information contained in this Safety Data Sheet (SDS), as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty, express or implied, or guarantee. Tersus Environmental, LLC urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since we cannot control the application, use or processing of the product, we do not accept responsibility. Therefore, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product and ensure that the intended use of the product will not infringe any party's intellectual property right. The information presented here pertains only to the product as shipped.

All recommendations for the use of our products, whether given by us, orally or to be implied from data or lab tests results by us, are based on the current state of our knowledge at the time those recommendations are made. When additional information is obtained, these recommendations may be

updated. They may also be influenced by circumstances outside our control. Notwithstanding such recommendation the user is responsible for ensuring that the product supplied by us is suitable for the process or purpose he/she intends to use it.

Due to the proliferation of sources for information such as manufacturer specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

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End of Safety Data Sheet

KB-1®

Bioaugmentation Culture

For bioaugmentation of chlorinated ethene contaminated sites

KB-1® is a naturally occurring, non-pathogenic microbial culture that contains *Dehalococcoides* (*Dhc*), the only group of microorganisms documented to promote the complete dechlorination of chlorinated ethenes to non-toxic ethene. Although *Dhc* are found in the environment, research indicates these microorganisms are not ubiquitous and not all Dhc are capable of complete dechlorination of chlorinated ethenes. At sites where *Dehalococcoides* are absent, tetrachloroethene (PCE) and trichloroethene (TCE) dechlorination typically stalls at cis-1,2-dichloroethene (cDCE), despite ample electron donor availability. KB-1® is used to establish complete dechlorination at sites that do not contain *Dhc* (or the right *Dhc*), and to accelerate dechlorination rates to achieve treatment goals. Bioaugmentation of aquifer systems with KB-1® provides an active microbial community capable of complete reductive dechlorination, ensuring that PCE, TCE, cDCE and vinyl chloride (VC) are completely dechlorinated to ethene, without undue acclimation periods, and at rates that are suitable for achieving remedial goals.

KB-1® is the most field-demonstrated culture of its type, and its robustness has been demonstrated for both source area and plume remediation in both porous media and fractured bedrock environments.

Benefits of KB-1® Include:

- Low cost: single application
- Works with all commonly used electron donors
- Natural microbial culture (not genetically modified or engineered)
- Certified to be free of known human pathogens
- Rigorous quality control procedures ensure each shipment is of the highest quality, stable, safe, effective and free of chlorinated volatile organic compounds
- Shipped overnight in specially designed stainless steel vessels that prevent exposure to air and which are safe and easy to handle

All KB-1® purchases include:

- Technical support from an experienced SiREM field technician to support successful application to your site
- Complimentary Gene-Trac® *Dehalococcoides* tests to verify the successful delivery and persistence of KB-1® in site groundwater
- KB-1® guarantee - complete dechlorination to ethene*

**Some conditions apply*

Contact SiREM for a quotation or more information on our line of leading bioaugmentation cultures

toll free: 1-866-251-1747
phone: (519) 822-2265