Supplemental Site Investigation Report, Remedial Action Options Report and Remedial Action Plan
WB Brewery Building, LLC and City of West Bend Parcels
415 North Main Street / 445 – 485 North Main Street
West Bend, Wisconsin

EPA BROWNFIELD COOPERATIVE AGREEMENT
No. BF-00E01349-0

EPA ACRES Nos.: 239363 and 239919
WDNR BRRTS Nos.: 02-67-586818 & 02-67-586821

Prepared for:
HKS Holdings, LLC
172 North Broadway
Milwaukee, Wisconsin 53202

and

Washington County
333 East Washington Street
West Bend, Wisconsin 53095

Prepared by:
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March 3, 2021
Stantec Project Nos.: 193707897 & 193706313

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CERTIFICATIONS

"I, Erin Gross, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of Chapter (ch.) GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in Chs. NR 700 to 726, Wis. Adm. Code."

Erin N. Gross, PG No. 1378-13 — March 3, 2021 Date

I, Hiedi A. Waller, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Hiedi A. Waller, PE No. E-33741 — March 3, 2021 Date

Sign-off Sheet

This document entitled “Supplemental Site Investigation, Remedial Action Options Evaluation and Remedial Action Plan, WB Brewery Building, LLC and City of West Bend Parcels, West Bend, Wisconsin” was prepared by Stantec Consulting Services Inc. (“Stantec”) for Washington County and HKS Holdings, LLC (“Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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GENERAL INFORMATION

Site Investigation, Remedial Action Options Report, and Remedial Action Plan
WB Brewery Building, LLC and City of West Bend Parcels

FACILITY:	WB Brewery Building, LLC and City of West Bend Parcels 415 & 445-485 North Main Street Parcel Identification Numbers: 291-1119114-0031, 291-1119114-0032, & 291-1119114-0033 City of West Bend, Wisconsin
WDNR FACILITY NO:	#267051620 & #267213870
SIZE:	2.94Acres
WDNR BRRTS NO.:	#02-67-586818 & #02-67-586821
SITE LOCATION:	Southeast ¼ of the Southeast ¼, Section 11, Township 11 North, Range 19 East, Washington County
WTM Coordinates (center of project):	X Coordinate (WTM91): 666952 Y Coordinate (WTM91): 329936
RESPONSIBLE PARTY:	**Former Brewery and Former Car Wash properties:** WB Brewery Building, LLC 1423 Schloemer Drive West Bend, Wisconsin 53095 Phone: (414) 312-3163 Email: chris@schmidtbuild.com
CONTACT:	**Former Brewery and Former Car Wash properties:** WB Brewery Building, LLC 1423 Schloemer Drive West Bend, Wisconsin 53095 Phone: (414) 312-3163 Email: chris@schmidtbuild.com **Parking Lot property:** City of West Bend 1115 South Main Street West Bend, Wisconsin 53095 Phone: (262) 335-5100 Email: wbclk@ci.west-bend.wi.us
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1.0 EXECUTIVE SUMMARY

Stantec Consulting Services Inc. (Stantec) prepared this Supplemental Site Investigation (SSI) Report, Remedial Action Options Report (RAOR), and Remedial Action Plan (RAP) on behalf of Washington County, Wisconsin, and HKS Holdings, LLC of the WB Brewery Building, LLC and City of West Bend parcels located at 415 and 445 - 485 North Main Street in the City of West Bend, Wisconsin (the Site and/or the Property). The propose of the SSI was to further evaluate the source, magnitude and extent of release identified as part of a Phase II environmental site assessment (ESA) (Stantec, 2020a) per ch. NR 716 Wisconsin Administrative Code (WAC) requirements. The SSI was completed in accordance with the scope of work and methodology identified in the SSI Work Plan (Stantec, 2020c), which was approved by the Wisconsin Department of Natural Resources (WDNR) and United States Environmental Protection Agency (EPA) prior to site activities. The SSI was partially funded by an EPA Brownfields Assessment Grant awarded to Washington County under EPA Cooperative Agreement No. BF-00E01349-0. The remainder of the work was funded by HKS Holdings, LLC. Based on the results of the SSI, a RAOR was developed to evaluate options to facilitate redevelopment of the Property for residential and commercial use. A total of three remedial action options were evaluated and the most appropriate option selected per ch. NR 722 WAC Requirements. A RAP was then developed to implement the selected remedy in compliance with chs. NR 718 and NR 724 WAC requirements.

SSI. The concentrations of select polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and eight Resource Conservation and Recovery Act (RCRA) metals (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) exceed one or more respective background threshold value (BTV) and/or the ch. NR 720 WAC residual contaminant levels (RCLs) for protection of groundwater, non-industrial direct contact, or industrial direct contact in select soil samples collected across the Site. The source(s) of residual soil impacts appear to be due to multiple cumulative releases associated with prior industrial/commercial activities and/or placement of an apparent heterogeneous anthropogenic fill unit containing cinders, glass, brick, coal and ash, and slag-like material.

Select VOCs and dissolved RCRA metals (arsenic, chromium, and/or lead) were detected in groundwater samples above respective ch. NR 140 WAC preventive action limits (PAL) and/or enforcement standards (ES) in samples collected during the SSI on the 445 - 485 North Main Street parcel. Petroleum-related VOCs (PVOCs; benzene, ethylbenzene, and naphthalene) were detected above the ch. NR 140 WAC PAL and/or ES in samples collected on the western portion of the parcel. Chlorinated VOCs (CVOCs; cis-1,2-dichloroethene and tetrachloroethene) were detected in samples collected from the northwest portion of the parcel above the ch. NR 140 WAC ES.

The concentrations of VOCs in soil gas samples collected from all soil vapor points are less than WDNR vapor risk screening levels (VRSLs) for residential and small-commercial properties via the sub-slab and deep soil gas exposure pathways. Therefore, the vapor exposure pathway can be excluded.

Proposed Site Reuse. The post-remediation use will be residential/commercial. Initial conceptual reuse plans include demolition of all existing structures, and construction of two new four-story apartment buildings (68,000 square feet [ft^2]), underground parking garage, landscaped areas consisting of 18 inches of clean soil (25,000 ft^2), landscaped river walk and concrete sidewalks (14,300 ft^2), asphalt-paved parking lot and driveway (13,200 ft^2), and first-floor restaurant with outdoor plaza (4,000 ft^2).

Remedial Action Options Evaluation and Remedial Action Plan. A total of three remedial action options were evaluated to achieve remedial objectives for residential/commercial redevelopment. The selected remedy includes limited removal and management of soil and fluids required for construction purposes, construction of a site wide engineered barrier for soil and groundwater concerns; and establishment of institutional controls for remaining soil and groundwater (listing on the WDNR Geographic Information System (GIS) Registry of Closed Remediation Sites). The RAP and accompanying Materials Management Plan (MMP), which will be completed at a future date, will be incorporated into site construction plans and specifications as they are developed.

It is recommended that a copy of this report should be submitted to WDNR for review and approval/ concurrence. A copy should also be submitted to the EPA.

2.0 INTRODUCTION

Stantec prepared this SSI Report, RAOR, and RAP on behalf of Washington County and HKS Holdings, LLC of the WB Brewery Building, LLC and City of West Bend parcels located at 415 and 445 - 485 North Main Street in the City of West Bend, Wisconsin. The purpose of the SSI was to further evaluate the source, magnitude and extent of release identified as part of a Phase II ESA (Stantec, 2020a) per ch. NR 716 WAC requirements. The SSI was completed in accordance with the scope of work and methodology identified in the SSI Work Plan (Stantec, 2020c), which was approved by the WDNR and EPA prior to site activities. The SSI was partially funded by an EPA Brownfields Assessment Grant awarded to Washington County under EPA Cooperative Agreement No. BF-00E01349-0. The remainder of the work was funded by HKS Holdings, LLC. Based on the results of the SSI, a RAOR was developed to evaluate options to facilitate redevelopment of the Property for residential and commercial use. A total of three remedial action options were evaluated and the most appropriate option selected per ch. NR 722 WAC Requirements. A RAP was then developed to implement the selected remedy in compliance with chs. NR 718 and NR 724 WAC requirements.

2.1 SITE DESCRIPTION/BACKGROUND

The Property location is illustrated on Figure 1. The main features of the Property are provided in Figure 2. The Property is approximately 2.94 acres and for ease of identification in this report, the individual parcels and associated information is provided below:

Designation	Address	ACRES Number/ BRRTS Number	FID Number	Parcel Number	Owner	Size (acres)	Land Use / Zoning
"Former Car Wash"	415 North Main Street	239919 / 02-67-586818 (open ERP) 03-67-000841 (closed LUST)	267051620	291-1119114-0031	WB Brewery Building, LLC	0.52	Vacant, Central Business District
"Former Brewery"	445 North Main Street 459-485 North Main Street	239363 / 02-67-586821 (open ERP)	267213870	291-1119114-0032	WB Brewery Building, LLC	2.18	Commercial Storefronts, Mixed-Use Development District.
"Parking Lot"	North Main Street	N/A (downgradient from 02-67-000323, open ERP)	N/A	291-1119114-0033	City of West Bend	0.24	Parking lot, Central Business District

ACRES – EPA Assessment, Cleanup and Redevelopment Exchange System
BRRTS – WDNR Bureau of Remediation and Redevelopment Tracking System
ERP – Environmental Repair Program
LUST – Leaking Underground Storage Tank

The Former Car Wash property includes a one-story building of concrete block construction and a small shed for supply storage on the north side of the main building. The remainder of the property is primarily asphalt paved with minor landscaped areas. The Former Brewery property buildings are built into a hill, with street access at approximately the second floor of the west-facing businesses. Some businesses are accessible from the east as well and are located on the walk-out "basement" floors in these locations. Brick is the primary construction material, with most buildings being between one- to two-stories. The exception is the southern-most Former Brewery property building, which is a three-story building with a two-story wort tower and a large chimney. East of the Former Brewery buildings is paved parking for customers and/or business tenants and a

gravel parking area is located to the northeast. An asphalt bi-modal pedestrian trail (Milwaukee Riverwalk Parkway) is located on the east side of the Former Brewery property adjacent to the Milwaukee River. Access to 415 and 445 N Main Street is provided by the former Franklin Street, which has been vacated east of the Property's access driveways.

The Former Brewery property operated as a brewery from at least 1884 to 1969. The Former Car Wash property operated as a gasoline service station and car wash from at least 1928 to 1974. Five underground storage tanks (USTs) were removed from a single excavation in May of 1990. The Parking Lot parcel served as the right-of-way of Main Street/River Street for approximately 100 years and also included a jewelry shop, cigar store and cigar factory. Historical and present uses adjoining the Property include several historical filling stations with gasoline tanks located west and south of the Property and a malting company and dry cleaner located to the west. The Property and surrounding properties are mostly commercially zoned with some residential properties located further west.

2.2 ENVIRONMENTAL CONCERNS

Stantec (2019b) Former Brewery and Former Car Wash Phase I ESA. Stantec completed a Phase I ESA for the Property on July 25, 2019 (Stantec, 2019b) that identified the following recognized environmental conditions (RECs):

- Key Engineering Group's determination of a probable low-level petroleum release accompanied by laboratory-analyzed data revealing that naphthalene and trimethylbenzene groundwater contamination exceed their respective ch. NR 140 WAC PALs on the Former Brewery property. In 2011 an investigation was conducted to locate the suspected UST associated with this petroleum release, on the north side of the main Former Brewery property. After hand-excavating the suspected UST site, it was determined that no tank existed and that the piping seen at the surface was abandoned piping from a former water conveyance system.
- The potential for release from petroleum underground storage tank systems, the oil and grease separator, and related sanitary sewer connection at the Former Car Wash property (BRRTS number 03-67-000841). The WDNR was notified of soil and groundwater contamination on the property from leaded and unleaded gasoline on June 14, 1990. Per the site file, five USTs were removed from a single excavation on May 23 and 24, 1990, and the 2,000-gallon heating oil UST was never used. Ten soil samples were collected from the excavation and beneath the fuel dispenser islands onsite, and contamination was found beneath both fuel islands and from the southern end of the UST excavation site. Eight additional soil borings were then performed around the perimeter of the excavation and fuel islands and assessed for total petroleum hydrocarbons (TPH); it was discovered that minimal TPH was present in the west corner of the excavation. The WDNR required over-excavation to remove contamination under the fuel islands and dispensers (50 cubic yards of petroleum contaminated soil). Remediation was performed and the case was closed with no further action required on September 10, 1991.
- The potential for fill of unknown quality to be present at the Property
- Three adjoining properties – 432 and 444 North Main Street, and 712 West Washington Street – with WDNR Registered Leaking Underground Storage Tank and/or Environmental Repair Program (ERP) cases that have potential based on proximity and/or perceived groundwater flow direction to impact soil and/or groundwater quality at the Property
- Potential for offsite contaminant migration to the Property from the upstream property at 611 Veterans Avenue.

The greatest potential environmental risks and liability associated with the Property appears to be the past uses, fill material of unknown quality (common contaminants PAHs and RCRA metals) and petroleum (common contaminants VOCs and PAHs) from USTs.

Stantec (2020a) Phase II ESA. The Stantec Phase II ESA identified a significant quantity of anthropogenic fill (cinders, coal and ash, and slag-like material) and reworked native soil at the Property (Stantec, 2020a). The concentrations of RCRA metals, PAHS, and VOCs in soil/fill exceeded one or more ch. NR 720 WAC RCLs and/or BTVs. Dissolved arsenic and benzene in groundwater exceeded one or more ch. 140 WAC PAL and/or ES. The Phase II ESA was submitted to WDNR in August 2020 and cases were opened in the BRRTS database for the two affected parcels within the Property boundary the same month.

Stantec (2020b) Parking Lot Phase I ESA. Stantec completed a Phase I ESA for the Parking Lot parcel on September 10, 2020 (Stantec, 2020b) that identified the following RECs:

- Storage and use of hazardous substances and/or petroleum products associated with historic industrial property uses of the property (cigar factory) is likely and may have impacted soil and/or groundwater on the Parking Lot parcel;
- Storage and use of hazardous substances and/or petroleum products associated with historic uses of the surrounding properties, including a former brewery (northeast of the Parking Lot), several filling stations with gasoline tanks (west, south, and east of the Parking Lot), historical auto shop to the north, a car wash to the east, and a dry cleaner to the west may have impacted soil and/or groundwater on the Parking Lot parcel;
- The potential for fill of unknown quality to be present at the Parking Lot parcel, particularly due to anthropogenic fill with heavy metals and PAHs detected on the adjoining Former Car Wash property to the east;
- The west-adjoining property across North Main Street, 712 West Washington Street with an open ERP case with reported groundwater contamination above the ch. NR 140 WAC ES and perceived groundwater flow direction to impact soil, vapor, and/or groundwater quality at the Parking Lot parcel; and
- The southwest-adjoining property, 320 North 7th Avenue/325 North 8th Avenue, is a closed leaking underground storage tank (LUST) site. This site represents a both a REC and a historical recognized environmental condition (HREC) due to possible contamination existing within the Main Street ROW that could affect soil or groundwater quality at the Parking Lot parcel. The HREC assignment is given since the site has been addressed to the satisfaction of the applicable regulatory authority and meets unrestricted use criteria without subjecting the property to any required controls.

Stantec (2020b) Site Investigation Work Plan. The Phase II ESA report completed by Stantec identified significant impacts to soil and groundwater on the Property (Stantec, 2020a). A ch. NR 716.09 WAC SSI Work Plan was developed to further identify the source and delineate the extents of residual subsurface impacts throughout the redevelopment site. The SSI Work Plan was submitted to WDNR for review on November 12, 2020 (Stantec, 2020c).

2.3 PREVIOUS RESPONSE ACTIONS

The Former Car Wash, 415 North Main Street, is listed in the UST and Department of Agriculture, Trade and Consumer Protection (DATCP) databases for its operations as “West Bend Car Wash”. Five USTs used for retail fuel sales were identified as being closed/removed from the Property – two 10,000-gallon unleaded gasoline tanks, one 8,000-gallon leaded gasoline tank, one 5,000-gallon unleaded gasoline tank, and one 2000-gallon fuel oil tank. No removal dates for these tanks were listed in the UST database. The LUST and BRRTS databases also list the Property for its operations as “West Bend Mobil Car” (BRRTS # 03-67-000841). The WDNR was notified of soil and groundwater contamination on the property from leaded and unleaded gasoline on June 14, 1990. Per the site file, five USTs were removed from a single excavation on May 23 and 24, 1990, and the 2,000-gallon heating oil UST was never used. Ten soil samples were collected from the excavation and beneath the fuel dispenser islands onsite, and contamination was found beneath both fuel islands and from the southern end of the UST excavation site. Eight additional soil borings were then performed around the perimeter of the excavation and fuel islands and assessed for TPH; it was discovered that minimal TPH was present in the west corner of the excavation. The WDNR required over-excavation to remove contamination under the fuel islands and dispensers. Remediation was performed and closed with no further action required on September 10, 1991.

On April 2, 2010 Key Engineering Group performed a Phase I ESA for the “Former Lithia Brewing Company” at 445 – 485 North Main Street, West Bend, Wisconsin (Key Engineering, 2010a). Their report revealed no evidence of RECs in connection with the Former Brewery property, with the exception of there being potential for a fuel oil UST, as an apparent ventilation pipe was observed during Site Reconnaissance. A 275-gallon aboveground storage tank (AST) was also noted on the north side of the southern-most building. On June 14, 2010 Key Engineering Group performed a Phase II ESA to investigate the REC from the Phase I ESA (Key Engineering, 2010b). They advanced one soil boring on May 25, 2010 to 20 feet below ground surface (ft bgs) on the north side of the main Former Brewery building, in the middle of the alleyway just north of the 275-gallon

AST discovered during the Phase I ESA. Field screening of the soil indicated that there was petroleum odor. A temporary well was installed, and a soil sample collected from between 15 – 16 ft bgs and a groundwater sample were submitted for laboratory analysis for VOCs and PAHs. Soil results indicated that several VOCs and PAHs were detected but not above the ch. NR 720 WAC RCLs. Groundwater results indicated that naphthalene and trimethylbenzene was detected above their respective ch. 140 WAC PALs, but not above their respective ch. NR 140 WAC ESs (approximate location is depicted on Figure 2). Key Engineering Group concluded that a low-level petroleum release occurred at the Former Brewery property and recommended that the release be reported to the WDNR.

On September 29, 2011 Professional Geologist Todd. A. Rickey performed an investigation to locate the potential UST on the north side of the main Former Brewery property building highlighted in Key Engineering Group's Phase I ESA in 2010 (Rickey, 2011). After hand-excavating the suspected UST site, it was determined that no tank existed and that the piping seen at the surface was abandoned piping from a former water conveyance system. As a result of this finding, a professional opinion was expressed that reporting the contamination discovered associated with a suspected UST to the WDNR would not be necessary, as there was no actual UST to associate the contamination with.

The presence of contamination at the Property was confirmed during the Phase II ESA and reported to the WDNR in August 2020. There are no records of environmental response actions having been completed at the Former Brewery parcel.

2.4 INTERIM MEASURES OR REMEDIAL ACTIONS

Concentrations of RCRA metals, VOCs, and several PAHs were detected in soil primarily covered with reasonable interim barriers, such as building slabs and/or asphalt-paved parking lots. The only exception is the northern portion of the Property that is covered with a gravel parking lot. The Property and the surrounding area are currently utilized for commercial purposes. Therefore, based on the current plans to proceed with redevelopment of the Property within the next year, no immediate or interim measures have been implemented or are currently planned. Interim measures could be warranted if the redevelopment is subject to significant delay.

3.0 DESCRIPTION OF INVESTIGATION

The methodology and results of both the Phase II ESA (Stantec 2020a) and SSI are provided in the following sections to provide a comprehensive summary of the recent property-wide assessment. Field activities were completed in a phased approach in accordance with the Phase II ESA and SSI Site-Specific Sampling and Analysis Plans (Stantec, 2019c; Stantec, 2020c) using sampling and analyses procedures outlined in the Quality Assurance Project Plan (QAPP) prepared by Stantec (Stantec, 2015; Stantec, 2019a).

3.1 SOIL

As part of the Phase II ESA in 2019, Probe Technologies, Inc., of West Bend, Wisconsin (Probe Tech) advanced 13 soil boreholes at various locations throughout the Property on September 13, 2019, under the supervision of Stantec personnel. Soil borings were advanced with a truck-mounted Geoprobe® using direct-push sampling methods. Boreholes extended up to 16 ft bgs, or to refusal. Boring logs and WDNR well abandonment forms have been previously submitted with the Phase II ESA (Stantec, 2020a)

As part of the SSI in 2020, GESTRA Engineering, Inc. advanced an additional 17 soil boreholes at targeted locations at the Property on September 16-18, 2020 to further delineate soil impacts identified during the Phase II ESA. Soil borings were advanced with a track-mounted Geoprobe® direct push rig or 3.25-inch hollow-stem auger split-spoon sampling methods. Boreholes extended up to 20 ft bgs, or to refusal.

Prior to the start of soil sampling, boring locations were cleared for safe working clearance from overhead and underground utility lines by contacting Digger's Hotline at least three workdays prior to the start of sampling. Contractors for Diggers Hotline marked the locations for electric and gas utility lines servicing the building. Additionally, a geophysical survey utilizing ground penetrating radar survey techniques was performed on September 16, 2020 to provide additional utility location.

All probe drilling rods and soil sampling equipment were clean when brought on the Property and were cleaned between each borehole. Hydraulic probe sampling barrels were decontaminated with an Alconox® equivalent wash and water rinse prior to the collection of each soil sample. New disposable plastic "sleeve" liners were used for collection of each soil sample to minimize the potential for cross contamination between soil samples.

Soil samples were collected continuously from the ground surface to the bottom of each boring. Soil samples were visually and physically examined by Stantec field geologists and observations made of the general lithology (percentages of gravel, sand, silt, and clay), visible layering, evidence of non-native fill/anthropogenic materials, indications of chemical or other staining, odors, and other distinctive features. Field observations are described on soil boring logs provided in Appendix A. Following sampling, boreholes TW-3 through TW-9 were completed as a one-inch diameter groundwater monitoring wells, as discussed further in Section 3.2. Boreholes not completed as wells were immediately abandoned in accordance with ch. NR 141 WAC requirements by backfilling with granular bentonite. Borehole abandonment forms are included in Appendix A.

Portions of the soil from approximately every two-foot depth interval were field screened for the presence of VOCs using a photoionization detector (PID) equipped with an 11.7 electronvolt (eV) lamp and calibrated to a 100 parts per million isobutylene gas standard. Approximately three to six inches of soil core from each two-foot interval was placed into Ziploc® storage bags, sealed, labeled, and stored for a period of approximately one-half hour. The samples were tested by piercing the side of each Ziploc® bag with the tip of the PID probe and then recording the maximum meter reading within an approximate five second measurement period. PID measurements are included on the soil boring logs presented in Appendix A.

Selection of soil samples for laboratory analysis was based upon depth, presence of suspected fill materials, moisture content, and field screening readings, in accordance with rationale detailed for each boring in the Stantec SSSAP (2019c) and Stantec SSI SSSAP (2020c). Soil samples selected for analysis were placed directly into laboratory-supplied containers, preserved as appropriate, and immediately placed in a cooler on ice for shipping to TestAmerica Laboratories, Inc. in University Park, Illinois (State of Wisconsin Laboratory Certification No. 999580010), under a chain of custody for analysis. Soil sample analyses included VOCs (SW846 Method 8260B), PAHs (SW846 Method 8270D), and RCRA metals (SW846 Method 6010B and 7471A). Field duplicate soil samples from soil borings DUP 4/TW-7 and DUP 5/SB-21 were submitted for arsenic, lead, VOC, and/or PAH analysis. In addition, one "Trip Blank" was submitted to the laboratory for VOC analysis. One soil matrix spike/matrix spike duplicate (MS/MSD) sample was also submitted to the laboratory

for VOC, RCRA metal, and PAH analysis. Laboratory reports are presented in Appendix B; analytical data are summarized on Table 1 and discussed in Section 5.2. Quality assurance/quality control (QA/QC) data for soil are discussed in Section 5.5.1 and summarized on Table 2a.

The horizontal locations of the soil borings were surveyed by Stantec using a sub-meter global positioning satellite (GPS) survey unit and locations are illustrated on Figures 2 through 6.

3.2 GROUNDWATER

As part of the Phase II ESA on September 13, 2019, Probe Tech constructed two temporary one-inch diameter schedule 40 polyvinyl chloride (PVC) wells with 10-foot long 10 slot (0.010-inch) PVC screens in boreholes SB-6 (TW-1) and SB-7 (TW-2) (Stantec, 2020a). On September 13, 2019, the temporary monitoring wells were decommissioned by removal of the casing and screen and backfilled with bentonite. Boring logs and WDNR well abandonment forms have been previously submitted with the Phase II ESA (Stantec, 2020a).

As part of the SSI on November 17-18, 2020, GESTRA Engineering, Inc. constructed seven permanent one-inch diameter schedule 40 polyvinyl chloride (PVC) wells with 10-foot long 10 slot (0.010-inch) PVC screens in boreholes TW-3 through TW-9. These wells were installed between 13.4 and 23.4 ft bgs. Quartz filter sand was placed in the annular space between the borehole wall and the outside of each screen. The annular space above the filter pack was filled to the ground surface with granular bentonite to serve as a seal to prevent filtration of surface water runoff into the borings which would potentially compromise the integrity and representativeness of the groundwater sample data. The wells were protected with flush mounted steel protective covers to secure the wells while assessment activities are on-going.

The elevation of the water table and the presence/thickness of immiscible layers within the well screen were measured on November 19, 2020 in wells TW-3 through TW-9 using an electronic Solinst interface probe. Following recovery, groundwater samples were collected from using low-flow sampling techniques. Groundwater samples collected for dissolved RCRA metals analyses were obtained with a peristaltic pump and field-filtered through an inline 0.45 micrometer disposable high-capacity filter capsule directly into a laboratory-supplied sample jar containing a nitric acid preservative. Samples collected for VOC analyses were collected using a peristaltic pump and poured directly into a laboratory-supplied sample jar containing a hydrochloric acid preservative. Samples collected for PAH analyses were collected with an effort to minimize the amount of suspended sediment in the groundwater and placed into one-liter amber glass jars without preservative. Once filled, sample containers were immediately placed in a cooler on ice and shipped for analysis to TestAmerica Laboratories, Inc. in Chicago, Illinois (State of Wisconsin Laboratory Certification No. 999580010) under chain of custody for analysis.

Groundwater samples were analyzed for VOCs (SW846 Method 8260B), dissolved RCRA metals (SW846 Method 6010B and 7471A), and PAHs (SW846 Method 8270D). A “Trip Blank” was submitted to the laboratory for VOC analysis. One groundwater MS/MSD sample was also submitted to the laboratory for VOC, dissolved RCRA metal, and PAH analysis. Laboratory analytical reports are presented in Appendix B. Laboratory analytical data for groundwater are summarized on Table 3 and discussed in Section 5.3. Monitoring well construction forms are presented in Appendix A. QA/QC data for soil are discussed in Section 5.5.2 and summarized on Table 2b.

3.3 SOIL VAPOR

On November 16-17, 2020, Stantec installed two sub-slab soil vapor and four soil vapor points.

3.3.1 Quality Control for Vapor Sampling Points

Prior to sub-slab vapor and soil vapor sampling, the connections, fittings, and other parts associated with the sampling equipment were checked to verify they were airtight. In cooperation with the EPA, the WDNR created a guidance document that outlines a two-step method for quality control to ensure that vapor/air samples are representative of the existing sub-slab vapor. Prior to collecting each sample for laboratory analysis, Stantec conducted quality control measures following this guidance as described below.

Step One – Shut-In Test

The shut-in test measured the airtightness of the fittings between the sample probe and the sample container. This process included the following steps:

1. A vacuum gage was connected to the sampling line between the soil vapor point and sample container (laboratory-supplied Summa canister).

2. Valves to the soil vapor point and Summa canister were shut and air was removed from the sampling line using a hand-pump inducing a vacuum in the line of greater than 50 inches of water (or, approximately 4 inches of mercury).

3. The vacuum reading was monitored for at least one minute to determine if vacuum remained steady. If the vacuum did not remain steady after one minute the connections were tightened and the shut-in test was repeated until a steady vacuum reading was observed.

Step Two – Helium Shroud Test

The helium shroud test is used to determine if the soil vapor point seal is preventing outside air from entering the soil vapor point. This process included the following steps:

1. A shroud was placed over the soil vapor point and helium gas was introduced at a concentration of at least 20% by volume into the shroud.

2. A vapor sample was then withdrawn from the vapor point and screened for helium using a Multi-Gas Detector (MGD)-2002 Multi-Gas Leak Locator. Helium concentrations greater than 5% of the helium shroud concentration indicates the soil vapor point should be resealed and retested. The helium shroud test was repeated until measured helium concentrations were less than 5% within the vapor point.

Stantec successfully completed the shut-in and helium shroud tests at each sub-slab vapor and soil vapor point. The helium concentrations introduced to each shroud ranged from 31.9% to 32.1%, and the helium concentration in each sample was 0%.

3.3.2 Sub-Slab Soil Vapor

On November 17, 2020, Stantec sampled the installed sub-slab vapor points for VOCs (VP-1 and VP-5; Figure 2). After successfully completing quality control checks, Stantec collected sub-slab soil vapor samples from VP-1 and VP-5 using 6-liter Summa canisters provided by TestAmerica, each equipped with a 30-minute air flow controller (200 milliliters per minute [mL/min]). The soil vapor samples were shipped to TestAmerica in Knoxville, Tennessee (Wisconsin State Program certified, identification number 998044300) under chain-of-custody protocol to be analyzed for VOCs using U.S. EPA Method TO-15. After completion of sample collection, the hose barb was removed from each vapor point and replaced with a flush mounted cap, allowing all installed vapor points to remain in place flush with the concrete floor surface. Laboratory results are provided in Attachment B and summarized and comparted to WDNR Vapor Risk Screening Levels on Table 4.

3.3.3 Soil Vapor Points

On November 16, 2020, four soil borings (VP-2, VP-3, VP-6, and VP-7; Figure 2) were advanced by GESTRA Engineering, Inc. to between 3.5 and 5 ft bgs using direct-push Geoprobe® drilling techniques methods identical to those described in Section 3.1. The soil borings terminated within the vadose zone at a depth approximating the slab/foundation wall depths of the proposed redevelopment buildings. Soil boring logs are provided in Attachment A.

Each soil boring was completed as a soil vapor point consisting of a slotted sampling point attached to 1/8-inch inside diameter rigid-wall Teflon® tubing which extended to the surface. The sampling point was placed above a six-inch base of #10-20 silica sand. Sand was then backfilled to six inches above the top of the screen. Approximately six inches of dry granular bentonite were placed on top of the sand pack, and the remainder of the borehole was grouted to the surface with hydrated bentonite. Drilling equipment was decontaminated between each location. Sample locations are illustrated on Figure 2.

Stantec collected a soil gas sample from four vapor points on November 17, 2020 after successfully completing quality control checks as noted in Section 3.3.1. Each soil gas sample was collected in a laboratory certified 6-Liter Summa™ canister paired with a laboratory-certified flow controller with built-in particulate filter that was calibrated to collect vapor samples at approximately 200 mL/min. The Summa™ canister's valve was closed and sampling ceased when a vacuum of between 3 to 5 inches of mercury remained inside the canister.

Sample collection data for each probe was recorded on the laboratory chain of custody (Attachment B). Soil gas canisters were properly labeled and placed within secure packaging received from the laboratory. Stantec delivered the samples to TestAmerica following chain-of-custody procedures. The soil gas samples were analyzed for VOCs according to EPA method TO-15. The laboratory report is provided in Attachment B. Concentrations of VOCs in soil gas samples are summarized and comparted to WDNR Vapor Risk Screening Levels on Table 4.

4.0 APPLICABLE CLEAN-UP CRITERIA

Soil. Procedures for establishing soil clean-up standards applicable to sites in Wisconsin with documented soil contamination are specified in ch. NR 720 WAC. The most current revisions to ch. NR 720 WAC were completed during December 2018 (WDNR, 2018) and will be used in the evaluation of the analytical results for soil samples presented on Table 1.

Soil clean-up standards depend in part on current and anticipated future land use. As discussed in Section 2, the Property is commercially zoned and future anticipated use will be commercial/residential. Therefore, the non-industrial classification will be used to assess clean-up criteria for the Property.

RCLs are numerical soil clean-up standards that are calculated for a minimum of two exposure pathways – direct contact by humans with exposed soil, and leaching of contaminants from soil into groundwater. A variety of methods may be used to calculate RCLs, subject to WDNR approval. The approach used for the Property was to use a RCL spreadsheet developed by the WDNR's Remediation and Redevelopment Program staff for use by consultants. The spreadsheet (WDNR, 2018) is updated periodically by WDNR staff and utilizes toxicity information maintained on the EPA Regional Screening Level website: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables. As toxicity data are updated periodically for different types of contaminants, the WDNR RCL spreadsheet is similarly updated. The version used to determine RCLs for this Property is the December 2018 update (WDNR, 2018) as summarized on Table 1.

As part of the revisions to ch. NR 720 WAC, WDNR adopted use of BTVs for select metals in soil whose occurrence may be attributable in whole or in part to natural occurrence in Wisconsin soil. BTVs are "non-outlier trace element maximum levels in Wisconsin surface soils" as determined through a state-wide study (United States Geological Survey [USGS], 2011). BTVs were established for 16 metals including aluminum, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, strontium, vanadium, and zinc. Probably the most significant BTV is the value of 8.3 milligrams per kilogram (mg/kg) established for arsenic. This value is significant because the RCLs calculated for the direct contact and groundwater pathways are significantly lower than this value, which in the past resulted in sites with relatively low levels of naturally occurring arsenic significantly exceeding the clean-up levels. If measured levels of arsenic or the other metals for which BTVs have been established are below the BTVs, these levels can be attributed to natural occurrence without the need to perform a WDNR-approved site-specific study to determine background levels where no BTV have been established for. Four of the seven other metals detected in soil at the Property have established BTVs. The established BTVs for the other detected metals at the Property are 364 mg/kg for barium, 1.07 mg/kg for cadmium, 43.5 mg/kg for total chromium, and 51.6 mg/kg for total lead.

Under ch. NR 722 WAC, WDNR has developed a spreadsheet to evaluate the cumulative carcinogenic risk from seven polycyclic aromatic hydrocarbons (cPAHs). For samples with detections below standards, the hazard quotient, cancer risk, and risk result are calculated for each sample using the WDNR's RCL calculation spreadsheet. For an individual sample to "pass," all three of the following criteria must be met: (a) the number of constituents for which there are individual exceedances must equal "0;" (b) the hazard quotient must be ≤ 1.0; and (c) the cumulative cancer risk must be ≤ 1.0E-06. Criteria for which the individual samples fail, the spreadsheet notes that, "This site sampling location will need either further clean-up to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway." As existing asphalt can serve as cap, Table 1 notes whether each boring is in a paved or unpaved location.

Waste Characterization Screening. EPA thresholds for toxicity (in milligrams per liter) are presented in 40 Code of Federal Regulations (CFR) 261.24, which are mirrored in ch. NR 661 WAC, Subchapter C, Table 5. Waste disposal screening limits (in mg/kg) for RCRA metals were calculated by multiplying the EPA toxicity thresholds by 20 as summarized on Table 5. EPA has not published toxicity thresholds for PAHs evaluated in this study.

Groundwater. Public health-related groundwater quality standards are set forth by ch. NR 140 WAC. Standards are listed for substances of public health concern (defined as substances having carcinogenic, mutagenic, or teratogenic properties or interactive effects) and substances of public welfare concern (defined as having a negative aesthetic value but with little threat to human health). Two levels of standards are listed; the PAL and the ES. The ES represents a concentration above which action generally must be taken to improve the quality of groundwater. The PAL represents a lower concentration (usually 10 to 20 percent of the ES)

above which groundwater quality should be monitored. PAL and ES values relevant to constituents evaluated in groundwater samples collected at the Site are summarized in Table 3 and represent the values included in the ch. NR 140 WAC published in January 2020 (https://docs.legis.wisconsin.gov/code/admin_code/nr/100/140).

Vapor. Stantec compared the sub-slab vapor and soil vapor probe analytical results to calculated screening levels for sub-slab vapor to indoor air in accordance with the guidelines presented in the WDNR guidance entitled “Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin” dated December 2010 and updated January 2018 (WDNR, January 2018). The WDNR assigned indoor air vapor action levels and VRSLs based on the EPA Air Screening Levels. The EPA provided updated regional screening level tables in April 2019. These April 2019 screening levels have been utilized for this evaluation. Applicable VRSLs for contaminants detected during sub-slab vapor and soil vapor sampling at the Property are included on Table 4.

5.0 RESULTS OF INVESTIGATION

5.1 REGIONAL PHYSIOLOGY, GEOLOGY, AND HYDROGEOLOGY

The Property is located within the southeast 1/4 of the southeast 1/4 of Section 11, Township 11 North, Range 19 East, Washington County, Wisconsin.

5.1.1 Topography and Regional Geology

As illustrated on Figure 1, the surface elevation at the Property slopes downward from 910 feet above mean sea level (ft amsl) to 900 feet amsl (along the Milwaukee Riverwalk Parkway) in a eastern direction followed by the Milwaukee River, which has an approximate water elevation of 890 ft amsl along the northern parcel. A dam across the Milwaukee River east of the Former Car Wash drops the river elevation to approximately 883 ft amsl on its south side. Based on topography, surface water on the Property flows overland from west to east into the Milwaukee River.

The Property is located in the area covered by the Laurentide Ice Sheet during the Wisconsin Glaciation (WGNHS, 2011) resulting in topography that is rolling, moderately hilly, and containing numerous drumlins. In general, the area is covered by greater than 50 feet of unconsolidated glacial till. Beneath the unconsolidated sediment is the Silurian Racine Formation, a medium- to coarse-grained and fossiliferous dolomite (Massie-Ferch and Peters, 2004a). The depth to bedrock on the Property is expected to be between 50 to 100 ft bgs (Massie-Ferch and Peters, 2004b).

5.1.2 Soil Lithology

Up to 90% of the combined area of the Property is covered by buildings or paved surfaces. Grass lawn or a gravel parking area (on the northern portion of the Property) cover the remainder of these parcels.

The characteristics of the soil at each boring located are detailed on the boring logs presented in Appendix A. Native soil at the Property was described at all boring locations as poorly graded sand to clay with low plasticity and trace silt with a gravel at depth in most locations. Above the native material in most locations was a sand and gravel and non-anthropogenic fill material up to nine feet in thickness on the Former Car Wash parcel. Cinders, glass, brick, coal and ash, and slag-like material was observed east of the commercial buildings and former brewery at Former Brewery parcel between zero and ten ft bgs (SB-7/TW-2, SB-9, SB-10, SB-12, TW-4, TW-5, TW-6, TW-8). Underlying native materials encountered generally consisted of clays and silts followed by gravel/sands with lenses of silt. Cross sections depicting horizontal and vertical soil patterns are presented on Figures 3a/3b.

5.1.3 Hydrogeology

The measured depth to groundwater ranged between approximately 5.26 and 18.53 ft bgs in wells TW-3 through TW-9, which corresponds to an elevation between 895.17 and 888.04 ft amsl (see Table 6). Groundwater flow is generally in the east-southeast direction with an approximate hydraulic gradient of 0.025. The shallow groundwater is primarily localized within a sandy-gravel layer.

5.2 SOIL QUALITY AND ANALYTICAL RESULTS

Table 1 compares the concentrations of detected constituents in soil to applicable ch. NR 720 WAC RCLs for the ch. NR 720 WAC groundwater protection pathway and the direct contact pathway. Direct contact RCLs are provided for both industrial and non-industrial land use scenarios. Additionally, the spatial relation of soil concentrations above ch. NR 720 WAC RCLs are depicted on cross sections A-A' and B-B' (Figure 3a/3b). The RCLs for non-industrial land uses are applicable to the Property, but the RCLs for industrial use could be applicable to evaluating management options for soil. Soil borehole locations are shown on Figures 2 through 5. Laboratory reports for soil samples are included in Appendix B.

5.2.1 PID Data

Petroleum (TW-7) and solvent odors (TW-3) were observed in soil borings TW-7 and TW-3, respectively. Elevated PID readings, greater than 10 instrument units (iu), between 36.2 and 324.8 iu, were recorded in soil samples collected from these boreholes which are located downgradient from off-site LUST sites (BRRTS #03-

67-004978 and #03-67-004419). The field screening results are included on the soil boring logs presented in Appendix A.

5.2.2 RCRA Metals

During the 2019 Phase II ESA, thirteen soil samples and one duplicate were analyzed for eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). The following samples were detected above both the BTV and ch. NR 720 WAC direct contact and/or the ch. NR 720 WAC groundwater protection RCLs in the following sample locations

RCRA Metals	Sample Location, Depth, and USCS Soil Type									
	SB-1 (2-4 ft bgs)	**SB-2 (3-4 ft bgs)**	**SB-3 (5-6 ft bgs)**	**SB-4 (2-4 ft bgs)**	**SB-8 (3-4 ft bgs)**	**SB-9 (1-3 ft bgs)**	**SB-10 (2-4 ft bgs)**	**SB-11 (2-4 ft bgs)**	**SB-12 (3-4 ft bgs)**	**SB-13 (2-4 ft bgs)**
	Fill, Black flecks	SC	PT	SC	SC	Fill, Coal/ Cinders	Fill, Cinders/ Slag	SC	Fill, Black/Metallic Pieces	GW
Arsenic	*2.6 mg/kg*	*2.5 mg/kg*	*5.0 mg/kg*	*5.8 mg/kg*	*3.9 mg/kg*	12 mg/kg	9.2 mg/kg	*2.3 mg/kg*	9.9 mg/kg	*3.5 mg/kg*
Lead	*22 mg/kg*	41 mg/kg	93 mg/kg	300 F2	61 mg/kg	56 mg/kg	89 mg/kg	190 mg/kg	51 mg/kg	*21 mg/kg*
Selenium	*<0.58 mg/kg*	*<0.58 mg/kg*	*<0.58 mg/kg*	1.2 mg/kg	*<0.58 mg/kg*	*1.2 mg/kg*	*<0.58 mg/kg*	*<0.58 mg/kg*	1.3 mg/kg	0.68 mg/kg
Silver	1.3 mg/kg	1.5 mg/kg	2.1 mg/kg	2.8 mg/kg	2.2 mg/kg	2.0 mg/kg	2.1 mg/kg	1.6 mg/kg	2.2 mg/kg	2.2 mg/kg
Mercury	*0.045 mg/kg*	*0.051 mg/kg*	*0.14 mg/kg*	0.40 mg/kg	*0.050 mg.kg*	*0.063 mg/kg*	*0.06 mg/kg*	*0.043 mg/kg*	0.23 mg/kg	*0.046 mg/kg*

*Blue shading indicates a concentration exceeding WDNR RCL for protection of groundwater. The red shading indicates a concentration exceeding WDNR RCL for industrial **and** non-industrial direct contact risk. Italic text indicates detect below RCLs and underlined text indicates the concentration is above the BTV, if a BTV value is designated for that constituent.*

During the 2020 SSI, 18 soil samples and one duplicate were analyzed for RCRA metals which were detected above both the BTV and ch. NR 720 WAC direct contact and/or the ch. NR 720 WAC groundwater protection RCLs in the following sample locations:

RCRA Metals	SB-14 (0-2 ft bgs)	SB-18 (0-2 ft bgs)	VP-3 (0-0.5 ft bgs)	TW-4 (0-2 ft bgs)	TW-5 (3-4 ft bgs)	TW-6 (4.5-6 ft bgs)	TW-7 (4-6 ft bgs)
	SM	SM	Fill (coal)	Fill (glass/coal) / SM	Fill (glass/coal/slag)	Fill (coal)	CL
Arsenic	*2.2*	*3.7*	*47*	*5.5*	*5.9*	7.1	*6.2*
Barium	*43*	*97*	*100*	*130*	*410*	*240*	*81*
Cadmium	*0.26*	*0.55*	*<0.18*	*0.47*	*1.4*	*0.79*	*<0.042*
Lead	*54*	*79*	*49*	*110*	*240*	*56*	*11*
Selenium	*<0.62*	*<0.65*	*<2.9*	0.72 J	*<0.65*	1.1 J	0.80 J
Silver	<0.14	*<0.14*	*<0.63*	*<0.13*	*<0.14*	*<0.16*	*<0.15*
Mercury	*0.068*	*0.045*	*0.12*	0.45	*0.19*	*0.11*	*0.025*

*Blue shading indicates a concentration exceeding WDNR RCL for protection of groundwater. The red shading indicates a concentration exceeding WDNR RCL for industrial **and** non-industrial direct contact risk. Italic text indicates detect below RCLs and underlined text indicates the concentration is above the BTV, if a BTV value is designated for that constituent.*

The reported concentration of selenium in soil from TW-4, TW-6, and TW-7 was greater than the soil to groundwater pathway; however, the laboratory qualified these results with a "J-flag" indicating the results are an estimate between the laboratory limit of detection and limit of quantitation. As selenium was not detected in groundwater; the apparent detection in soil is considered insignificant and selenium is not considered a constituent of concern.

The horizontal and vertical extents (between 0 and 6 ft bgs) of RCRA metal impacts to soil do not follow a clear pattern. However, the area having the greatest metal impacts is similar to the area having the greatest PAH impacts (shown on Figure 4) and also coincides with anthropogenic fill (glass, coal, cinders, and slag) east of the former brewery and commercial buildings. Further, as summarized on Table 5, the concentrations of RCRA metals in all soil samples are less than the waste disposal screening limits; therefore, additional waste characterization for RCRA metals is not warranted.

5.2.3 Polynuclear Aromatic Hydrocarbons

2019 Phase II ESA. The concentrations of two PAHs (benzo(a)pyrene and benzo(b)fluoranthene) exceed the groundwater protection RCLs in one or more soil samples. The concentrations of three PAHs (benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene) exceed the ch. NR 720 WAC non-industrial direct contact RCL in one or more soil samples.

2020 SSI. Seventeen soil samples and one duplicate were analyzed for PAH compounds. The concentrations of four PAHs (benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and naphthalene) exceed the groundwater protection RCLs in one or more soil samples. The concentrations of four PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene) exceed their respective ch. NR 720 WAC non-industrial direct contact RCL in one or more soil samples.

Cumulative impact of cPAHs as it relates to direct contact at non-industrial properties is further discussed in Section 5.2.3.1. The area having the greatest PAH impacts in soil is similar to the areas having the greatest RCRA metal impacts and roughly coincides with anthropogenic fill. However, as no clear "source" of PAH impacts can be identified, and as proposed redevelopment will include construction and maintenance of a site-wide engineered barrier, further delineation of residual PAH impacts to soil does not appear to be warranted.

5.2.3.1 Cumulative Impact of Polynuclear Aromatic Hydrocarbons

To assess the cumulative impact of the PAHs, particularly cPAHs, a risk assessment using the WDNR's cPAH calculator was conducted on the soil samples where PAHs were detected (see Appendix C for the calculations and results). A majority of the soil samples, despite several detections of concentrations above ch. NR 720 WAC non-industrial direct contact RCL and the ch. NR 720 groundwater protection RCLs, did not pose a cumulative PAH risk. According to the analysis, only four soil samples from the 2019 Phase II ESA (SB-1, SB-9, SB-10, and SB-13) and four soil samples from the 2020 SSI (VP-3, TW-4, TW-6, and TW-8) are at risk for cumulative PAHs. For these sampling locations, further cleanup to lower contaminant levels or the construction of a cap or cover to address the PAH direct-contact pathway is recommended to meet non-industrial standards. Soil boring SB-9, SB-10, vapor point VP-3, temporary monitoring well TW-6, and TW-8 are currently covered with an intact asphalt cap, but SB-1, SB-13, and TW-4 currently have a topsoil/grass/gravel cover which may be a direct contact risk. These samples were collected between one and four ft bgs, respectively.

5.2.4 Volatile Organic Compounds

Twenty-six soil samples and two duplicates were submitted for analysis for 68 VOCs during the 2019 Phase II ESA and 2020 Supplemental Site Investigation, combined. As shown on Table 1, minimal concentrations of VOCs were detected in a majority of the soil samples. Five soil samples, SB-9, SB-10, SB-11, TW-4, TW-6, had VOC concentrations above the ch. NR 720 WAC groundwater protection RCL between zero and four ft bgs. The remaining detected soil sample VOC concentrations did not exceed either RCLs. See Table 1 and Figure 4 for a summary of detected VOC results.

5.3 GROUNDWATER QUALITY AND ANALYTICAL RESULTS

Groundwater was observed in two of the soil borings that were converted to temporary wells installed during the 2019 Phase II ESA (TW-1 and TW-2). Groundwater was observed in seven of the soil borings that were converted to one-inch monitoring wells during the 2020 SSI. Various VOCs, PAHs, and dissolved RCRA metals were detected in the monitoring wells and duplicate groundwater samples. See Section 5.3.1 through 5.3.3 below for analytical result details.

The analytical laboratory report is presented in Appendix B and summarized on Table 3 and Figure 5, which includes the applicable Wisconsin groundwater standards for the detected constituents. Additionally, the spatial relation of groundwater concentrations above ch. NR 140 WAC PAL/ES are depicted on cross sections A-A' and B-B' (Figure 3a/3b).

5.3.1 RCRA Metals

Eight groundwater samples and two duplicate samples were analyzed for dissolved RCRA metals during the 2019 Phase II ESA and the 2020 SSI. The following groundwater samples detected dissolved RCRA metals above the ch. NR 140 WAC PALs as follows:

Dissolved RCRA Metals (µg/L)	TW-1	TW-3	TW-5	TW-6	TW-7	TW-8
Arsenic	3.9	4.6	1.1	1.0	7.2	1.3
Chromium	*<0.0011*	15	*<1.1*	*<1.1*	18	*<1.1*
Lead	0.58	6.5	0.79	*<0.19*	11	*<0.19*

Yellow shading indicates a concentration exceeding ch. NR 140 PAL.

The concentrations of dissolved arsenic are generally greater than the ch. NR 140 WAC PAL throughout the Property. Dissolved chromium and lead were detected above the ch. NR 140 WAC PAL in wells TW-3 and TW-7, which are both located on the western portion of the Property. The extent of dissolved metal impacts to groundwater at concentrations greater than the ch. 140 WAC PAL are illustrated on Figure 5.

5.3.2 Polynuclear Aromatic Hydrocarbons

Three low-level PAH constituents were detected in samples from the monitoring wells installed on the Property, although the concentrations were not above the ch. NR 140 WAC PAL or ES.

5.3.3 Volatile Organic Compounds

Ten groundwater samples and two duplicate samples were analyzed for VOCs during the 2019 Phase II ESA and the 2020 SSI.

Benzene was detected in TW-1 above the ch. NR 140 WAC PAL. PVOCs (benzene, ethylbenzene, and naphthalene) were detected above the ch. NR 140 WAC PAL and ES in TW-7. CVOCs (cis-1,2-dichloroethene and tetrachloroethene) were detected in the sample from TW-1 and TW-3 above the ch. NR 140 WAC groundwater ES concentration. Tetrachloroethene was also detected in the sample from TW-6 above the ch. NR 140 WAC PAL although the laboratory qualified these results with a "J-flag" indicating the results are an estimate between the laboratory limit of detection and limit of quantitation. The extent of VOC impacts to groundwater at concentrations greater than the ch. 140 PAL and ES are illustrated on Figure 5. The extent of these impacts are consistent with the measured east-southeast groundwater flow on the property (Figure 6).

5.4 VAPOR INTRUSION

The concentrations of VOCs in soil gas collected from all soil vapor points are less than WDNR VRSLs for residential and small-commercial properties via the sub-slab and deep soil gas exposure pathways (Table 4). Therefore, the vapor exposure pathway can be excluded.

5.5 QUALITY ASSURANCE / QUALITY CONTROL

Analysis was conducted at the TestAmerica Laboratories, Inc. laboratory in University Park, Illinois (State of Wisconsin Laboratory Certification No. 999580010). As noted in the project QAPP (Stantec, 2015; Stantec, 2019a), field duplicate and MS/MSD samples are being used to evaluate the quality of data collected during implementation of the EPA Community Wide Assessment Grant used to fund the samples collected and analyzed as part of the 2020 SSI. A statistic commonly used to evaluate the precision of measurements is relative difference (RD). To compare sample measurement results to field duplicate results, the RD was calculated per the following equation:

$$RD\ (\%) = \frac{(C_1 - C_2)}{\left[\frac{(C_1 + C_2)}{2}\right]} \quad X\ 100$$

C_1 and C_2 are concentrations in the sample and in the field duplicate sample, respectively. A RD of 0% indicates the two measurements are equal while a larger RD indicates an increasing difference between the two measurements. In cases where either the sample value or field duplicate value was less than the laboratory reporting limit, an RD could not be calculated. Additional quality assurance data provided by TestAmerica are also included in this evaluation. A quality assurance analysis of data for duplicate samples is presented on Table 2a/2b.

5.5.1 Soil

The concentrations of several constituents on Table 1 were qualified with a "J" flag indicating the concentration is an estimate between the limit of detection and reporting limit. This is relevant to results for constituents for which the reported concentrations are only marginally an applicable soil RCL. For example, the concentration of selenium in the soil samples at TW-4(0-2), TW-6(5-6), TW-7(4-6) were qualified with a "J" flag and the estimated concentrations of 0.72, 1.1, and 0.8 mg/kg are only slightly greater than the groundwater protection RCL of 0.52 mg/kg. Therefore, the actual selenium concentrations in these samples may be lower than the estimated values and lower than the groundwater protection RCL. A similar conclusion appears applicable to other soil data qualified with the "J" flag, with all of these estimated values being significantly below applicable soil RCLs.

Soil boring SB-4 and SB-19 are qualified with a “F1” flag indicating that the MS and/or MSD recovery is outside acceptance limits. Poor spike recoveries for MS/MSD samples could mean the sample matrix is causing matrix interference issues. This does not appear to significantly impact the flagged values shown on Table 1.

Soil boring SB-4 and SB-19 are qualified with a “F2” flag indicating that the MS/MSD Relative Percent Difference, a measure of the relative difference between two points, exceeds control limits. This does not appear to significantly impact the flagged values shown on Table 1.

Several soil samples, particularly methylene chloride, were qualified with a “B” flag indicating that the compounds were found in the associated blank, as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action and to take into consideration during analysis. Methylene chloride was detected in the groundwater trip blanks, TB-02 and Trip - HCL, at a concentration of 3.8 and 4.3 µg/L, respectively, indicating that the soil and groundwater samples were likely cross-contaminated with this contaminant. Since methylene chloride is a known laboratory contaminant and the results are just above the reporting limit; the results were flagged by TestAmerica as a “probable lab contaminant”. Therefore, sample results with methylene chloride concentrations exceeding a RCL do not represent actual methylene chloride concentrations in soil at the Site and methylene chloride is not considered to be a constituent of concern.

Soil boring SB-19 was qualified with a “V” flag indicating that serial dilution exceeded the laboratory control limits. This does not appear to significantly impact the flagged values shown on Table 1.

Further evaluation of QA/QC data is presented below.

RCRA Metals. The RD value for lead for the duplicate sample from TW-3 (2-4) (40%, respectively) meets the project threshold (≥40%) suggesting slight variability could exist in the distribution of these metals within a single duplicate sample set, and that greater caution should be taken in making remedial decisions based on individual sample data. However, moderate correlation (i.e., RD values of 30% and 38%) existed for the data for the sample set from this same sample for the remaining RCRA metals.

PAHs. As was the case for RCRA metals, poor correlation (i.e., RD values >40%) was present in the PAH results for the set of duplicate samples from SB-21 (2-4). Variability could exist in the distribution of these metals within a single duplicate sample set, and that greater caution should be taken in making remedial decisions based on individual sample data.

VOCs. The concentrations of all VOCs in the trip blank were less than laboratory detection limits. Therefore, transport and handling of samples is not considered a possible source of bias in the data.

5.5.2 Groundwater

Several concentrations reported on Table 3 are qualified with a “J” flag indicating the concentrations are estimated values that lie between the limit of detection and the reporting limit. This is relevant in situations where the reported concentrations are relative similar in value to applicable ch. NR 140 WAC groundwater standards and could impact whether the standards are exceeded. This does not appear to be true for any of the “J” flagged values.

Chromium and methylene chloride were qualified with a “B” flag in most of the groundwater results, indicating that the compounds were found in the associated blank, as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action and to take into consideration during analysis. Methylene chloride was detected in the groundwater trip blanks, TB-02 and Trip - HCL, at a concentration of 3.8 and 4.3 µg/L, respectively, indicating that the soil and groundwater samples were likely cross-contaminated with this contaminant. Since methylene chloride is a known laboratory contaminant and the results are just above the reporting limit; the results were flagged by TestAmerica as a “probable lab contaminant”. Therefore, sample results with methylene chloride concentrations exceeding a RCL do not represent actual methylene chloride concentrations in soil at the Site and methylene chloride is not considered to be a constituent of concern.

The RD value for dissolved arsenic, chromium, and lead for the duplicate sample from TW-3 (45%-57%) exceeds the project threshold (≥40%) suggesting slight variability could exist in the distribution of these metals within a single duplicate sample set, and that greater caution should be taken in making remedial decisions based on individual sample data. However, moderate correlation (i.e., RD values between 5% and 18%) existed for the remaining RCRA metals and duplicate data from TW-5 and TW-9 for PAHs and VOCs.

5.6 MIGRATION PATHWAYS AND POTENTIAL RECEPTORS

Direct Contact: Various RCRA metals were detected in many of the soil samples at concentrations that exceed the RCL for protection of human health from direct contact at a non-industrial property. Arsenic was detected above the BTV and NR 720 WAC industrial direct contact RCL from soil borings VP-3, SB-9. SB-10, and SB-12. See Table 1. These soil borings are capped by asphalt so there is currently no direct contact risk.

PAHs were detected in many of the soil samples at concentrations that exceed the chapter ch. NR 720 WAC non-industrial direct contact RCLs, although only eight soil samples, collected during the 2019 Phase II ESA and 2020 SSI, are at risk for cumulative PAHs from the following locations: VP-3, TW-4, TW-6, TW-8, SB-1, SB-9. SB-10, and SB-13. These areas will either need further cleanup to lower contaminant levels or the construction of a cap or cover to address the PAH direct-contact pathway to meet non-industrial standards. VP-3, TW-6, TW-8, SB-9 and SB-10 are currently covered with an intact asphalt cap, but TW-4, SB-1 and SB-13 are indicated to currently have a topsoil/grass/gravel cover which may be a direct contact risk.

Soil Leaching to Groundwater: VOCs, PAHs and RCRA metals were detected in a majority of the soil samples at concentrations that that could impact groundwater quality. Most of these soil borings are capped by asphalt so it is unlikely that stormwater infiltration at this location would cause the contaminants to mobilize into groundwater, however soil borings SB-1, SB-5, SB-6/TW-1, SB-8, SB-12, SB-13, SB-14, TW-4, and TW-5 are covered with grass/landscaping/gravel and are at risk for potential VOC/PAH/RCRA metals soil to groundwater migration. See Table 1.

Groundwater Ingestion: The Property and the surrounding area is served by City of West Bend community water system and not the groundwater located on Site.

Vapor intrusion: Numerous VOCs were detected in several of the soil vapor samples. However, none of the reported VOC concentrations exceeded their respective residential or commercial VRSLs for sub-slab soil vapor nor deep soil vapor. See Table 4. Chlorinated and petroleum VOCs were detected in soil and groundwater in proximity to site structures, WDNR may require further evaluation of the vapor intrusion pathway.

Utilities. The locations of buried public utilities relative to the Property are primarily located within North Main Street and along the Riverfront Parkway Trail. Underground utilities traversing the Property include stormwater and gas lines east of the Former Brewery Building and water on the West Bend Car Wash Property. Based on the nature and extent of residual soil impacts and the depth of groundwater at the Property, utility corridors may be considered migration pathways of concern.

Off-Site Groundwater Wells. Stantec reviewed the Wisconsin Geological and Natural History Survey (WGNHS) Historic Well Construction Reports from 1930 – 1989 database of historic well construction reports for wells constructed from 1930-1989 (WGNHS, 2020). One well (Unique Well Number 8EL852) is shown at a location approximately 675 feet north-northwest of the Property. Limited information is provided on the well record, but the name of the well is named “Brewery” and the location is within the southeast 1/4 of the southeast 1/4 of Section 11, Township 11 North, Range 19 East (same as the Property). Given the limited location information and the Brewery notation, it is likely this well was georeferenced to the quarter section centroid and it is located on the Property. The report had limited information but did show that the well was drilled into the Wisconsin Silurian formation with “Drift” from 0 – 18 ft bgs, “Niagara” beneath the Drift, and striking “Richmond” at 330 ft bgs (WGNHS, 2020). Well construction and abandonment dates are unknown, although given the Phase I ESA conducted by Stantec in 2019, the well was in the basement of the Former Brewery (Stantec, 2019b). Additionally, the casing from the well abandonment was in the basement during site reconnaissance (Stantec, 2019b). No other wells are identifiable within a 1,200-foot radius of the Property.

The WDNR’s on-line database of wells constructed for private homeowners since 1987 was queried for Section 11, Township 11 North, Range 19 East http://prodoasext.dnr.wi.gov/inter1/watr$.startup). Zero private homeowner wells are within a 1,200-foot radius of the Property.

Sensitive Habitats. Stantec conducted Property visits and reviewed documents such as topographic maps, Phase I ESA reports, and WDNR water resources maps to evaluate whether there may be the following sensitive receptors on the Property or in nearby properties:

- Species, habitat or ecosystems sensitive to the contamination.
- Wetlands, especially those in areas of special natural resource interest as designated in ch. NR 103.04 WAC.
- Outstanding resource waters and exceptional resource waters as defined in ch. NR 102.10 and 102.11 WAC.
- Sites or facilities of historical or archaeological significance.

The Property is located in a mixed-use area of commercial and residential developments. The Property is approximately 90% paved or covered by buildings and has limited areas of landscaping. All of the adjoining properties, except east of the Property, consist of commercial properties that have limited areas of landscaping. Vegetation in the area is limited to landscaping species and urban trees. An Endangered Resources Preliminary Assessment was conducted on January 14, 2021 with the applicable project details and the results determined that this project is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities (No/Low BITP/A) provided that erosion and runoff prevention measures are implemented (WDNR, 2021). According to the WDNR Surface Water Data Viewer application, mapped wetlands (forested broad-leaved deciduous with wet soil, T3K) are greater than 300 feet east of the Property (WDNR, 2021). Milwaukee River is not considered an outstanding resource water or exceptional resource water as defined in ch. NR 102.10 and 102.11 WAC. No sensitive species, habitat, ecosystem, wetlands, or outstanding resource waters were identified in the vicinity of the Property.

Two buildings on the Property, 475 North Main Street and 459 North Main Street, are listed in the Wisconsin Architecture and History Inventory (AHI). AHI is a digital source of information on more than 151,000 historic buildings, structures and objects throughout Wisconsin. Property inclusion in AHI conveys no special status such as National Register designation, rights, or benefits for owners of these properties. The contamination noted during the site investigation is not a risk to the existing buildings.

6.0 REMEDIAL ACTION OPTIONS EVALUATION

6.1 PROPOSED REDEVELOPMENT

As illustrated on Figure 2, the Property consists of three contiguous parcels of land totaling 2.94 acres located in the north-central portion of the downtown area of the City of West Bend. Redevelopment of the Property will consist of demolition of the existing structures, grading, and construction of two new 4-story, multi-family residential buildings with associated underground parking lot, landscaped areas, outdoor concrete patio, and sidewalk. Conceptual draft drawings prepared by Engberg Anderson Architects (Milwaukee, Wisconsin) are adapted as Figure 7 and Figure 8a-8j. The proposed redevelopment plan relative to soil and groundwater impacts is illustrated on Figures 4 and 6, respectively.

Proposed redevelopment may generate up to 32,000 cubic yards of PAH, VOC, and metals-impacted soil. Therefore, redevelopment of the Property will require proper handling and management of soil impacted with VOCs, PAHs and heavy metals. Management of impacted groundwater and other fluids also may be required.

6.2 EVALUATION OF REMEDIAL OPTIONS

The evaluation of three remedial options utilizing criteria presented in ch. NR 722.07(4) and ch. NR 722.09(2m) WAC to address residual soil and groundwater impacts during redevelopment is summarized on Table 7. The remedial options evaluated included the following:

1. Natural attenuation (no action)
2. Removal and management of soil and fluids for construction purposes, construction of a site wide engineered barrier for soil and groundwater concerns; and establishment of institutional controls for soil and groundwater (GIS Registry for Closed Remediation Sites).
3. Complete removal and offsite disposal of impacted soil and remaining institutional controls for groundwater (GIS Registry for Closed Remediation Sites).

In general, each remedial option is considered technically feasible; however, the short-term and long-term effectiveness of each remedial option's capability to be protective of public health, safety, or welfare or the environment and the cost associated with each approach varies greatly.

Although the cost to implement remedial Alternative 1 is the least of the three options, as constituents associated with residual impacts are considered recalcitrant, the overall magnitude, mobility, and toxicity of impacts would not decrease, and Property restoration will not occur within a reasonable timeframe. Therefore, following redevelopment for multi-family residential reuse, impacts would be near sensitive receptors. In addition, stormwater could mobilize impacted media if left uncovered. Therefore, Remedial Alternative 1 is not considered a prudent approach.

Although Remedial Alternative 3 will eliminate the mobility, toxicity, and magnitude of residual impacts, the overall project cost (likely greater than $2.8 million) and the expectedly large carbon footprint associated the excavation/transportation/disposal of such a large volume of material (estimated 32,000 cubic yards) makes this alternative impractical.

Under Remedial Alternative 2, only soil required to be moved/handled for constructing the new multi-family residential building will be disturbed (approximately 17,500 cubic yards). Most disturbed material will remain at the Property for use in achieving the final construction grade. Disturbed excess soil may be disposed of offsite at a licensed solid waste landfill. Construction of engineered barriers to prevent direct contact, leaching, and/or mobilization of residual impacts through stormwater runoff and establishment of institutional controls to provide for long-term control of residual soil and/or groundwater impacts is considered the most reasonable approach to facilitate proposed mixed-use commercial/recreation redevelopment. Remedial Alternative 2 is the selected remedial alternative based on its short-term and long-term effectiveness, implement-ability, restoration time frame, economic feasibility, and sustainability.

7.0 REMEDIAL ACTION PLAN

7.1 SELECTED REMEDIAL ACTION OPTION

The selected remedial action option includes four elements described below:

Excavation and management of VOC, PAH and metals-impacted soil and potentially contaminated fluids generated as part of construction. During planned construction work, an estimated 17,500 cubic yards (26,250 tons) of VOC, PAH and RCRA metals-impacted soil will be generated. Targeted soil will be further characterized for waste disposal during development of a detailed MMP based on final cut/fill calculations by the developer alongside a ch. NR 718 WAC Exemption Request. Groundwater may be encountered in the northern portion of the site during construction. Stormwater/precipitation may also enter excavations within potentially contaminated materials. The following summarizes likely soil/fluid management scenarios:

- Most impacted soil will remain onsite and used to obtain final construction grade (as long as it's deemed geotechnically fit).
- Pending landfill approval, contaminated soil may be trucked offsite for disposal at a licensed solid waste landfill (estimated 17,500 cubic yards).
- Impacted fluids will be pumped to a settling basin for discharge to the sanitary sewer or surface water in compliance with WPDES General Permit No. WI-S067831-05 or City sanitary sewer requirements. Sediments in the basin will be managed with impacted soil.

Construction of engineered barriers to prevent direct contact and/or mobilization of residual impacts through stormwater runoff. As illustrated on Figures 7 and 8, the Property will be redeveloped as a 4-story multi-family residential building. Conceptually, engineered barriers will include:

- Landscaped areas consisting of 14-inches of clean soil, 4-inches of topsoil, and vegetation (25,000 square feet),
- Asphalt-paved parking lot and associated driveway (13,200 square feet),
- Multi-family residential building (68,000 square feet),
- Concrete patio (4,000 square feet), and
- Concrete sidewalk (14,300 square feet).

Establish institutional controls. After the construction of the engineered barriers, the Property will be listed on the WDNR GIS Registry of Closed Remediation Sites.

The following outlines the permits/approvals likely to be required to implement Remedial Alternative 2:

- WPDES General Permit No. WI-S067831-05 or City Sanitary Sewer Permit for dewatering (if necessary)
- Exemption under ch. NR 718 WAC to reuse soil onsite to achieve final construction grade, as appropriate
- Stormwater Discharge Notice of Intent (work is not anticipated below the ordinary high water mark)
- Ch. NR 115 WAC Filling and Grading Permit
- Landfill disposal approval.

Installation of monitoring wells post-construction. Although the investigation is considered substantially complete, further evaluation of physical and chemical hydrogeology may be warranted to further evaluate the magnitude/extent and monitor natural attenuation of the identified groundwater contamination. As redevelopment plans are finalized, a workplan for confirmation groundwater sampling will be developed and submitted to WDNR. Given the western location of TW-1/TW-3 and TW-7 along the Property boundary and the east-southeast groundwater flow direction, the CVOC and PVOC groundwater concentrations measured above the ch. NR 140 WAC ES may be attributable to an off-site source. It is recommended that an off-site liability exemption (Form 4400-201) is pursued for the groundwater impacts measured in these areas, if appropriate.

7.2 SCHEDULE

A proposed schedule is provided below.

Task #	Task Description	Target Date
1	Complete pre-demolition testing/permitting and abatement (as warranted)	6/1/2021
2	Abatement and demolition of existing buildings	7/1/2021
3	Start of construction/remediation	8/1/2021
4	Completion of remedial excavation activities	9/30/2021
5	Completion of construction (parking lots, sidewalks, and landscaping)	12/31/2022
6	Submit case closure request to WDNR	4/13/2022

7.3 ESTIMATED COST

A preliminary estimate of the cost for implementation of Remedial Alternative 2 is presented on the table below.

Cost Estimate for Remedial Alternative 2

#	Item	Estimated or Assumed Value
1	Excavation and Off-site disposal of VOC/PAH/RCRA metals-impacted soil during construction (estimated 26,250 tons)	26,250 tons x $50/ton = $1,312,500
2	Grade with appropriate base course	$50,000
3	Post-construction documentation (remedial documentation, GIS registry, fees)	$50,000
4	**Total estimated remedial cost**	**$1,412,500**

The cost estimate is limited to contractor costs (for excavation, treatment, trucking, loading, or placement of soil), construction of barriers, fluid management, follow-up groundwater sampling, landfill disposal costs and materials costs (for backfill), but does not include engineering/consultant costs beyond those described above.

7.4 RESTORATION TIME FRAME

The proposed remedial alternative should achieve cleanup goals concurrent with building construction, which is targeted for completion in December 2022. Establishment of the restored vegetation is likely to take one to two growing seasons.

7.5 PERFORMANCE MEASURES

Confirmation soil samples are not warranted in this project. The site-wide engineered barriers will control for future potential exposure routes.

7.6 TREATMENT RESIDUALS

Soil removed from the Property will be disposed of at an appropriately licensed solid waste management facility. Potentially impacted fluids will be managed via a WPDES General Permit No. WI-S067831-05 or City Sanitary Sewer Permit, if necessary.

7.7 SUSTAINABLE REMEDIAL ACTION CONSIDERATIONS

Energy and fuel use is considered significant, but offsite disposal of surplus soil is required regardless. Future receptors following redevelopment will be protected and the mobility, toxicity and magnitude of impacts will be significantly reduced. It is likely the material removed from the Property will be used by the landfill for beneficial reuse. Low sulfur diesel can be used, and a no-idle policy will reduce the carbon footprint.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The propose of the SSI was to further evaluate the source, magnitude and extent of release identified as part of a Phase II ESA per ch. NR 716 WAC requirements. The SSI was completed in accordance with the scope of work and methodology identified in the SSI Work Plan which was approved by the WDNR and EPA prior to site activities. Based on the results of the SSI, a RAOR was developed to evaluate options to facilitate redevelopment of the Property for residential and commercial use. A total of three remedial action options were evaluated and the most appropriate option selected per ch. NR 722 WAC Requirements. A RAP was then developed to implement the selected remedy in compliance with chs. NR 718 and NR 724 WAC requirements.

SSI. The concentrations of select PAHs, VOCs, and eight RCRA metals (i.e., arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) exceed one or more respective BTV and/or the ch. NR 720 WAC RCLs for protection of groundwater, non-industrial direct contact, or industrial direct contact in select soil samples collected across the Site. The source(s) of residual soil impacts appear to be due to multiple cumulative releases associated with prior industrial/commercial activities and/or placement of an apparent heterogeneous anthropogenic fill unit containing cinders, glass, brick, coal and ash, and slag-like material.

Select VOCs and dissolved RCRA metals (arsenic, chromium, and/or lead) were detected in groundwater samples above respective ch. NR 140 WAC PAL and/or ES in samples collected during the SSI on the 445 - 485 North Main Street parcel. PVOCs (benzene, ethylbenzene, and naphthalene) were detected above the ch. NR 140 WAC PAL and/or ES in samples collected on the western portion of the parcel. CVOCs (cis-1,2-dichloroethene and tetrachloroethene) were detected in samples collected from the northwest portion of the parcel above the ch. NR 140 WAC ES.

The concentrations of VOCs in soil gas samples collected from all soil vapor points are less than WDNR VRSLs for residential and small-commercial properties via the sub-slab and deep soil gas exposure pathways. Therefore, the vapor exposure pathway can be excluded.

Proposed Site Reuse. The post-remediation use will be residential/commercial. Initial conceptual reuse plans include demolition of all existing structures, and construction of two new four-story apartment buildings (68,000 ft^2), underground parking garage, landscaped areas consisting of 18 inches of clean soil (25,000 ft^2), landscaped river walk and concrete sidewalks (14,300 ft^2), asphalt-paved parking lot and driveway (13,200 ft^2), and first-floor restaurant with outdoor plaza (4,000 ft^2).

Remedial Action Options Evaluation and Remedial Action Plan. A total of three remedial action options were evaluated to achieve remedial objectives for residential/commercial redevelopment. The selected remedy includes limited removal and management of soil and fluids required for construction purposes, construction of a site wide engineered barrier for soil and groundwater concerns; and establishment of institutional controls for remaining soil and groundwater (GIS Registry for Closed Remediation Sites). The RAP and accompanying MMP, which will be completed at a future date, will be incorporated into site construction plans and specifications as they are developed.

It is recommended that a copy of this report should be submitted to WDNR for review and approval/concurrence. A copy should also be submitted to the EPA.

9.0 DISCLAIMER AND LIMITATIONS

The SSI, RAOR and RAP were performed and developed in accordance with generally accepted practices of the profession for performing similar studies at the same time and in the same geographical area. Stantec observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions. No other warranty is expressed or implied.

Stantec observations, findings, and opinions must not be considered as scientific certainties but only an opinion based on our professional judgment concerning the significance of the data gathered during the investigation. Specifically, Stantec does not and cannot represent that the Property contains no hazardous or toxic materials or other latent condition beyond that observed by Stantec.

Please note that the cost estimates provided are based on Stantec's experience in addressing similar environmental liabilities at similar sites. Uncertainties are inherent in the cost estimates as a result of: (a) the possible presence of additional areas of undocumented soil and groundwater contamination (as it is not possible to test every possible location where releases may have occurred at the site, (b) uncertainties as to the exact volumes of contaminated soil present, (c) uncertainties as to closure requirements, (which may vary by individual WDNR project manager), and (d) uncertainties as to the specific closure pathway or remedial activities that will be performed (for which multiple potentially acceptable alternatives are available and which are therefore subject to possible preferences by the seller and/or buyer of the property, as well as the specific development plans for the property).

10.0 REFERENCES

Key Engineering Group, Ltd., "Phase I Environmental Site Assessment Report, Former Lithia Brewing Company, 445 – 485 North Main Street, West Bend, Wisconsin", April 2, 2010a.

Key Engineering Group, Ltd., "Phase II Environmental Site Assessment and Engineers Opinion of Probable Cost, 445 – 485 North Main Street, West Bend, Wisconsin", June 14, 2010b.

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FIGURES

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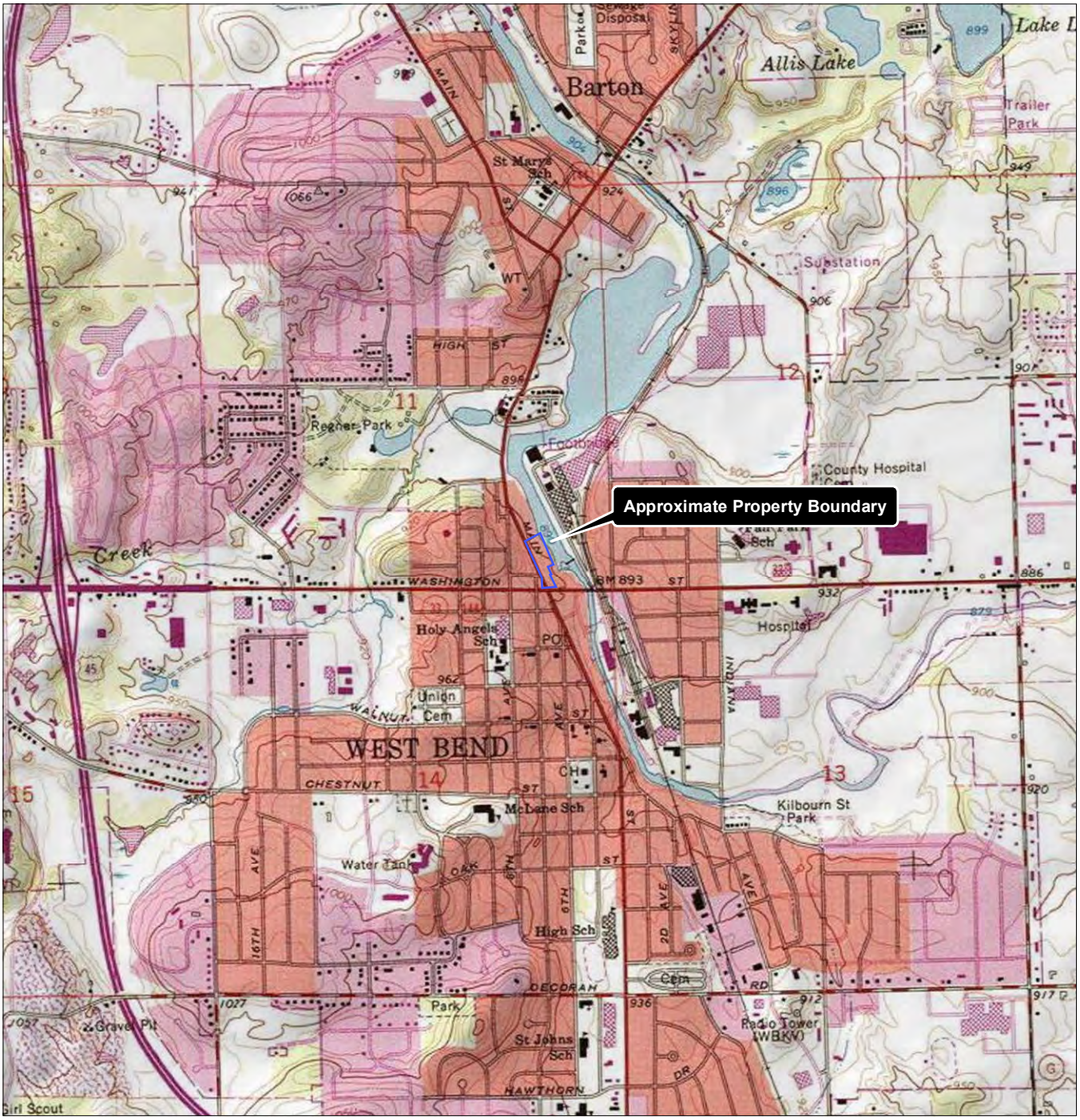

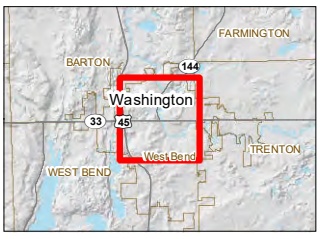

Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources Include: Stantec, WDNR, WisDOT
3. Background: USGS 7.5' Topographic Quadrangles

Legend

Approximate Property Boundary

Figure No.
1

Title
Property Location and Local Topography

Client/Project
WB Brewery Building, LLC & City of West Bend Parcels 415 & 445-485 N. Main Street, West Bend, Wisconsin
Supplemental Site Investigation, RAOR, & RAP

Project Location
T11N, R19E, S11,
C. of West Bend,
Washington Co., WI

193707897
Prepared by AJS on 2019-02-28
Technical Review by SF on 2019-02-28
Independent Review by EG on 2021-01-13

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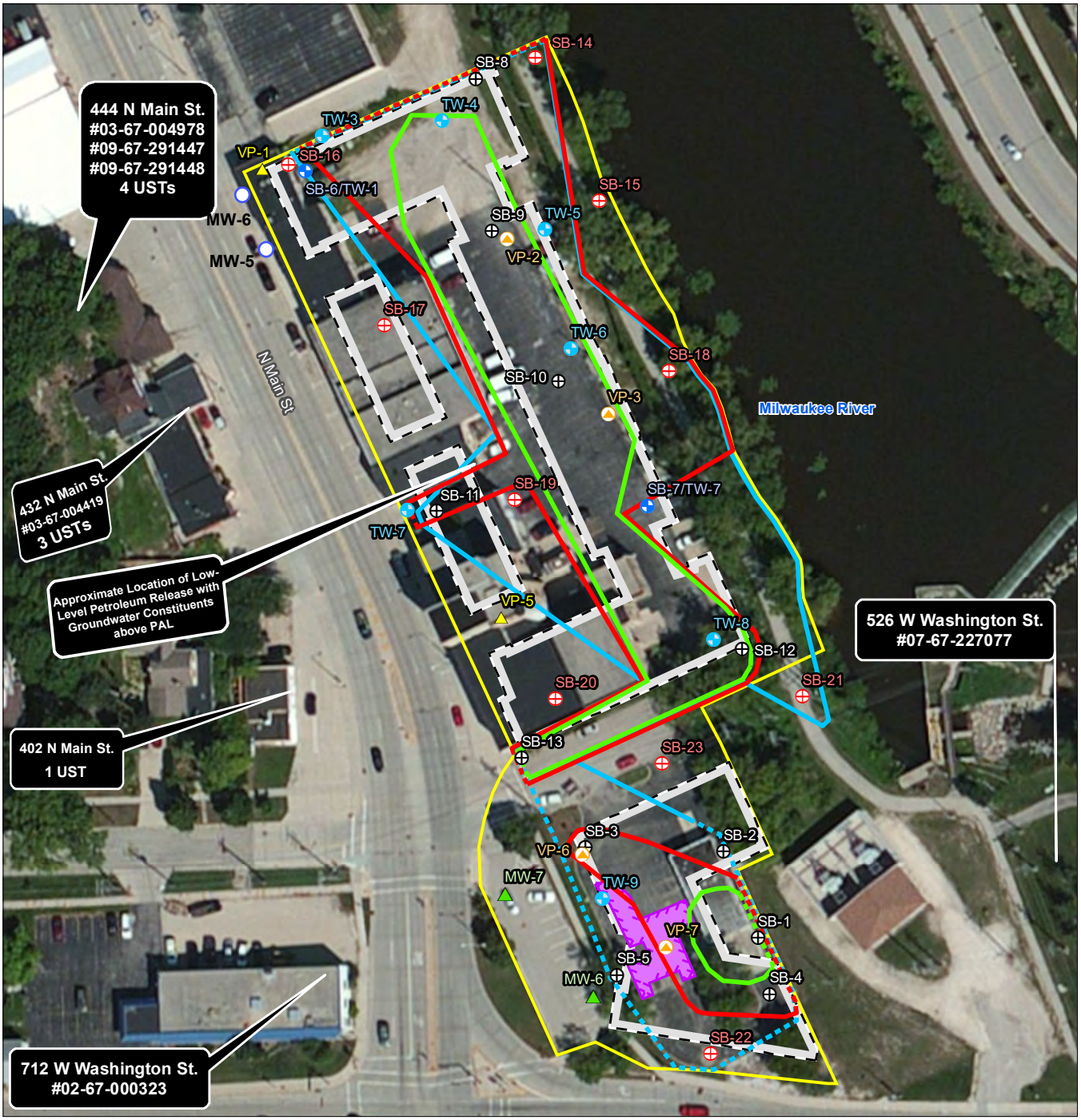
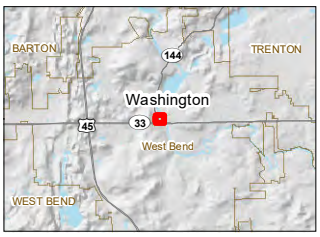
Stantec





Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources Include: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: ESRI World Imagery Clarity

Legend

- Approximate Site Boundary
- Borehole (Stantec, 2020)
- Borehole/Temporary Well (Stantec, 2020)
- Soil Vapor Point (Stantec, 2020)
- Sub-Slab Vapor Point (Stantec, 2020)
- Borehole (Stantec, 2019)
- Temporary Well (Stantec, 2019)
- Former Wells (1996 Clothes Clinic Investigation)
- Monitoring wells installed as part of BRRTS #03-67-004978 investigation with measured TCE/PCE contamination in 1996 above ch. NR 140 PAL and/or ES
- NR 700 Non-Industrial Direct Contact Concern
- NR 700 Non-Industrial Direct Contact Concern (Inferred)
- NR 700 Groundwater Pathway Concern
- NR 700 Groundwater Pathway Concern (Inferred)
- Soil Management Concern
- Soil Management Concern (Inferred)
- Approximate Location of Soil Excavation (1990)
- Approximate Proposed Building Locations

Note:
BRRTS = Bureau for Remediation and Redevelopment Tracking System
PCE = tetrachloroethene
TCE = trichloroethene
ch. NR 140 = Chapter NR 140
PAL = preventative action limit
ES = enforcement standard

Figure No.
2

Title
Sample Location Map

Client/Project
WB Brewery Building, LLC & City of West Bend Parcels 415 & 445-485 N. Main Sreet, West Bend, Wisconsin
Supplemental Site Investigation, RAOR, & RAP

Project Location
T11N, R19E, S11,
C. of West Bend,
Washington Co., WI

193707897
Prepared by JM on 2021-01-07
Technical Review by DG on 2021-01-11
Independent Review by EG on 2021-01-13

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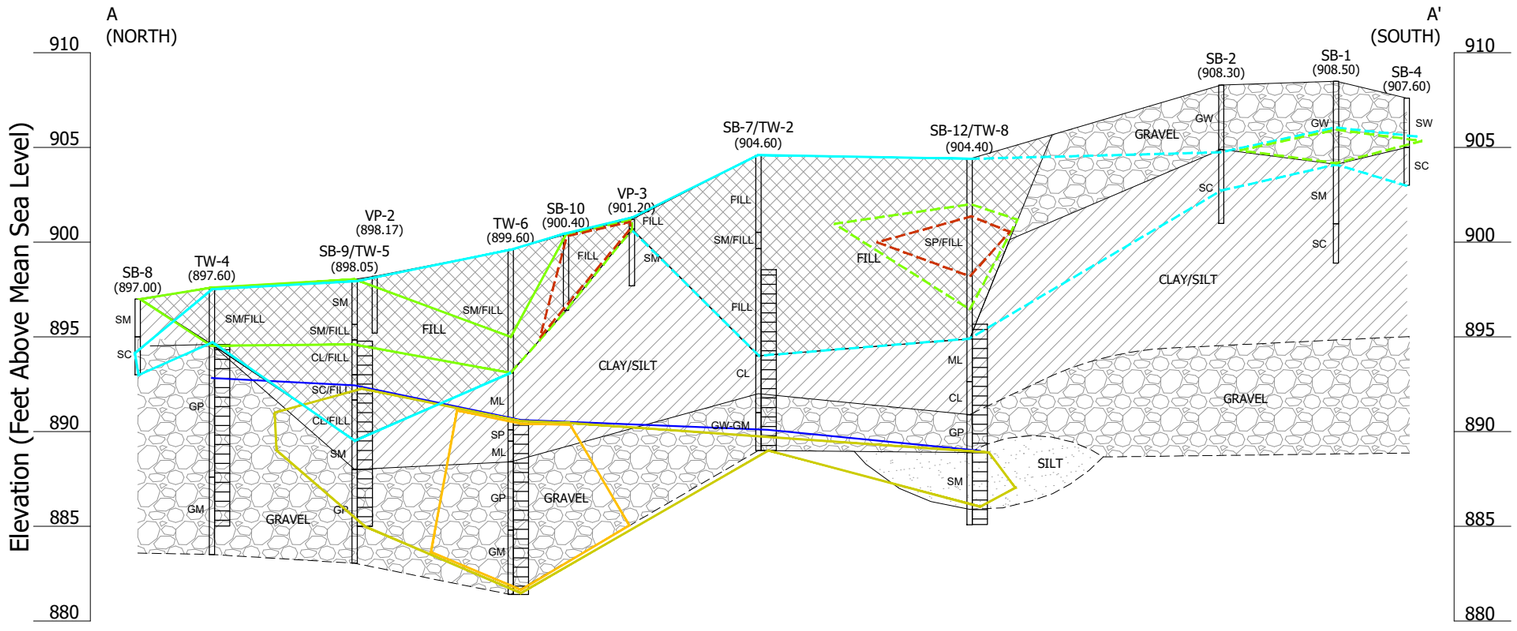
Stantec



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

Figure No.

3a

Title

Geologic Cross Section A-A'

Client/Project

WB Brewery Building, LLC & City of West Bend Parcels
415 & 445-485 N. Main Street, West Bend, Wisconsin
Supplemental Site Investigation, RAOR, & RAP

Project Location

T11N, R19E, S11
C. of West Bend
Washington Co., State

193707879

Prepared by AJR on 2021-01-15
Technical Review by EG on 2021-01-15
Independent Review by XXX on 2021-01-15

0 80' 160' Feet — Horizonatal
0 4' 8' Feet — Vertical

1:960 (At original document size of 11x17)

N

Legend

MW-XX	Well Name
SB-XX	Soil Boring Name
VP-XX	Soil Vapor Point Name
(XXX.XX)	Surface Elevation

Well Screen Loction

GRAVEL; ANTHROPOGENIC FILL; CLAY/SILT; SILT

Depth to Water Measurement in November 2020

Boundaries are Inferred

Metals, PAHs, and/or VOCs exceeding the NR 720 WAC groundwater pathway RCLs

Metals and/or PAHs above the NR 720 WAC non-industrial direct contact RCL

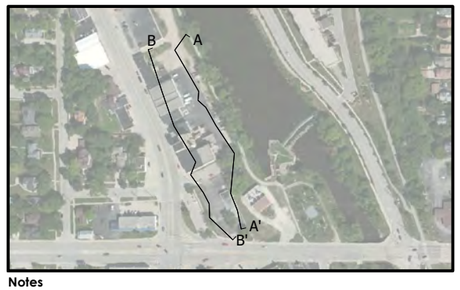
Metals above the NR 720 WAC industrial direct contact RCL

Dissolved metals (arsenic) above NR 140 WAC PAL

CVOCs above the NR 140 WAC PAL

Note: All elevations are referenced to a benchmark datum located on the rim of a storm manhole on the northwest portion of the City of West Bend Parking Lot property. Rim of the manhole = 907.89 ft amsl

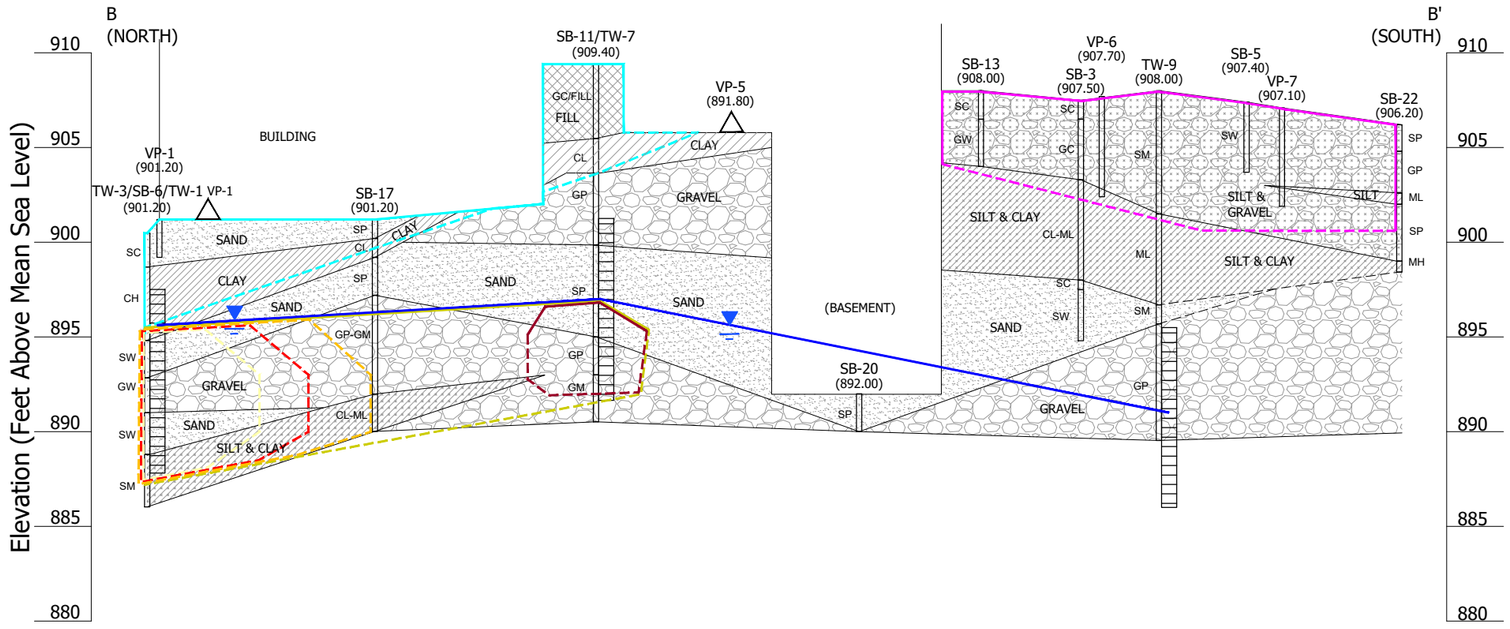
CVOCs = Chlorinated VOCs
ft amsl = Feet Above Mean Sea Level
RCLs = Residual Containment Levels
PAHs = Polycyclic Aromatic Hydrocarbons
PAL = Preventative Action Limits
VOCs = Volatile Organic Compounds
WAC = Wisconsin Administrative Code



Notes

1. Coordinates System: NAD 1983 State Plane Wisconsin Central FIPS 4802 Feet
2. Data Sources Include: Stantec, WDOT, WDNR
3. Orthophotography: ESRI

Stantec



CVOCs = Chlorinated VOCs
ES = Enforcement Standard
ft amsl = Feet Above Mean Sea Level
RCLs = Residual Containment Levels
PAHs = Polycyclic Aromatic Hydrocarbons
PAL = Preventative Action Limits
PVOCs = Petroleum Volatile Organic Compound
VOCs= Volatile Organic Compounds
WAC = Wisconsin Administrative Code

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

Figure No.
3b

Title
Geologic Cross Section B-B'

Client/Project
WB Brewery Building, LLC City of West Bend Parcels
415 & 445-485 N. Main Street, West Bend, Wisconsin
Supplemental Site Investigation, RAOR, & RAP

Project Location
T11N, R19E, S11
C. of West Bend
Washington Co., State

193707879
Prepared by AJR on 2021-01-15
Technical Review by EG on 2021-01-15
Independent Review by XXX on 2021-01-XX

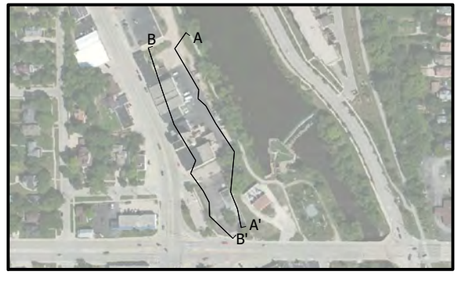
0 80' 160' Feet
Horizonatal
0 4' 8' Feet
Vertical
1:960 (At original document size of 11x17)

N

Legend

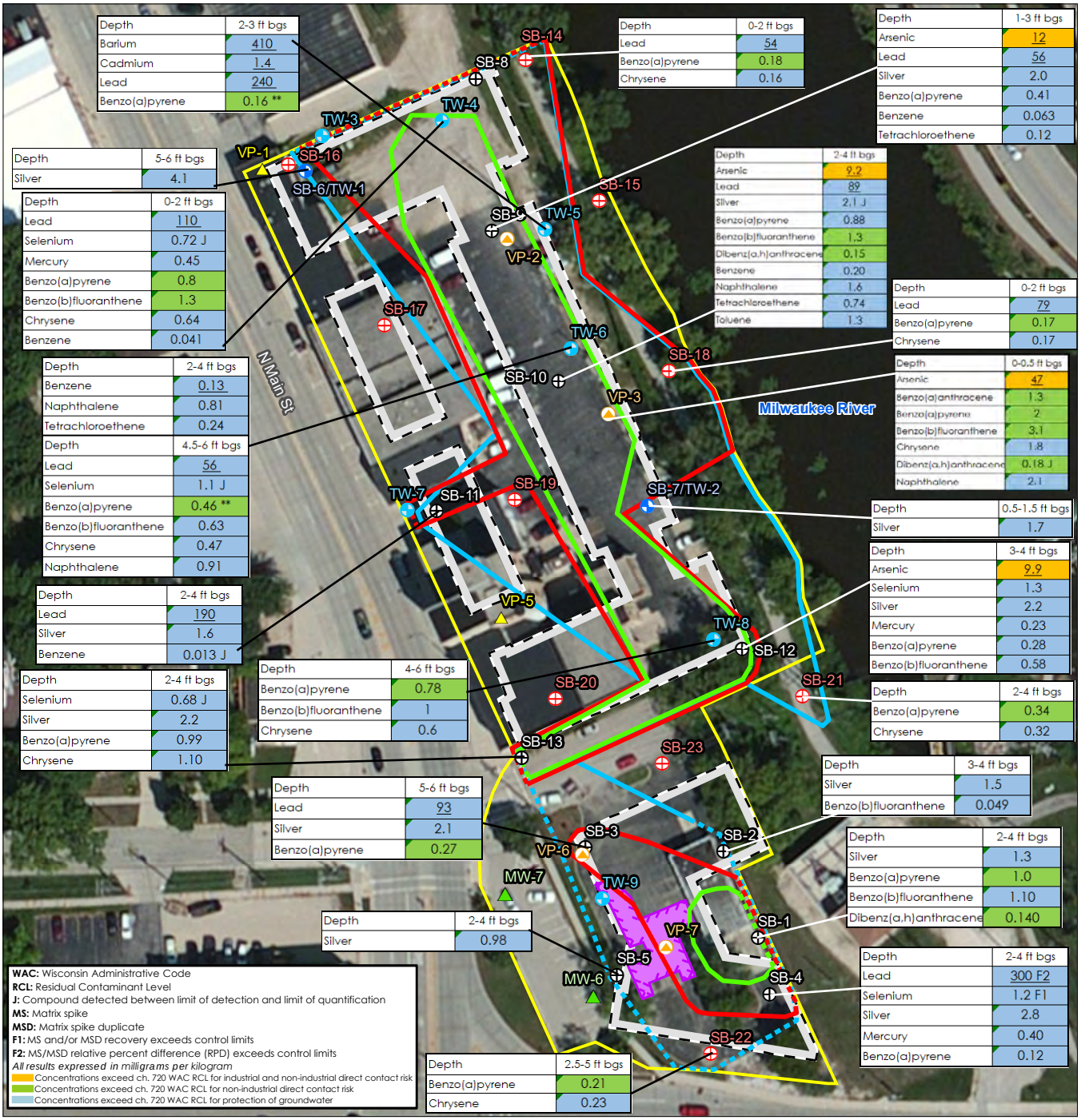
MW-XX	Well Name
SB-XX	Soil Boring Name
VP-XX	Soil Vapor Point Name
(XXX.XX)	Surface Elevation
	Sub-Slab Soil Vapor Point
	Well Screen Loction
GRAVEL	
ANTHROPOGENIC FILL	
CLAY	
SILT	
SAND	
SILT/CLAY	
SAND & GRAVEL	
	Metals, PAHs, and/or VOCs exceeding the NR 720 WAC groundwater pathway RCLs
	Metals and/or PAHs above the NR 720 WAC non-industrial direct contact RCL
	Dissolved metals above NR 140 WAC PAL
	CVOCs above the NR 140 WAC PAL
	CVOCs above the NR 140 WAC ES
	PVOCs above the NR 140 WAC PAL
	PVOCs above the NR 140 WAC ES
	Boundaries are Inferred
	Groundwater table (11/19/2020)

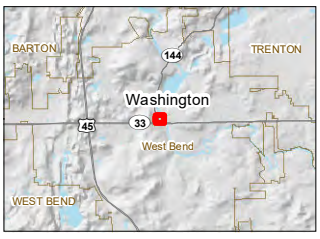
Note: All elevations are referenced to a benchmark datum located on the rim of a storm manhole on the northwest portion of the City of West Bend Parking Lot property. Rim of the manhole = 907.89 ft amsl



1. Coordinates System: NAD 1983 State Plane Wisconsin Central FIPS 4803 Feet
2. Data Sources Include: Stantec, WDOT, WDNR
3. Orthophotography: ESRI

Stantec





Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources Include: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: ESRI World Imagery Clarity

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Legend

- Approximate Site Boundary
- Borehole (Stantec, 2020)
- Borehole/Temporary Well (Stantec, 2020)
- Soil Vapor Point (Stantec, 2020)
- Sub-Slab Vapor Point (Stantec, 2020)
- Borehole (Stantec, 2019)
- Temporary Well (Stantec, 2019)
- Former Wells (1996 Clothes Clinic Investigation)
- NR 700 Non-Industrial Direct Contact Concern
- NR 700 Non-Industrial Direct Contact Concern (Inferred)
- NR 700 Groundwater Pathway Concern
- NR 700 Groundwater Pathway Concern (Inferred)
- Soil Management Concern
- Soil Management Concern (Inferred)
- Approximate Location of Soil Excavation (1990)
- Approximate Proposed Building Locations

Note:
During Stantec's Sept 2019 investigation, refusal due to shallow bedrock was encountered between 7.5 and 13.5 ft bg on the Former Car Wash Property
fbg = Feet below grade

Figure No.
4

Title
Soil Concentrations in Soil Exceeding RCLs

Client/Project
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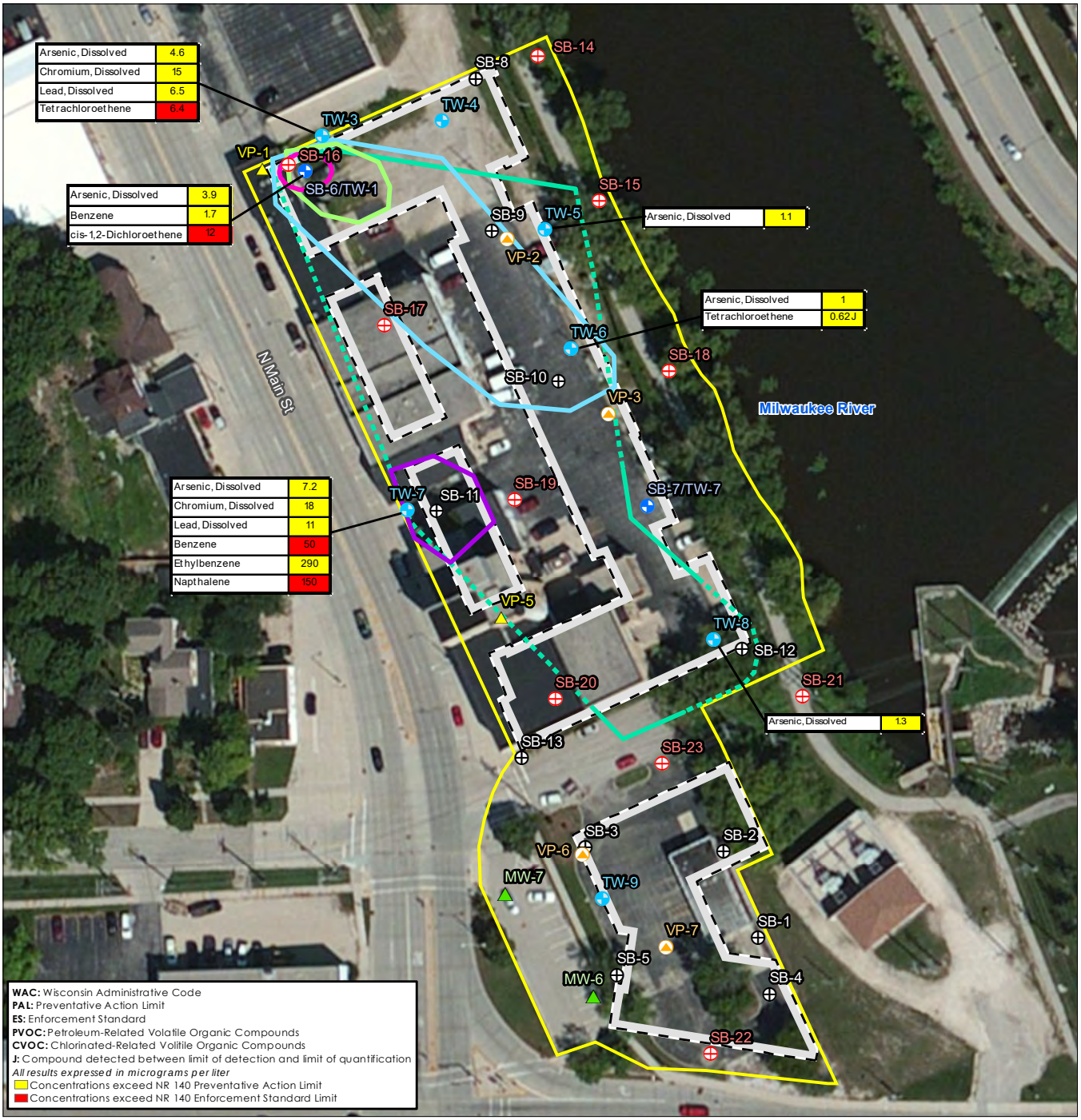
T11N, R19E, S11,
C. of West Bend,
Washington Co., WI

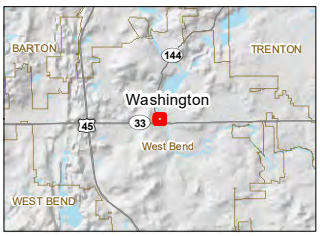
193707897
Prepared by JM on 2021-01-07
Technical Review by DG on 2021-01-11
Independent Review by EG on 2021-01-13

0 50 100 Feet
1:1,200 (at original document size of 8.5x11)

N

Stantec





Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources Include: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: ESRI World Imagery Clarity

Legend

- Approximate Site Boundary
- Borehole (Stantec, 2020)
- Borehole/Temporary Well (Stantec, 2020)
- Soil Vapor Point (Stantec, 2020)
- Sub-Slab Vapor Point (Stantec, 2020)
- Borehole (Stantec, 2019)
- Temporary Well (Stantec, 2019)
- Former Wells (1996 Clothes Clinic Investigation)
- PVOCs above NR 140 WAC PAL
- CVOCs above NR 140 WAC ES
- CVOCs above NR 140 WAC PAL
- PVOCs above NR 140 WAC ES
- Dissolved metals above NR 140 PAL
- Dissolved metals above NR 140 PAL (Inferred)
- Approximate Proposed Building Locations

Figure No.
5

Title
VOC & Dissolved RCRA Metal Concentrations Exceeding NR 140 WAC Standards

Client/Project
WB Brewery Building, LLC & City of West Bend Parcels 415 & 445-485 N. Main Street, West Bend, Wisconsin
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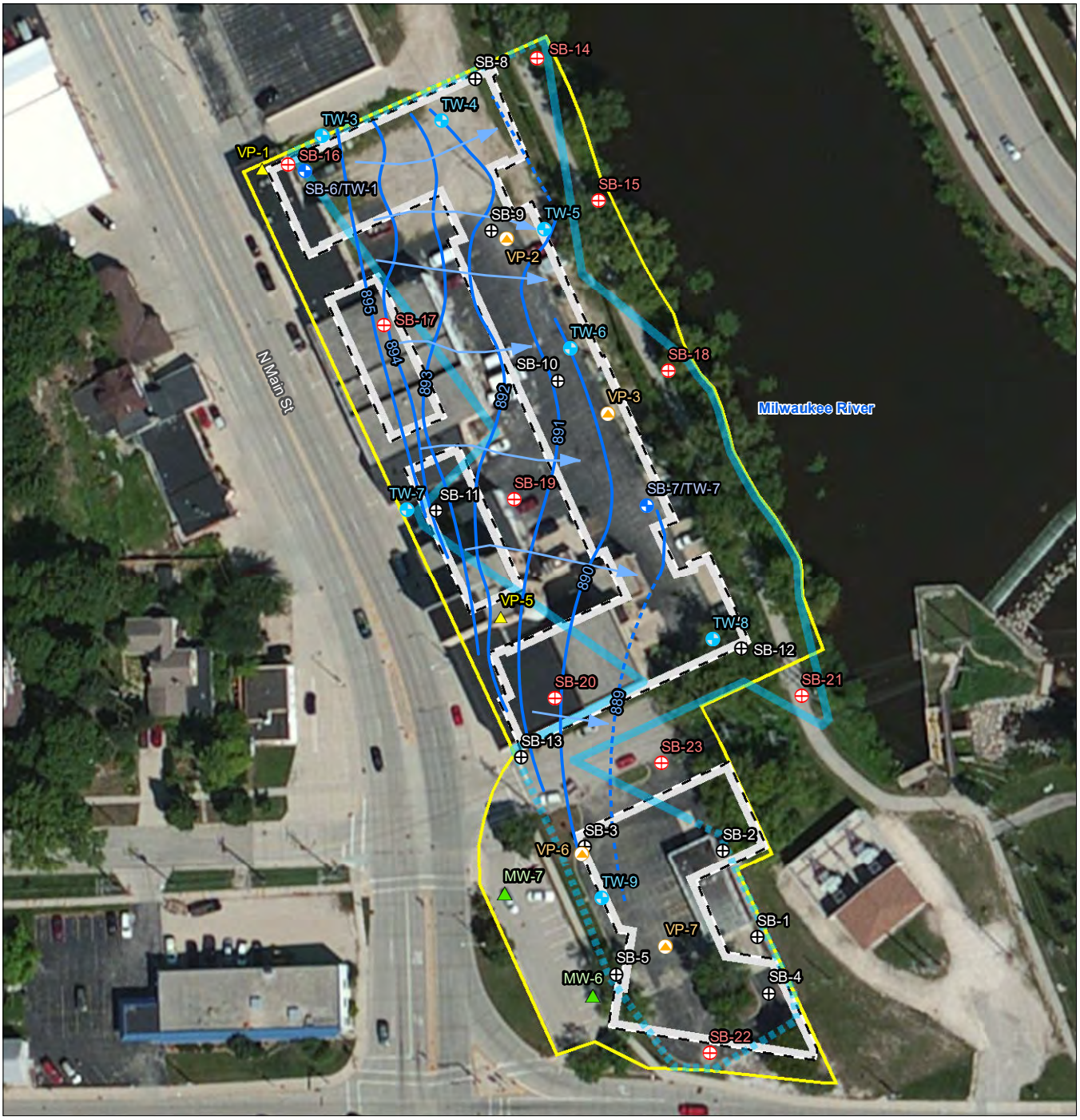
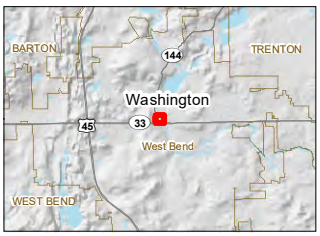
0 50 100 Feet
1:1,200 (at original document size of 8.5x11)

N

Stantec





Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources Include: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: ESRI World Imagery Clarity

Legend

- Approximate Site Boundary
- Borehole (Stantec, 2020)
- Borehole/Temporary Well (Stantec, 2020)
- Soil Vapor Point (Stantec, 2020)
- Sub-Slab Vapor Point (Stantec, 2020)
- Borehole (Stantec, 2019)
- Temporary Well (Stantec, 2019)
- Former Wells (1996 Clothes Clinic Investigation)
- Groundwater Flow Direction
- Shallow Groundwater Elevation Contour (November 19, 2020)
- Shallow Groundwater Elevation Contour (Inferred)
- NR 700 Groundwater Pathway Concern
- NR 700 Groundwater Pathway Concern (Inferred)
- Approximate Proposed Building Locations

Figure No.
6

Title
Groundwater Contours

Client/Project
WB Brewery Building, LLC & City of West Bend Parcels 415 & 445-485 N. Main Street, West Bend, Wisconsin
Supplemental Site Investigation, RAOR, & RAP

Project Location
T11N, R19E, S11,
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Washington Co., WI

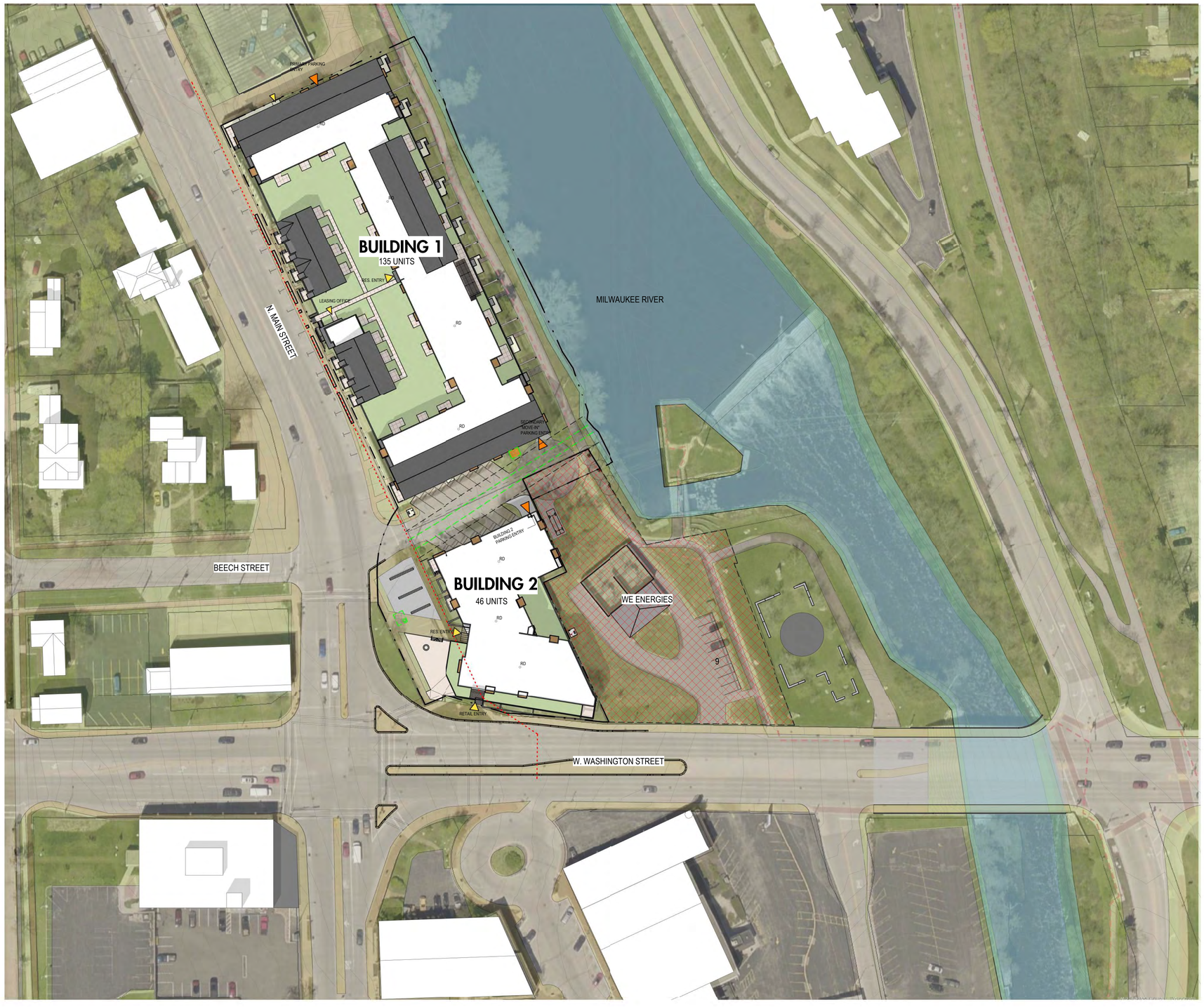
193707897
Prepared by JM on 2021-01-07
Technical Review by DG on 2021-01-11
Independent Review by EG on 2021-01-13

0 50 100 Feet
1:1,200 (at original document size of 8.5x11)

N

Stantec

Figure 7



Engberg Anderson ARCHITECTS
MILWAUKEE | MADISON | TUCSON | CHICAGO

WEST BEND MIXED USE

OVERALL SITE PLAN

SCALE: 1" = 50'-0"
0' 25' 50' 100' 200'

Engberg Anderson Project No. 203229.00

Engberg Anderson ARCHITECTS

Figure 8a

Engberg Anderson ARCHITECTS

Figure 8b

Figure 8c

Engberg Anderson

Figure 8d

Engberg Anderson ARCHITECTS

Figure 8e

Figure 8f

Figure 8g

Figure 8h

Figure 8i

Figure 8j

TABLES

Table 1 - Soil Summary Laboratory Detection Results

WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, Wisconsin

Sample Location					SB-14	SB-15		SB-16	SB-17	SB-18		SB-19	SB-20	SB-21		SB-22		SB-23	VP-3	TW-3	TW-4
Sample Date					11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/16/2020	11/17/2020	11/17/2020
Sample ID					SB-14 0-2	SB-15 0-2	SB-15 2-4	SB-16 2-4	SB-17 2-4	SB-18 0-2	SB-18 2-4	SB-19 2-4	SB-20 0-2	SB-21 2-4	DUP 5	SB-22 2.5-5	SB-22 5-6.5	SB-23 2-4	VP-3 0-0.5	TW-3 2-4	TW-4 0-2
Sample Depth					0 - 2 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	2.5 - 5 ft	5 - 6.5 ft	2 - 4 ft	0 - 0.5 ft	2 - 4 ft	0 - 2 ft
Ground Surface Cover					Grass	Grass		Concrete	Concrete	Asphalt		Asphalt	Concrete	Asphalt		Asphalt		Asphalt	Asphalt	Grass	Gravel
PID Reading (iui)					0.2	0.3	0.4	0.0	0.3	0.2	0.4	0.2	0.0	0.1	0.1	0.3	0.4	0.1	--	0.2	2.2
Sample Type and USCS Classification	Units	Wisconsin DC- NI RCL	Wisconsin DC- I RCL	Wisconsin GW RCL	SM	SM	SM / CL	CL / SP	SP	SM	SM	ML	SP	ML / CL	ML / CL	Fill (non-anthropogenic) / GP / ML	SP	SP	Fill (coal)	ML	Fill (glass/coal) / SM
RCRA Metals (EPA Method 6010B & 7471A)																					
Arsenic	mg/kg	0.677 [8]	3.0 [8]	0.584 [8]	2.2	--	3.3	1.1	1.0	3.7	--	4.3	0.50 J	3.0	4.2	3.6	0.97	1.4	47	6.4	5.5
Barium	mg/kg	15,300 [364]	100,000 [364]	164.8 [364]	43	--	59	13	14	97	--	76 V F1 F2	19	100	74	58	8.8	10	100	100	130
Cadmium	mg/kg	71.1 [1]	985 [1]	0.752 [1]	0.26	--	<0.042	0.049 J	0.044 J	0.55	--	<0.039 F1 F2	0.079 J	0.048 J	<0.039	<0.039	<0.031	<0.037	<0.18	<0.041	0.47
Chromium	mg/kg	100,000, 0.301 Cr VI [44]	100,000, 6.36 Cr VI [44]	360,000 (if no Cr VI)	9.2	--	18	5.5	6.4	14	--	19 F1	8.5	13	19	12	4.7	7.2	10	19	23
Lead	mg/kg	400 [52]	800 [52]	27 [52]	54	--	11	2.7	2.8	79	--	11 F1	5.0	18	12	11	2.1	3.5	49	16	110
Selenium	mg/kg	391	5,840	0.52	<0.62	--	<0.69	<0.64	<0.58	<0.65	--	<0.63 F1 F2	<0.63	<0.72	<0.63	<0.64	<0.51	<0.60	<2.9	<0.67	0.72 J
Silver	mg/kg	391	5,840	0.8491	<0.14	--	<0.15	<0.14	<0.13	<0.14	--	<0.14 F1 F2	<0.14	<0.16	<0.14	<0.14	<0.11	<0.13	<0.63	<0.15	<0.13
Mercury	mg/kg	3.13	3.13	0.208	0.068	--	0.036	0.013 J	0.011 J	0.045	--	0.057	0.010 J	0.070	0.049	0.029	0.0069 J	0.0095 J	0.12	0.037	0.45
Polycyclic Aromatic Hydrocarbons (EPA Method 8270D)																					
1-Methylnaphthalene	mg/kg	17.6	72.7	n/v	<0.009	--	<0.0095	<0.0089	<0.0085	0.071 J	--	<0.049	<0.0086	0.021 J	<0.0092	<0.0091	<0.0081	<0.0085	2.5	--	0.3
2-Methylnaphthalene	mg/kg	239	3,010	n/v	<0.0067	--	<0.0072	<0.0067	<0.0064	0.084	--	<0.037	<0.0065	0.021 J	0.007 J	<0.0069	<0.0061	<0.0064	3.1	--	0.35
Acenaphthene	mg/kg	3,590	45,200	n/v	0.011 J	--	<0.007	<0.0066	<0.0062	0.016 J	--	<0.036	<0.0064	0.048	0.015 J	0.025 J	<0.006	<0.0062	0.23	--	0.022 J
Acenaphthylene	mg/kg	n/v	n/v	n/v	0.0052 J	--	<0.0051	<0.0048	<0.0046	0.01 J	--	<0.027	<0.0047	0.013 J	0.0059 J	<0.0049	<0.0044	<0.0046	0.076 J	--	0.074
Anthracene	mg/kg	17,900	100,000	196.94	0.031 J	--	<0.0065	<0.0061	<0.0058	0.032 J	--	<0.034	<0.0059	0.1	0.038	0.049	<0.0055	<0.0058	0.47	--	0.089
Benzo(a)anthracene	mg/kg	1.14	20.8	n/v	0.14	--	0.0065 J	<0.0049	0.0051 J	0.14	--	<0.027	<0.0048	0.31	0.13	0.22	<0.0045	<0.0047	1.3	--	0.48
Benzo(a)pyrene	mg/kg	0.115	2.11	0.470	0.18 **	--	0.0079 J	<0.0071	<0.0067	0.17 **	--	<0.039	<0.0069	0.34 **	0.13 **	0.21 **	<0.0064	<0.0067	2	--	0.8
Benzo(b)fluoranthene	mg/kg	1.15	21.1	0.478	0.23	--	<0.0084	<0.0079	<0.0075	0.24	--	<0.044	<0.0076	0.47	0.17	0.25	<0.0072	<0.0075	3.1	--	1.3
Benzo(g,h,i)perylene	mg/kg	n/v	n/v	n/v	0.068	--	<0.013	<0.012	<0.011	0.074	--	<0.065 F1	<0.011	0.12	0.057	0.095	<0.011	<0.011	0.79	--	0.37
Benzo(k)fluoranthene	mg/kg	11.5	211	n/v	0.12	--	<0.011	<0.011	<0.01	0.091	--	<0.06	<0.01	0.15	0.06	0.11	<0.0098	<0.01	1	--	0.39
Chrysene	mg/kg	115	2,110	0.144	0.16	--	<0.011	<0.0099	<0.0094	0.17	--	<0.055	<0.0097	0.32	0.13	0.23	<0.0091	<0.0095	1.8	--	0.64
Dibenz(a,h)anthracene	mg/kg	0.115	2.11	n/v	<0.0071	--	<0.0075	<0.007	<0.0067	0.02 J	--	<0.039	<0.0068	0.038 J	0.016 J	0.029 J	<0.0064	<0.0067	0.18 J	--	0.084
Fluoranthene	mg/kg	2,390	30,100	88.877	0.26	--	0.011 J	<0.0068	0.011 J	0.29	--	<0.037	<0.0066	0.82	0.28	0.48	<0.0062	<0.0064	3	--	0.84
Fluorene	mg/kg	2,390	30,100	14.829	0.0083 J	--	<0.0055	<0.0051	<0.0049	0.014 J	--	<0.028	<0.005	0.041	0.013 J	0.024 J	<0.0047	<0.0049	0.22	--	0.03 J
Indeno(1,2,3-cd)pyrene	mg/kg	1.15	21.1	n/v	0.058	--	<0.01	<0.0095	<0.009	0.057	--	<0.052 F1	<0.0092	0.13	0.054	0.089	<0.0086	<0.009	0.71	--	0.3
Naphthalene	mg/kg	5.52	24.1	0.6582	<0.0056	--	<0.006	<0.0056	<0.0053	0.051	--	<0.031	<0.0054	0.022 J	<0.0058	<0.0058	<0.0051	<0.0053	2.1	--	0.23
Phenanthrene	mg/kg	n/v	n/v	n/v	0.13	--	0.014 J	<0.0051	0.012 J	0.2	--	<0.028	<0.0049	0.5	0.16	0.24	<0.0046	<0.0048	3.7	--	0.5
Pyrene	mg/kg	1,790	22,600	54.546	0.37	--	0.0092 J	<0.0072	0.009 J	0.33	--	<0.04	<0.007	0.57	0.21	0.34	<0.0066	<0.0069	3.9	--	1.2
Volatile Organic Compounds (EPA Method 8260B)																					
1,2,4-Trimethylbenzene	mg/kg	219	219	1.3787	--	<0.025	--	<0.022	<0.02	--	<0.022	<0.026	<0.023	--	--	--	--	--	--	<0.027	0.13
1,3,5-Trimethylbenzene	mg/kg	219	219	1.3787	--	<0.027	--	<0.023	<0.021	--	<0.023	<0.028	<0.024	--	--	--	--	--	--	<0.028	0.035 J
Benzene	mg/kg	1.6	7.07	0.0051	--	<0.01	--	<0.0089	<0.0081	--	<0.009	<0.011	<0.0094	--	--	--	--	--	--	<0.011	0.041
Ethylbenzene	mg/kg	8.02	35.4	1.57	--	<0.013	--	<0.011	<0.01	--	<0.011	<0.013	<0.012	--	--	--	--	--	--	<0.014	0.035
Isopropylbenzene	mg/kg	n/v	n/v	n/v	--	<0.027	--	<0.023	<0.021	--	<0.024	<0.028	<0.025	--	--	--	--	--	--	<0.029	<0.032
Methylene Chloride	mg/kg	61.8	1,150	0.0026	--	<0.11	--	<0.099	<0.09	--	<0.1	<0.12	<0.1	--	--	--	--	--	--	<0.12	<0.14
Naphthalene	mg/kg	5.52	24.1	0.6582	--	<0.023	--	<0.02	<0.018	--	<0.021	<0.024	<0.021	--	--	--	--	--	--	<0.025	0.21
n-Butylbenzene	mg/kg	108	108	n/v	--	<0.027	--	<0.024	<0.021	--	<0.024	<0.028	<0.025	--	--	--	--	--	--	<0.029	<0.032
N-Propylbenzene	mg/kg	264	264	n/v	--	<0.029	--	<0.025	<0.023	--	<0.026	<0.03	<0.027	--	--	--	--	--	--	<0.031	<0.034
p-Isopropyltoluene	mg/kg	162	162	n/v	--	<0.025	--	<0.022	<0.02	--	<0.022	<0.026	<0.023	--	--	--	--	--	--	<0.027	<0.03
sec-Butylbenzene	mg/kg	145	145	n/v	--	<0.028	--	<0.024	<0.022	--	<0.025	<0.029	<0.025	--	--	--	--	--	--	<0.03	<0.033
Tetrachloroethene	mg/kg	33	145	0.0045	--	<0.026	--	<0.023	<0.02	--	<0.023	<0.027	<0.024	--	--	--	--	--	--	<0.028	<0.031
Toluene	mg/kg	818	818	1.1072	--	<0.01	--	<0.009	<0.0081	--	<0.0091	<0.011	<0.0094	--	--	--	--	--	--	<0.011	0.16
Xylenes, Total	mg/kg	260	260	3.96	--	<0.015	--	<0.013	<0.012	--	<0.014	<0.016	<0.014	--	--	--	--	--	--	<0.016	0.37

Notes:

Wisconsin Department of Natural Resources (WDNR) soil residual contaminant level (RCL) Summary table (December 2018) used to establish RCLs for GW protection and direct contact.

-- = not analyzed

<x = compound not detected to a detection limit of x

DC-NI = WDNR Non-Industrial RCL for direct contact risk

DC - I = WDNR Industrial RCL for direct contact risk

GW RCL = WDNR RCL for protection of groundwater

n/v = no value established by WAC (Wis. Adm. Code) or WDNR Soil RCL Summary Table

iui = instrument units as isobutylene

mg/kg = milligrams per kilogram

ft = feet

MS and/or MSD = matrix spike and/or matrix spike duplicate

RPD = relative percent difference

J = Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.

F1 = Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery exceeds control limits.

F2 = MS/MSD relative percent difference (RPD) exceeds control limits

V = Serial Dilution exceeds the control limits

(xx) = Respective background threshold value (BTV)

xx = Exceeds BTV

** = Exceeds DC-NI, but NOT the GW RCL

Exceeds WDNR RCL for DC-NI

Exceeds WDNR RCL for DC-NI but NOT the BTV

Exceeds WDNR RCL for DC-I

Exceeds WDNR RCL for DC-I but NOT the BTV

Exceeds WDNR GW RCL

Exceeds WDNR GW RCL but NOT the BTV

September '19 data from the Former West Bend Brewing Property Phase II Environmental Site Assessment conducted by Stantec using United States Enviornmental Protection Agency (EPA) Brownfield Assessment Grant funds (EPA Brownfield Cooperative Agreement No. BF-00E01349-0).

Table 1 - Soil Summary Laboratory Detection Results

WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, Wisconsin

Sample Location					TW-5		TW-6		TW-7			TW-8	Trip Blank	SB-1		SB-2		SB-3		SB-4	SB-5	SB-6 / TW-1	
Sample Date					11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/16-18/2020	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19
Sample ID					TW-5 2-3	TW-5 3-4	TW-6 2-4	TW-6 4.5-6	TW-7 2-4	DUP 4	TW-7 4-6	TW-8 4-6	Trip-MEOH	SB-1 2-4	SB-1 6-8	SB-2 0.5-3	SB-2 3-4	SB-3 1-3	SB-3 5-6	SB-4 2-4	SB-5 2-4	SB-6 5-6	DUP-1
Sample Depth					2 - 3 ft	3 - 4 ft	2 - 4 ft	4.5 - 6 ft	2 - 4 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	N/A	2 - 4 ft	6 - 8 ft	0.5 - 3 ft	3 - 4 ft	1 - 3 ft	5 - 6 ft	2 - 4 ft	2 - 4 ft	5 - 6 ft	5 - 6 ft
Ground Surface Cover					Grass		Asphalt		Asphalt			Asphalt	N/A	Grass / Topsoil		Concrete		Asphalt		Asphalt	Grass / Topsoil	Grass / Topsoil	
PID Reading (iui)					2.2	0.3	0.7	0.5	1.3	1.3	0.6	1.5	N/A	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Sample Type and USCS Classification	Units	Wisconsin DC- NI RCL	Wisconsin DC- I RCL	Wisconsin GW RCL	SM	Fill (glass/coal/slag)	Fill (glass)	Fill (coal)	GC / Fill (non-anthropogenic)	GC / Fill (non-anthropogenic)	CL	Fill (coal/slag) / SP	N/A	Fill, Black Flecks	Fill	GW	SC	SC	PT	SC	SW	CH	CH
RCRA Metals (EPA Method 6010B & 7471A)																							
Arsenic	mg/kg	0.677 [8]	3.0 [8]	0.584 [8]	--	5.9	--	7.1	--	--	6.2	--	--	2.6	--	--	2.5	--	5.0	5.8	1.1	5.1	4.8
Barium	mg/kg	15,300 [364]	100,000 [364]	164.8 [364]	--	410	--	240	--	--	81	--	--	30	--	--	37	--	87	130	11	44	53
Cadmium	mg/kg	71.1 [1]	985 [1]	0.752 [1]	--	1.4	--	0.79	--	--	<0.042	--	--	0.20 B	--	--	0.23 J B	--	0.36 B	0.44 F1 B	0.15 J B	0.072 J B	0.097 J B
Chromium	mg/kg	100,000, 0.301 Cr VI [44]	100,000, 6.36 Cr VI [44]	360,000 (if no Cr VI)	--	20	--	11	--	--	24	--	--	7.6	--	--	8.4	--	11	15	4.8	20	20
Lead	mg/kg	400 [52]	800 [52]	27 [52]	--	240	--	56	--	--	11	--	--	22	--	--	41	--	93	300 F2	2.7	8.0	7.8
Selenium	mg/kg	391	5,840	0.52	--	<0.65	--	1.1 J	--	--	0.80 J	--	--	<0.58	--	--	<0.58	--	<0.58	1.2 F1	<0.58	<0.58	<0.6
Silver	mg/kg	391	5,840	0.8491	--	<0.14	--	<0.16	--	--	<0.15	--	--	1.3	--	--	1.5	--	2.1	2.8	0.98	4.1	4.0
Mercury	mg/kg	3.13	3.13	0.208	--	0.19	--	0.11	--	--	0.025	--	--	0.045	--	--	0.051	--	0.14	0.40		0.024	0.020
Polycyclic Aromatic Hydrocarbons (EPA Method 8270D)																							
1-Methylnaphthalene	mg/kg	17.6	72.7	n/v	--	0.071 J	--	1.2	--	--	--	0.54	--	0.017 J	--	--	<0.00024	--	0.049 J	0.014 J	<0.009	<0.009	<0.009
2-Methylnaphthalene	mg/kg	239	3,010	n/v	--	0.087	--	1.4	--	--	--	0.72	--	0.015 J	--	--	<0.000051	--	0.05 J	0.016 J	<0.0068	<0.0068	<0.007
Acenaphthene	mg/kg	3,590	45,200	n/v	--	0.0077 J	--	0.047	--	--	--	0.044	--	0.099	--	--	<0.00024	--	0.016 J	<0.0067	<0.0066	<0.0066	<0.007
Acenaphthylene	mg/kg	n/v	n/v	n/v	--	0.016 J	--	0.041	--	--	--	0.064	--	<0.0046	--	--	<0.00021	--	0.015 J	0.015 J	<0.0046	<0.0046	<0.005
Anthracene	mg/kg	17,900	100,000	196.94	--	0.025 J	--	0.14	--	--	--	0.13	--	0.25	--	--	<0.00026	--	0.053	0.021 J	<0.0061	<0.0061	<0.006
Benzo(a)anthracene	mg/kg	1.14	20.8	n/v	--	0.094	--	0.38	--	--	--	0.54	--	1.10	--	--	0.029 J	--	0.25	0.087	<0.0049	<0.0049	<0.005
Benzo(a)pyrene	mg/kg	0.115	2.11	0.470	--	0.16 **	--	0.46 **	--	--	--	0.78	--	1.0	--	--	0.045	--	0.27	0.12	0.0088 J	0.011 J	0.012 J
Benzo(b)fluoranthene	mg/kg	1.15	21.1	0.478	--	0.25	--	0.63	--	--	--	1	--	1.10	--	--	0.049	--	0.41	0.15	0.01 J	0.013 J	0.013 J
Benzo(g,h,i)perylene	mg/kg	n/v	n/v	n/v	--	0.12	--	0.6	--	--	--	0.39	--	0.45	--	--	0.018	--	0.088	0.055 F1	<0.012	<0.012	<0.013
Benzo(k)fluoranthene	mg/kg	11.5	211	n/v	--	0.081	--	0.22	--	--	--	0.35	--	0.49	--	--	0.022	--	0.12	0.070 F1	<0.011	<0.011	<0.012
Chrysene	mg/kg	115	2,110	0.144	--	0.12	--	0.47	--	--	--	0.6	--	1.10	--	--	0.035	--	0.32	0.10	<0.010	<0.010	<0.011
Dibenz(a,h)anthracene	mg/kg	0.115	2.11	n/v	--	0.035 J	--	0.063	--	--	--	0.075	--	0.140	--	--	0.012	--	0.027	0.018 J F1	<0.0071	<0.0071	<0.007
Fluoranthene	mg/kg	2,390	30,100	88.877	--	0.17	--	0.54	--	--	--	0.91	--	1.70	--	--	0.056	--	0.53	0.15	<0.0068	<0.0068	<0.007
Fluorene	mg/kg	2,390	30,100	14.829	--	0.0079 J	--	0.053	--	--	--	0.048	--	0.076	--	--	<0.00019	--	0.014	<0.0052	<0.0052	<0.0052	<0.005
Indeno(1,2,3-cd)pyrene	mg/kg	1.15	21.1	n/v	--	0.09	--	0.17	--	--	--	0.24	--	0.42	--	--	0.026	--	0.087	0.065 F1	<0.0095	0.011 J	0.011 J
Naphthalene	mg/kg	5.52	24.1	0.6582	--	0.058	--	0.91	--	--	--	0.53	--	<0.0054	--	--	<0.0054	--	0.034	0.011 J	<0.0057	<0.0057	<0.006
Phenanthrene	mg/kg	n/v	n/v	n/v	--	0.13	--	0.98	--	--	--	0.66	--	0.98	--	--	0.028	--	0.25	0.078	<0.0051	<0.0051	<0.005
Pyrene	mg/kg	1,790	22,600	54.546	--	0.23	--	0.82	--	--	--	1.3	--	1.60	--	--	0.054	--	0.47	0.17	<0.0073	<0.0073	<0.008
Volatile Organic Compounds (EPA Method 8260B)																							
1,2,4-Trimethylbenzene	mg/kg	219	219	1.3787	<0.021	--	0.64	--	<0.024	<0.024	--	--	<0.018	--	<0.024	<0.025	--	<0.025	--	<0.024	<0.024	<0.024	<0.024
1,3,5-Trimethylbenzene	mg/kg	219	219	1.3787	<0.022	--	0.15	--	<0.026	<0.026	--	--	<0.019	--	<0.026	<0.026	--	<0.026	--	<0.026	<0.026	<0.026	<0.026
Benzene	mg/kg	1.6	7.07	0.0051	<0.0085	--	0.13	--	<0.0099	<0.0098	--	--	<0.0073	--	<0.0097	<0.010	--	<0.010	--	<0.010	<0.010	<0.010	<0.010
Ethylbenzene	mg/kg	8.02	35.4	1.57	<0.011	--	0.21	--	<0.012	<0.012	--	--	<0.0092	--	<0.012	<0.013	--	<0.013	--	<0.013	<0.013	<0.013	<0.013
Isopropylbenzene	mg/kg	n/v	n/v	n/v	<0.022	--	0.16	--	<0.026	<0.026	--	--	<0.019	--	<0.027	<0.027	--	<0.027	--	<0.027	<0.027	<0.027	<0.027
Methylene Chloride	mg/kg	61.8	1,150	0.0026	<0.095	--	<0.14	--	<0.11	<0.11	--	--	<0.082	--	0.14 J B	0.15 J B	--	0.12 J B	--	0.15 J B	0.14 J B	0.15 J B	0.15 J B
Naphthalene	mg/kg	5.52	24.1	0.6582	<0.02	--	0.81	--	0.09	<0.022	--	--	<0.017	--	<0.022	<0.023	--	<0.022	--	<0.023	<0.022	<0.023	<0.023
n-Butylbenzene	mg/kg	108	108	n/v	<0.023	--	0.081 J	--	<0.026	<0.026	--	--	<0.019	--	<0.027	<0.027	--	<0.027	--	<0.027	<0.027	<0.027	<0.027
N-Propylbenzene	mg/kg	264	264	n/v	<0.024	--	0.17	--	<0.028	<0.028	--	--	<0.021	--	<0.029	<0.029	--	<0.029	--	<0.029	<0.029	<0.029	<0.029
p-Isopropyltoluene	mg/kg	162	162	n/v	<0.021	--	0.052 J	--	<0.025	<0.024	--	--	<0.018	--	<0.024	<0.025	--	<0.020	--	<0.023	<0.023	<0.026	<0.025
sec-Butylbenzene	mg/kg	145	145	n/v	<0.023	--	0.062 J	--	<0.027	<0.027	--	--	<0.02	--	<0.027	<0.028	--	<0.022	--	<0.026	<0.025	<0.028	<0.028
Tetrachloroethene	mg/kg	33	145	0.0045	<0.022	--	0.24	--	<0.025	<0.025	--	--	<0.019	--	<0.026	<0.026	--	<0.026	--	<0.026	<0.026	<0.026	<0.026
Toluene	mg/kg	818	818	1.1072	0.011 J	--	0.87	--	0.011 J	<0.0099	--	--	<0.0074	--	<0.0098	<0.010	--	<0.0098	--	<0.010	<0.0098	<0.010	<0.0098
Xylenes, Total	mg/kg	260	260	3.96	0.017 J	--	1.8	--	0.017 J	<0.015	--	--	<0.011	--	<0.015	<0.015	--	<0.015	--	<0.015	<0.015	<0.015	<0.015

Notes:

Wisconsin Department of Natural Resources (WDNR) soil residual contaminant level (RCL) Summary table (December 2018) used t establish RCLs for GW protection and direct contact.

-- = not analyzed

<x = compound not detected to a detection limit of x

DC-NI = WDNR Non-Industrial RCL for direct contact risk

DC - I = WDNR Industrial RCL for direct contact risk

GW RCL = WDNR RCL for protection of groundwater

n/v = no value established by WAC (Wis. Adm. Code) or WDNR Soil RCL Summary Table

iui = instrument units as isobutylene

mg/kg = milligrams per kilogram

ft = feet

MS and/or MSD = matrix spike and/or matrix spike duplicate

RPD = relative percent difference

J = Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.

F1 = Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery exceeds control limits.

F2 = MS/MSD relative percent difference (RPD) exceeds control limit

V = Serial Dilution exceeds the control limits

(xx) = Respective background threshold value (BTV)

xx = Exceeds BTV

** = Exceeds DC-NI, but NOT the GW RCL

Exceeds WDNR RCL for DC-NI

Exceeds WDNR RCL for DC-NI but NOT the BTV

Exceeds WDNR RCL for DC-I

Exceeds WDNR RCL for DC-I but NOT the BTV

Exceeds WDNR GW RCL

Exceeds WDNR GW RCL but NOT the BTV

September '19 data from the Former West Bend Brewing Property Phase II Environmental Site Assessment conducted by Stantec using United States Enviornmental Protection Agency (EPA) Brownfield Assessment Grant funds (EPA Brownfield Cooperative Agreement No. BF-00E01349-0).

Table 1 - Soil Summary Laboratory Detection Results

WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, Wisconsin

Sample Location					SB-7 / TW-2		SB-8		SB-9	SB-10	SB-11	SB-12	SB-13	Trip Blank
Sample Date					9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19
Sample ID					SB-7 0.5-1.5	SB-7 13.5-14.5	SB-8 2-3	SB-8 3-4	SB-9 1-3	SB-10 2-4	SB-11 2-4	SB-12 3-4	SB-13 2-4	TB-01
Sample Depth					0.5 - 1.5 ft	13.5 - 14.5 ft	2 -3 ft	3 - 4 ft	1 - 3 ft	2 - 4 ft	2 - 4 ft	3 - 4 ft	2 - 4 ft	N/A
Ground Surface Cover					Asphalt		Grass / Topsoil		Asphalt	Asphalt	Asphalt	Grass / Topsoil	Grass / Topsoil	N/A
PID Reading (iui)					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Sample Type and USCS Classification	Units	Wisconsin DC- NI RCL	Wisconsin DC- I RCL	Wisconsin GW RCL	Fill, Coal / Ash	GW	Fill	SC	Fill, Coal/ Cinders	Fill, Cinders/ Slag	SC	Fill, Black/Metallic Pieces	GW	N/A
RCRA Metals (EPA Method 6010B & 7471A)														
Arsenic	mg/kg	0.677 [8]	3.0 [8]	0.584 [8]	5.4	--	--	3.9	12	9.2	2.3	9.9	3.5	--
Barium	mg/kg	15,300 [364]	100,000 [364]	164.8 [364]	71	--	--	65	94	110	77	130	43	--
Cadmium	mg/kg	71.1 [1]	985 [1]	0.752 [1]	0.23 B	--	--	0.30 B	0.54 B	0.58 J B	0.19 J B	0.35 B	0.16 J B	--
Chromium	mg/kg	100,000, 0.301 Cr VI [44]	100,000, 6.36 Cr VI [44]	360,000 (if no Cr VI)	7.8	--	--	13	14	10	9.1	8.4	9.7	--
Lead	mg/kg	400 [52]	800 [52]	27 [52]	18	--	--	61	56	89	190	51	21	--
Selenium	mg/kg	391	5,840	0.52	<0.58	--	--	<0.58	1.2	<0.58	<0.58	1.3	0.68 J	--
Silver	mg/kg	391	5,840	0.8491	1.7	--	--	2.2	2.0	2.1 J	1.6	2.2	2.2	--
Mercury	mg/kg	3.13	3.13	0.208	0.023	--	--	0.050	0.063	0.06	0.043	0.23	0.046	--
Polycyclic Aromatic Hydrocarbons (EPA Method 8270D)														
1-Methylnaphthalene	mg/kg	17.6	72.7	n/v	0.24	--	--	0.032	0.45	1.6	0.018 J	0.27	0.084	--
2-Methylnaphthalene	mg/kg	239	3,010	n/v	0.32	--	--	0.046	0.59	2.2	0.019 J	0.32	0.11	--
Acenaphthene	mg/kg	3,590	45,200	n/v	0.0083 J	--	--	<0.0066	<0.0066	0.18	0.0084 J	<0.0066	0.40	--
Acenaphthylene	mg/kg	n/v	n/v	n/v	<0.0046	--	--	<0.0046	<0.0046	<0.0046	0.0099 J	0.043	0.021 J	--
Anthracene	mg/kg	17,900	100,000	196.94	0.017 J	--	--	0.023	0.13 J	0.37	0.020	0.093	0.59	--
Benzo(a)anthracene	mg/kg	1.14	20.8	n/v	0.07	--	--	0.075	0.29	0.92	0.1	0.31	1.0	--
Benzo(a)pyrene	mg/kg	0.115	2.11	0.470	0.084	--	--	0.11	0.41	0.88	0.11	0.28	0.99	--
Benzo(b)fluoranthene	mg/kg	1.15	21.1	0.478	0.13	--	--	0.15	0.43	1.3	0.16	0.58	1.4	--
Benzo(g,h,i)perylene	mg/kg	n/v	n/v	n/v	0.039	--	--	<0.012	0.11 J	0.24	0.032 J F1	0.10	0.37	--
Benzo(k)fluoranthene	mg/kg	11.5	211	n/v	0.044	--	--	0.062	0.26	0.47	0.046	0.13	0.46	--
Chrysene	mg/kg	115	2,110	0.144	0.084	--	--	0.079	0.3	0.85	0.1	0.37	1.10	--
Dibenz(a,h)anthracene	mg/kg	0.115	2.11	n/v	0.021	--	--	<0.0071	0.082 J	0.15	<0.0071	0.024 J	0.11	--
Fluoranthene	mg/kg	2,390	30,100	88.877	0.084	--	--	0.17	0.52	1.9	0.14	0.67	3.70	--
Fluorene	mg/kg	2,390	30,100	14.829	0.0083 J	--	--	0.0063 J	0.029 J	0.16	<0.0052	0.036	0.32	--
Indeno(1,2,3-cd)pyrene	mg/kg	1.15	21.1	n/v	0.054	--	--	0.06	0.24	0.38	0.036 J F1	0.11	0.31	--
Naphthalene	mg/kg	5.52	24.1	0.6582	0.18	--	--	0.026 J	0.34	1.3	0.015 J	0.21	0.23	--
Phenanthrene	mg/kg	n/v	n/v	n/v	0.23	--	--	0.089	0.58	2.3	0.058	0.56	3.80	--
Pyrene	mg/kg	1,790	22,600	54.546	0.073	--	--	0.12	0.42	1.5	0.13	0.66	3.00	--
Volatile Organic Compounds (EPA Method 8260B)														
1,2,4-Trimethylbenzene	mg/kg	219	219	1.3787	--	<0.024	<0.025	--	0.31	1.1	0.058 J	0.082	<0.024	<0.018
1,3,5-Trimethylbenzene	mg/kg	219	219	1.3787	--	<0.026	<0.026	--	0.078	0.25	<0.026	<0.026	<0.026	<0.026
Benzene	mg/kg	1.6	7.07	0.0051	--	<0.010	<0.010	--	0.063	0.20	0.013 J	<0.010	<0.010	<0.0073
Ethylbenzene	mg/kg	8.02	35.4	1.57	--	<0.013	<0.013	--	0.10	0.35	0.016 J	0.020	<0.013	<0.0092
Isopropylbenzene	mg/kg	n/v	n/v	n/v	--	<0.027	<0.027	--	0.068 J	0.26	<0.027	<0.027	<0.027	<0.019
Methylene Chloride	mg/kg	61.8	1,150	0.0026	--	0.11 J B	0.110 J B	--	0.14 J B	0.19 J B	0.12 J B	0.14 J B	0.12 J B	<0.082
Naphthalene	mg/kg	5.52	24.1	0.6582	--	<0.023	0.024 J	--	0.50	1.6	0.093	0.14	0.025 J	<0.017
n-Butylbenzene	mg/kg	108	108	n/v	--	<0.027	<0.027	--	0.036 J	0.13	<0.027	<0.027	<0.027	<0.019
N-Propylbenzene	mg/kg	264	264	n/v	--	<0.029	<0.029	--	0.082	0.29	<0.029	<0.029	<0.029	<0.021
p-Isopropyltoluene	mg/kg	162	162	n/v	--	<0.020	<0.021	--	<0.028	0.090 J	<0.025	<0.026	<0.022	<0.018
sec-Butylbenzene	mg/kg	145	145	n/v	--	<0.023	<0.024	--	<0.031	0.093 J	<0.028	<0.029	<0.024	<0.020
Tetrachloroethene	mg/kg	33	145	0.0045	--	<0.026	<0.026	--	0.12	0.74	<0.026	<0.026	<0.026	<0.019
Toluene	mg/kg	818	818	1.1072	--	<0.010	0.019	--	0.37	1.3	0.071	0.083	<0.0098	<0.0074
Xylenes, Total	mg/kg	260	260	3.96	--	<0.015	0.040	--	0.98	3.2	0.14	0.21	<0.015	<0.011

Notes: Wisconsin Department of Natural Resources (WDNR) soil residual contaminant level (RCL) Summary table (December 2018) used t establish RCLs for GW protection and direct contact.

-- = not analyzed

<x = compound not detected to a detection limit of x

DC-NI = WDNR Non-Industrial RCL for direct contact risk

DC - I = WDNR Industrial RCL for direct contact risk

GW RCL = WDNR RCL for protection of groundwater

n/v = no value established by WAC (Wis. Adm. Code) or WDNR Soil RCL Summary Table

iui = instrument units as isobutylene

mg/kg = milligrams per kilogram

ft = feet

MS and/or MSD = matrix spike and/or matrix spike duplicate

RPD = relative percent difference

J = Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.

F1 = Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery exceeds control limits.

F2 = MS/MSD relative percent difference (RPD) exceeds control limit

V = Serial Dilution exceeds the control limits

(xx) = Respective background threshold value (BTV)

xx = Exceeds BTV

** = Exceeds DC-NI, but NOT the GW RCL

Exceeds WDNR RCL for DC-NI

Exceeds WDNR RCL for DC-NI but NOT the BTV

Exceeds WDNR RCL for DC-I

Exceeds WDNR RCL for DC-I but NOT the BTV

Exceeds WDNR GW RCL

Exceeds WDNR GW RCL but NOT the BTV

September '19 data from the Former West Bend Brewing Property Phase II Environmental Site Assessment conducted by Stantec using United States Enviornmental Protection Agency (EPA) Brownfield Assessment Grant funds (EPA Brownfield Cooperative Agreement No. BF-00E01349-0).

Table 2a
QA/QC Summary of Soil
WB Brewery Building, LLC Parcels
415, 445 - 485 North Main Street
West Bend, Wisconsin

	Constituents	Units	SB-21, 2-4 ft		RPD	TW-7, 2-4 ft		RPD
			Field Duplicate	Sample		Field Duplicate	Sample	
			11/16/20			11/18/20		
RCRA Metals	Arsenic	mg/kg	4.2	3.0	33%	--	--	--
	Barium	mg/kg	74	100	30%	--	--	--
	Cadmium	mg/kg	< 0.039	0.048 J	NC	--	--	--
	Chromium	mg/kg	19	13	38%	--	--	--
	Lead	mg/kg	12	18	40%	--	--	--
	Selenium	mg/kg	< 0.63	< 0.72	NC	--	--	--
	Silver	mg/kg	< 0.14	< 0.16	NC	--	--	--
	Mercury	mg/kg	0.049	0.070	35%	--	--	--
Polycyclic Aromatic Hydrocarbons	1-Methylnaphthalene	mg/kg	< 0.0092	0.021 J	NC	--	--	--
	2-Methylnaphthalene	mg/kg	0.007 J	0.021 J	100%	--	--	--
	Acenaphthene	mg/kg	0.015 J	0.048	105%	--	--	--
	Acenaphthylene	mg/kg	0.0059 J	0.013 J	75%	--	--	--
	Anthracene	mg/kg	0.038	0.1	90%	--	--	--
	Benzo(a)anthracene	mg/kg	0.13	0.31	82%	--	--	--
	Benzo(a)pyrene	mg/kg	0.13	0.34	89%	--	--	--
	Benzo(b)fluoranthene	mg/kg	0.17	0.47	94%	--	--	--
	Benzo(g,h,i)perylene	mg/kg	0.057	0.12	71%	--	--	--
	Benzo(k)fluoranthene	mg/kg	0.06	0.15	86%	--	--	--
	Chrysene	mg/kg	0.13	0.32	84%	--	--	--
	Dibenz(a,h)anthracene	mg/kg	0.016 J	0.038 J	81%	--	--	--
	Fluoranthene	mg/kg	0.28	0.82	98%	--	--	--
	Fluorene	mg/kg	0.013 J	0.041	104%	--	--	--
	Indeno(1,2,3-cd)pyrene	mg/kg	0.054	0.13	83%	--	--	--
	Naphthalene	mg/kg	< 0.0058	0.022 J	NC	--	--	--
	Phenanthrene	mg/kg	0.16	0.5	103%	--	--	--
	Pyrene	mg/kg	0.21	0.57	92%	--	--	--
Volatile Organic Compounds	1,2,4-Trimethylbenzene	mg/kg	--	--	--	< 0.024	< 0.024	NC
	1,3,5-Trimethylbenzene	mg/kg	--	--	--	< 0.026	< 0.026	NC
	Benzene	mg/kg	--	--	--	< 0.0098	< 0.0099	NC
	Ethylbenzene	mg/kg	--	--	--	< 0.012	< 0.012	NC
	Isopropylbenzene	mg/kg	--	--	--	< 0.026	< 0.026	NC
	Methylene Chloride	mg/kg	--	--	--	< 0.11	< 0.11	NC
	Naphthalene	mg/kg	--	--	--	< 0.022	0.09	NC
	n-Butylbenzene	mg/kg	--	--	--	< 0.026	< 0.026	NC
	N-Propylbenzene	mg/kg	--	--	--	< 0.028	< 0.028	NC
	p-Isopropyltoluene	mg/kg	--	--	--	< 0.024	< 0.025	NC
	sec-Butylbenzene	mg/kg	--	--	--	< 0.027	< 0.027	NC
	Tetrachloroethene	mg/kg	--	--	--	< 0.025	< 0.025	NC
	Toluene	mg/kg	--	--	--	< 0.0099	0.011 J	NC
	Xylenes, Total	mg/kg	--	--	--	< 0.015	0.017 J	NC

Notes:

mg/kg	milligram per kilogram, dry weight
RCRA	Resource Conservation and Recovery Act
--	Parameter not analyzed / not available.
*	Indicates analysis is not within the quality control limits.
J	Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
RPD	Relative Percent Difference between the field duplicate and sample. A negative value indicates the field duplicate is less than the corresponding sample.
NC	RPD cannot be calculated as either the sample value or duplicate value is less than the laboratory reporting limit.

Table 2b
QA/QC Summary of Groundwater
WB Brewery Building, LLC Parcels
415, 445 - 485 North Main Street
West Bend, Wisconsin

	Constituents	Units	TW-3		RPD	TW-5		RPD	TW-9		RPD
			Field Duplicate	Sample		Field Duplicate	Sample		Field Duplicate	Sample	
			11/18/20			11/18/20			11/18/20		
Dissolved RCRA Metals	Arsenic, Dissolved	µg/L	2.6	4.6	56%	--	--	--	--	--	--
	Barium, Dissolved	µg/L	160	190	17%	--	--	--	--	--	--
	Cadmium, Dissolved	µg/L	< 0.170	0.170 J	NC	--	--	--	--	--	--
	Chromium, Dissolved	µg/L	9.5	15	45%	--	--	--	--	--	--
	Lead, Dissolved	µg/L	3.6	6.5	57%	--	--	--	--	--	--
	Selenium, Dissolved	µg/L	2.6	3.1	18%	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons	1-Methylnaphthalene	µg/L	--	--	--	< 0.24	< 0.25	NC	--	--	--
	2-Methylnaphthalene	µg/L	--	--	--	< 0.052	< 0.053	NC	--	--	--
	Naphthalene	µg/L	--	--	--	< 0.25	< 0.25	NC	--	--	--
Volatile Organic Compounds	1,1-Dichloroethane	µg/L	--	--	--	--	--	--	< 0.41	< 0.41	NC
	1,2,4-Trimethylbenzene	µg/L	--	--	--	--	--	--	< 0.36	< 0.36	NC
	1,3,5-Trimethylbenzene	µg/L	--	--	--	--	--	--	< 0.25	< 0.25	NC
	Benzene	µg/L	--	--	--	--	--	--	< 0.15	< 0.15	NC
	cis-1,2-Dichloroethene	µg/L	--	--	--	--	--	--	< 0.41	< 0.41	NC
	Ethylbenzene	µg/L	--	--	--	--	--	--	< 0.18	< 0.18	NC
	Isopropylbenzene	µg/L	--	--	--	--	--	--	< 0.39	< 0.39	NC
	Methylene Chloride	µg/L	--	--	--	--	--	--	3.9 J	4.1 J	5%
	Napthalene	µg/L	--	--	--	--	--	--	< 0.34	< 0.34	NC
	n-Butylbenzene	µg/L	--	--	--	--	--	--	< 0.39	< 0.39	NC
	N-Propylbenzene	µg/L	--	--	--	--	--	--	< 0.41	< 0.41	NC
	p-Isopropyltoluene	µg/L	--	--	--	--	--	--	< 0.36	< 0.36	NC
	sec-Butylbenzene	µg/L	--	--	--	--	--	--	< 0.40	< 0.40	NC
	tert-Butylbenzene	µg/L	--	--	--	--	--	--	< 0.40	< 0.40	NC
	Tetrachloroethene	µg/L	--	--	--	--	--	--	< 0.37	< 0.37	NC
	Toluene	µg/L	--	--	--	--	--	--	0.15 J	0.18 J	18%
	Trichloroethene	µg/L	--	--	--	--	--	--	< 0.16	< 0.16	NC
	Xylenes, Total	µg/L	--	--	--	--	--	--	< 0.22	< 0.22	NC

Notes:

µg/L	microgram per liter
RCRA	Resource Conservation and Recovery Act
--	Parameter not analyzed / not available.
*	Indicates analysis is not within the quality control limits.
J	Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
RPD	Relative Percent Difference between the field duplicate and sample. A negative value indicates the field duplicate is less than the corresponding sample.
NC	RPD cannot be calculated as either the sample value or duplicate value is less than the laboratory reporting limit.

Table 3
Groundwater Summary Laboratory Detection Results
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, Wisconsin

	Constituents	NR 140, WAC ES (µg/L)	NR 140, WAC PAL (µg/L)	TW-3	DUP 2 / TW-3	TW-4	TW-5	DUP 3 / TW-5	TW-6	TW-7	TW-8	TW-9	DUP 1 / TW-9	Trip - HCL	TW-1	DUP-02 / TW-1	TW-2	Trip Blank (TB-02)
				11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/18/2020	11/16-18/2020	9/13/2019	9/13/2019	9/13/2019	9/13/2019
				Concentrations (µg/L)														
Dissolved Metals	Arsenic, Dissolved	10	1.0	4.6	2.6	0.79 J	1.1	--	1	7.2	1.3	--	--	--	3.9	4.2	0.46 J	–
	Barium, Dissolved	2,000	400	190	160	150	230	--	140	240	110	--	--	--	120	120	100	–
	Cadmium, Dissolved	5	1	0.17 J	<0.17	<0.17	<0.17	--	<0.17	<0.17	<0.17	--	--	--				–
	Chromium, Dissolved	100	10	15	9.5	<1.1 ^	<1.1 ^	--	<1.1 ^	18	<1.1 ^	--	--	--	<0.0011	<0.0011	1.3 J, B	–
	Lead, Dissolved	15	1.5	6.5	3.6	0.24 J	0.79	--	<0.19	11	<0.19	--	--	--	0.58	0.35 J	<0.00019	–
	Selenium, Dissolved	50	10	3.1	2.6	2.6	1.5 J	--	1.4 J	1.5 J	2.6	--	--	--	<0.00098	<0.00098	1.3 J	–
PAHs	Methylnaphthalene, 1-	NE	NE	--	--	--	<0.25	<0.24	<0.24 F1 F2	--	<0.26	--	--	--	1.4 J	1.4 J	<0.24	–
	Methylnaphthalene, 2-	NE	NE	--	--	--	<0.053	<0.052	<0.052 F1 F2	--	<0.057	--	--	--	1.4 J	1.4 J	<0.051	–
	Naphthalene	100	10	--	--	--	<0.25	<0.25	<0.25 F1	--	<0.27	--	--	--	2.9	2.9	<0.24	–
VOCs	1,1-Dichloroethane	850	85	<0.41	--	<0.41	<0.41	--	<0.41	<0.41	--	<0.41	<0.41	<0.41	3.3	3.6	<0.41	<0.41
	1,2,4-Trimethylbenzene	480	96	<0.36	--	<0.36	<0.36	--	<0.36	13	--	<0.36	<0.36	<0.36	15	15	0.42 J	<0.36
	1,3,5-Trimethylbenzene	480	96	<0.25	--	<0.25	<0.25	--	<0.25	48	--	<0.25	<0.25	<0.25	4.6	4.7	<0.25	<0.25
	Benzene	5	0.5	<0.15	--	0.31 J	<0.15	--	<0.15	50	--	<0.15	<0.15	<0.15	1.7	1.7	<0.15	<0.15
	cis-1,2-Dichloroethene	5	0.5	<0.41	--	<0.41	<0.41	--	<0.41	<0.41	--	<0.41	<0.41	<0.41	12	12	<0.41	<0.41
	Ethylbenzene	700	140	<0.18	--	<0.18	<0.18	--	<0.18	290	--	<0.18	<0.18	<0.18	6.1	6.1	<0.18	<0.18
	Isopropylbenzene	NE	NE	<0.39	--	<0.39	<0.39	--	<0.39	44	--	<0.39	<0.39	<0.39	1	1.1	<0.39	<0.39
	Methylene Chloride	5	0.5	4.0 J	--	<1.6	4.1 J	--	4.1 J	<1.6	--	4.1 J	3.9 J	4.3 J	2.1 J, B	1.9 J, B	2.8 J, B	3.8 J, B
	Napthalene	100	10	<0.34	--	<0.34	<0.34	--	<0.34	150	--	<0.34	<0.34	<0.34	8.5	8.9	0.71 J	<0.34
	n-Butylbenzene	NE	NE	<0.39	--	<0.39	<0.39	--	<0.39	23	--	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39
	N-Propylbenzene	NE	NE	<0.41	--	<0.41	<0.41	--	<0.41	120	--	<0.41	<0.41	<0.41	2.7	2.7	<0.41	<0.41
	p-Isopropyltoluene	NE	NE	<0.36	--	<0.36	<0.36	--	<0.36	5.7	--	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.40
	sec-Butylbenzene	NE	NE	<0.40	--	<0.40	<0.40	--	<0.40	11	--	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	tert-Butylbenzene	NE	NE	<0.40	--	<0.40	<0.40	--	<0.40	0.95 J	--	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	Tetrachloroethene	5	0.5	6.4	--	<0.37	0.46 J	--	0.62 J	<0.37	--	<0.37	<0.37	<0.37	0.42 J	<0.37	<0.37	<0.37
	Toluene	800	160	0.17 J	--	0.60	<0.15	--	0.37 J	41	--	0.18 J	0.15 J	<0.15	0.79	0.75	0.31 J	<0.15
	Trichloroethene	5	0.5	0.17 J	--	<0.16	<0.16	--	0.23 J	<0.16	--	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
	Xylenes, Total	2000	400	<0.22	--	0.27 J	<0.22	--	<0.22	180	--	<0.22	<0.22	<0.22	13	13	<0.22	<0.22

Notes: Wisconsin Department of Natural Resources (WDNR) NR 140 Wisconsin Administrative Code (WAC) Table 1 (January 2020) used to establish Public Health Groundwater Quality Standards.

<xx = compound not detected at a detection limit of xx
NE = not established by WAC
XX = exceeds NR 140, WAC prevention action limit (PAL)
XX = exceeds NR 140, WAC enforcement standard (ES)
PAHs = polynuclear aromatic hydrocarbons
VOCs = volatile organic compounds
– = Not analyzed for constituent class
µg/L = micrograms per liter
J = Compound detected between limit of detection and limit of quantification
B = Compound was found in the blank and sample
^ Instrument related quality control (QC) is outside acceptance limits
F1 = Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery exceeds control limits.
F2 = MS/MSD relative percent difference (RPD) exceeds control limits

September '19 data from the Former West Bend Brewing Property Phase II Environmental Site Assessment conducted by Stantec using United States Enviornmental Protection Agency (EPA) Brownfield Assessment Grant funds (EPA Brownfield Cooperative Agreement No. BF-00E01349-0).

Table 4: Sub-Slab & Deep Soil Gas Air Quality Laboratory Results, WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, Wisconsin

Sample Point	Vacuum Testing of Sampling Fittings** (Pass/Fail)	Helium Shroud QA/QC Testing		Date Sampled	Date Analyzed	Sample Location	Sample Duration (minutes)	Detected Volatile Organic Compounds (micrograms per cubic meter)														
		Helium Concentration Under Shroud (% He)	Helium Concentration in Sample (%)					2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Benzene	Carbon disulfide	Cyclohexane	Dichlorodifluoromethane	Ethylbenzene	Hexane	m-Xylene & p-Xylene	o-Xylene	Tetrachloroethene	Toluene	Trichloroethene	Trichlorofluoromethane	Xylenes, Total
Residential VRSL (micrograms per cubic meter)						Sub-Slab Residential (AF = 0.03)		173,667	104,333	120	24,333	208,667	3,467	373	4,667	3,467	3,467	1,390	107,000	70	NSL	3,467
						Deep Soil Gas (AF = 0.01)		521,000	313,000	360	73,000	626,000	10,400	1,120	14,000	10,400	10,400	4,170	321,000	209	NSL	10,400
Small-Commercial / Indoor Worker VRSL (micrograms per cubic meter)						Sub-Slab Residential (AF = 0.03)		730,000	436,667	523	102,333	876,667	14,600	1,637	20,433	14,600	14,600	5,833	730,000	292	NSL	14,600
						Deep Soil Gas (AF = 0.01)		2,190,000	1,310,000	1,570	307,000	2,630,000	43,800	4,910	61,300	43,800	43,800	17,500	2,190,000	876	NSL	43,800
VP-1	Pass	31.9%	0%	11/17/20	11/23/20	Ground floor sub-slab	34	<5.4	<5.5	1.7 J	<0.87	<2.0	3.6 J	<1.4	1.7 J	<3.2	<1.7	<1.2	<7.4	<0.81	1.4 J	<2.6
VP-2	Pass	31.6%	0%	11/17/20	11/23/20	Soil Vapor Point - Installed 3 ft bgs	26	<5.4	<5.5	1.1 J	<0.87	<2.0	4.6 J	<1.4	<1.2	<3.2	<1.7	46	<7.4	<0.81	1.2 J	<2.6
VP-3	Pass	30.5%	0%	11/17/20	11/23/20	Soil Vapor Point - Installed 5 ft bgs	38	18 J	23	5.9 J	3.0 J	89	3.6 J	2.3 J	20 J	8.6 J	4.2 J	12 J	14	<0.81	1.8 J	13 J
VP-5	Pass	32.1%	0%	11/17/20	11/23/20	Ground floor sub-slab	35	<5.4	<5.5	<0.61	<0.87	<2.0	3.3 J	<1.4	<1.2	<3.2	<1.7	3.1 J	<7.4	<0.81	1.2 J	<2.6
VP-6	Pass	35.7%	0%	11/17/20	11/23/20	Soil Vapor Point - Installed 5 ft bgs	31	8.4 J	17 J	5.7 J	1.6 J	4.4 J	3.2 J	2.9 J	8.5 J	5.5 J	2.6 J	18	14	1.2 J	1.4 J	8.2 J
VP-7	Pass	36.3%	0%	11/17/20	11/23/20	Soil Vapor Point - Installed 5 ft bgs	35	<5.4	8.4 J	1.4 J	<0.87	<2.0	3.1 J	2.0 J	1.6 J	<3.2	<1.7	2.3 J	<7.4	<0.81	1.2 J	<2.6

Note: Target Hazard Quotient (THQ) of 1 and Target Risk (TR) of 1E-05 per RR-800 (WDNR, January 2018)

AF = attenuation factor

NSL = no screening level assigned from USEPA Regional Screening Level (RSL) Table - November 2020

VAL = vapor action level

VRSL = vapor risk screening level

<x = analyte was not detected at a concentration greater than "x"

x = analyte exceeds applicable target air concentration

"J" = analyte exceeds the limit of detection but is below the limit of quantification

** = a vacuum of greater than 5 inches of mercury was applied to the hoses and fittings used to collect each sample. A passing grade was given if no drop in vacuum was observed after at least 1 minute

ft bgs = feet below ground surface

All screening levels were determined based upon the guidance provided in the WDNR WI Vapor Quick Look-Up Table - Indoor Air Vapor Action Levels (WDNR, 2017) and Vapor Risk Screening Levels, (WDNR, November 2020). The VAL and VRSLs were determined from the USEPA Regional Screening Level (RSL) Table - November 2020 per WDNR Publication RR-800 - Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin (WDNR, January 2018).

Table 5
Waste Screening of Soil
WB Brewery Building, LLC Parcels
415, 445 - 485 North Main Street
West Bend, Wisconsin

Constituents		Thresholds for Toxicity[1]	Waste Disposal Screening Limit[2]	BRRTS #02-67-586818		BRRTS #02-67-586821													
				SB-22		SB-14	SB-15	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-23	VP-3	TW-3	TW-4	TW-5	TW-6	TW-7
				11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/16/20	11/17/20	11/17/20	11/18/20	11/18/20	11/18/20
				2.5 - 5 ft	5 - 6.5 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	0 - 0.5 ft	2 - 4 ft	0 - 2 ft	3 - 4 ft	4.5 - 6 ft	4 - 6 ft
RCRA Metals	Arsenic	5	100	3.6	0.97	2.2	3.3	1.1	1.0	3.7	4.3	0.50 J	3.0	1.4	47	6.4	5.5	5.9	7.1	6.2
	Barium	100	2000	58	8.8	43	59	13	14	97	76 V F1 F2	19	100	10	100	100	130	410	240	81
	Cadmium	1	20	<0.039	<0.031	0.26	<0.042	0.049 J	0.044 J	0.55	<0.039 F1 F2	0.079 J	0.048 J	<0.037	<0.18	<0.041	0.47	1.4	0.79	<0.042
	Chromium	5	100	12	4.7	9.2	18	5.5	6.4	14	19 F1	8.5	13	7.2	10	19	23	20	11	24
	Lead	5	100	11	2.1	54	11	2.7	2.8	79	11 F1	5.0	18	3.5	49	16	110	240	56	11
	Selenium	1	20	<0.64	<0.51	<0.62	<0.69	<0.64	<0.58	<0.65	<0.63 F1 F2	<0.63	<0.72	<0.60	<2.9	<0.67	0.72 J	<0.65	1.1 J	0.80 J
	Silver	5	100	<0.14	<0.11	<0.14	<0.15	<0.14	<0.13	<0.14	<0.14 F1 F2	<0.14	<0.16	<0.13	<0.63	<0.15	<0.13	<0.14	<0.16	<0.15
	Mercury	0.2	4	0.029	0.0069 J	0.068	0.036	0.013 J	0.011 J	0.045	0.057	0.010 J	0.070	0.0095 J	0.12	0.037	0.45	0.19	0.11	0.025

Notes:
Analyte concentrations are expressed in milligrams per kilogram
Only detected constituents listed in 40 CFR 261.24 and ch. NR 661 Subchapter C, Table 2 are summarized on this table. Results qualified by the laboratory are not compared to waste screening levels.
<0.03 = Analyte was not detected at a concentration greater than the laboratory reporting limit.
[1] USEPA thresholds for toxicity in milligrams per liter presented in 40 CFR 261.24, which are mirrored in Ch. NR 661, Subchapter C, Table 2.
[2] Waste disposal screening limit in milligrams per kilogram is equal to 20-times the USEPA thresholds for toxicity presented in 40 CFR 261.24.
CFR = Code of Federal Regulations
J = analyte detected between the limit of detection and the limit of quantitation
F1 = MS and/or MSD recovery is outside of acceptance limits
F2 = MS/MSD RPD exceeds control limits
MS = matrix spike
MSD = matrix spike duplicate
RCRA = Resource Conservation and Recovery Act
RPD = relative percent difference
USEPA = United States Environmental Protection Agency
V = Duplicate RPD exceeds the control limit

TABLE 6 - WATER LEVEL DATA, WB BREWERY BUILDING, LLC PARCELS, WEST BEND, WISCONSIN

Well ID	Date Installed	Latitude	Longitude	Screen Interval (fbgs)	Water Level Measurement Date	TOC elevation (ft amsl)[2]	DTW[1] (fbgs)	Groundwater Elevation (ft amsl)[2]
TW-3	11/17/20	43°25'43.09"N	88°11'6.66"W	3.4 - 13.4	11/19/20	900.43	5.26	895.17
TW-4	11/18/20	43°25'43.17"N	88°11'5.60"W	3.4 - 13.4	11/19/20	897.14	5.26	891.88
TW-5	11/18/20	43°25'42.46"N	88°11'4.72"W	4.1 - 14.1	11/19/20	897.60	6.60	891.00
TW-6	11/18/20	43°25'41.69"N	88°11'4.50"W	9.0 - 19.0	11/19/20	899.34	9.40	889.94
TW-7	11/18/20	43°25'40.67"N	88°11'5.98"W	8.6 - 18.6	11/19/20	909.11	13.83	895.28
TW-8	11/18/20	43°25'39.79"N	88°11'3.30"W	8.9 - 18.9	11/19/20	904.18	16.14	888.04
TW-9	11/17/20	43°25'38.14"N	88°11'4.33"W	13.4 - 23.4	11/19/20	907.59	18.53	889.06

Notes:

1) The water level in the well may not have fully recovered at the time of measurement, which was measured the morning after sampling.

2) Survey benchmark datum used was the rim of a storm manhole on the northwest portion of the City of West Bend Parking Lot property. Rim of the manhole = 907.89

DTW = depth to water ID = identification

fbgs = feet below ground surface

ft amsl = feet above mean sea level

TOC = top of casing

Table 7
Remedial Action Options Evaluation
WB Brewery Building, LLC Parcels
415, 445 - 485 North Main Street
West Bend, Wisconsin

Remedial Action Area Description:
Residual RCRA metal and volatile organic compounds, polycyclic aromatic hydrocarbon soil impacts at the property warranting remedial action to facilitate multi-family residential redevelopment appear associated with one or more historic fill units which are known to extend across ~ 80% of the Property (approximately 2.16 acres) to a depth of 0 to 10 feet (approximately 32,000 cubic yards).

Exposure Routes Evalation						
Matrix	**Soil**			**Groundwater**		**Indoor Air**
Exposure Routes	**Soil Source Area**	**Soil Direct Contact**	**Soil to Groundwater**	**Groundwater Source Area**	**Groundwater Consumption**	
Applicable at Site (Yes/No)	**Yes**	**Yes**	**Yes**	**Yes**	No - no impacts identified and municipal water supplied to site	Indoor Air - No impacts identified

Remedial Action Options Evaluation							
Affected Media	**Remedial Alternative**	**Technical Feasibility - ch. NR 722.07(4)(a)**				**Economic Feasibility**	**Sustainability**
		Long-Term Effectiveness	**Short Term Effectiveness**	**Implementability**	**Restoration Time Frame**	**ch. NR 722.07(4)(b)**	**ch. NR 722.09(2m)**
Soil	**Alt 1 - Natural Attenuation (no action)**	Residual soil impacts are located near the surface and could currently serve as a direct contact exposure route and/or be mobilized by stormwater. PAH and VOC impacts in soil are generally considered biodegradable; however, RCRA metals impacts are considered recalcitrant to natural attenuation. Therefore natural attenuation would not reduce the overall toxicity, mobility, and volume of impacts. Natural attenuation would not be protective of public health, safety, or welfare or the environment in the short-term or long-term time periods.		Implementation of Alt 1 is technically feasible; however, monitoring the effectiveness of the remain action is impractical as RCRA metal impacts are not considered biodegradable. Redevelopment potential would be impeded.	As constituents associated with residual impacts are considered recalcitrant, the overall magnitude, mobility, and toxicity of impacts would not decrease and Site restoration will not occur within a reasonable timeframe. Therefore, following redevelopment for multi-family residential reuse, impacts would be in close proximity to sensitive receptors. In additional stormwater could mobilize impacted media if left exposed.	Initial and capital costs to implement Alt 1 are minimal; however, future potential costs associated with monitoring natural attenuation could be significant. Long-term probable costs for securing the Site (i.e. perimeter fencing and video surveillance) are +$15,000 per year, plus future natural attenuation sampling.	The carbon footprint and energy use associated with Alt 1 is considered minimal. However, Alt 1 is not considered to be protective of health/safety/env. within a reasonable timeframe. Residual impacts would be in close proximity to sensitive receptors following redevelopment.
	Alt 2 - Removal and Management of Soil for Construction Purposes, Engineered Barrier, and Institutional Control	Residual soil impacts are associated with multiple heterogeneous fill units extending across the majority of the Property. Therefore, traditional "hot spot" removal is impractical. Instead, only soil required to be moved/handled for the purpose of constructing the new multi-family residential building will be disturbed. Most disturbed material will remain at the property for use in achieving the final construction grade. Additional soil may be disposed of offsite at a licensed solid waste landfill. A site-wide engineered barrier will be constructed following construction. Soil removal, construction of an engineered barrier, and use of an institutional control would provide for a reduction in the toxicity, mobility, and volume of contaminants and would increase protection of public health, safety, welfare and the environment in a short-term time frame. Natural attenuation of residual VOC and PAH impacts is expected to occur over long-term time frames. The engineered barrier will prevent mobilization of residual impacts through		Alt 2 is technically feasible and technology is available for implementation. The engineered barrier will require maintenance for long-term effectiveness. Waste disposal approval will be needed from the landfill. Construction permits, approval to construct on historic fill, and dewatering permits will be required from WDNR.	Immediate for source soil removal; however the restoration time frame depends on construction of an appropriate engineered barrier. Maintenance of the engineered barrier is needed to provide for protection of sensitive receptors which may be present in close proximity to residual impacts following redevelopment. The mobility, toxicity, and magnitude of impacts would be reduced. Groundwater will likely need to be monitored after restoration to observe plume migration/reduction over time.	Source removal capital and initial costs include excavation and disposal of 26,250 tons of soil (17,500 yd = estimated $1,312,500) in a solid waste landfill. Construction of the engineered barriers will occur concurrent with Property construction activities. Additional costs will be incurred for project documentation including: oversight, grading, closure, institutional control, fees ($50,000). Future costs will be associated with barrier inspection/maintenance and groundwater monitoring.	Energy and fuel use will be incurred excavation and offsite disposal of material and construction of the engineered barrier; however low sulfur diesel can be used and a no-idle policy will reduce the carbon footprint. Alt. 2 will minimize energy use and unnecessary soil disturbance. Engineered barrier will prevent future runoff.
	Alt. 3 - Complete Removal and Off-site Disposal of Impacted Soil	Excavation and offsite disposal of impacted media will provide for short-term and long-term protection of public health, safety, welfare and the environment.		Alt. 3 is considered to be generally implementable. Approval for disposal of the residually impacted material as a special waste will need to be obtained. Construction permits and approval will be needed from the landfill.	Immediate following removal of impacted soil. Future receptors following redevelopment would be protected and the mobility, toxicity, and magnitude of impacts would be eliminated. Groundwater will likely need to be monitored after restoration to observe plume migration/reduction over time.	Capital costs include excavation and offsite disposal of 32,000 cubic yards of soil (@$50/yd = estimated $2.4 million); backfilling the excavation (@ $25/yd = estimated $362,500), oversight (estimated $80,000), confirmation sampling and reporting (estimated $25,000). No long-term costs are expected with Alt. 3 other than groundwater monitoring.	Energy and fuel use is considered significant and impacts to local infrastructure (roads) would be high; however low sulfur diesel can be used and a no-idle policy will reduce the carbon footprint. The project will consume a considerable amount of space in a local solid waste landfill.

APPENDICES

APPENDIX A – SOIL BORING LOGS AND ABANDONMENT FORMS

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	_ _ _ _ _ _	

Latitude / Longitude (see instructions): 43°25'43.78" N, 88°11'4.92" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range	or Gov't Lot #
SE	SE	11	11 N	19 ☒ E ☐ W	

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	_ _ _ _ _ _

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267213870
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-14

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	_ _ _ _ _	

Latitude / Longitude (see instructions): 43°25'42.63" N, 88°11'4.23" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range	or Gov't Lot #
SE	SE	11	11 N	19 ☒ E ☐ W	

Well Street Address: 445-485 North Main Street
Well City, Village or Town: West Bend
Well ZIP Code: 53090
Subdivision Name:
Lot #:
Reason for Removal from Service: Investigation Complete
WI Unique Well # of Replacement Well: _ _ _ _ _

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267213870
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive
City of Present Owner: West Bend
State: WI
ZIP Code: 53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-15

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

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☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington		

Latitude / Longitude (see instructions)	Format Code	Method Code
43°25'42.91" N 88°11'6.96" W	☐ DD ☒ DDM	☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SE	11	11 N	19 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels

Facility ID (FID or PWS): 267213870

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: Chris Schmidt

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
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For Monitoring Wells and Monitoring Well Boreholes Only:
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☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-16

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

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Comments:

State of Wis., Dept. of Natural Resources
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Well / Drillhole / Borehole Filling & Sealing Report

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Route to DNR Bureau:
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1. Well Location Information

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Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

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Facility Name: WB Brewery Building LLC Parcels

Facility ID (FID or PWS): 267213870

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Present Well Owner: Chris Schmidt

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

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Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
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For Monitoring Wells and Monitoring Well Boreholes Only:
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☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-17

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

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Well / Drillhole / Borehole Filling & Sealing Report

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☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	_ _ _ _ _ _	

Latitude / Longitude (see instructions): 43°25'41.53" N, 88°11'3.65" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range	or Gov't Lot #
SE	SE	11	11 N	19 ☒ E ☐ W	

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	_ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267213870
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-18

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	_ _ _ _ _	

Latitude / Longitude (see instructions): 43°25'40.72" N, 88°11'5.03" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range	or Gov't Lot #
SE	SE	11	11 N	19 ☒ E ☐ W	

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	_ _ _ _ _

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267213870
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-19

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington		

Latitude / Longitude (see instructions)	Format Code	Method Code
43°25'39.44" N 88°11'4.71" W	☐ DD ☒ DDM	☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SE	11	11 N	19 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels

Facility ID (FID or PWS): 267213870

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: Chris Schmidt

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
3	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 3 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	3	0.25 bags of chips	

6. Comments

SB-20

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington		

Latitude / Longitude (see instructions): 43°25'39.41" N, 88°11'2.52" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SE	11	11 N	19 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267213870
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-21

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington		

Latitude / Longitude (see instructions): 43°25'37.13" N, 88°11'3.41" W
Format Code: ☐ DD ☒ DDM
Method Code: ☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SE	11	11 N	19 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels
Facility ID (FID or PWS): 267051620
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: Chris Schmidt
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-22

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington		

Latitude / Longitude (see instructions)	Format Code	Method Code
43°25'39.00" N 88°11'3.78" W	☐ DD ☒ DDM	☐ GPS008 ☒ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SE	11	11 N	19 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 445-485 North Main Street

Well City, Village or Town	Well ZIP Code
West Bend	53090

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Investigation Complete	

2. Facility / Owner Information

Facility Name: WB Brewery Building LLC Parcels

Facility ID (FID or PWS): 267051620

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: Chris Schmidt

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 11/16/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
4	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	> 4 ft

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
bentonite chips, 3/8	Surface	4	0.25 bags of chips	

6. Comments

SB-23

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec Consulting		11/16/2020

Street or Route	Telephone Number
12075 Corporate Pkwy, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092	Erin Gross	12/17/2020

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	10	1/2 sack	

6. Comments

SB-1

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	7.5	1/2 sack	

6. Comments

SB-2

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	10.5

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	13.5	1/2 sack	

6. Comments

SB-3

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-4

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: WB Brewery Building LLC
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-5

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Goss	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	7

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	6

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☒ Yes	☐ No	☐ N/A
Liner(s) perforated?	☒ Yes	☐ No	☐ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	12	1/2 sack	

6. Comments

SB-6 / TW-1

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	10

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	14.5

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☒ Yes	☐ No	☐ N/A
Liner(s) perforated?	☒ Yes	☐ No	☐ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	15	1/2 sack	

6. Comments

SB-7 / TW-2

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-8

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-9

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: WB Brewery Building LLC
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-10

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Goss	10/17/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: WB Brewery Building LLC
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-11

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Goss	10/17/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: WB Brewery Building LLC
Present Well Owner: WB Brewery Building LLC
Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-12

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Washington	__ __ __ __ __	

Latitude / Longitude (see instructions)	Format Code	Method Code
_____ N	☐ DD	☐ GPS008
_____ W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 415, 445 & 447 North Main St

Well City, Village or Town	Well ZIP Code
City of West Bend	53095

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary	__ __ __ __ __ __ __

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 09/13/2019

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe: Direct-push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
N/A	2-inches

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2-inches	N/A

Was well annular space grouted? ☐ Yes ☐ No ☒ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Former West Bend Brewing Property

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: WB Brewery Building LLC

Present Well Owner: WB Brewery Building LLC

Mailing Address of Present Owner: 1423 Schloemer Drive

City of Present Owner	State	ZIP Code
City of West Bend	WI	53095

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☒ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	4	1/2 sack	

6. Comments

SB-13

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Stantec		09/13/2019

Street or Route	Telephone Number
12075 Corporate Parkway, Suite 200	(608) 628-6278

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Mequon	WI	53092-2649	Erin Gross	10/17/2019

DNR Use Only

Date Received	Noted By

Comments:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	6			Topsoil, dark brown, moist, no odor				0.0						
(0.5-1.5)	12		1.5	Sand and gravel with some clay, dark grayish brown, medium to coarse, firm, moist, no odor, angular, well graded, some black flecks				0.0						
(1.5-3)	18							0.0						
(3-4)	12		3.0					0.0						
(4-6)	24		4.5					0.0						
(6-8)	24		6.0					0.0						
(8-10)	24		7.5					0.0						
			9.0	SILTY SAND with gravel, dark grayish brown, fine to medium, firm, moist, no odor, angular, well graded	SC									
(10-11.5)	18			Clayey sand with some gravel, yellowish brown, fine to medium, firm, saturated, no odor, angular, well graded				0.0						
(11.5-12)	6			End of Borehole @ 10 feet below grade				0.0						
(12-13.5)	18							0.0						
(13.5-14.5)	12							0.0						

Refusal @ 10 feet

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel/Fax
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	6			Crumbly concrete, white, dry, no odor,				0.0						
(0.5-2.5)	30		1.5	Sand with gravel, grayish brown, find to medium, slightly moist, slight odor, no staining, subrounded, well graded, small plant roots	GW			0.0						
(2.5-3.5)	12		3.0	Clayey sand and gravel, dark brown,	SC			0.0						
(4-6)	24		4.5	medium grain, moist, no odor, subangular, well graded, some plant roots				0.0						
(6-7.5)	18		6.0	Crumbly fill, white, slightly moist, no odor, some plant roots				0.0						
			7.5	End of Borehole @ 7.5 feet below grade										

Refusal @ 7.5 feet

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-3

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-1.0)	12			Pulverised Concrete, some medium sand (yellow-brown), dry, no odor				0.0						
(1-3.0)	24		1.5	Clayey Sand & Gravel, brown sand, fine to medium grain, sub-angular, dry, no odor	SC			2.0						
(3.0-5.0)	24		3.0					0.0						
(5.0-6.0)	12		4.5	Peaty Clay, dark brown, organic material, no odor, trace gravel, lean, soft, moist				0.0						
(6.0-8.0)	24		6.0	Clayey Silt, brown, stiff, no odor, moist	CL-ML			0.0						
(8.0-10.0)	24		7.5	Clayey/Silty sand & Gravel, most, no odor, moist, angular, fine to medium grain	CL-ML			0.0						
(10.0-11.0)	12		9.0	Clayey Sand, moist, brown, some cobbles (white), no odor	SC			0.0						
(11.0-12.0)	12		10.5	Sand, saturated, yellow-brown, medium to coarse grained, rounded, no odor	SW			0.0						
(12.0-13.5)	18		12.0	Stone, sucrose texture				0.0						
			13.5	End of Borehole @ 13.5 feet below grade										

Refusal @ 13.5 feet

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm Stantec Consulting Services, Inc.
12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649
Tel:(608) 628-6278
Fax: (262) 241-4901

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-4

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0.0-0.5)	6			Asphalt, black, asphalt odor, dry				-						
(0.5-1.0)	6			Pulverized concrete, white, dry, no odor				0.0						
(1.0-2.0)	12		1.5	Sand & Gravel, brown, rounded, medium to coarse, no odor	SW			0.0						
(2.0-4.0)	24		3.0	SILTY CLAY, homogeneous, high plasticity, dark brown (10YR3/3), no odor, moist	SC			0.0						
				End of Borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel/Fax
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-5

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0.0-1.0)	12			TOPSOIL with organics, dark brown, moist, no odor				0.0						
(3.5-5.0)	12		1.5	Sand, dark brown, moist, some roots, no odor	SW			0.0						
(6.0-7.5)	24		3.0	Fine sand, tan, wet, no odor, trace gravel	SW			0.0						
				End of Borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Gross Firm Stantec Consulting Services, Inc.
12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649
Tel:(608) 628-6278
Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-6 / TW-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW1	Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-2)	6			Topsoil, organics, dark brown, no odor, moist	SC			0.0						
(2-4)	6							0.0						
(4-6)	24		1.5	Clayey sand & gravel, medium to coarse, rounded, some roots, moist, no odor				0.0						
(6-8)	24		3.0	Loamy clay, wet, soft, becomes stiffer but more plastice with depth, grades from dark brown to brown, some sand, no odor	CH			0.0						
(8-10)	12		4.5					0.0						
(10-12)	12		6.0	Sand, saturated, very faint hydrocarbon odor, rounded, coarse to medium, brown	SW			-						
(12-14)	24		7.5	Sand, saturated, strong hydrocarbon odor, black @ 7' bgs, grades to grey with depth, sheen noted on black surfaces	SW			36.2						
			9.0	Gravel & sand, tan, hydrocarbon odor, fine to medium, rounded, saturated	GW									
			10.5	Sand, tan, saturated, fine to coarse, becomes clayey from 11.5-12' bgs	SW									
			12.0	End of Borehole @ 12 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:(608) 628-6278
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-7 / TW-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW2	Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	6			Asphalt, black, dry, asphalt odor				0.0						
(0.5-1.5)	12		1.5	Fill, granular, black and brown, pieces of coal and ash, no odor, dry, some black pieces				0.0						
(1.5-3)	18							0.0						
(3-4)	12		3.0	Silty sand, brown, moist, trace black pieces (coad), no odor	SM			0.0						
(4-6)	24		4.5	Brick material, red/orange, mixed color from 4-10, no odor				0.0						
(6-8)	24		6.0					0.0						
(8-10)	24		7.5					0.0						
(10-11.5)	18		9.0 10.5	Sandy clay, brown, wet, soft, somewhat plastic, no odor	CL			0.0						
(11.5-12)	6		12.0	As above but moist w/gravel	CL			0.0						
(12-13.5)	18			Coarse fill/sand, olive colored, no odor				0.0						
(13.5-14.5)	12		13.5	Sand and gravel, medium to coarse grain, tan, no odor	GW			0.0						
(14.5-16)	18		15.0	Gravel with silty sand, saturated, no odor	GW-GM			0.0						
				End of Borehole @ 15 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel/Fax
Erin Goss	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-8

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-2)	6			Topsoil, rooted, brown, moist, no odor				0.0						
(2-4)	18		1.5	Silty sand and gravel mixted with topsoil, moist, no odor, brown, fine to coarse	SM			0.0						
(4-6)	12		3.0	Concrete (possibly stone), white, competant, dry, no odor				0.0						
(6-8)	12			Sand and clay, brown, moist, some black and red granuals, no odor	SC			0.0						
				End of Borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm Stantec Consulting Services, Inc.
12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649
Tel:(608) 628-6278
Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	8			Asphalt, grey-black, asphalt odor, dry				0.3						
(0.5-1)	6							0.0						
(1-3)	24		1.5	Sand and gravel, tan, rounded, fine to medium, moist, no oor				0.0						
				Fill, coal and cinders, some glass, dark brown/black, red layer @ 2.75-3', no odor, wet										
(3-3.5)	6		3.0					0.0						
(3.5-4)	6							0.0						
				Sand, coarse, tan, rouned, wet, no odor										
				Clayey sand, brown/dark brown, wet, soft, no odor										
				End of borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel/Fax
Erin Goss	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-10

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	16			Asphalt, black, asphalt odor, dry				0.0						
(0.5-2)	16			Gravel with sand, dry, fine to coarse, no odor				0.0						
			1.5											
(2-4)	24			Glass, amber broken beer bottles				0.0						
			3.0	Cinders and Slag, black with some large pieces and metallic luster, no odor, moist										
				End of borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	
Erin Goss	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-11

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-0.5)	16			Asphalt, black, dry, asphalt odor	SP			0.0						
(0.5-2)	16			Sand with gravel, dry, dark grey, some glass, no odor	SM			0.0						
			1.5											
(2-4)	24			Clayey sand with gravel, moist, tan, coarse gravel, no odor				0.0						
			3.0											
				End of borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-2)	24		1.5	Rooted topsoil, dark brown, most, some gravel				0.0						
(2-3)	12			Sand and stone, tan, dry, no odor				0.0						
(3-4)	12		3.0	Fill, black/dark brown, black pieces, metallic luster, no odor, moist				0.0						
				End of Borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:(608) 628-6278
Erin Goss	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Fax: (262) 241-4901

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Former West Bend Brewing	.	SB-13

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies, Inc.	9/13/2019	9/13/2019	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of SE 1/4 of Section 11, T 11 N, R 19
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	68		West Bend

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-2)	24		1.5	Topsoil with roots, dark brown, wet, no odor				0.0						
(2-4)	24		3.0	Sand and gravel, moist, tan, medium grain, no odor				0.0						
				End of Borehole @ 4 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	
Erin Gross	Stantec Consulting Services, Inc. 12075 Corporate Parkway, Suite 200 Mequon, WI 53092-2649	Tel:(608) 628-6278 Fax: (262) 241-4901

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-14**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **895** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**		Lat. **43°25'43.78"N** Long **88°11'4.92"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-14 0 - 2 (PAH / Metals)	48/48		0 -1 -2 -3 -4	Grass & topsoil to 6" SILTY SAND, brown-dark brown, fine sand, little small subangular gravel, moist, no odor/staining wet at 3' GRAVEL, white, small, moist, no odor, subrounded	SM GP		N/A	0.2 0.3	N/A	M W M	N/A	N/A	N/A	
			-5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	End of boring @ 4 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Gross	STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-15**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **895** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**		Lat. **43°25'42.63"N** Long **88°11'4.23"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-15 0 - 2 (VOC) SB-15 2 - 4 (PAH / Metals)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Grass & topsoil to 6" SILTY SAND, lt brown-brown, fine sand, moist, no odor/staining little small angular gravel CLAY, brown-gray, low plasticity, moist, no odor/staining End of boring @ 4 feet	SM CL		N/A	0.3 0.4	N/A	M M	N/A	N/A	N/A	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Gross	STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-16**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _ Well Id No. Well Name	Final Static Water Level **N/A**	Surface Elevation **902**	Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'42.91"N** ---------- Long **88°11'6.96"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-16 2 - 4 (VOC / PAH / Metals)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Concrete to 6" CLAY, brown, trace fine sand, low plasticity, moist, no odor/staining	CL		N/A	0.0	N/A	M	N/A	N/A	N/A	
				SAND, brown, fine-med. sand, some angular sm. gravel, moist-wet, no odor/staining, poorly graded	SP			0.0		M-W				
				End of boring @ 4 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

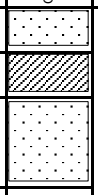
Signature	Firm
Erin Goss	STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-17**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _	Well Id No. / Well Name 	Final Static Water Level **N/A**	Surface Elevation **901**
Borehole Dia. **2-inch**			
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'41.86"N** Long **88°11'6.15"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE									SOIL PROPERTIES					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-17 2 - 4 (VOC / PAH / Metals)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Concrete to 6" SAND, tan, medium grained, moist, no odor CLAY, brown, trace very fine sand, low plasticity, dry-moist, no odor SAND, tan, some large angular gravel, trace clay, dry, slight odor, poorly graded End of boring @ 4 feet	 SP CL SP		N/A	 0.1 0.3	N/A	 M D-M D	N/A	N/A	N/A	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Goss	STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-18**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **894** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**		Lat. **43°25'41.53"N** Long **88°11'3.65"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-18 0 - 2 (PAH / Metals) SB-18 2 - 4 (VOC)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Asphalt SILTY SAND, brown-tan, fine-medium sand, trace small subangular gravel, moist, no odor/staining	SM		N/A	0.2 0.4	N/A	M	N/A	N/A	N/A	
				End of boring @ 4 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Gross	STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-19**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **904** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**		Lat. **43°25'40.72"N** Long **88°11'5.03"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-19 2 - 4 (VOC / PAH / Metals)	36/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Asphalt SAND, gray-tan, some small angular gravel, dry, no odor/staining, poorly graded	SP		N/A	0.2	N/A	D	N/A	N/A	N/A	
				CLAYEY SILT, reddish brown, trace fine sand, low plasticity, moist, no odor/staining	ML			0.2		M				
				End of boring @ 4 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Goss	STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-20**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **807** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'39.44"N** Long **88°11'4.71"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-20 0 - 2 (VOC / PAH / Metals)	24/48		-1 -2	About 6" of concrete in the basement SAND, tan, course, saturated, no odor/staining, poorly graded	SP		N/A	0.0	N/A	W	N/A	N/A	N/A	
			-3	NO RECOVERY										
			-4	End of boring @ 3 feet (refusal)										
			-5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-21**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _ Well Id No. Well Name	Final Static Water Level **N/A**	Surface Elevation **895**	Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'39.41"N** ---------- Long **88°11'2.52"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE				SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES					RQD/Comments
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)						Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
SB-21 2 - 4 (PAH / Metals)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Asphalt SAND, light brown-tan, some angular small gravel, trace clay, moist, no odor/staining, poorly graded CLAYEY SILT, brown, low plasticity, moist, no odor/staining CLAY, brown, low plasticity, moist, no odor/staining End of boring @ 4 feet	SP ML CL		N/A	0.1 0.1	N/A	M M M	N/A	N/A	N/A	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-22**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **905** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**		Lat. **43°25'37.13"N** Long **88°11'3.41"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W
Facility Id. **267051620**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-22 2.5 - 5 (PAH / Metals) SB-22 5 - 6.5 (PAH / Metals)	48/48		0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Asphalt SAND, FILL, gray-white, little small gravel, dry no odor/staining, poorly graded GRAVEL, FILL, tan, large, some sand, dry-moist, no odor/staining, poorly graded CLAYEY SILT, brown, low plasticity, no odor SAND, tan, medium-course sand, trace rounded small gravel, moist, no odor/staining, poorly graded SILT, tan, trace very fine sand, moist, no odor End of boring @ 8 feet	SP / Fill GP / Fill ML SP MH		N/A	0.3 0.3 0.4 0.2	N/A	D D-M M M M	N/A	N/A	N/A	

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**SB-23**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. _ _ _ _ _ _ _ Well Id No. Well Name	Final Static Water Level **N/A**	Surface Elevation **906**	Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'39.00"N** --------- Long **88°11'3.78"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267051620**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
SB-23 2 - 4 (PAH / Metals)	48/48		-1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	Asphalt SILTY SAND, brown, some medium-small angular gravel, moist, no odor/staining	SM		N/A	0.1	N/A	M	N/A	N/A	N/A	
				SAND, tan, some angular medium gravel, moist, no odor/staining, poorly graded	SP			0.1		M				
				End of boring @ 4 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Goss	STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-3**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/17/2020** M/D/Y	Date Drilling Completed **11/17/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No.: __ __ __ __ __ __ / DNR Well Id No.: / Well Name: **TW-3**	Final Static Water Level: **5.26**	Surface Elevation: **900**	Borehole Dia.: **2-inch / 4.25-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'43.09"N** Long **88°11'6.66"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
TW-3 2 - 4 (VOC / Metals)		N/A	0	Grass with topsoil					N/A		N/A	N/A	N/A	
			-1	CLAYEY SAND, some medium to course gravel, trace roots, moist, no odor, rounded	SC			0.0		M				
			-2	CLAY, brown-dark brown, trace sand, high plasticity, wet, no odor/staining	CH					W				
	48/48		-3					0.2						
			-4											
			-5					0.0						
	48/48		-6											
			-7	SAND, brown, medium to course, saturated, slight solvent odor, no staining, rounded	SW			0.0		W				
			-8	black-gray, strong solvent odor, sheen on black surfaces										
			-9	GRAVEL, some sand, tan, fine-medium, saturated, solvent odor, no staining, rounded	GW			0.0		W				
	48/48		-10											
			-11	SAND, tan, fine-course, saturated, solvent odor, no staining	SW			36.2		W				
			-12	becomes clayey 11.5-12 feet										
	36/36		-13	SILTY SAND, brown, little gravel, wet, no odo	SM					W				
			-14											
			-15											
			-16	End of boring @ 15 feet Well set at 13.4 feet										
			-17											
			-18											
			-19											
			-20											
			-21											
			-22											
			-23											
			-24											
			-25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross — Firm: STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-4**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/17/2020** M/D/Y	Date Drilling Completed **11/17/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No. _ _ _ _ _ _ _	DNR Well Id No.	Well Name **TW-4**	Final Static Water Level **5.26**
Surface Elevation **897**	Borehole Dia. **2-inch / 4.25-inch**		
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'43.17"N** --------- Long **88°11'5.60"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	SAMPLE Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
TW-4 0 - 2 (VOC / PAH/ Metals)		N/A	-1	Gravel SILTY SAND, FILL, dark brown to black, trace brick and glass pieces, moist, no odor	SM / Fill			0.2	N/A	M	N/A	N/A	N/A	
	48/48		-3					1.6						
			-4	GRAVEL, tan, trace silt and sand, moist-wet, no odor, poorly graded	GP					M-W				
	48/48		-6											
			-10											
	48/48		-11	SILTY GRAVEL, tan, trace sand, wet, no odor	GM					W				
	36/36		-13											
			-15											
			-16	End of boring @ 15 feet Well set at 13.4 feet										
			-25											

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-5**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/18/2020** M/D/Y	Date Drilling Completed **11/18/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No.: __ __ __ __ __ __ / DNR Well Id No.: / Well Name: **TW-5**	Final Static Water Level: **6.60**	Surface Elevation: **898**	Borehole Dia.: **2-inch / 4.25-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'42.46"N** Long **88°11'4.72"W**	Local Grid Location (If applicable) _____ Feet ¨ N ¨ E _____ Feet ¨ S ¨ W	
Facility Id.: **267213870**	County: **Washington County**	County Code: **68**	Civil Town/City/or Village: **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
TW-5 2 - 3 (VOC) TW-5 3 - 4 (PAH / Metals)		N/A	-	Grass				0.3	N/A		N/A	N/A	N/A	
			-1	SILTY SAND, brown, trace gravel, dry-moist, no odor	SM			0.1		D-M				
			-2	little clay, moist										
	48/48		-					2.2						
			-3											
			-	SILTY SAND, FILL, brown/gray with black,	SM / Fill			0.3		M				
			-4	moist, glass, pieces of coal, some slag, no odor										
			-	CLAY, FILL, black, trace gravel, trace brick an	CL / Fill					M				
			-5	glass, moist, no odor										
			-											
	12/48		-6											
			-	CLAYEY SAND, FILL, brown, trace gravel,	SC / Fill					W				
			-7	trace glass pieces, wet, no odor										
			-											
			-8											
			-	CLAY, FILL, dark brown with black, trace	CL / Fill					M				
			-9	gravel, trace glass, moist, no odor										
			-											
	12/48		-10	SILTY SAND, dark brown, some glass,	SM					W				
			-	saturated, no odor										
			-11											
			-	GRAVEL, gray-brown, some sand, trace silt,	GP					W				
			-12	medium grained sand, wet, no odor/staining,										
			-	subrounded gravel, poorly graded				0.4						
	12/48		-13											
			-											
			-14											
			-											
			-15											
			-											
			-16											
			-	End of boring @ 16 feet										
			-17	Well set at 14.1 feet										
			-											
			-18											
			-											
			-19											
			-											
			-20											
			-											
			-21											
			-											
			-22											
			-											
			-23											
			-											
			-24											
			-											
			-25											
			-											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Erin Gross	STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-6**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/18/2020** M/D/Y	Date Drilling Completed **11/18/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No. _ _ _ _ _ _ _	DNR Well Id No.	Well Name **TW-6**	Final Static Water Level **9.40**
Surface Elevation **899**	Borehole Dia. **2-inch / 4.25-inch**		
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'41.69"N** Long **88°11'4.50"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
TW-6 2 - 4 (VOC) TW-6 4.5 - 6 (PAH / Metals)		N/A	-	Asphalt					N/A		N/A	N/A	N/A	
			-1	SILTY SAND, FILL, dark brown-black, course sand, trace sm angular gravel, glass, wet, no odor	SM / Fill			0.3		W				
	48/48		-2											
			-3					0.7						
			-4											
			-5	black, some sand, coal, small angular gravel, moist				0.5		M				
	48/48		-6											
			-7					0.4						
			-8	SILT, light brown, trace fine sand, moist, no od	ML					M				
			-9											
	48/48		-10	SAND, tan, coarse, moist, no odor, p. graded	SP			0.3		M				
			-11	SILT, brown, little clay, trace very fine sand, low plasticity, moist, no odor/staining	ML					M				
			-12	GRAVEL, tan, some course sand, saturated, no odor/staining, angular gravel	GP					W				
	12/48		-13					0.3						
			-14											
			-15											
	12/48		-16	SILTY GRAVEL, brown, little sand, saturated, no odor/staining	GM					W				
			-17											
			-18											
	12/48		-19											
			-20											
			-21	End of boring @ 20feet Well set at 19.0feet										
			-22											
			-23											
			-24											
			-25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Gross Firm STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-7**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/18/2020** M/D/Y	Date Drilling Completed **11/18/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No.: _ _ _ _ _ _ _ DNR Well Id No.:	Well Name: **TW-7**	Final Static Water Level: **13.83**	Surface Elevation: **909**	Borehole Dia.: **2-inch / 4.25-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'40.67"N** Long **88°11'5.98"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id.: **267213870**	County: **Washington County**	County Code: **68**	Civil Town/City/or Village: **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
TW-7 2 - 4 (VOC) TW-7 4.4 - 6 (Metals)		N/A	-	Asphalt					N/A		N/A	N/A	N/A	
			-1	CLAYEY GRAVEL, brown, trace sand & silt, sm-medium gravel, moist, no odor/staining, angular gravel	GC / Fill			0.5		M				
	48/48		-2	slight hydrocarbon odor										
			-3					1.3						
			-4											
			-5	CLAY, brown, trace small angular gravel, low plasticity, moist, no odor/staining	CL			0.6		M				
	48/48		-6											
			-7	GRAVEL, tan, large gravel, moist, slight hydrocarbon odor, no staining, subangular little clay	GP					M				
			-8					0.9						
			-9											
	12/48		-10	SAND, brown, little subrounded gravel, trace silt, moist, no odor/staining	SP			0.5		M				
			-11											
			-12											
	12/48		-13					0.3						
			-14											
			-15											
	12/48		-16	GRAVEL, tan, some sand, sm-medium gravel saturated, slight hydrocarbon odor, no staining, subangular	GP			1.0		W				
			-17											
			-18	SILTY GRAVEL, gray, some sand, saturated, hydrocarbon odor, no staining	GM			324.8		W				
	12/48		-19											
			-20											
			-21	End of boring @ 20feet Well set at 18.6feet										
			-22											
			-23											
			-24											
			-25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross

Firm: STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**TW-8**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/18/2020** M/D/Y	Date Drilling Completed **11/18/2020** M/D/Y	Drilling Method **Geoprobe / HSA**
WI Unique Well No. _ _ _ _ _ _ _	DNR Well Id No.	Well Name **TW-8**	Final Static Water Level **16.14**
Surface Elevation **904**	Borehole Dia. **2-inch / 4.25-inch**		
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'39.79"N** Long **88°11'3.30"W**	Local Grid Location (If applicable) ¨ N ¨ E _____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE				SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES					RQD/Comments
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)						Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
TW-8 4 - 6 (PAH / Metals)	48/48	N/A	-1	Asphalt SAND, FILL, black, coal, glass, brick, slag, dry no odor/staining	SP / Fill			1.9	N/A	D	N/A	N/A	N/A	
			-2											
			-3					4.0						
			-4											
			-5					1.5						
	48/48		-6											
			-7											
			-8					6.3						
			-9											
	36/48		-10	CLAYEY SILT, brown, trace fine sand, trace small angular gravel, low plasticity, wet, no odor/staining	ML			4.8		W				
			-11											
			-12											
	36/48		-13	CLAY, brown, trace silt, low plasticity, moist, no odor/stianing	CL			1.5		M				
			-14											
			-15	GRAVEL, brown, some sand, wet, no odor	GP					W				
	12/48		-16											
			-17											
			-18	SILTY SAND, brown, some gravel, wet, no od	SM					W				
	12/48		-19											
			-20											
			-21	End of boring @ 20 feet Well set at 18.9 feet										
			-22											
			-23											
			-24											
			-25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Gross Firm STANTEC

SOIL BORING LOG

GESTRA Engineering Inc.
191 W. Edgerton Avenue
Milwaukee, WI 53207
Phone: 414-933-7444, Fax: 414-933-7844

PROJECT NAME: West Bend Mixed Use		DATE DRILLING STARTED: 11/17/2020	PAGE NUMBER: 1 of 1
PROJECT LOCATION: West Bend, WI		DATE DRILLING ENDED: 11/17/2020	BORING NUMBER: GB-24/TW-9
BORING DRILLED BY: FIRM: GESTRA CREW CHIEF: S. Gonyer	FIELD LOG: K. Turner LAB LOG / QC: R. Haque	LATITUDE: ° ' " LONGITUDE: ° ' "	PROJECT NUMBER: 20337-10 DRILLING RIG: CME 75 (International) DRILLING METHOD: 3¼" HSA SURFACE ELEVATION: 908 ft

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft) / Elevation	Soil Description and Geological Origin for Each Major Unit	USCS Classification	Graphic	Well Diagram	Unconfined Comp. Strength (Q_u or Q_p) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
					ASPHALT (2.5-inches) 0.2 (907.8)								Sample SS-1 affected by pavement section; SPT-value may not be representative.
SS - 1	12	5 6			BASE COURSE (7-inches) 0.8 (907.2) SILTY SAND, brown, moist, loose to medium dense								
SS - 2	16	4 4 4 4	8	905.0	With reddish brown clay lenses in sample SS-2	SM							
SS - 3	11	5 6 8 11	14	5	Brown with gray, trace gravel in sample SS-3								Driller noted possible large gravels and/or cobbles between 5 feet and 6 feet
SS - 4	11	8 10 7 6	17		7.4 (900.6)								
				900.0	SANDY SILT, brown, moist to very moist, medium dense, trace gravel								
SS - 5	17	6 6 9 12	15	10		ML						15.4	P200 = 61.8%
SS - 6	20	7 7 7 7	14									19	
SS - 7	8	10 50/5"	R		12.3 (895.7) Wet seam at 12.2 feet								Driller noted possible large gravels and/or cobbles between 12 and 16 feet
				895.0	GRAVEL WITH SILT AND SAND, gray with brown, moist, very dense	GP-GM							
					13.3 (894.7) GRAVEL, gray, moist, very dense								
SS - 8	4	15 50/1"	R	15									Driller noted hard drilling and rig chatter from 12 to 16 feet
SS - 9	17	29 37 21 21	58			GP							
				▽ 890.0	Wet at 18 feet								
SS - 10	15	16 20 25 42	45	20	20 (888)								
					End of Boring at 20.0 ft.								
				885.0									Blind drilled from 20 to 25 feet and installed monitoring well in borehole
				25									

WATER & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: 18 ft.		CAVE DEPTH AT COMPLETION: NMR	WET ☐ DRY ☐
▼	WATER LEVEL AT COMPLETION: NMR		CAVE DEPTH AFTER 0 HOURS: NMR	WET ☐ DRY ☐
▼	WATER LEVEL AFTER 0 HOURS: NMR			

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**VP-2**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **899** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'42.40"N** ---------- Long **88°11'5.05"W**	Local Grid Location (If applicable) ¨ N ¨ E ____ Feet ¨ S _____ Feet ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
	36/36		0 -1 -2 -3	Asphalt GRAVELLY SAND, FILL, brick, glass, some coal, moist, small-medium gravel, no odor, tan-black	SP/FILL		N/A		N/A	M	N/A	N/A	N/A	
			-4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	End of boring @ 3 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**VP-3**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **902** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'41.26"N** Long **88°11'4.19"W**	Local Grid Location (If applicable) ____ Feet ¨ N ¨ S _____ Feet ¨ E ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
VP-3 0 - 0.5 (PAH & metals)	60/60		0 -1 -2 -3 -4 -5	Asphalt FILL, coal, dry, no odor SILTY SAND, some medium subrounded gravel, moist, no odor, light brown	FILL SM		N/A		N/A	D M	N/A	N/A	N/A	
			-6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	End of boring @ 5 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Gross Firm STANTEC

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SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**VP-6**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **908** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'38.43"N** ---------- Long **88°11'4.50"W**	Local Grid Location (If applicable) ____ Feet ¨ N ¨ S _____ Feet ¨ E ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
			0	Asphalt			N/A		N/A		N/A	N/A	N/A	
	60/60		1	SAND, some angular sm-med gravel, moist, no odor, tan	SP					M				
			2											
			3											
			4	SILT, trace small gravel, moist, no odor, brown	ML					M				
			5											
			6	End of boring @ 5 feet										
			7											
			8											
			9											
			10											
			11											
			12											
			13											
			14											
			15											
			16											
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm STANTEC

Stantec

SOIL BORING LOG INFORMATION

Route to:
Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Numbe		Boring Number
WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI			**VP-7**
Boring Drilled By: Name of crew chief (first,last) and Firm First Name: Steve & Keith Last Name: Firm: **GESTRA Engineering, Inc.**	Date Drilling Started **11/16/2020** M/D/Y	Date Drilling Completed **11/16/2020** M/D/Y	Drilling Method **Geoprobe**
Unique Well No. __ __ __ __ __ __	Well Id No. / Well Name	Final Static Water Level **N/A**	Surface Elevation **908** / Borehole Dia. **2-inch**
Local Grid Origin ¨ (estimated: ¨) or Boring Location ¨ State Plane _____N, _____E **SE ¼ of the SE ¼ of Section 11, T 11 N, R 19 E**	Lat. **43°25'37.82"N** ---------- Long **88°11'3.78"W**	Local Grid Location (If applicable) ____ Feet ¨ N ¨ S _____ Feet ¨ E ¨ W	
Facility Id. **267213870**	County **Washington County**	County Code **68**	Civil Town/City/or Village **City of West Bend**

SAMPLE Number and Type	SAMPLE Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	SOIL/ROCK DESCRIPTION AND GEOLOGIC ORIGIN FOR EACH MAJOR UNIT	USCS	Graphic Log	Well Diagram	PID/FID	SOIL PROPERTIES: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/Comments
	60/60		-1 -2 -3 -4 -5	Asphalt SAND, dry, medium grained, poorly graded, no odor, tan	SP		N/A		N/A	D	N/A	N/A	N/A	
			-6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25	End of boring @ 5 feet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Erin Goss Firm STANTEC

State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. ____ N. S. ____ ft. ____ E. W.	Well Name TW-3
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'43.09"N Long. 88°11'6.66"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/17/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 900.4 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP ____ GM ____ GC ____ GW x SW x SP ____

SM x SC ____ ML ____ MH ____ CL ____ CH x

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0 ft.

F. Fine sand, top ____ ft. MSL or 2.4 ft.

G. Filter pack, top ____ ft. MSL or 2.4 ft.

H. Screen joint, top ____ ft. MSL or 3.4 ft.

I. Well bottom ____ ft. MSL or 13.4 ft.

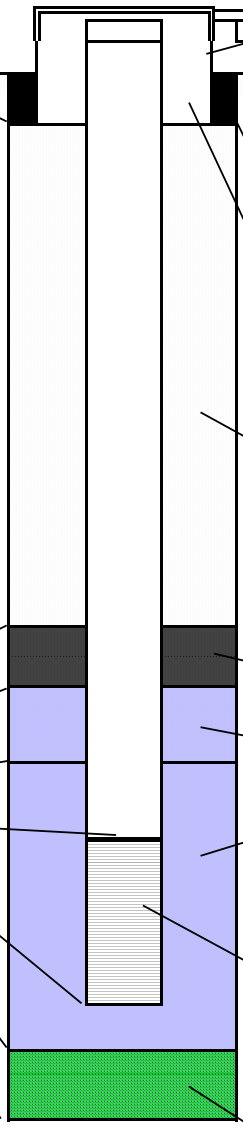
J. Filter pack, bottom ____ ft. MSL or 13.9 ft.

K. Borehole, bottom ____ ft. MSL or 13.9 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:

a. Inside diameter: 4 in.

b. Length: 1 ft.

c. Material: Steel X 04; Other ____

d. Additional protection? Yes ____ No X

If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33

b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35

c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31

d. ____ % Bentonite.....Bentonite-cement grout ____ 50

e. ____ cubic ft volume added for any of the above

f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33

b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32

c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size

a. Ohio 30-50

b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size

a. Ohio 30-50 #5 course

b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC

a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____

b. Manufacturer ____

c. Slot size: 0.010 in.

d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14

Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross | Firm: Stantec

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. N. ____ S. ____ ft. E. ____ W.	Well Name TW-4
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'43.17"N Long. 88°11'5.60"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/17/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 897.1 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM x GC ____ GW ____ SW ____ SP ____

SM ____ SC ____ ML ____ MH ____ CL ____ CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0 ft.

F. Fine sand, top ____ ft. MSL or 2.4 ft.

G. Filter pack, top ____ ft. MSL or 2.4 ft.

H. Screen joint, top ____ ft. MSL or 3.4 ft.

I. Well bottom ____ ft. MSL or 13.4 ft.

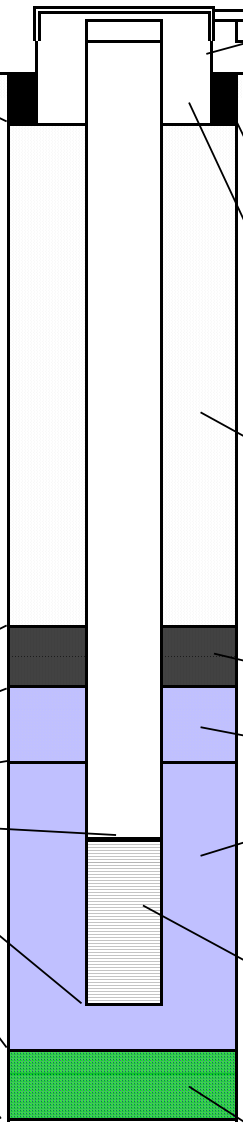
J. Filter pack, bottom ____ ft. MSL or 13.9 ft.

K. Borehole, bottom ____ ft. MSL or 13.9 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:

a. Inside diameter: 4 in.

b. Length: 1 ft.

c. Material: Steel X 04; Other ____

d. Additional protection? Yes ____ No X

If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33

b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35

c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31

d. ____ % Bentonite.....Bentonite-cement grout ____ 50

e. ____ cubic ft volume added for any of the above

f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33

b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32

c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size

a. Ohio 30-50

b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size

a. Ohio 30-50 #5 course

b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC

a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____

b. Manufacturer ____

c. Slot size: 0.010 in.

d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14

Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross Firm: Stantec

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147, and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instruction for more information including where the completed form should be sent.

State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. N. ____ S. ____ ft. E. ____ W.	Well Name TW-5
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'42.46"N Long. 88°11'4.72"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 897.6 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM ____ GC ____ GW ____ SW ____ SP ____

SM x SC x ML ____ MH ____ CL x CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0 ft.

F. Fine sand, top ____ ft. MSL or 3.1 ft.

G. Filter pack, top ____ ft. MSL or 3.1 ft.

H. Screen joint, top ____ ft. MSL or 4.1 ft.

I. Well bottom ____ ft. MSL or 14.1 ft.

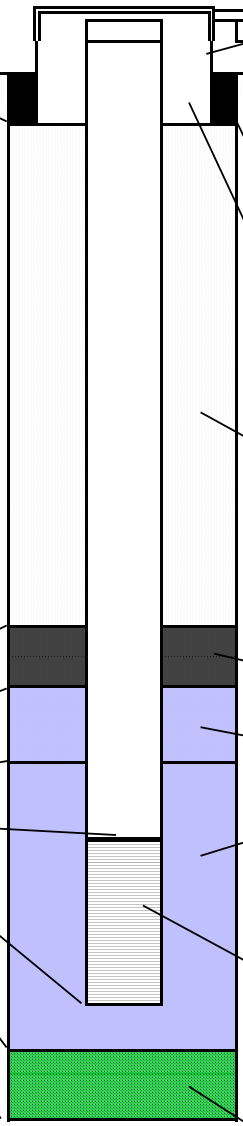
J. Filter pack, bottom ____ ft. MSL or 14.6 ft.

K. Borehole, bottom ____ ft. MSL or 14.6 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:
   a. Inside diameter: 4 in.
   b. Length: 1 ft.
   c. Material: Steel X 04; Other ____
   d. Additional protection? Yes ____ No X
   If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33
   b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35
   c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
   d. ____ % Bentonite.....Bentonite-cement grout ____ 50
   e. ____ cubic ft volume added for any of the above
   f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33
   b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
   c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size
   a. Ohio 30-50
   b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size
   a. Ohio 30-50 #5 course
   b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC
    a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____
    b. Manufacturer ____
    c. Slot size: 0.010 in.
    d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14
    Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross | Firm: Stantec

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State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. N. ____ S. ____ ft. E. ____ W.	Well Name TW-6
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'41.69"N Long. 88°11'4.50"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 899.3 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM x GC ____ GW ____ SW ____ SP x

SM ____ SC ____ ML x MH ____ CL ____ CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.

F. Fine sand, top ____ ft. MSL or 8.0 ft.

G. Filter pack, top ____ ft. MSL or 8.0 ft.

H. Screen joint, top ____ ft. MSL or 9.0 ft.

I. Well bottom ____ ft. MSL or 19.0 ft.

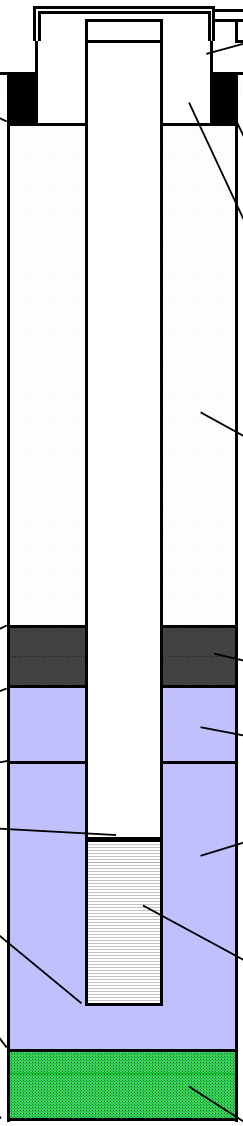
J. Filter pack, bottom ____ ft. MSL or 19.5 ft.

K. Borehole, bottom ____ ft. MSL or 19.5 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:

a. Inside diameter: 4 in.

b. Length: 1 ft.

c. Material: Steel X 04; Other ____

d. Additional protection? Yes ____ No X

If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33

b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35

c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31

d. ____ % Bentonite.....Bentonite-cement grout ____ 50

e. ____ cubic ft volume added for any of the above

f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33

b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32

c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size

a. Ohio 30-50

b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size

a. Ohio 30-50 #5 course

b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC

a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____

b. Manufacturer ____

c. Slot size: 0.010 in.

d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14

Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross Firm: Stantec

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State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. N. ____ S. ____ ft. E. ____ W.	Well Name TW-7
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'40.67"N Long. 88°11'5.98"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 909.1 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM x GC ____ GW ____ SW ____ SP x

SM ____ SC ____ ML ____ MH ____ CL ____ CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.

F. Fine sand, top ____ ft. MSL or 7.6 ft.

G. Filter pack, top ____ ft. MSL or 7.6 ft.

H. Screen joint, top ____ ft. MSL or 8.6 ft.

I. Well bottom ____ ft. MSL or 18.6 ft.

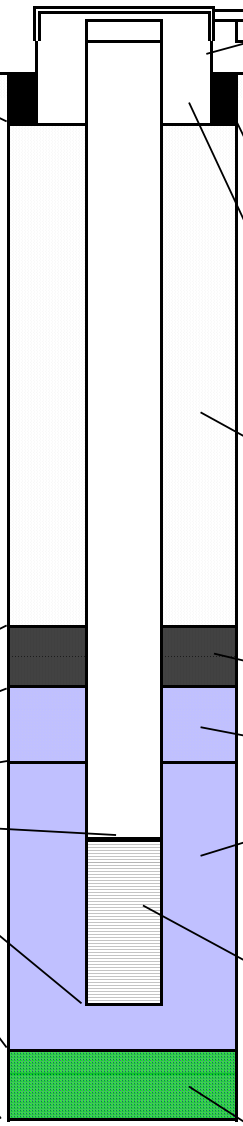
J. Filter pack, bottom ____ ft. MSL or 19.1 ft.

K. Borehole, bottom ____ ft. MSL or 19.1 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:

a. Inside diameter: 4 in.

b. Length: 1 ft.

c. Material: Steel X 04; Other ____

d. Additional protection? Yes ____ No X

If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33

b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35

c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31

d. ____ % Bentonite.....Bentonite-cement grout ____ 50

e. ____ cubic ft volume added for any of the above

f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33

b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32

c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size

a. Ohio 30-50

b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size

a. Ohio 30-50 #5 course

b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC

a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____

b. Manufacturer ____

c. Slot size: 0.010 in.

d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14

Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross Firm: Stantec

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State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. N. ____ S. ____ ft. E. ____ W.	Well Name TW-8
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'39.79"N Long. 88°11'3.30"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11; Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E.	Date Well Installed 11/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.	Section Location of Waste/Source	Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 904.2 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM ____ GC ____ GW ____ SW ____ SP x

SM x SC ____ ML x MH ____ CL x CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02; Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.

F. Fine sand, top ____ ft. MSL or 7.9 ft.

G. Filter pack, top ____ ft. MSL or 7.9 ft.

H. Screen joint, top ____ ft. MSL or 8.9 ft.

I. Well bottom ____ ft. MSL or 18.9 ft.

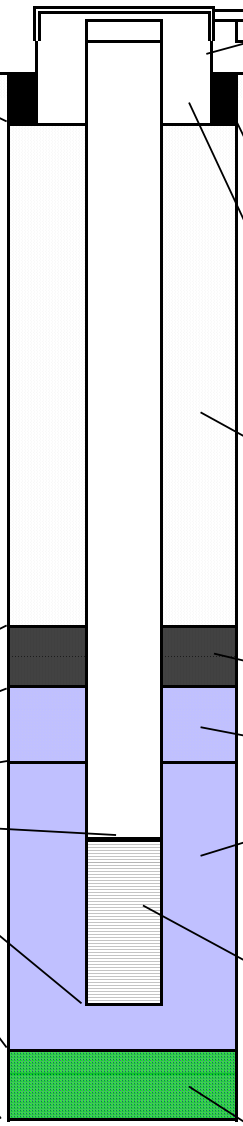
J. Filter pack, bottom ____ ft. MSL or 19.4 ft.

K. Borehole, bottom ____ ft. MSL or 19.4 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:

a. Inside diameter: 4 in.

b. Length: 1 ft.

c. Material: Steel X 04; Other ____

d. Additional protection? Yes ____ No X

If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33

b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35

c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31

d. ____ % Bentonite.....Bentonite-cement grout ____ 50

e. ____ cubic ft volume added for any of the above

f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33

b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32

c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size

a. Ohio 30-50 ____

b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size

a. Ohio 30-50 #5 course ____

b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC

a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____

b. Manufacturer ____

c. Slot size: 0.010 in.

d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14

Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross Firm: Stantec

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State of Wisconsin | Route to: Solid Waste ____ Haz. Waste ____ Wastewater ____ | MONITORING WELL CONSTRUCTION

Env. Response & Repair ____ Underground Tanks ____ Other x

Facility /Project Name WB Brewery Building, LLC Parcels, 415, 445 - 485 North Main Street, West Bend, WI	Local Grid Location of Well ____ ft. ____ N. S. ____ ft. ____ E. W.	Well Name TW-9
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 43°25'38.14"N Long. 88°11'4.33"W	Wis. Unique Well Number / DNR Well Number
Type of Well: Water Table Observation Well X 11 Piezometer ____ 12	St. Plane ____ ft. N. ____ ft.E. Section Location of Waste/Source	Date Well Installed 11/18/2020
Distance Well Is From Waste/Source Boundary ____ ft.		Well Installed By: (Person's Name and Firm) GESTRA Engineering, Inc.
Is Well A Point of Enforcement Std. Application? X Yes ____ No	Location of Well Relative to Waste/Source u ____ Upgradient s ____ Sidegradient d ____ Downgradient n ____ Not Known	

A. Protective Pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 907.6 ft. MSL

C. Land surface elevaton ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 0 ft.

12. USCS classification of soil near screen:

GP x GM x GC ____ GW ____ SW ____ SP ____

SM ____ SC ____ x MH ____ CL ____ CH ____

Bedrock ____

13. Sieve analysis attached? ____ Yes X No

14. Drilling method used: Rotary ____ 50; Hollow Stem Auger X 41; Other ____

15. Drilling fluid used: Air ____ 01 Water ____ 02 Drilling Mud ____ 03 None X 99

16. Drilling additives used? ____ Yes X No

Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.

F. Fine sand, top ____ ft. MSL or 12.4 ft.

G. Filter pack, top ____ ft. MSL or 12.4 ft.

H. Screen joint, top ____ ft. MSL or 13.4 ft.

I. Well bottom ____ ft. MSL or 23.4 ft.

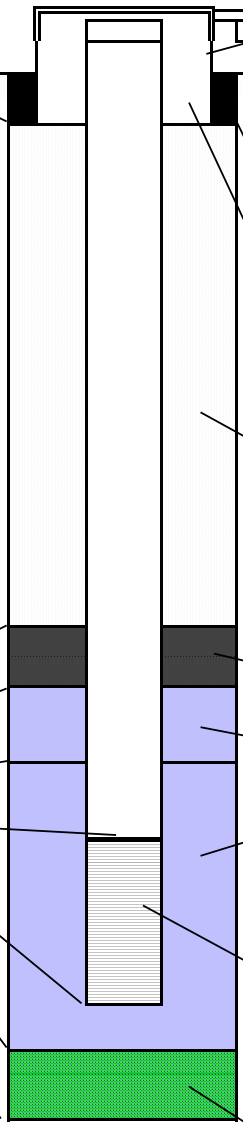
J. Filter pack, bottom ____ ft. MSL or 23.9 ft.

K. Borehole, bottom ____ ft. MSL or 23.9 ft.

L. Borehole, diameter 4.25 in

M. O.D. well casing 2.38 in

N. I.D. well casing 2 in



1. Cap and Lock? X Yes ____ No

2. Protective cover pipe:
   a. Inside diameter: 4 in.
   b. Length: 1 ft.
   c. Material: Steel X 04; Other ____
   d. Additional protection? Yes ____ No X
   If yes, describe ____

3. Surface seal: Bentonite ____ 30; Concrete X 01; Other ____

4. Material between well casing and protective pipe: Bentonite X 30; Annular Space Seal ____; Other ____

5. Annular space seal: a. Granular Bentonite X 33
   b. ____ Lbs/gal mud weight.....Bentonite-sand slurry ____ 35
   c. ____ Lbs/gal mud weight.....Bentonite slurry ____ 31
   d. ____ % Bentonite.....Bentonite-cement grout ____ 50
   e. ____ cubic ft volume added for any of the above
   f. How installed: Tremie ____ 01; Tremie pumped ____ 02; Gravity X 08

6. Bentonite seal: a. Bentonite granules ____ 33
   b. 1/4in. ____ 3/8in. X 1/2in. ____ Bentonite Pellets ____ 32
   c. Bentonite chips ____ Other ____

7. Fine sand material: Manufacturer, product name and mesh size
   a. Ohio 30-50
   b. Volume Added ____ lbs.

8. Filter pack material: Manufacturer, product name and mesh size
   a. Ohio 30-50 #5 course
   b. Volume Added ____ lbs. 20

9. Well casing: Flush threaded PVC schedule 40 ____ 23; Flush threaded PVC schedule 80 ____ 24; Other ____

10. Screen material: Sch. 40, PVC
    a. Screen type: Factory cut X 11; Continuous slot ____ 01; Other ____
    b. Manufacturer ____
    c. Slot size: 0.010 in.
    d. Slotted length: 10 ft.

11. Backfill Material (below filter pack): None ____ 14; Ohio 30-50 Other X

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Erin Gross | Firm: Stantec

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State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
WB Brew	Washington	TW-3

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒ __

3. Time spent developing well 68 min.

4. Depth of well (from top of well casisng) 13.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing ~~__.__~~ gal.

7. Volume of water removed from well 4.0 gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No (If yes, attach results) N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 5.21 ft.	___.__ ft.
Date	b. 11/18/2020 (m m d d y y y y)	11/18/2020
Time	c. 09:57 ☒ a.m. ☐ p.m.	11:05 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) lt brown-tan silty	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids N/A mg/l ___.__ mg/l

15. COD N/A mg/l ___.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:

PN° 1935107897

Sampled VOCs & RCRA metals @ 11:10 drs.

TW-3 MS/MSD @ 11:11 VOC

RCRA Dup @ 11:13

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Boutique, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____ TW

Facility/Project Name	County Name	Well Name
WB Brew	Washington Co	MW-4

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒ __

3. Time spent developing well ____ min.

4. Depth of well (from top of well casisng) __13.4__ ft.

5. Inside diameter of well __1.0__ in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ____.__ gal.

8. Volume of water added (if any) __N/A.__ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results) N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __5.03__ ft.	____.__ ft.
Date	b. 11/18/2020 (m m d d y y y y)	11/18/2020 (m m d d y y y y)
Time	c. 16:30 ☐ a.m. ☒ p.m.	17:30 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	____.__ inches	____.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) tan silty	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	__N/A.__ mg/l	____.__ mg/l
15. COD	__N/A.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:
test sist @ 17:45
VOCs & dis RCRA metals sampled @ 17:25

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Building, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
WB Brew	Washington Co	TW-5
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒ __

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 14.1 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ____.__ gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 6.90 ft.	____.__ ft.
Date	b. 11/18/2020 (m m d d y y y y)	__/__/____ (m m d d y y y y)
Time	c. 11:42 ☒ a.m. ☐ p.m.	13:65 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	____.__ inches	____.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) dk brown	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids N/A mg/l ____.__ mg/l

15. COD N/A mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:
PN: 193707897
VOC, PAH, dis RCRA @ 13:10
(PAH) DUP 3 @ 13:12
(metals) TW-5 MSMSD @ 13:14

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Building, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
WB Brew	Washington Co	TW-6

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☑ 50
Other peristaltic	☒ __

3. Time spent developing well 85 min.

4. Depth of well (from top of well casisng) 19.0 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ____.__ gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results) N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 9.41 ft.	____.__ ft.
Date	b. 11/18/2020 m m d d y y y y	__/__/____ m m d d y y y y
Time	c. 12:05 ☐ a.m. ☒ p.m.	13:30 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	N/A mg/l	____.__ mg/l
15. COD	N/A mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:

VOC/PAH/RCRA metals dis. @ 13:35

RN: 193707897

TW-6 MS/MSD @ 13:37 (PAH)

25 +60 85

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Chris Last Name: Schmodt
Facility/Firm: WB Brewery Building, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
WB Brew	Washington Co	TW-7

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒ ___

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 18.6 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ____.__ gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results) N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 13.79 ft.	____.__ ft.
Date	b. 11/18/2020 (m m d d y y y y)	11/18/2020 (m m d d y y y y)
Time	c. 14:57 ☐ a.m. ☒ p.m.	15:45 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☐ 25
(Describe)	dk brown/ gray	

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	N/A. mg/l	____.__ mg/l
15. COD	N/A. mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:
Hydrocarbon odor

VOC & dis RCRA metals sampled @ 15:50

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Building, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
WB Brew	Washington	~~MW~~ TW-8

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒ __

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 18.9 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing _____ gal.

7. Volume of water removed from well _____ gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) N/A ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 16.13 ft.	_____ ft.
Date	b. 11/18/2020 (m m d d y y y y)	11/18/2020 (m m d d y y y y)
Time	c. 16:17 ☐ a.m. ☒ p.m.	17:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) tan silty	Clear ☐ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	N/A mg/l	_____ mg/l
15. COD	N/A mg/l	_____ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:
PAH & Dis. RCRA metals sampled @ 17:05

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Buildings, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
Former Car Wash	Washington	TW-9

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☒ 50
Other peristaltic	☒

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 23.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing ____ gal.

7. Volume of water removed from well 2.0 gal.

8. Volume of water added (if any) N/A gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results) N/A

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 18.55 ft.	____.__ ft.
Date	b. 11/18/2020 (m m d d y y y y)	11/18/2020 (m m d d y y y y)
Time	c. 08:10 ☒ a.m. ☐ p.m.	08:40 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) brown silty	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	N/A mg/l	____.__ mg/l
15. COD	N/A mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Erin Last Name: Gross
Firm: Stantec

17. Additional comments on development:
PN: 193707897
Sampled @ 8:45
Dup1 (VOC) @ 8:47
*Sample flow rate ~100mL/min

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Chris Last Name: Schmidt
Facility/Firm: WB Brewery Building, LLC
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Erin Gross
Print Name: Erin Gross
Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

APPENDIX B – LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-21080-1
Client Project/Site: WB Brew - 193707897

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Erin Gross

Jodie Bracken

Authorized for release by:
11/27/2020 3:03:22 PM
Jodie Bracken, Project Management Assistant II
Jodie.Bracken@Eurofinset.com

Designee for

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 140-21080-1

Laboratory: Eurofins TestAmerica, Knoxville

Narrative

Job Narrative
140-21080-1

Comments
No additional comments.

Receipt
The samples were received on 11/20/2020 9:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-44664 exhibited % difference of > 30% for the following analyte(s) 3-Chloro-1-propene, Acetonitrile, Acrylonitrile, Butane, Dichlorodifluoromethane and Isopropyl alcohol; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Methods TO 15 LL, TO-15: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-44664: Isopropyl alcohol. This is not indicative of a systematic control problem because this was random marginal exceedance. Qualified results have been reported.

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-6 — Lab Sample ID: 140-21080-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.8	J	10	1.8	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	4.1	J	5.0	1.4	ppb v/v	1		TO-15	Total/NA
Benzene	1.8	J	2.0	0.19	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.50	J	5.0	0.28	ppb v/v	1		TO-15	Total/NA
Cyclohexane	1.3	J	5.0	0.59	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.65	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.67	J	2.0	0.33	ppb v/v	1		TO-15	Total/NA
Hexane	2.4	J	8.0	0.33	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	1.3	J	8.0	0.73	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.59	J	2.0	0.38	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	2.7		2.0	0.17	ppb v/v	1		TO-15	Total/NA
Toluene	3.6		2.0	2.0	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.22	J	2.0	0.15	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA
Xylenes, Total	1.9	J	4.0	0.61	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	8.4	J	29	5.4	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	17	J	20	5.5	ug/m3	1		TO-15	Total/NA
Benzene	5.7	J	6.4	0.61	ug/m3	1		TO-15	Total/NA
Carbon disulfide	1.6	J	16	0.87	ug/m3	1		TO-15	Total/NA
Cyclohexane	4.4	J	17	2.0	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3.2	J	25	1.7	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.9	J	8.7	1.4	ug/m3	1		TO-15	Total/NA
Hexane	8.5	J	28	1.2	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	5.5	J	35	3.2	ug/m3	1		TO-15	Total/NA
o-Xylene	2.6	J	8.7	1.7	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	18		14	1.2	ug/m3	1		TO-15	Total/NA
Toluene	14		7.5	7.4	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.2	J	11	0.81	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4	J	11	1.0	ug/m3	1		TO-15	Total/NA
Xylenes, Total	8.2	J	17	2.6	ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-7 — Lab Sample ID: 140-21080-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	2.0	J	5.0	1.4	ppb v/v	1		TO-15	Total/NA
Benzene	0.44	J	2.0	0.19	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.63	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.46	J	2.0	0.33	ppb v/v	1		TO-15	Total/NA
Hexane	0.44	J	8.0	0.33	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.34	J	2.0	0.17	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.21	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	8.4	J	20	5.5	ug/m3	1		TO-15	Total/NA
Benzene	1.4	J	6.4	0.61	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3.1	J	25	1.7	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.0	J	8.7	1.4	ug/m3	1		TO-15	Total/NA
Hexane	1.6	J	28	1.2	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	2.3	J	14	1.2	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2	J	11	1.0	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-2 — Lab Sample ID: 140-21080-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.36	J	2.0	0.19	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.94	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	6.8		2.0	0.17	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.21	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1	J	6.4	0.61	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	4.6	J	25	1.7	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	46		14	1.2	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2	J	11	1.0	ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-3 — Lab Sample ID: 140-21080-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	6.0	J	10	1.8	ppb v/v	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	5.6		5.0	1.4	ppb v/v	1		TO-15	Total/NA
Benzene	1.8	J	2.0	0.19	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.96	J	5.0	0.28	ppb v/v	1		TO-15	Total/NA
Cyclohexane	26		5.0	0.59	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.72	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.54	J	2.0	0.33	ppb v/v	1		TO-15	Total/NA
Hexane	5.5	J	8.0	0.33	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	2.0	J	8.0	0.73	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.97	J	2.0	0.38	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	1.7	J	2.0	0.17	ppb v/v	1		TO-15	Total/NA
Toluene	3.6		2.0	2.0	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.33	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA
Xylenes, Total	3.0	J	4.0	0.61	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	18	J	29	5.4	ug/m3	1		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	23		20	5.5	ug/m3	1		TO-15	Total/NA
Benzene	5.9	J	6.4	0.61	ug/m3	1		TO-15	Total/NA
Carbon disulfide	3.0	J	16	0.87	ug/m3	1		TO-15	Total/NA
Cyclohexane	89		17	2.0	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3.6	J	25	1.7	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.3	J	8.7	1.4	ug/m3	1		TO-15	Total/NA
Hexane	20	J	28	1.2	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	8.6	J	35	3.2	ug/m3	1		TO-15	Total/NA
o-Xylene	4.2	J	8.7	1.7	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	12	J	14	1.2	ug/m3	1		TO-15	Total/NA
Toluene	14		7.5	7.4	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.8	J	11	1.0	ug/m3	1		TO-15	Total/NA
Xylenes, Total	13	J	17	2.6	ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-1 — Lab Sample ID: 140-21080-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.54	J	2.0	0.19	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.72	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Hexane	0.49	J	8.0	0.33	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VP-1 (Continued)

Lab Sample ID: 140-21080-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7	J	6.4	0.61	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	3.6	J	25	1.7	ug/m3	1		TO-15	Total/NA
Hexane	1.7	J	28	1.2	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4	J	11	1.0	ug/m3	1		TO-15	Total/NA

Client Sample ID: VP-5

Lab Sample ID: 140-21080-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.67	J	5.0	0.35	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.45	J	2.0	0.17	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.22	J	2.0	0.18	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	3.3	J	25	1.7	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	3.1	J	14	1.2	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2	J	11	1.0	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-6

Date Collected: 11/17/20 09:37
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-1

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 12:50	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 12:50	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 12:50	1
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 12:50	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 12:50	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 12:50	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 12:50	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 12:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 12:50	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 12:50	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 12:50	1
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 12:50	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 12:50	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 12:50	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 12:50	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 12:50	1
2-Butanone (MEK)	**2.8**	**J**	10	1.8	ppb v/v			11/23/20 12:50	1
4-Methyl-2-pentanone (MIBK)	**4.1**	**J**	5.0	1.4	ppb v/v			11/23/20 12:50	1
Acetone	<14		50	14	ppb v/v			11/23/20 12:50	1
Benzene	**1.8**	**J**	2.0	0.19	ppb v/v			11/23/20 12:50	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 12:50	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 12:50	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 12:50	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 12:50	1
Carbon disulfide	**0.50**	**J**	5.0	0.28	ppb v/v			11/23/20 12:50	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 12:50	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 12:50	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 12:50	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 12:50	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 12:50	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 12:50	1
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 12:50	1
Cyclohexane	**1.3**	**J**	5.0	0.59	ppb v/v			11/23/20 12:50	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 12:50	1
Dichlorodifluoromethane	**0.65**	**J**	5.0	0.35	ppb v/v			11/23/20 12:50	1
Ethylbenzene	**0.67**	**J**	2.0	0.33	ppb v/v			11/23/20 12:50	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 12:50	1
Hexane	**2.4**	**J**	8.0	0.33	ppb v/v			11/23/20 12:50	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 12:50	1
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 12:50	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 12:50	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 12:50	1
m-Xylene & p-Xylene	**1.3**	**J**	8.0	0.73	ppb v/v			11/23/20 12:50	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 12:50	1
o-Xylene	**0.59**	**J**	2.0	0.38	ppb v/v			11/23/20 12:50	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 12:50	1
Tetrachloroethene	**2.7**		2.0	0.17	ppb v/v			11/23/20 12:50	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-6

Date Collected: 11/17/20 09:37
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-1

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 12:50	1
Toluene	**3.6**		2.0	2.0	ppb v/v			11/23/20 12:50	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 12:50	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 12:50	1
Trichloroethene	**0.22**	**J**	2.0	0.15	ppb v/v			11/23/20 12:50	1
Trichlorofluoromethane	**0.25**	**J**	2.0	0.18	ppb v/v			11/23/20 12:50	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 12:50	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 12:50	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 12:50	1
Xylenes, Total	**1.9**	**J**	4.0	0.61	ppb v/v			11/23/20 12:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 12:50	1
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 12:50	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 12:50	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 12:50	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 12:50	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 12:50	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 12:50	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 12:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 12:50	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 12:50	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 12:50	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 12:50	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 12:50	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 12:50	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 12:50	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 12:50	1
2-Butanone (MEK)	**8.4**	**J**	29	5.4	ug/m3			11/23/20 12:50	1
4-Methyl-2-pentanone (MIBK)	**17**	**J**	20	5.5	ug/m3			11/23/20 12:50	1
Acetone	<34		120	34	ug/m3			11/23/20 12:50	1
Benzene	**5.7**	**J**	6.4	0.61	ug/m3			11/23/20 12:50	1
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 12:50	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 12:50	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 12:50	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 12:50	1
Carbon disulfide	**1.6**	**J**	16	0.87	ug/m3			11/23/20 12:50	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 12:50	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 12:50	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 12:50	1
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 12:50	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 12:50	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 12:50	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 12:50	1
Cyclohexane	**4.4**	**J**	17	2.0	ug/m3			11/23/20 12:50	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 12:50	1
Dichlorodifluoromethane	**3.2**	**J**	25	1.7	ug/m3			11/23/20 12:50	1
Ethylbenzene	**2.9**	**J**	8.7	1.4	ug/m3			11/23/20 12:50	1

Client Sample ID: VP-6

Lab Sample ID: 140-21080-1

Date Collected: 11/17/20 09:37
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 12:50	1
Hexane	**8.5**	**J**	28	1.2	ug/m3			11/23/20 12:50	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 12:50	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 12:50	1
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 12:50	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 12:50	1
m-Xylene & p-Xylene	**5.5**	**J**	35	3.2	ug/m3			11/23/20 12:50	1
Naphthalene	<10		26	10	ug/m3			11/23/20 12:50	1
o-Xylene	**2.6**	**J**	8.7	1.7	ug/m3			11/23/20 12:50	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 12:50	1
Tetrachloroethene	**18**		14	1.2	ug/m3			11/23/20 12:50	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 12:50	1
Toluene	**14**		7.5	7.4	ug/m3			11/23/20 12:50	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 12:50	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 12:50	1
Trichloroethene	**1.2**	**J**	11	0.81	ug/m3			11/23/20 12:50	1
Trichlorofluoromethane	**1.4**	**J**	11	1.0	ug/m3			11/23/20 12:50	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 12:50	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 12:50	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 12:50	1
Xylenes, Total	**8.2**	**J**	17	2.6	ug/m3			11/23/20 12:50	1

Client Sample ID: VP-7

Lab Sample ID: 140-21080-2

Date Collected: 11/17/20 11:09
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 13:37	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 13:37	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 13:37	1
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 13:37	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 13:37	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 13:37	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 13:37	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 13:37	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 13:37	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 13:37	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 13:37	1
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 13:37	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 13:37	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 13:37	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 13:37	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 13:37	1
2-Butanone (MEK)	<1.8		10	1.8	ppb v/v			11/23/20 13:37	1
4-Methyl-2-pentanone (MIBK)	**2.0**	**J**	5.0	1.4	ppb v/v			11/23/20 13:37	1
Acetone	<14		50	14	ppb v/v			11/23/20 13:37	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-7

Lab Sample ID: 140-21080-2

Date Collected: 11/17/20 11:09
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.44**	**J**	2.0	0.19	ppb v/v			11/23/20 13:37	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 13:37	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 13:37	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 13:37	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 13:37	1
Carbon disulfide	<0.28		5.0	0.28	ppb v/v			11/23/20 13:37	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 13:37	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 13:37	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 13:37	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 13:37	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 13:37	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 13:37	1
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 13:37	1
Cyclohexane	<0.59		5.0	0.59	ppb v/v			11/23/20 13:37	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 13:37	1
Dichlorodifluoromethane	**0.63**	**J**	5.0	0.35	ppb v/v			11/23/20 13:37	1
Ethylbenzene	**0.46**	**J**	2.0	0.33	ppb v/v			11/23/20 13:37	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 13:37	1
Hexane	**0.44**	**J**	8.0	0.33	ppb v/v			11/23/20 13:37	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 13:37	1
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 13:37	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 13:37	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 13:37	1
m-Xylene & p-Xylene	<0.73		8.0	0.73	ppb v/v			11/23/20 13:37	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 13:37	1
o-Xylene	<0.38		2.0	0.38	ppb v/v			11/23/20 13:37	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 13:37	1
Tetrachloroethene	**0.34**	**J**	2.0	0.17	ppb v/v			11/23/20 13:37	1
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 13:37	1
Toluene	<2.0		2.0	2.0	ppb v/v			11/23/20 13:37	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 13:37	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 13:37	1
Trichloroethene	<0.15		2.0	0.15	ppb v/v			11/23/20 13:37	1
Trichlorofluoromethane	**0.21**	**J**	2.0	0.18	ppb v/v			11/23/20 13:37	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 13:37	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 13:37	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 13:37	1
Xylenes, Total	<0.61		4.0	0.61	ppb v/v			11/23/20 13:37	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 13:37	1
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 13:37	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 13:37	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 13:37	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 13:37	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 13:37	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 13:37	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 13:37	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-7
Date Collected: 11/17/20 11:09
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 13:37	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 13:37	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 13:37	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 13:37	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 13:37	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 13:37	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 13:37	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 13:37	1
2-Butanone (MEK)	<5.4		29	5.4	ug/m3			11/23/20 13:37	1
4-Methyl-2-pentanone (MIBK)	**8.4**	**J**	20	5.5	ug/m3			11/23/20 13:37	1
Acetone	<34		120	34	ug/m3			11/23/20 13:37	1
Benzene	**1.4**	**J**	6.4	0.61	ug/m3			11/23/20 13:37	1
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 13:37	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 13:37	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 13:37	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 13:37	1
Carbon disulfide	<0.87		16	0.87	ug/m3			11/23/20 13:37	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 13:37	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 13:37	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 13:37	1
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 13:37	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 13:37	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 13:37	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 13:37	1
Cyclohexane	<2.0		17	2.0	ug/m3			11/23/20 13:37	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 13:37	1
Dichlorodifluoromethane	**3.1**	**J**	25	1.7	ug/m3			11/23/20 13:37	1
Ethylbenzene	**2.0**	**J**	8.7	1.4	ug/m3			11/23/20 13:37	1
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 13:37	1
Hexane	**1.6**	**J**	28	1.2	ug/m3			11/23/20 13:37	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 13:37	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 13:37	1
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 13:37	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 13:37	1
m-Xylene & p-Xylene	<3.2		35	3.2	ug/m3			11/23/20 13:37	1
Naphthalene	<10		26	10	ug/m3			11/23/20 13:37	1
o-Xylene	<1.7		8.7	1.7	ug/m3			11/23/20 13:37	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 13:37	1
Tetrachloroethene	**2.3**	**J**	14	1.2	ug/m3			11/23/20 13:37	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 13:37	1
Toluene	<7.4		7.5	7.4	ug/m3			11/23/20 13:37	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 13:37	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 13:37	1
Trichloroethene	<0.81		11	0.81	ug/m3			11/23/20 13:37	1
Trichlorofluoromethane	**1.2**	**J**	11	1.0	ug/m3			11/23/20 13:37	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 13:37	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 13:37	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 13:37	1

Client Sample ID: VP-7

Lab Sample ID: 140-21080-2

Date Collected: 11/17/20 11:09
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<2.6		17	2.6	ug/m3			11/23/20 13:37	1

Client Sample ID: VP-2

Lab Sample ID: 140-21080-3

Date Collected: 11/17/20 12:10
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 14:24	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 14:24	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 14:24	1
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 14:24	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 14:24	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 14:24	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 14:24	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 14:24	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 14:24	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 14:24	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 14:24	1
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 14:24	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 14:24	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 14:24	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 14:24	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 14:24	1
2-Butanone (MEK)	<1.8		10	1.8	ppb v/v			11/23/20 14:24	1
4-Methyl-2-pentanone (MIBK)	<1.4		5.0	1.4	ppb v/v			11/23/20 14:24	1
Acetone	<14		50	14	ppb v/v			11/23/20 14:24	1
Benzene	**0.36**	**J**	2.0	0.19	ppb v/v			11/23/20 14:24	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 14:24	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 14:24	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 14:24	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 14:24	1
Carbon disulfide	<0.28		5.0	0.28	ppb v/v			11/23/20 14:24	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 14:24	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 14:24	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 14:24	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 14:24	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 14:24	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 14:24	1
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 14:24	1
Cyclohexane	<0.59		5.0	0.59	ppb v/v			11/23/20 14:24	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 14:24	1
Dichlorodifluoromethane	**0.94**	**J**	5.0	0.35	ppb v/v			11/23/20 14:24	1
Ethylbenzene	<0.33		2.0	0.33	ppb v/v			11/23/20 14:24	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 14:24	1
Hexane	<0.33		8.0	0.33	ppb v/v			11/23/20 14:24	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 14:24	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-2
Date Collected: 11/17/20 12:10
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-3
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 14:24	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 14:24	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 14:24	1
m-Xylene & p-Xylene	<0.73		8.0	0.73	ppb v/v			11/23/20 14:24	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 14:24	1
o-Xylene	<0.38		2.0	0.38	ppb v/v			11/23/20 14:24	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 14:24	1
Tetrachloroethene	**6.8**		2.0	0.17	ppb v/v			11/23/20 14:24	1
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 14:24	1
Toluene	<2.0		2.0	2.0	ppb v/v			11/23/20 14:24	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 14:24	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 14:24	1
Trichloroethene	<0.15		2.0	0.15	ppb v/v			11/23/20 14:24	1
Trichlorofluoromethane	**0.21**	**J**	2.0	0.18	ppb v/v			11/23/20 14:24	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 14:24	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 14:24	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 14:24	1
Xylenes, Total	<0.61		4.0	0.61	ppb v/v			11/23/20 14:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 14:24	1
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 14:24	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 14:24	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 14:24	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 14:24	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 14:24	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 14:24	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 14:24	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 14:24	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 14:24	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 14:24	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 14:24	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 14:24	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 14:24	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 14:24	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 14:24	1
2-Butanone (MEK)	<5.4		29	5.4	ug/m3			11/23/20 14:24	1
4-Methyl-2-pentanone (MIBK)	<5.5		20	5.5	ug/m3			11/23/20 14:24	1
Acetone	<34		120	34	ug/m3			11/23/20 14:24	1
Benzene	**1.1**	**J**	6.4	0.61	ug/m3			11/23/20 14:24	1
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 14:24	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 14:24	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 14:24	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 14:24	1
Carbon disulfide	<0.87		16	0.87	ug/m3			11/23/20 14:24	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 14:24	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 14:24	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 14:24	1

Client Sample ID: VP-2

Lab Sample ID: 140-21080-3

Date Collected: 11/17/20 12:10
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 14:24	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 14:24	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 14:24	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 14:24	1
Cyclohexane	<2.0		17	2.0	ug/m3			11/23/20 14:24	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 14:24	1
Dichlorodifluoromethane	**4.6**	**J**	25	1.7	ug/m3			11/23/20 14:24	1
Ethylbenzene	<1.4		8.7	1.4	ug/m3			11/23/20 14:24	1
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 14:24	1
Hexane	<1.2		28	1.2	ug/m3			11/23/20 14:24	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 14:24	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 14:24	1
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 14:24	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 14:24	1
m-Xylene & p-Xylene	<3.2		35	3.2	ug/m3			11/23/20 14:24	1
Naphthalene	<10		26	10	ug/m3			11/23/20 14:24	1
o-Xylene	<1.7		8.7	1.7	ug/m3			11/23/20 14:24	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 14:24	1
Tetrachloroethene	**46**		14	1.2	ug/m3			11/23/20 14:24	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 14:24	1
Toluene	<7.4		7.5	7.4	ug/m3			11/23/20 14:24	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 14:24	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 14:24	1
Trichloroethene	<0.81		11	0.81	ug/m3			11/23/20 14:24	1
Trichlorofluoromethane	**1.2**	**J**	11	1.0	ug/m3			11/23/20 14:24	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 14:24	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 14:24	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 14:24	1
Xylenes, Total	<2.6		17	2.6	ug/m3			11/23/20 14:24	1

Client Sample ID: VP-3

Lab Sample ID: 140-21080-4

Date Collected: 11/17/20 13:06
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 15:11	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 15:11	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 15:11	1
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 15:11	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 15:11	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 15:11	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 15:11	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 15:11	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 15:11	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 15:11	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 15:11	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-3

Date Collected: 11/17/20 13:06
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-4

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 15:11	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 15:11	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 15:11	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 15:11	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 15:11	1
2-Butanone (MEK)	**6.0**	**J**	10	1.8	ppb v/v			11/23/20 15:11	1
4-Methyl-2-pentanone (MIBK)	**5.6**		5.0	1.4	ppb v/v			11/23/20 15:11	1
Acetone	<14		50	14	ppb v/v			11/23/20 15:11	1
Benzene	**1.8**	**J**	2.0	0.19	ppb v/v			11/23/20 15:11	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 15:11	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 15:11	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 15:11	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 15:11	1
Carbon disulfide	**0.96**	**J**	5.0	0.28	ppb v/v			11/23/20 15:11	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 15:11	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 15:11	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 15:11	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 15:11	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 15:11	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 15:11	1
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 15:11	1
Cyclohexane	**26**		5.0	0.59	ppb v/v			11/23/20 15:11	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 15:11	1
Dichlorodifluoromethane	**0.72**	**J**	5.0	0.35	ppb v/v			11/23/20 15:11	1
Ethylbenzene	**0.54**	**J**	2.0	0.33	ppb v/v			11/23/20 15:11	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 15:11	1
Hexane	**5.5**	**J**	8.0	0.33	ppb v/v			11/23/20 15:11	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 15:11	1
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 15:11	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 15:11	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 15:11	1
m-Xylene & p-Xylene	**2.0**	**J**	8.0	0.73	ppb v/v			11/23/20 15:11	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 15:11	1
o-Xylene	**0.97**	**J**	2.0	0.38	ppb v/v			11/23/20 15:11	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 15:11	1
Tetrachloroethene	**1.7**	**J**	2.0	0.17	ppb v/v			11/23/20 15:11	1
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 15:11	1
Toluene	**3.6**		2.0	2.0	ppb v/v			11/23/20 15:11	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 15:11	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 15:11	1
Trichloroethene	<0.15		2.0	0.15	ppb v/v			11/23/20 15:11	1
Trichlorofluoromethane	**0.33**	**J**	2.0	0.18	ppb v/v			11/23/20 15:11	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 15:11	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 15:11	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 15:11	1
Xylenes, Total	**3.0**	**J**	4.0	0.61	ppb v/v			11/23/20 15:11	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 15:11	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-3
Date Collected: 11/17/20 13:06
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 15:11	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 15:11	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 15:11	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 15:11	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 15:11	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 15:11	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 15:11	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 15:11	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 15:11	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 15:11	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 15:11	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 15:11	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 15:11	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 15:11	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 15:11	1
2-Butanone (MEK)	**18**	**J**	29	5.4	ug/m3			11/23/20 15:11	1
4-Methyl-2-pentanone (MIBK)	**23**		20	5.5	ug/m3			11/23/20 15:11	1
Acetone	<34		120	34	ug/m3			11/23/20 15:11	1
Benzene	**5.9**	**J**	6.4	0.61	ug/m3			11/23/20 15:11	1
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 15:11	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 15:11	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 15:11	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 15:11	1
Carbon disulfide	**3.0**	**J**	16	0.87	ug/m3			11/23/20 15:11	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 15:11	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 15:11	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 15:11	1
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 15:11	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 15:11	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 15:11	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 15:11	1
Cyclohexane	**89**		17	2.0	ug/m3			11/23/20 15:11	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 15:11	1
Dichlorodifluoromethane	**3.6**	**J**	25	1.7	ug/m3			11/23/20 15:11	1
Ethylbenzene	**2.3**	**J**	8.7	1.4	ug/m3			11/23/20 15:11	1
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 15:11	1
Hexane	**20**	**J**	28	1.2	ug/m3			11/23/20 15:11	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 15:11	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 15:11	1
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 15:11	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 15:11	1
m-Xylene & p-Xylene	**8.6**	**J**	35	3.2	ug/m3			11/23/20 15:11	1
Naphthalene	<10		26	10	ug/m3			11/23/20 15:11	1
o-Xylene	**4.2**	**J**	8.7	1.7	ug/m3			11/23/20 15:11	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 15:11	1
Tetrachloroethene	**12**	**J**	14	1.2	ug/m3			11/23/20 15:11	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 15:11	1

Client Sample ID: VP-3

Lab Sample ID: 140-21080-4

Date Collected: 11/17/20 13:06
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**14**		7.5	7.4	ug/m3			11/23/20 15:11	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 15:11	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 15:11	1
Trichloroethene	<0.81		11	0.81	ug/m3			11/23/20 15:11	1
Trichlorofluoromethane	**1.8**	**J**	11	1.0	ug/m3			11/23/20 15:11	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 15:11	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 15:11	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 15:11	1
Xylenes, Total	**13**	**J**	17	2.6	ug/m3			11/23/20 15:11	1

Client Sample ID: VP-1

Lab Sample ID: 140-21080-5

Date Collected: 11/17/20 15:06
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 15:59	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 15:59	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 15:59	1
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 15:59	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 15:59	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 15:59	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 15:59	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 15:59	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 15:59	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 15:59	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 15:59	1
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 15:59	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 15:59	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 15:59	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 15:59	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 15:59	1
2-Butanone (MEK)	<1.8		10	1.8	ppb v/v			11/23/20 15:59	1
4-Methyl-2-pentanone (MIBK)	<1.4		5.0	1.4	ppb v/v			11/23/20 15:59	1
Acetone	<14		50	14	ppb v/v			11/23/20 15:59	1
Benzene	**0.54**	**J**	2.0	0.19	ppb v/v			11/23/20 15:59	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 15:59	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 15:59	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 15:59	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 15:59	1
Carbon disulfide	<0.28		5.0	0.28	ppb v/v			11/23/20 15:59	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 15:59	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 15:59	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 15:59	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 15:59	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 15:59	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 15:59	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-1

Lab Sample ID: 140-21080-5

Date Collected: 11/17/20 15:06
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 15:59	1
Cyclohexane	<0.59		5.0	0.59	ppb v/v			11/23/20 15:59	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 15:59	1
Dichlorodifluoromethane	**0.72**	**J**	5.0	0.35	ppb v/v			11/23/20 15:59	1
Ethylbenzene	<0.33		2.0	0.33	ppb v/v			11/23/20 15:59	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 15:59	1
Hexane	**0.49**	**J**	8.0	0.33	ppb v/v			11/23/20 15:59	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 15:59	1
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 15:59	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 15:59	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 15:59	1
m-Xylene & p-Xylene	<0.73		8.0	0.73	ppb v/v			11/23/20 15:59	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 15:59	1
o-Xylene	<0.38		2.0	0.38	ppb v/v			11/23/20 15:59	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 15:59	1
Tetrachloroethene	<0.17		2.0	0.17	ppb v/v			11/23/20 15:59	1
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 15:59	1
Toluene	<2.0		2.0	2.0	ppb v/v			11/23/20 15:59	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 15:59	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 15:59	1
Trichloroethene	<0.15		2.0	0.15	ppb v/v			11/23/20 15:59	1
Trichlorofluoromethane	**0.25**	**J**	2.0	0.18	ppb v/v			11/23/20 15:59	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 15:59	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 15:59	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 15:59	1
Xylenes, Total	<0.61		4.0	0.61	ppb v/v			11/23/20 15:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 15:59	1
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 15:59	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 15:59	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 15:59	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 15:59	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 15:59	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 15:59	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 15:59	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 15:59	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 15:59	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 15:59	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 15:59	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 15:59	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 15:59	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 15:59	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 15:59	1
2-Butanone (MEK)	<5.4		29	5.4	ug/m3			11/23/20 15:59	1
4-Methyl-2-pentanone (MIBK)	<5.5		20	5.5	ug/m3			11/23/20 15:59	1
Acetone	<34		120	34	ug/m3			11/23/20 15:59	1
Benzene	**1.7**	**J**	6.4	0.61	ug/m3			11/23/20 15:59	1

Client Sample ID: VP-1

Lab Sample ID: 140-21080-5

Date Collected: 11/17/20 15:06
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 15:59	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 15:59	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 15:59	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 15:59	1
Carbon disulfide	<0.87		16	0.87	ug/m3			11/23/20 15:59	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 15:59	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 15:59	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 15:59	1
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 15:59	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 15:59	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 15:59	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 15:59	1
Cyclohexane	<2.0		17	2.0	ug/m3			11/23/20 15:59	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 15:59	1
Dichlorodifluoromethane	**3.6**	**J**	25	1.7	ug/m3			11/23/20 15:59	1
Ethylbenzene	<1.4		8.7	1.4	ug/m3			11/23/20 15:59	1
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 15:59	1
Hexane	**1.7**	**J**	28	1.2	ug/m3			11/23/20 15:59	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 15:59	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 15:59	1
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 15:59	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 15:59	1
m-Xylene & p-Xylene	<3.2		35	3.2	ug/m3			11/23/20 15:59	1
Naphthalene	<10		26	10	ug/m3			11/23/20 15:59	1
o-Xylene	<1.7		8.7	1.7	ug/m3			11/23/20 15:59	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 15:59	1
Tetrachloroethene	<1.2		14	1.2	ug/m3			11/23/20 15:59	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 15:59	1
Toluene	<7.4		7.5	7.4	ug/m3			11/23/20 15:59	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 15:59	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 15:59	1
Trichloroethene	<0.81		11	0.81	ug/m3			11/23/20 15:59	1
Trichlorofluoromethane	**1.4**	**J**	11	1.0	ug/m3			11/23/20 15:59	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 15:59	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 15:59	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 15:59	1
Xylenes, Total	<2.6		17	2.6	ug/m3			11/23/20 15:59	1

Client Sample ID: VP-5

Lab Sample ID: 140-21080-6

Date Collected: 11/17/20 16:00
Matrix: Air
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.49		2.0	0.49	ppb v/v			11/23/20 16:46	1
1,1,2,2-Tetrachloroethane	<0.36		2.0	0.36	ppb v/v			11/23/20 16:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.21		2.0	0.21	ppb v/v			11/23/20 16:46	1
1,1,2-Trichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 16:46	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-5
Date Collected: 11/17/20 16:00
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.18		2.0	0.18	ppb v/v			11/23/20 16:46	1
1,1-Dichloroethene	<0.20		2.0	0.20	ppb v/v			11/23/20 16:46	1
1,2,4-Trichlorobenzene	<1.6		20	1.6	ppb v/v			11/23/20 16:46	1
1,2,4-Trimethylbenzene	<0.51		2.0	0.51	ppb v/v			11/23/20 16:46	1
1,2-Dibromoethane (EDB)	<0.17		2.0	0.17	ppb v/v			11/23/20 16:46	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.31		2.0	0.31	ppb v/v			11/23/20 16:46	1
1,2-Dichlorobenzene	<0.76		2.0	0.76	ppb v/v			11/23/20 16:46	1
1,2-Dichloroethane	<0.25		2.0	0.25	ppb v/v			11/23/20 16:46	1
1,2-Dichloropropane	<0.25		2.0	0.25	ppb v/v			11/23/20 16:46	1
1,3,5-Trimethylbenzene	<0.55		2.0	0.55	ppb v/v			11/23/20 16:46	1
1,3-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 16:46	1
1,4-Dichlorobenzene	<0.40		2.0	0.40	ppb v/v			11/23/20 16:46	1
1,4-Dioxane	<0.75		50	0.75	ppb v/v			11/23/20 16:46	1
2-Butanone (MEK)	<1.8		10	1.8	ppb v/v			11/23/20 16:46	1
4-Methyl-2-pentanone (MIBK)	<1.4		5.0	1.4	ppb v/v			11/23/20 16:46	1
Acetone	<14		50	14	ppb v/v			11/23/20 16:46	1
Benzene	<0.19		2.0	0.19	ppb v/v			11/23/20 16:46	1
Benzyl chloride	<0.95		8.0	0.95	ppb v/v			11/23/20 16:46	1
Bromodichloromethane	<0.44		2.0	0.44	ppb v/v			11/23/20 16:46	1
Bromoform	<0.22		2.0	0.22	ppb v/v			11/23/20 16:46	1
Bromomethane	<0.56		2.0	0.56	ppb v/v			11/23/20 16:46	1
Carbon disulfide	<0.28		5.0	0.28	ppb v/v			11/23/20 16:46	1
Carbon tetrachloride	<0.18		2.0	0.18	ppb v/v			11/23/20 16:46	1
Chlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 16:46	1
Chloroethane	<0.72		8.0	0.72	ppb v/v			11/23/20 16:46	1
Chloroform	<0.16		2.0	0.16	ppb v/v			11/23/20 16:46	1
Chloromethane	<1.7		5.0	1.7	ppb v/v			11/23/20 16:46	1
cis-1,2-Dichloroethene	<0.25		2.0	0.25	ppb v/v			11/23/20 16:46	1
cis-1,3-Dichloropropene	<0.39		2.0	0.39	ppb v/v			11/23/20 16:46	1
Cyclohexane	<0.59		5.0	0.59	ppb v/v			11/23/20 16:46	1
Dibromochloromethane	<0.17		2.0	0.17	ppb v/v			11/23/20 16:46	1
Dichlorodifluoromethane	**0.67**	**J**	5.0	0.35	ppb v/v			11/23/20 16:46	1
Ethylbenzene	<0.33		2.0	0.33	ppb v/v			11/23/20 16:46	1
Hexachlorobutadiene	<0.80		2.0	0.80	ppb v/v			11/23/20 16:46	1
Hexane	<0.33		8.0	0.33	ppb v/v			11/23/20 16:46	1
Isopropyl alcohol	<2.8	*	50	2.8	ppb v/v			11/23/20 16:46	1
Isopropylbenzene	<0.42		8.0	0.42	ppb v/v			11/23/20 16:46	1
Methyl tert-butyl ether	<1.3		10	1.3	ppb v/v			11/23/20 16:46	1
Methylene Chloride	<9.7		10	9.7	ppb v/v			11/23/20 16:46	1
m-Xylene & p-Xylene	<0.73		8.0	0.73	ppb v/v			11/23/20 16:46	1
Naphthalene	<1.9		5.0	1.9	ppb v/v			11/23/20 16:46	1
o-Xylene	<0.38		2.0	0.38	ppb v/v			11/23/20 16:46	1
Styrene	<0.60		2.0	0.60	ppb v/v			11/23/20 16:46	1
Tetrachloroethene	**0.45**	**J**	2.0	0.17	ppb v/v			11/23/20 16:46	1
Tetrahydrofuran	<0.42		50	0.42	ppb v/v			11/23/20 16:46	1
Toluene	<2.0		2.0	2.0	ppb v/v			11/23/20 16:46	1
trans-1,2-Dichloroethene	<0.16		2.0	0.16	ppb v/v			11/23/20 16:46	1
trans-1,3-Dichloropropene	<0.21		2.0	0.21	ppb v/v			11/23/20 16:46	1

Client Sample ID: VP-5

Date Collected: 11/17/20 16:00
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-6

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.15		2.0	0.15	ppb v/v			11/23/20 16:46	1
Trichlorofluoromethane	**0.22**	**J**	2.0	0.18	ppb v/v			11/23/20 16:46	1
Vinyl acetate	<0.71		50	0.71	ppb v/v			11/23/20 16:46	1
Vinyl bromide	<0.50		2.0	0.50	ppb v/v			11/23/20 16:46	1
Vinyl chloride	<0.66		2.0	0.66	ppb v/v			11/23/20 16:46	1
Xylenes, Total	<0.61		4.0	0.61	ppb v/v			11/23/20 16:46	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.7		11	2.7	ug/m3			11/23/20 16:46	1
1,1,2,2-Tetrachloroethane	<2.5		14	2.5	ug/m3			11/23/20 16:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.6		15	1.6	ug/m3			11/23/20 16:46	1
1,1,2-Trichloroethane	<0.98		11	0.98	ug/m3			11/23/20 16:46	1
1,1-Dichloroethane	<0.73		8.1	0.73	ug/m3			11/23/20 16:46	1
1,1-Dichloroethene	<0.79		7.9	0.79	ug/m3			11/23/20 16:46	1
1,2,4-Trichlorobenzene	<12		150	12	ug/m3			11/23/20 16:46	1
1,2,4-Trimethylbenzene	<2.5		9.8	2.5	ug/m3			11/23/20 16:46	1
1,2-Dibromoethane (EDB)	<1.3		15	1.3	ug/m3			11/23/20 16:46	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<2.2		14	2.2	ug/m3			11/23/20 16:46	1
1,2-Dichlorobenzene	<4.6		12	4.6	ug/m3			11/23/20 16:46	1
1,2-Dichloroethane	<1.0		8.1	1.0	ug/m3			11/23/20 16:46	1
1,2-Dichloropropane	<1.2		9.2	1.2	ug/m3			11/23/20 16:46	1
1,3,5-Trimethylbenzene	<2.7		9.8	2.7	ug/m3			11/23/20 16:46	1
1,3-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 16:46	1
1,4-Dichlorobenzene	<2.4		12	2.4	ug/m3			11/23/20 16:46	1
1,4-Dioxane	<2.7		180	2.7	ug/m3			11/23/20 16:46	1
2-Butanone (MEK)	<5.4		29	5.4	ug/m3			11/23/20 16:46	1
4-Methyl-2-pentanone (MIBK)	<5.5		20	5.5	ug/m3			11/23/20 16:46	1
Acetone	<34		120	34	ug/m3			11/23/20 16:46	1
Benzene	<0.61		6.4	0.61	ug/m3			11/23/20 16:46	1
Benzyl chloride	<4.9		41	4.9	ug/m3			11/23/20 16:46	1
Bromodichloromethane	<2.9		13	2.9	ug/m3			11/23/20 16:46	1
Bromoform	<2.3		21	2.3	ug/m3			11/23/20 16:46	1
Bromomethane	<2.2		7.8	2.2	ug/m3			11/23/20 16:46	1
Carbon disulfide	<0.87		16	0.87	ug/m3			11/23/20 16:46	1
Carbon tetrachloride	<1.1		13	1.1	ug/m3			11/23/20 16:46	1
Chlorobenzene	<0.74		9.2	0.74	ug/m3			11/23/20 16:46	1
Chloroethane	<1.9		21	1.9	ug/m3			11/23/20 16:46	1
Chloroform	<0.78		9.8	0.78	ug/m3			11/23/20 16:46	1
Chloromethane	<3.4		10	3.4	ug/m3			11/23/20 16:46	1
cis-1,2-Dichloroethene	<0.99		7.9	0.99	ug/m3			11/23/20 16:46	1
cis-1,3-Dichloropropene	<1.8		9.1	1.8	ug/m3			11/23/20 16:46	1
Cyclohexane	<2.0		17	2.0	ug/m3			11/23/20 16:46	1
Dibromochloromethane	<1.4		17	1.4	ug/m3			11/23/20 16:46	1
Dichlorodifluoromethane	**3.3**	**J**	25	1.7	ug/m3			11/23/20 16:46	1
Ethylbenzene	<1.4		8.7	1.4	ug/m3			11/23/20 16:46	1
Hexachlorobutadiene	<8.5		21	8.5	ug/m3			11/23/20 16:46	1
Hexane	<1.2		28	1.2	ug/m3			11/23/20 16:46	1
Isopropyl alcohol	<6.9	*	120	6.9	ug/m3			11/23/20 16:46	1
Isopropylbenzene	<2.1		39	2.1	ug/m3			11/23/20 16:46	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-5

Date Collected: 11/17/20 16:00
Date Received: 11/20/20 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-21080-6

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<4.7		36	4.7	ug/m3			11/23/20 16:46	1
Methylene Chloride	<34		35	34	ug/m3			11/23/20 16:46	1
m-Xylene & p-Xylene	<3.2		35	3.2	ug/m3			11/23/20 16:46	1
Naphthalene	<10		26	10	ug/m3			11/23/20 16:46	1
o-Xylene	<1.7		8.7	1.7	ug/m3			11/23/20 16:46	1
Styrene	<2.6		8.5	2.6	ug/m3			11/23/20 16:46	1
Tetrachloroethene	**3.1**	**J**	14	1.2	ug/m3			11/23/20 16:46	1
Tetrahydrofuran	<1.2		150	1.2	ug/m3			11/23/20 16:46	1
Toluene	<7.4		7.5	7.4	ug/m3			11/23/20 16:46	1
trans-1,2-Dichloroethene	<0.63		7.9	0.63	ug/m3			11/23/20 16:46	1
trans-1,3-Dichloropropene	<0.95		9.1	0.95	ug/m3			11/23/20 16:46	1
Trichloroethene	<0.81		11	0.81	ug/m3			11/23/20 16:46	1
Trichlorofluoromethane	**1.2**	**J**	11	1.0	ug/m3			11/23/20 16:46	1
Vinyl acetate	<2.5		180	2.5	ug/m3			11/23/20 16:46	1
Vinyl bromide	<2.2		8.7	2.2	ug/m3			11/23/20 16:46	1
Vinyl chloride	<1.7		5.1	1.7	ug/m3			11/23/20 16:46	1
Xylenes, Total	<2.6		17	2.6	ug/m3			11/23/20 16:46	1

Default Detection Limits

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.20	0.049	ppb v/v
1,1,1-Trichloroethane	1.1	0.27	ug/m3
1,1,2,2-Tetrachloroethane	0.20	0.036	ppb v/v
1,1,2,2-Tetrachloroethane	1.4	0.25	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	0.021	ppb v/v
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.16	ug/m3
1,1,2-Trichloroethane	0.20	0.018	ppb v/v
1,1,2-Trichloroethane	1.1	0.098	ug/m3
1,1-Dichloroethane	0.20	0.018	ppb v/v
1,1-Dichloroethane	0.81	0.073	ug/m3
1,1-Dichloroethene	0.20	0.020	ppb v/v
1,1-Dichloroethene	0.79	0.079	ug/m3
1,2,4-Trichlorobenzene	2.0	0.16	ppb v/v
1,2,4-Trichlorobenzene	15	1.2	ug/m3
1,2,4-Trimethylbenzene	0.20	0.051	ppb v/v
1,2,4-Trimethylbenzene	0.98	0.25	ug/m3
1,2-Dibromoethane (EDB)	0.20	0.017	ppb v/v
1,2-Dibromoethane (EDB)	1.5	0.13	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	0.031	ppb v/v
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.22	ug/m3
1,2-Dichlorobenzene	0.20	0.076	ppb v/v
1,2-Dichlorobenzene	1.2	0.46	ug/m3
1,2-Dichloroethane	0.20	0.025	ppb v/v
1,2-Dichloroethane	0.81	0.10	ug/m3
1,2-Dichloropropane	0.20	0.025	ppb v/v
1,2-Dichloropropane	0.92	0.12	ug/m3
1,3,5-Trimethylbenzene	0.20	0.055	ppb v/v
1,3,5-Trimethylbenzene	0.98	0.27	ug/m3
1,3-Dichlorobenzene	0.20	0.040	ppb v/v
1,3-Dichlorobenzene	1.2	0.24	ug/m3
1,4-Dichlorobenzene	0.20	0.040	ppb v/v
1,4-Dichlorobenzene	1.2	0.24	ug/m3
1,4-Dioxane	5.0	0.075	ppb v/v
1,4-Dioxane	18	0.27	ug/m3
2-Butanone (MEK)	1.0	0.18	ppb v/v
2-Butanone (MEK)	2.9	0.54	ug/m3
4-Methyl-2-pentanone (MIBK)	0.50	0.14	ppb v/v
4-Methyl-2-pentanone (MIBK)	2.0	0.55	ug/m3
Acetone	5.0	1.4	ppb v/v
Acetone	12	3.4	ug/m3
Benzene	0.20	0.019	ppb v/v
Benzene	0.64	0.061	ug/m3
Benzyl chloride	0.80	0.095	ppb v/v
Benzyl chloride	4.1	0.49	ug/m3
Bromodichloromethane	0.20	0.044	ppb v/v
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	0.20	0.022	ppb v/v
Bromoform	2.1	0.23	ug/m3
Bromomethane	0.20	0.056	ppb v/v
Bromomethane	0.78	0.22	ug/m3
Carbon disulfide	0.50	0.028	ppb v/v
Carbon disulfide	1.6	0.087	ug/m3
Carbon tetrachloride	0.20	0.018	ppb v/v

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Carbon tetrachloride	1.3	0.11	ug/m3
Chlorobenzene	0.20	0.016	ppb v/v
Chlorobenzene	0.92	0.074	ug/m3
Chloroethane	0.80	0.072	ppb v/v
Chloroethane	2.1	0.19	ug/m3
Chloroform	0.20	0.016	ppb v/v
Chloroform	0.98	0.078	ug/m3
Chloromethane	0.50	0.17	ppb v/v
Chloromethane	1.0	0.34	ug/m3
cis-1,2-Dichloroethene	0.20	0.025	ppb v/v
cis-1,2-Dichloroethene	0.79	0.099	ug/m3
cis-1,3-Dichloropropene	0.20	0.039	ppb v/v
cis-1,3-Dichloropropene	0.91	0.18	ug/m3
Cyclohexane	0.50	0.059	ppb v/v
Cyclohexane	1.7	0.20	ug/m3
Dibromochloromethane	0.20	0.017	ppb v/v
Dibromochloromethane	1.7	0.14	ug/m3
Dichlorodifluoromethane	0.50	0.035	ppb v/v
Dichlorodifluoromethane	2.5	0.17	ug/m3
Ethylbenzene	0.20	0.033	ppb v/v
Ethylbenzene	0.87	0.14	ug/m3
Hexachlorobutadiene	0.20	0.080	ppb v/v
Hexachlorobutadiene	2.1	0.85	ug/m3
Hexane	0.80	0.033	ppb v/v
Hexane	2.8	0.12	ug/m3
Isopropyl alcohol	5.0	0.28	ppb v/v
Isopropyl alcohol	12	0.69	ug/m3
Isopropylbenzene	0.80	0.042	ppb v/v
Isopropylbenzene	3.9	0.21	ug/m3
Methyl tert-butyl ether	1.0	0.13	ppb v/v
Methyl tert-butyl ether	3.6	0.47	ug/m3
Methylene Chloride	1.0	0.97	ppb v/v
Methylene Chloride	3.5	3.4	ug/m3
m-Xylene & p-Xylene	0.80	0.073	ppb v/v
m-Xylene & p-Xylene	3.5	0.32	ug/m3
Naphthalene	0.50	0.19	ppb v/v
Naphthalene	2.6	1.0	ug/m3
o-Xylene	0.20	0.038	ppb v/v
o-Xylene	0.87	0.17	ug/m3
Styrene	0.20	0.060	ppb v/v
Styrene	0.85	0.26	ug/m3
Tetrachloroethene	0.20	0.017	ppb v/v
Tetrachloroethene	1.4	0.12	ug/m3
Tetrahydrofuran	5.0	0.042	ppb v/v
Tetrahydrofuran	15	0.12	ug/m3
Toluene	0.20	0.20	ppb v/v
Toluene	0.75	0.74	ug/m3
trans-1,2-Dichloroethene	0.20	0.016	ppb v/v
trans-1,2-Dichloroethene	0.79	0.063	ug/m3
trans-1,3-Dichloropropene	0.20	0.021	ppb v/v
trans-1,3-Dichloropropene	0.91	0.095	ug/m3
Trichloroethene	0.20	0.015	ppb v/v
Trichloroethene	1.1	0.081	ug/m3

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Trichlorofluoromethane	0.20	0.018	ppb v/v
Trichlorofluoromethane	1.1	0.10	ug/m3
Vinyl acetate	5.0	0.071	ppb v/v
Vinyl acetate	18	0.25	ug/m3
Vinyl bromide	0.20	0.050	ppb v/v
Vinyl bromide	0.87	0.22	ug/m3
Vinyl chloride	0.20	0.066	ppb v/v
Vinyl chloride	0.51	0.17	ug/m3
Xylenes, Total	0.40	0.061	ppb v/v
Xylenes, Total	1.7	0.26	ug/m3

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-44664/5
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.049		0.20	0.049	ppb v/v			11/23/20 10:39	1
1,1,2,2-Tetrachloroethane	<0.036		0.20	0.036	ppb v/v			11/23/20 10:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.021		0.20	0.021	ppb v/v			11/23/20 10:39	1
1,1,2-Trichloroethane	<0.018		0.20	0.018	ppb v/v			11/23/20 10:39	1
1,1-Dichloroethane	<0.018		0.20	0.018	ppb v/v			11/23/20 10:39	1
1,1-Dichloroethene	<0.020		0.20	0.020	ppb v/v			11/23/20 10:39	1
1,2,4-Trichlorobenzene	<0.16		2.0	0.16	ppb v/v			11/23/20 10:39	1
1,2,4-Trimethylbenzene	<0.051		0.20	0.051	ppb v/v			11/23/20 10:39	1
1,2-Dibromoethane (EDB)	<0.017		0.20	0.017	ppb v/v			11/23/20 10:39	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.031		0.20	0.031	ppb v/v			11/23/20 10:39	1
1,2-Dichlorobenzene	<0.076		0.20	0.076	ppb v/v			11/23/20 10:39	1
1,2-Dichloroethane	<0.025		0.20	0.025	ppb v/v			11/23/20 10:39	1
1,2-Dichloropropane	<0.025		0.20	0.025	ppb v/v			11/23/20 10:39	1
1,3,5-Trimethylbenzene	<0.055		0.20	0.055	ppb v/v			11/23/20 10:39	1
1,3-Dichlorobenzene	<0.040		0.20	0.040	ppb v/v			11/23/20 10:39	1
1,4-Dichlorobenzene	<0.040		0.20	0.040	ppb v/v			11/23/20 10:39	1
1,4-Dioxane	<0.075		5.0	0.075	ppb v/v			11/23/20 10:39	1
2-Butanone (MEK)	<0.18		1.0	0.18	ppb v/v			11/23/20 10:39	1
4-Methyl-2-pentanone (MIBK)	<0.14		0.50	0.14	ppb v/v			11/23/20 10:39	1
Acetone	<1.4		5.0	1.4	ppb v/v			11/23/20 10:39	1
Benzene	<0.019		0.20	0.019	ppb v/v			11/23/20 10:39	1
Benzyl chloride	<0.095		0.80	0.095	ppb v/v			11/23/20 10:39	1
Bromodichloromethane	<0.044		0.20	0.044	ppb v/v			11/23/20 10:39	1
Bromoform	<0.022		0.20	0.022	ppb v/v			11/23/20 10:39	1
Bromomethane	<0.056		0.20	0.056	ppb v/v			11/23/20 10:39	1
Carbon disulfide	<0.028		0.50	0.028	ppb v/v			11/23/20 10:39	1
Carbon tetrachloride	<0.018		0.20	0.018	ppb v/v			11/23/20 10:39	1
Chlorobenzene	<0.016		0.20	0.016	ppb v/v			11/23/20 10:39	1
Chloroethane	<0.072		0.80	0.072	ppb v/v			11/23/20 10:39	1
Chloroform	<0.016		0.20	0.016	ppb v/v			11/23/20 10:39	1
Chloromethane	<0.17		0.50	0.17	ppb v/v			11/23/20 10:39	1
cis-1,2-Dichloroethene	<0.025		0.20	0.025	ppb v/v			11/23/20 10:39	1
cis-1,3-Dichloropropene	<0.039		0.20	0.039	ppb v/v			11/23/20 10:39	1
Cyclohexane	<0.059		0.50	0.059	ppb v/v			11/23/20 10:39	1
Dibromochloromethane	<0.017		0.20	0.017	ppb v/v			11/23/20 10:39	1
Dichlorodifluoromethane	<0.035		0.50	0.035	ppb v/v			11/23/20 10:39	1
Ethylbenzene	<0.033		0.20	0.033	ppb v/v			11/23/20 10:39	1
Hexachlorobutadiene	<0.080		0.20	0.080	ppb v/v			11/23/20 10:39	1
Hexane	<0.033		0.80	0.033	ppb v/v			11/23/20 10:39	1
Isopropyl alcohol	<0.28		5.0	0.28	ppb v/v			11/23/20 10:39	1
Isopropylbenzene	<0.042		0.80	0.042	ppb v/v			11/23/20 10:39	1
Methyl tert-butyl ether	<0.13		1.0	0.13	ppb v/v			11/23/20 10:39	1
Methylene Chloride	<0.97		1.0	0.97	ppb v/v			11/23/20 10:39	1
m-Xylene & p-Xylene	<0.073		0.80	0.073	ppb v/v			11/23/20 10:39	1
Naphthalene	<0.19		0.50	0.19	ppb v/v			11/23/20 10:39	1
o-Xylene	<0.038		0.20	0.038	ppb v/v			11/23/20 10:39	1
Styrene	<0.060		0.20	0.060	ppb v/v			11/23/20 10:39	1
Tetrachloroethene	<0.017		0.20	0.017	ppb v/v			11/23/20 10:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-44664/5
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<0.042		5.0	0.042	ppb v/v			11/23/20 10:39	1
Toluene	<0.20		0.20	0.20	ppb v/v			11/23/20 10:39	1
trans-1,2-Dichloroethene	<0.016		0.20	0.016	ppb v/v			11/23/20 10:39	1
trans-1,3-Dichloropropene	<0.021		0.20	0.021	ppb v/v			11/23/20 10:39	1
Trichloroethene	<0.015		0.20	0.015	ppb v/v			11/23/20 10:39	1
Trichlorofluoromethane	<0.018		0.20	0.018	ppb v/v			11/23/20 10:39	1
Vinyl acetate	<0.071		5.0	0.071	ppb v/v			11/23/20 10:39	1
Vinyl bromide	<0.050		0.20	0.050	ppb v/v			11/23/20 10:39	1
Vinyl chloride	<0.066		0.20	0.066	ppb v/v			11/23/20 10:39	1
Xylenes, Total	<0.061		0.40	0.061	ppb v/v			11/23/20 10:39	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.27		1.1	0.27	ug/m3			11/23/20 10:39	1
1,1,2,2-Tetrachloroethane	<0.25		1.4	0.25	ug/m3			11/23/20 10:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.16		1.5	0.16	ug/m3			11/23/20 10:39	1
1,1,2-Trichloroethane	<0.098		1.1	0.098	ug/m3			11/23/20 10:39	1
1,1-Dichloroethane	<0.073		0.81	0.073	ug/m3			11/23/20 10:39	1
1,1-Dichloroethene	<0.079		0.79	0.079	ug/m3			11/23/20 10:39	1
1,2,4-Trichlorobenzene	<1.2		15	1.2	ug/m3			11/23/20 10:39	1
1,2,4-Trimethylbenzene	<0.25		0.98	0.25	ug/m3			11/23/20 10:39	1
1,2-Dibromoethane (EDB)	<0.13		1.5	0.13	ug/m3			11/23/20 10:39	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m3			11/23/20 10:39	1
1,2-Dichlorobenzene	<0.46		1.2	0.46	ug/m3			11/23/20 10:39	1
1,2-Dichloroethane	<0.10		0.81	0.10	ug/m3			11/23/20 10:39	1
1,2-Dichloropropane	<0.12		0.92	0.12	ug/m3			11/23/20 10:39	1
1,3,5-Trimethylbenzene	<0.27		0.98	0.27	ug/m3			11/23/20 10:39	1
1,3-Dichlorobenzene	<0.24		1.2	0.24	ug/m3			11/23/20 10:39	1
1,4-Dichlorobenzene	<0.24		1.2	0.24	ug/m3			11/23/20 10:39	1
1,4-Dioxane	<0.27		18	0.27	ug/m3			11/23/20 10:39	1
2-Butanone (MEK)	<0.54		2.9	0.54	ug/m3			11/23/20 10:39	1
4-Methyl-2-pentanone (MIBK)	<0.55		2.0	0.55	ug/m3			11/23/20 10:39	1
Acetone	<3.4		12	3.4	ug/m3			11/23/20 10:39	1
Benzene	<0.061		0.64	0.061	ug/m3			11/23/20 10:39	1
Benzyl chloride	<0.49		4.1	0.49	ug/m3			11/23/20 10:39	1
Bromodichloromethane	<0.29		1.3	0.29	ug/m3			11/23/20 10:39	1
Bromoform	<0.23		2.1	0.23	ug/m3			11/23/20 10:39	1
Bromomethane	<0.22		0.78	0.22	ug/m3			11/23/20 10:39	1
Carbon disulfide	<0.087		1.6	0.087	ug/m3			11/23/20 10:39	1
Carbon tetrachloride	<0.11		1.3	0.11	ug/m3			11/23/20 10:39	1
Chlorobenzene	<0.074		0.92	0.074	ug/m3			11/23/20 10:39	1
Chloroethane	<0.19		2.1	0.19	ug/m3			11/23/20 10:39	1
Chloroform	<0.078		0.98	0.078	ug/m3			11/23/20 10:39	1
Chloromethane	<0.34		1.0	0.34	ug/m3			11/23/20 10:39	1
cis-1,2-Dichloroethene	<0.099		0.79	0.099	ug/m3			11/23/20 10:39	1
cis-1,3-Dichloropropene	<0.18		0.91	0.18	ug/m3			11/23/20 10:39	1
Cyclohexane	<0.20		1.7	0.20	ug/m3			11/23/20 10:39	1
Dibromochloromethane	<0.14		1.7	0.14	ug/m3			11/23/20 10:39	1
Dichlorodifluoromethane	<0.17		2.5	0.17	ug/m3			11/23/20 10:39	1
Ethylbenzene	<0.14		0.87	0.14	ug/m3			11/23/20 10:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-44664/5
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.85		2.1	0.85	ug/m3			11/23/20 10:39	1
Hexane	<0.12		2.8	0.12	ug/m3			11/23/20 10:39	1
Isopropyl alcohol	<0.69		12	0.69	ug/m3			11/23/20 10:39	1
Isopropylbenzene	<0.21		3.9	0.21	ug/m3			11/23/20 10:39	1
Methyl tert-butyl ether	<0.47		3.6	0.47	ug/m3			11/23/20 10:39	1
Methylene Chloride	<3.4		3.5	3.4	ug/m3			11/23/20 10:39	1
m-Xylene & p-Xylene	<0.32		3.5	0.32	ug/m3			11/23/20 10:39	1
Naphthalene	<1.0		2.6	1.0	ug/m3			11/23/20 10:39	1
o-Xylene	<0.17		0.87	0.17	ug/m3			11/23/20 10:39	1
Styrene	<0.26		0.85	0.26	ug/m3			11/23/20 10:39	1
Tetrachloroethene	<0.12		1.4	0.12	ug/m3			11/23/20 10:39	1
Tetrahydrofuran	<0.12		15	0.12	ug/m3			11/23/20 10:39	1
Toluene	<0.74		0.75	0.74	ug/m3			11/23/20 10:39	1
trans-1,2-Dichloroethene	<0.063		0.79	0.063	ug/m3			11/23/20 10:39	1
trans-1,3-Dichloropropene	<0.095		0.91	0.095	ug/m3			11/23/20 10:39	1
Trichloroethene	<0.081		1.1	0.081	ug/m3			11/23/20 10:39	1
Trichlorofluoromethane	<0.10		1.1	0.10	ug/m3			11/23/20 10:39	1
Vinyl acetate	<0.25		18	0.25	ug/m3			11/23/20 10:39	1
Vinyl bromide	<0.22		0.87	0.22	ug/m3			11/23/20 10:39	1
Vinyl chloride	<0.17		0.51	0.17	ug/m3			11/23/20 10:39	1
Xylenes, Total	<0.26		1.7	0.26	ug/m3			11/23/20 10:39	1

Lab Sample ID: LCS 140-44664/1002
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2.00	2.17		ppb v/v		109	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.21		ppb v/v		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	2.30		ppb v/v		115	70 - 130
1,1,2-Trichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,1-Dichloroethane	2.00	2.16		ppb v/v		108	70 - 130
1,1-Dichloroethene	2.00	2.22		ppb v/v		111	70 - 130
1,2,4-Trichlorobenzene	2.00	1.88		ppb v/v		94	60 - 140
1,2,4-Trimethylbenzene	2.00	2.09		ppb v/v		104	70 - 130
1,2-Dibromoethane (EDB)	2.00	2.21		ppb v/v		110	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.23		ppb v/v		111	60 - 140
1,2-Dichlorobenzene	2.00	2.00		ppb v/v		100	70 - 130
1,2-Dichloroethane	2.00	2.20		ppb v/v		110	70 - 130
1,2-Dichloropropane	2.00	2.23		ppb v/v		111	70 - 130
1,3,5-Trimethylbenzene	2.00	2.41		ppb v/v		121	70 - 130
1,3-Dichlorobenzene	2.00	2.07		ppb v/v		103	70 - 130
1,4-Dichlorobenzene	2.00	1.94		ppb v/v		97	70 - 130
1,4-Dioxane	2.00	1.98	J	ppb v/v		99	60 - 140
2-Butanone (MEK)	2.00	2.23		ppb v/v		112	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.45		ppb v/v		123	60 - 140
Acetone	2.00	2.40		ppb v/v		120	60 - 140

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-44664/1002
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.00	2.26		ppb v/v		113	70 - 130
Benzyl chloride	2.00	2.12		ppb v/v		106	70 - 130
Bromodichloromethane	2.00	2.26		ppb v/v		113	70 - 130
Bromoform	2.00	2.36		ppb v/v		118	60 - 140
Bromomethane	2.00	2.16		ppb v/v		108	70 - 130
Carbon disulfide	2.00	2.29		ppb v/v		114	70 - 130
Carbon tetrachloride	2.00	2.42		ppb v/v		121	70 - 130
Chlorobenzene	2.00	2.06		ppb v/v		103	70 - 130
Chloroethane	2.00	2.36		ppb v/v		118	70 - 130
Chloroform	2.00	2.25		ppb v/v		112	70 - 130
Chloromethane	2.00	2.36		ppb v/v		118	60 - 140
cis-1,2-Dichloroethene	2.00	2.23		ppb v/v		112	70 - 130
cis-1,3-Dichloropropene	2.00	2.30		ppb v/v		115	70 - 130
Cyclohexane	2.00	2.26		ppb v/v		113	70 - 130
Dibromochloromethane	2.00	2.31		ppb v/v		116	70 - 130
Dichlorodifluoromethane	2.00	2.78		ppb v/v		139	60 - 140
Ethylbenzene	2.00	2.14		ppb v/v		107	70 - 130
Hexachlorobutadiene	2.00	1.67		ppb v/v		84	60 - 140
Hexane	2.00	2.34		ppb v/v		117	70 - 130
Isopropyl alcohol	2.00	2.82	*	ppb v/v		141	60 - 140
Isopropylbenzene	2.00	2.16		ppb v/v		108	70 - 130
Methyl tert-butyl ether	2.00	2.17		ppb v/v		109	60 - 140
Methylene Chloride	2.00	2.35		ppb v/v		117	70 - 130
m-Xylene & p-Xylene	4.00	4.36		ppb v/v		109	70 - 130
Naphthalene	2.00	1.90		ppb v/v		95	60 - 140
o-Xylene	2.00	2.06		ppb v/v		103	70 - 130
Styrene	2.00	2.41		ppb v/v		120	70 - 130
Tetrachloroethene	2.00	2.02		ppb v/v		101	70 - 130
Tetrahydrofuran	2.00	2.37		ppb v/v		118	60 - 140
Toluene	2.00	2.23		ppb v/v		111	70 - 130
trans-1,2-Dichloroethene	2.00	2.17		ppb v/v		109	70 - 130
trans-1,3-Dichloropropene	2.00	2.31		ppb v/v		115	70 - 130
Trichloroethene	2.00	2.18		ppb v/v		109	70 - 130
Trichlorofluoromethane	2.00	2.28		ppb v/v		114	60 - 140
Vinyl acetate	2.00	2.55		ppb v/v		128	60 - 140
Vinyl bromide	2.00	2.30		ppb v/v		115	60 - 140
Vinyl chloride	2.00	2.35		ppb v/v		118	70 - 130
Xylenes, Total	6.00	6.42		ppb v/v		107	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	11.8		ug/m3		109	70 - 130
1,1,2,2-Tetrachloroethane	14	15.1		ug/m3		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	15	17.6		ug/m3		115	70 - 130
1,1,2-Trichloroethane	11	11.7		ug/m3		107	70 - 130
1,1-Dichloroethane	8.1	8.75		ug/m3		108	70 - 130
1,1-Dichloroethene	7.9	8.79		ug/m3		111	70 - 130
1,2,4-Trichlorobenzene	15	14.0		ug/m3		94	60 - 140
1,2,4-Trimethylbenzene	9.8	10.3		ug/m3		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-44664/1002
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	15	17.0		ug/m3		110	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	15.6		ug/m3		111	60 - 140
1,2-Dichlorobenzene	12	12.0		ug/m3		100	70 - 130
1,2-Dichloroethane	8.1	8.90		ug/m3		110	70 - 130
1,2-Dichloropropane	9.2	10.3		ug/m3		111	70 - 130
1,3,5-Trimethylbenzene	9.8	11.9		ug/m3		121	70 - 130
1,3-Dichlorobenzene	12	12.4		ug/m3		103	70 - 130
1,4-Dichlorobenzene	12	11.7		ug/m3		97	70 - 130
1,4-Dioxane	7.2	7.14	J	ug/m3		99	60 - 140
2-Butanone (MEK)	5.9	6.59		ug/m3		112	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	10.0		ug/m3		123	60 - 140
Acetone	4.8	5.71		ug/m3		120	60 - 140
Benzene	6.4	7.23		ug/m3		113	70 - 130
Benzyl chloride	10	11.0		ug/m3		106	70 - 130
Bromodichloromethane	13	15.2		ug/m3		113	70 - 130
Bromoform	21	24.4		ug/m3		118	60 - 140
Bromomethane	7.8	8.40		ug/m3		108	70 - 130
Carbon disulfide	6.2	7.13		ug/m3		114	70 - 130
Carbon tetrachloride	13	15.2		ug/m3		121	70 - 130
Chlorobenzene	9.2	9.49		ug/m3		103	70 - 130
Chloroethane	5.3	6.24		ug/m3		118	70 - 130
Chloroform	9.8	11.0		ug/m3		112	70 - 130
Chloromethane	4.1	4.87		ug/m3		118	60 - 140
cis-1,2-Dichloroethene	7.9	8.84		ug/m3		112	70 - 130
cis-1,3-Dichloropropene	9.1	10.4		ug/m3		115	70 - 130
Cyclohexane	6.9	7.77		ug/m3		113	70 - 130
Dibromochloromethane	17	19.7		ug/m3		116	70 - 130
Dichlorodifluoromethane	9.9	13.7		ug/m3		139	60 - 140
Ethylbenzene	8.7	9.28		ug/m3		107	70 - 130
Hexachlorobutadiene	21	17.9		ug/m3		84	60 - 140
Hexane	7.0	8.23		ug/m3		117	70 - 130
Isopropyl alcohol	4.9	6.93	*	ug/m3		141	60 - 140
Isopropylbenzene	9.8	10.6		ug/m3		108	70 - 130
Methyl tert-butyl ether	7.2	7.82		ug/m3		109	60 - 140
Methylene Chloride	6.9	8.16		ug/m3		117	70 - 130
m-Xylene & p-Xylene	17	18.9		ug/m3		109	70 - 130
Naphthalene	10	9.94		ug/m3		95	60 - 140
o-Xylene	8.7	8.94		ug/m3		103	70 - 130
Styrene	8.5	10.3		ug/m3		120	70 - 130
Tetrachloroethene	14	13.7		ug/m3		101	70 - 130
Tetrahydrofuran	5.9	6.99		ug/m3		118	60 - 140
Toluene	7.5	8.39		ug/m3		111	70 - 130
trans-1,2-Dichloroethene	7.9	8.61		ug/m3		109	70 - 130
trans-1,3-Dichloropropene	9.1	10.5		ug/m3		115	70 - 130
Trichloroethene	11	11.7		ug/m3		109	70 - 130
Trichlorofluoromethane	11	12.8		ug/m3		114	60 - 140
Vinyl acetate	7.0	8.98		ug/m3		128	60 - 140
Vinyl bromide	8.7	10.1		ug/m3		115	60 - 140

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-44664/1002
Matrix: Air
Analysis Batch: 44664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	5.1	6.02		ug/m3		118	70 - 130
Xylenes, Total	26	27.9		ug/m3		107	70 - 130

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Air - GC/MS VOA

Analysis Batch: 44664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-21080-1	VP-6	Total/NA	Air	TO-15	
140-21080-2	VP-7	Total/NA	Air	TO-15	
140-21080-3	VP-2	Total/NA	Air	TO-15	
140-21080-4	VP-3	Total/NA	Air	TO-15	
140-21080-5	VP-1	Total/NA	Air	TO-15	
140-21080-6	VP-5	Total/NA	Air	TO-15	
MB 140-44664/5	Method Blank	Total/NA	Air	TO-15	
LCS 140-44664/1002	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: VP-6
Date Collected: 11/17/20 09:37
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 12:50	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: VP-7
Date Collected: 11/17/20 11:09
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 13:37	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: VP-2
Date Collected: 11/17/20 12:10
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 14:24	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: VP-3
Date Collected: 11/17/20 13:06
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 15:11	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: VP-1
Date Collected: 11/17/20 15:06
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 15:59	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: VP-5
Date Collected: 11/17/20 16:00
Date Received: 11/20/20 09:00

Lab Sample ID: 140-21080-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	44664	11/23/20 16:46	S1K	TAL KNX
	Instrument ID: MR									

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Client Sample ID: Method Blank

Lab Sample ID: MB 140-44664/5

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	44664	11/23/20 10:39	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-44664/1002

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	44664	11/23/20 08:02	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Laboratory: Eurofins TestAmerica, Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998044300	08-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,1,1-Trichloroethane
TO-15		Air	1,1,2,2-Tetrachloroethane
TO-15		Air	1,1,2-Trichloro-1,2,2-trifluoroethane
TO-15		Air	1,1,2-Trichloroethane
TO-15		Air	1,1-Dichloroethane
TO-15		Air	1,1-Dichloroethene
TO-15		Air	1,2,4-Trichlorobenzene
TO-15		Air	1,2,4-Trimethylbenzene
TO-15		Air	1,2-Dibromoethane (EDB)
TO-15		Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane
TO-15		Air	1,2-Dichlorobenzene
TO-15		Air	1,2-Dichloroethane
TO-15		Air	1,2-Dichloropropane
TO-15		Air	1,3,5-Trimethylbenzene
TO-15		Air	1,3-Dichlorobenzene
TO-15		Air	1,4-Dichlorobenzene
TO-15		Air	1,4-Dioxane
TO-15		Air	2-Butanone (MEK)
TO-15		Air	4-Methyl-2-pentanone (MIBK)
TO-15		Air	Acetone
TO-15		Air	Benzene
TO-15		Air	Benzyl chloride
TO-15		Air	Bromodichloromethane
TO-15		Air	Bromoform
TO-15		Air	Bromomethane
TO-15		Air	Carbon disulfide
TO-15		Air	Carbon tetrachloride
TO-15		Air	Chlorobenzene
TO-15		Air	Chloroethane
TO-15		Air	Chloroform
TO-15		Air	Chloromethane
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	cis-1,3-Dichloropropene
TO-15		Air	Cyclohexane
TO-15		Air	Dibromochloromethane
TO-15		Air	Dichlorodifluoromethane
TO-15		Air	Ethylbenzene
TO-15		Air	Hexachlorobutadiene
TO-15		Air	Hexane
TO-15		Air	Isopropyl alcohol
TO-15		Air	Isopropylbenzene
TO-15		Air	Methyl tert-butyl ether
TO-15		Air	Methylene Chloride
TO-15		Air	m-Xylene & p-Xylene
TO-15		Air	Naphthalene

Laboratory: Eurofins TestAmerica, Knoxville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998044300	08-31-21
TO-15	Air	o-Xylene	
TO-15	Air	Styrene	
TO-15	Air	Tetrachloroethene	
TO-15	Air	Tetrahydrofuran	
TO-15	Air	Toluene	
TO-15	Air	trans-1,2-Dichloroethene	
TO-15	Air	trans-1,3-Dichloropropene	
TO-15	Air	Trichloroethene	
TO-15	Air	Trichlorofluoromethane	
TO-15	Air	Vinyl acetate	
TO-15	Air	Vinyl bromide	
TO-15	Air	Vinyl chloride	
TO-15	Air	Xylenes, Total	

Method Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 140-21080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-21080-1	VP-6	Air	11/17/20 09:37	11/20/20 09:00	Air Canister (6-Liter) #11227
140-21080-2	VP-7	Air	11/17/20 11:09	11/20/20 09:00	Air Canister (6-Liter) #10102
140-21080-3	VP-2	Air	11/17/20 12:10	11/20/20 09:00	Air Canister (6-Liter) #34000030
140-21080-4	VP-3	Air	11/17/20 13:06	11/20/20 09:00	Air Canister (6-Liter) #11232
140-21080-5	VP-1	Air	11/17/20 15:06	11/20/20 09:00	Air Canister (6-Liter) #11562
140-21080-6	VP-5	Air	11/17/20 16:00	11/20/20 09:00	Air Canister (6-Liter) #10405

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-21080 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	Client Project Manager: Erin Gross	Samples Collected By: ENG	COC No: 1
Company Name: Stantec	Phone: 608 628 6278		1 of 1 COCs
Address: 12075 Corporate Pkwy, #200	Email: erin.gross@stantec.com		TALS Project #:
City/State/Zip Mequon, WI 53038			For Lab Use Only:
Phone: 608 628 6278	Site Contact: Erin Gross		Walk-in Client:
FAX:	Tel/Fax 608 628 6278		Lab Sampling:
Project Name: WB Brew	Analysis Turnaround Time		
Site/Location: West Bend, WI	Standard (Specific):		Job / SDG No.:
P O # 193707897	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
VP-6	11/17/20	9:06	11/17/20	9:37	28.0	4.0	7334	11227	X														TO-15, VOCs only
VP-7	11/17/20	10:34	11/17/20	11:09	30.0	4.0	10671	20848	X														
VP-2	11/17/20	11:44	11/17/20	12:10	27.0	3.0	11783	34000030	X														
VP-3	11/17/20	12:28	11/17/20	13:06	30.0	4.0	68860	11232	X														
VP-1	11/17/20	14:32	11/17/20	15:06	28.0	4.0	7455	115162	X														
VP-5	11/17/20	15:25	11/17/20	16:00	29.0	4.0	11103	10405	X														

Temperature (Fahrenheit)			
	Interior	Ambient	
Start			25°F
Stop			

Pressure (inches of Hg)			
	Interior	Ambient	
Start			30.4
Stop			

Received @ ambient, 2 boxes trk# 8161 1623 8714, FedEx SO " " 8725 Custody seal intact KW 11/20/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by: Erin Gross	Date / Time:	Samples Received by:	
Samples Relinquished by: Erin Gross	Date / Time:	Received by: ETA 11/20/20 0900	
Relinquished by:	Date / Time:	Received by:	7 cans, 7 KR
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

11/27/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number: 21080

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 5000656S PM Instructions: _____

Sample Receiving Associate: KC Date: 11/20/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 11/20/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-21080-a-1	11227	20848	B	6	-3.9	14:13	
BRS	140-21080-a-2	10102	20848	B	6	-1.6	14:14	
BRS	140-21080-a-3	34000030	20848	B	6	-4.2	14:15	
BRS	140-21080-a-4	11232	20848	B	6	0.0	14:16	
BRS	140-21080-a-5	11562	20848	B	6	-2.8	14:17	
BRS	140-21080-a-6	10405	20899	B	6	-2.1	14:18	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)

□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-170172-1
Client Project/Site: West Bend Brewery - 193706313

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Erin Gross

Authorized for release by:
10/2/2019 2:18:59 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

Table of Contents

Job ID: 500-170172-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-170172-1

Comments
No additional comments.

Receipt
The samples were received on 9/17/2019 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º C.

Receipt Exceptions

Didn't receive sample SB-3 (5-6), we received an 8oz with ID of SB-3 (1-3) and time of 1100, should it be SB-3 (5-6)?

GC/MS VOA
Method(s) 5035: sample vial has < 8 grams of sample in 10 ml of methanol. SB-10 (2-4) (500-170172-15)

Method(s) 8260B: The MS/ MSD (matrix spike and matrix spike duplicate) in batch 506823 were analyzed 22 and 47 minutes outside the method specified 12 hour tune time. TW-1 (500-170172-19), (500-170172-A-19 MS) and (500-170172-A-19 MSD)

Method(s) 8260B: The method blank for 506135-506823-506947-506948 contained Methylene chloride above the method detection limit (MDL) and below the reporting limit (RL). This target analyte concentration was less than the reporting limit (RL) in the samples; therefore, re-analysis of samples was not performed. Methylene chloride results have been flagged in the associated samples with a "B" flag denote the presence in the blank and possible lab contamination.

Method(s) 8260B: The extraction blank for 506135 contained Methylene chloride above the method detection limit (MDL) but below the reporting limit (RL). The method blank associated with analytical batch 506814 has detect for Methylene chloride above the method detection limit (MDL) but below the reporting limit (RL). This target analyte concentration was less than the reporting limit (RL) in the associated sample; therefore, re-analysis of samples was not performed. Methylene chloride results have been flagged in the associated samples with a "B" flag denote the presence in the blank and possible lab contamination.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples contained one base surrogate outside acceptance limits: The laboratory's SOP allows one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified. SB-4 (2-4) (500-170172-6), SB-4 (2-4) (500-170172-6[MS]), SB-4 (2-4) (500-170172-6[MSD]) and DUP-01 (500-170172-9)

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SB-9 (1-3) (500-170172-14) and SB-10 (2-4) (500-170172-15). Elevated reporting limits (RLs) are provided.

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

Metals
Method(s) 6010B: The following sample was diluted due to the nature of the sample matrix: SB-10 (2-4) (500-170172-15). Elevated reporting limits (RLs) are provided.

Method(s) 6020A: The method blank for preparation batch 500-507443 contained Chromium above the reporting limit (RL). The samples associated with this method blank did not contain the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 500-170172-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

Organic Prep

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-1 (2-4) — Lab Sample ID: 500-170172-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	17	J	71	8.6	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	15	J	71	6.5	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	99		35	6.3	ug/Kg	1	☼	8270D	Total/NA
Anthracene	250		35	5.9	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	1100		35	4.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	1000		35	6.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1100		35	7.6	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	450		35	11	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	490		35	10	ug/Kg	1	☼	8270D	Total/NA
Chrysene	1100		35	9.6	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	140		35	6.8	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1700		35	6.5	ug/Kg	1	☼	8270D	Total/NA
Fluorene	76		35	5.0	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	420		35	9.1	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	980		35	4.9	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1600		35	7.0	ug/Kg	1	☼	8270D	Total/NA
Arsenic	2.6		0.99	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	30		0.99	0.11	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.20	B	0.20	0.036	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.6		0.99	0.49	mg/Kg	1	☼	6010B	Total/NA
Lead	22		0.49	0.23	mg/Kg	1	☼	6010B	Total/NA
Silver	1.3		0.49	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.045		0.016	0.0054	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-1 (6-8) — Lab Sample ID: 500-170172-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	140	J B	330	110	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: SB-2 (0.5-3) — Lab Sample ID: 500-170172-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	150	J B	350	110	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: SB-2 (3-4) — Lab Sample ID: 500-170172-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	29	J	43	5.9	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	45		43	8.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	49		43	9.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	18	J	43	14	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	22	J	43	13	ug/Kg	1	☼	8270D	Total/NA
Chrysene	35	J	43	12	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	12	J	43	8.4	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	56		43	8.1	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	26	J	43	11	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	28	J	43	6.1	ug/Kg	1	☼	8270D	Total/NA
Pyrene	54		43	8.7	ug/Kg	1	☼	8270D	Total/NA
Arsenic	2.5		1.2	0.41	mg/Kg	1	☼	6010B	Total/NA
Barium	37		1.2	0.14	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	J B	0.24	0.043	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.4		1.2	0.60	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-2 (3-4) (Continued) — Lab Sample ID: 500-170172-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	41		0.60	0.28	mg/Kg	1	☼	6010B	Total/NA
Silver	1.5		0.60	0.16	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.051		0.020	0.0068	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-3 (1-3) — Lab Sample ID: 500-170172-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120	J B	280	92	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: SB-4 (2-4) — Lab Sample ID: 500-170172-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	150	J B	320	110	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	14	J	75	9.1	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	16	J	75	6.8	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	15	J	37	4.9	ug/Kg	1	☼	8270D	Total/NA
Anthracene	21	J	37	6.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	87		37	5.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	120		37	7.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	150		37	8.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	55	F1	37	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	70	F1	37	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	100		37	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	18	J F1	37	7.2	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	150		37	6.9	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	65	F1	37	9.6	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	11	J	37	5.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	78		37	5.2	ug/Kg	1	☼	8270D	Total/NA
Pyrene	170		37	7.4	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.8		1.0	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	130		1.0	0.12	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.44	F1 B	0.21	0.037	mg/Kg	1	☼	6010B	Total/NA
Chromium	15		1.0	0.51	mg/Kg	1	☼	6010B	Total/NA
Lead	300	F2	0.52	0.24	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.2	F1	1.0	0.61	mg/Kg	1	☼	6010B	Total/NA
Silver	2.8		0.52	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.40		0.017	0.0058	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-5 (2-4) — Lab Sample ID: 500-170172-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	140	J B	320	100	ug/Kg	50	☼	8260B	Total/NA
Benzo[a]pyrene	8.8	J	37	7.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	10	J	37	7.9	ug/Kg	1	☼	8270D	Total/NA
Arsenic	1.1		0.99	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	11		0.99	0.11	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15	J B	0.20	0.036	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.8		0.99	0.49	mg/Kg	1	☼	6010B	Total/NA
Lead	2.7		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Silver	0.98		0.50	0.13	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-6 (5-6)

Lab Sample ID: 500-170172-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	150	J B	350	120	ug/Kg	50	☼	8260B	Total/NA
Benzo[a]pyrene	11	J	39	7.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	13	J	39	8.6	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	11	J	39	10	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.1		1.0	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	44		1.0	0.12	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.072	J B	0.21	0.037	mg/Kg	1	☼	6010B	Total/NA
Chromium	20		1.0	0.51	mg/Kg	1	☼	6010B	Total/NA
Lead	8.0		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA
Silver	4.1		0.51	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.024		0.020	0.0065	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 500-170172-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	150	J B	350	110	ug/Kg	50	☼	8260B	Total/NA
Benzo[a]pyrene	12	J	40	7.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	13	J	40	8.6	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	11	J	40	10	ug/Kg	1	☼	8270D	Total/NA
Arsenic	4.8		1.0	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	53		1.0	0.12	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.097	J B	0.20	0.036	mg/Kg	1	☼	6010B	Total/NA
Chromium	20		1.0	0.50	mg/Kg	1	☼	6010B	Total/NA
Lead	7.8		0.51	0.23	mg/Kg	1	☼	6010B	Total/NA
Silver	4.0		0.51	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.020		0.019	0.0064	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-7 (0.5-1.5)

Lab Sample ID: 500-170172-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	240		76	9.2	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	320		76	6.9	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	8.3	J	37	6.8	ug/Kg	1	☼	8270D	Total/NA
Anthracene	17	J	37	6.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	70		37	5.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	84		37	7.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	130		37	8.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	39		37	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	44		37	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	84		37	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	21	J	37	7.3	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	84		37	7.0	ug/Kg	1	☼	8270D	Total/NA
Fluorene	8.3	J	37	5.3	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	54		37	9.8	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	180		37	5.8	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	230		37	5.2	ug/Kg	1	☼	8270D	Total/NA
Pyrene	73		37	7.5	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.4		1.0	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	71		1.0	0.12	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.23	B	0.21	0.037	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.8		1.0	0.51	mg/Kg	1	☼	6010B	Total/NA
Lead	18		0.51	0.24	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-7 (0.5-1.5) (Continued) — Lab Sample ID: 500-170172-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	1.7		0.51	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.023		0.019	0.0062	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-7 (13.5-14.5) — Lab Sample ID: 500-170172-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	110	J B	280	92	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: SB-8 (2-3) — Lab Sample ID: 500-170172-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	110	J B	300	97	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	24	J	59	20	ug/Kg	50	☼	8260B	Total/NA
Toluene	19		15	8.7	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	40		30	13	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: SB-8 (3-4) — Lab Sample ID: 500-170172-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	32	J	75	9.0	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	46	J	75	6.8	ug/Kg	1	☼	8270D	Total/NA
Anthracene	23	J	37	6.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	75		37	5.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	110		37	7.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	150		37	8.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	62		37	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	79		37	10	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	170		37	6.9	ug/Kg	1	☼	8270D	Total/NA
Fluorene	6.3	J	37	5.2	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	60		37	9.6	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	26	J	37	5.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	89		37	5.2	ug/Kg	1	☼	8270D	Total/NA
Pyrene	120		37	7.4	ug/Kg	1	☼	8270D	Total/NA
Arsenic	3.9		1.1	0.38	mg/Kg	1	☼	6010B	Total/NA
Barium	65		1.1	0.13	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30	B	0.22	0.040	mg/Kg	1	☼	6010B	Total/NA
Chromium	13		1.1	0.54	mg/Kg	1	☼	6010B	Total/NA
Lead	61		0.55	0.25	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.55	0.14	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.050		0.017	0.0058	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-9 (1-3) — Lab Sample ID: 500-170172-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	310		77	27	ug/Kg	50	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	78		77	29	ug/Kg	50	☼	8260B	Total/NA
Benzene	63		19	11	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	100		19	14	ug/Kg	50	☼	8260B	Total/NA
Isopropylbenzene	68	J	77	29	ug/Kg	50	☼	8260B	Total/NA
Methylene Chloride	140	J B	380	130	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	500		77	26	ug/Kg	50	☼	8260B	Total/NA
n-Butylbenzene	36	J	77	30	ug/Kg	50	☼	8260B	Total/NA
N-Propylbenzene	82		77	32	ug/Kg	50	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-9 (1-3) (Continued)

Lab Sample ID: 500-170172-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	120		77	28	ug/Kg	50	☼	8260B	Total/NA
Toluene	370		19	11	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	980		38	17	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	450		400	48	ug/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	590		400	36	ug/Kg	5	☼	8270D	Total/NA
Anthracene	130	J	200	33	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	290		200	26	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	410		200	38	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	430		200	42	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	110	J	200	63	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	260		200	58	ug/Kg	5	☼	8270D	Total/NA
Chrysene	300		200	54	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	82	J	200	38	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	520		200	36	ug/Kg	5	☼	8270D	Total/NA
Fluorene	29	J	200	28	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	240		200	51	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	340		200	30	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	580		200	27	ug/Kg	5	☼	8270D	Total/NA
Pyrene	420		200	39	ug/Kg	5	☼	8270D	Total/NA
Arsenic	12		1.0	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	94		1.0	0.11	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.54	B	0.20	0.036	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		1.0	0.50	mg/Kg	1	☼	6010B	Total/NA
Lead	56		0.50	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.2		1.0	0.59	mg/Kg	1	☼	6010B	Total/NA
Silver	2.0		0.50	0.13	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.063		0.019	0.0062	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 500-170172-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1100		110	38	ug/Kg	50	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	250		110	41	ug/Kg	50	☼	8260B	Total/NA
Benzene	200		27	16	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	350		27	20	ug/Kg	50	☼	8260B	Total/NA
Isopropylbenzene	260		110	41	ug/Kg	50	☼	8260B	Total/NA
Methylene Chloride	190	J B	540	170	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	1600		110	36	ug/Kg	50	☼	8260B	Total/NA
n-Butylbenzene	130		110	42	ug/Kg	50	☼	8260B	Total/NA
N-Propylbenzene	290		110	44	ug/Kg	50	☼	8260B	Total/NA
p-Isopropyltoluene	90	J	110	39	ug/Kg	50	☼	8260B	Total/NA
sec-Butylbenzene	93	J	110	43	ug/Kg	50	☼	8260B	Total/NA
Tetrachloroethene	740		110	40	ug/Kg	50	☼	8260B	Total/NA
Toluene	1300		27	16	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	3200		54	24	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	1600		400	49	ug/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	2200		400	37	ug/Kg	5	☼	8270D	Total/NA
Acenaphthene	180	J	200	36	ug/Kg	5	☼	8270D	Total/NA
Anthracene	370		200	33	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	920		200	27	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	880		200	39	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-10 (2-4) (Continued)

Lab Sample ID: 500-170172-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	1300		200	43	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	240		200	64	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	470		200	59	ug/Kg	5	☼	8270D	Total/NA
Chrysene	850		200	54	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	150	J	200	38	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1900		200	37	ug/Kg	5	☼	8270D	Total/NA
Fluorene	160	J	200	28	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	380		200	52	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	1300		200	31	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	2300		200	28	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1500		200	40	ug/Kg	5	☼	8270D	Total/NA
Arsenic	9.2		5.3	1.8	mg/Kg	5	☼	6010B	Total/NA
Barium	110		5.3	0.60	mg/Kg	5	☼	6010B	Total/NA
Cadmium	0.58	J B	1.1	0.19	mg/Kg	5	☼	6010B	Total/NA
Chromium	10		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Lead	89		2.6	1.2	mg/Kg	5	☼	6010B	Total/NA
Silver	2.1	J	2.6	0.68	mg/Kg	5	☼	6010B	Total/NA
Mercury	0.060		0.019	0.0063	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-11 (2-4)

Lab Sample ID: 500-170172-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	58	J	70	25	ug/Kg	50	☼	8260B	Total/NA
Benzene	13	J	17	10	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	16	J	17	13	ug/Kg	50	☼	8260B	Total/NA
Methylene Chloride	120	J B	350	110	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	93		70	23	ug/Kg	50	☼	8260B	Total/NA
Toluene	71		17	10	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	140		35	15	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	18	J	79	9.5	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	19	J	79	7.2	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	8.4	J	39	7.0	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	9.9	J	39	5.1	ug/Kg	1	☼	8270D	Total/NA
Anthracene	20	J	39	6.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	100		39	5.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	110		39	7.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	160		39	8.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	32	J F1	39	13	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	46		39	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	100		39	11	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	140		39	7.2	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	36	J F1	39	10	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	15	J	39	6.0	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	58		39	5.4	ug/Kg	1	☼	8270D	Total/NA
Pyrene	130		39	7.7	ug/Kg	1	☼	8270D	Total/NA
Arsenic	2.3		1.2	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	77		1.2	0.13	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.19	J B	0.23	0.042	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.1		1.2	0.58	mg/Kg	1	☼	6010B	Total/NA
Lead	190		0.58	0.27	mg/Kg	1	☼	6010B	Total/NA
Silver	1.6		0.58	0.15	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-11 (2-4) (Continued)

Lab Sample ID: 500-170172-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.043		0.019	0.0065	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-12 (3-4)

Lab Sample ID: 500-170172-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	82		72	26	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	20		18	13	ug/Kg	50	☼	8260B	Total/NA
Methylene Chloride	140	J B	360	120	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	140		72	24	ug/Kg	50	☼	8260B	Total/NA
Toluene	83		18	11	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	210		36	16	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	270		78	9.5	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	320		78	7.1	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	43		38	5.1	ug/Kg	1	☼	8270D	Total/NA
Anthracene	93		38	6.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	310		38	5.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	280		38	7.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	580		38	8.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	100		38	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	130		38	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	370		38	11	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	24	J	38	7.5	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	670		38	7.2	ug/Kg	1	☼	8270D	Total/NA
Fluorene	36	J	38	5.4	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	110		38	10	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	210		38	6.0	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	560		38	5.4	ug/Kg	1	☼	8270D	Total/NA
Pyrene	660		38	7.7	ug/Kg	1	☼	8270D	Total/NA
Arsenic	9.9		1.2	0.40	mg/Kg	1	☼	6010B	Total/NA
Barium	130		1.2	0.13	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35	B	0.24	0.042	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.4		1.2	0.58	mg/Kg	1	☼	6010B	Total/NA
Lead	51		0.59	0.27	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.3		1.2	0.69	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.59	0.15	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.23		0.019	0.0062	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SB-13 (2-4)

Lab Sample ID: 500-170172-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120	J B	300	97	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	25	J	60	20	ug/Kg	50	☼	8260B	Total/NA
1-Methylnaphthalene	84		70	8.5	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	110		70	6.4	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	400		34	6.2	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	21	J	34	4.6	ug/Kg	1	☼	8270D	Total/NA
Anthracene	590		34	5.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	1000		34	4.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	990		34	6.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1400		34	7.5	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	370		34	11	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	460		34	10	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-13 (2-4) (Continued)

Lab Sample ID: 500-170172-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	1100		34	9.4	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	110		34	6.7	ug/Kg	1	☼	8270D	Total/NA
Fluorene	320		34	4.9	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	310		34	9.0	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	230		34	5.3	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene - DL	3700		170	32	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene - DL	3800		170	24	ug/Kg	5	☼	8270D	Total/NA
Pyrene - DL	3000		170	34	ug/Kg	5	☼	8270D	Total/NA
Arsenic	3.5		0.95	0.32	mg/Kg	1	☼	6010B	Total/NA
Barium	43		0.95	0.11	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	J B	0.19	0.034	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.7		0.95	0.47	mg/Kg	1	☼	6010B	Total/NA
Lead	21		0.47	0.22	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.68	J	0.95	0.56	mg/Kg	1	☼	6010B	Total/NA
Silver	2.2		0.47	0.12	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.046		0.017	0.0057	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: TW-1

Lab Sample ID: 500-170172-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.3		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	15		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	4.6		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	1.7		0.50	0.15	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	12		1.0	0.41	ug/L	1		8260B	Total/NA
Ethylbenzene	6.1		0.50	0.18	ug/L	1		8260B	Total/NA
Isopropylbenzene	1.0		1.0	0.39	ug/L	1		8260B	Total/NA
Methylene Chloride	2.1	J B	5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	8.5		1.0	0.34	ug/L	1		8260B	Total/NA
N-Propylbenzene	2.7		1.0	0.41	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.42	J	1.0	0.37	ug/L	1		8260B	Total/NA
Toluene	0.79		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	13		1.0	0.22	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.4	J	1.6	0.24	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	1.4	J	1.6	0.052	ug/L	1		8270D	Total/NA
Naphthalene	2.9		0.80	0.25	ug/L	1		8270D	Total/NA
Arsenic	0.0039		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.12		0.0025	0.00073	mg/L	1		6020A	Dissolved
Lead	0.00058		0.00050	0.00019	mg/L	1		6020A	Dissolved

Client Sample ID: DUP-02

Lab Sample ID: 500-170172-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.6		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	15		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	4.7		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	1.7		0.50	0.15	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	12		1.0	0.41	ug/L	1		8260B	Total/NA
Ethylbenzene	6.1		0.50	0.18	ug/L	1		8260B	Total/NA
Isopropylbenzene	1.1		1.0	0.39	ug/L	1		8260B	Total/NA
Methylene Chloride	1.9	J B	5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	8.9		1.0	0.34	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02 (Continued) — Lab Sample ID: 500-170172-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
N-Propylbenzene	2.7		1.0	0.41	ug/L	1		8260B	Total/NA
Toluene	0.75		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	13		1.0	0.22	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.4	J	1.6	0.24	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	1.4	J	1.6	0.052	ug/L	1		8270D	Total/NA
Naphthalene	2.9		0.81	0.25	ug/L	1		8270D	Total/NA
Arsenic	0.0042		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.12		0.0025	0.00073	mg/L	1		6020A	Dissolved
Lead	0.00035	J	0.00050	0.00019	mg/L	1		6020A	Dissolved

Client Sample ID: TW-2 — Lab Sample ID: 500-170172-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.42	J	1.0	0.36	ug/L	1		8260B	Total/NA
Methylene Chloride	2.8	J B	5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	0.71	J	1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	0.31	J	0.50	0.15	ug/L	1		8260B	Total/NA
Arsenic	0.00046	J	0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.10		0.0025	0.00073	mg/L	1		6020A	Dissolved
Chromium	0.0013	J B	0.0050	0.0011	mg/L	1		6020A	Dissolved
Selenium	0.0013	J	0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: TB-01 (Trip Blank) — Lab Sample ID: 500-170172-22

No Detections.

Client Sample ID: TB-02 (Trip Blank) — Lab Sample ID: 500-170172-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.8	J B	5.0	1.6	ug/L	1		8260B	Total/NA

Client Sample ID: SB-3 (5-6) — Lab Sample ID: 500-170172-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	49	J	81	9.8	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	50	J	81	7.4	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	16	J	40	7.2	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	15	J	40	5.3	ug/Kg	1	☼	8270D	Total/NA
Anthracene	53		40	6.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	250		40	5.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	270		40	7.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	410		40	8.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	88		40	13	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120		40	12	ug/Kg	1	☼	8270D	Total/NA
Chrysene	320		40	11	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	27	J	40	7.8	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	530		40	7.5	ug/Kg	1	☼	8270D	Total/NA
Fluorene	14	J	40	5.7	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	87		40	10	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	34	J	40	6.2	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	250		40	5.6	ug/Kg	1	☼	8270D	Total/NA
Pyrene	470		40	8.0	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.0		1.1	0.36	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-3 (5-6) (Continued)

Lab Sample ID: 500-170172-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	87		1.1	0.12	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.36	B	0.21	0.038	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		1.1	0.52	mg/Kg	1	☼	6010B	Total/NA
Lead	93		0.53	0.24	mg/Kg	1	☼	6010B	Total/NA
Silver	2.1		0.53	0.14	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.14		0.018	0.0061	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
7471A	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI
7471A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-170172-1	SB-1 (2-4)	Solid	09/13/19 09:50	09/17/19 08:40	
500-170172-2	SB-1 (6-8)	Solid	09/13/19 09:50	09/17/19 08:40	
500-170172-3	SB-2 (0.5-3)	Solid	09/13/19 10:20	09/17/19 08:40	
500-170172-4	SB-2 (3-4)	Solid	09/13/19 10:15	09/17/19 08:40	
500-170172-5	SB-3 (1-3)	Solid	09/13/19 11:00	09/17/19 08:40	
500-170172-6	SB-4 (2-4)	Solid	09/13/19 11:00	09/17/19 08:40	
500-170172-7	SB-5 (2-4)	Solid	09/13/19 11:40	09/17/19 08:40	
500-170172-8	SB-6 (5-6)	Solid	09/13/19 11:55	09/17/19 08:40	
500-170172-9	DUP-01	Solid	09/13/19 13:00	09/17/19 08:40	
500-170172-10	SB-7 (0.5-1.5)	Solid	09/13/19 13:01	09/17/19 08:40	
500-170172-11	SB-7 (13.5-14.5)	Solid	09/13/19 14:00	09/17/19 08:40	
500-170172-12	SB-8 (2-3)	Solid	09/13/19 15:15	09/17/19 08:40	
500-170172-13	SB-8 (3-4)	Solid	09/13/19 15:15	09/17/19 08:40	
500-170172-14	SB-9 (1-3)	Solid	09/13/19 15:20	09/17/19 08:40	
500-170172-15	SB-10 (2-4)	Solid	09/13/19 15:25	09/17/19 08:40	
500-170172-16	SB-11 (2-4)	Solid	09/13/19 16:30	09/17/19 08:40	
500-170172-17	SB-12 (3-4)	Solid	09/13/19 16:45	09/17/19 08:40	
500-170172-18	SB-13 (2-4)	Solid	09/13/19 16:50	09/17/19 08:40	
500-170172-19	TW-1	Water	09/13/19 15:25	09/17/19 08:40	
500-170172-20	DUP-02	Water	09/13/19 15:35	09/17/19 08:40	
500-170172-21	TW-2	Water	09/13/19 16:40	09/17/19 08:40	
500-170172-22	TB-01 (Trip Blank)	Solid	09/13/19 00:00	09/17/19 08:40	
500-170172-23	TB-02 (Trip Blank)	Water	09/13/19 00:00	09/17/19 08:40	
500-170172-24	SB-3 (5-6)	Solid	09/13/19 11:00	09/17/19 08:40	

Client Sample ID: SB-1 (2-4)

Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-1

Matrix: Solid
Percent Solids: 92.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	17	J	71	8.6	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
2-Methylnaphthalene	15	J	71	6.5	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Acenaphthene	99		35	6.3	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Acenaphthylene	<4.6		35	4.6	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Anthracene	250		35	5.9	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Benzo[a]anthracene	1100		35	4.7	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Benzo[a]pyrene	1000		35	6.8	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Benzo[b]fluoranthene	1100		35	7.6	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Benzo[g,h,i]perylene	450		35	11	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Benzo[k]fluoranthene	490		35	10	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Chrysene	1100		35	9.6	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Dibenz(a,h)anthracene	140		35	6.8	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Fluoranthene	1700		35	6.5	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Fluorene	76		35	5.0	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Indeno[1,2,3-cd]pyrene	420		35	9.1	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Naphthalene	<5.4		35	5.4	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Phenanthrene	980		35	4.9	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1
Pyrene	1600		35	7.0	ug/Kg	☼	09/27/19 15:41	09/28/19 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*43 - 145*	*09/27/19 15:41*	*09/28/19 18:43*	*1*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*	*09/27/19 15:41*	*09/28/19 18:43*	*1*
Terphenyl-d14 (Surr)	*81*		*42 - 157*	*09/27/19 15:41*	*09/28/19 18:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.6		0.99	0.34	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Barium	30		0.99	0.11	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Cadmium	0.20	B	0.20	0.036	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Chromium	7.6		0.99	0.49	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Lead	22		0.49	0.23	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Selenium	<0.58		0.99	0.58	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1
Silver	1.3		0.49	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 09:20	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.016	0.0054	mg/Kg	☼	09/26/19 14:35	09/27/19 08:11	1

Client Sample ID: SB-1 (6-8)

Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-2

Matrix: Solid
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		67	31	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1,1-Trichloroethane	<25		67	25	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1,2,2-Tetrachloroethane	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1,2-Trichloroethane	<23		67	23	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1-Dichloroethane	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1-Dichloroethene	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,1-Dichloropropene	<20		67	20	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-1 (6-8)
Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-2
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<31		67	31	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2,3-Trichloropropane	<28		130	28	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2,4-Trichlorobenzene	<23		67	23	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2-Dibromoethane	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2-Dichlorobenzene	<22		67	22	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2-Dichloroethane	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,2-Dichloropropane	<29		67	29	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,3,5-Trimethylbenzene	<25		67	25	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,3-Dichlorobenzene	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,3-Dichloropropane	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
1,4-Dichlorobenzene	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
2,2-Dichloropropane	<30		67	30	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
2-Chlorotoluene	<21		67	21	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
4-Chlorotoluene	<23		67	23	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Benzene	<9.7		17	9.7	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Bromobenzene	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Bromochloromethane	<29		67	29	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Bromodichloromethane	<25		67	25	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Bromoform	<32		67	32	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Bromomethane	<53		200	53	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Carbon tetrachloride	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Chlorobenzene	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Chloroethane	<34		67	34	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Chloroform	<25		130	25	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Chloromethane	<21		67	21	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
cis-1,2-Dichloroethene	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
cis-1,3-Dichloropropene	<28		67	28	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Dibromochloromethane	<33		67	33	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Dibromomethane	<18		67	18	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Dichlorodifluoromethane	<45		200	45	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Ethylbenzene	<12		17	12	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Hexachlorobutadiene	<30		67	30	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Isopropyl ether	<18		67	18	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Isopropylbenzene	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Methyl tert-butyl ether	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Methylene Chloride	**140**	**J B**	330	110	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Naphthalene	<22		67	22	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
n-Butylbenzene	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
N-Propylbenzene	<28		67	28	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
p-Isopropyltoluene	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
sec-Butylbenzene	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Styrene	<26		67	26	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
tert-Butylbenzene	<27		67	27	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Tetrachloroethene	<25		67	25	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Toluene	<9.8		17	9.8	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
trans-1,2-Dichloroethene	<23		67	23	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
trans-1,3-Dichloropropene	<24		67	24	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50

Client Sample ID: SB-1 (6-8)

Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-2

Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<11		33	11	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Trichlorofluoromethane	<29		67	29	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Vinyl chloride	<17		67	17	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50
Xylenes, Total	<15		33	15	ug/Kg	☼	09/13/19 09:50	09/26/19 13:10	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 126*	*09/13/19 09:50*	*09/26/19 13:10*	*50*
4-Bromofluorobenzene (Surr)	*110*		*72 - 124*	*09/13/19 09:50*	*09/26/19 13:10*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*09/13/19 09:50*	*09/26/19 13:10*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 09:50*	*09/26/19 13:10*	*50*

Client Sample ID: SB-2 (0.5-3)

Date Collected: 09/13/19 10:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-3

Matrix: Solid
Percent Solids: 84.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		69	32	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1,1-Trichloroethane	<26		69	26	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1,2,2-Tetrachloroethane	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1,2-Trichloroethane	<24		69	24	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1-Dichloroethane	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1-Dichloroethene	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,1-Dichloropropene	<21		69	21	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2,3-Trichlorobenzene	<32		69	32	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2,4-Trichlorobenzene	<24		69	24	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2,4-Trimethylbenzene	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2-Dibromoethane	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2-Dichlorobenzene	<23		69	23	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2-Dichloroethane	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,2-Dichloropropane	<30		69	30	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,3,5-Trimethylbenzene	<26		69	26	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,3-Dichlorobenzene	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,3-Dichloropropane	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
1,4-Dichlorobenzene	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
2,2-Dichloropropane	<31		69	31	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
2-Chlorotoluene	<22		69	22	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
4-Chlorotoluene	<24		69	24	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Benzene	<10		17	10	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Bromobenzene	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Bromochloromethane	<30		69	30	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Bromodichloromethane	<26		69	26	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Bromoform	<33		69	33	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Bromomethane	<55		210	55	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Carbon tetrachloride	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Chlorobenzene	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Chloroethane	<35		69	35	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Chloroform	<26		140	26	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50

Client Sample ID: SB-2 (0.5-3)

Date Collected: 09/13/19 10:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-3
Matrix: Solid
Percent Solids: 84.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<22		69	22	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
cis-1,2-Dichloroethene	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
cis-1,3-Dichloropropene	<29		69	29	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Dibromochloromethane	<34		69	34	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Dibromomethane	<19		69	19	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Ethylbenzene	<13		17	13	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Hexachlorobutadiene	<31		69	31	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Isopropyl ether	<19		69	19	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Isopropylbenzene	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Methyl tert-butyl ether	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Methylene Chloride	**150**	**J B**	350	110	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Naphthalene	<23		69	23	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
n-Butylbenzene	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
N-Propylbenzene	<29		69	29	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
p-Isopropyltoluene	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
sec-Butylbenzene	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Styrene	<27		69	27	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
tert-Butylbenzene	<28		69	28	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Tetrachloroethene	<26		69	26	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Toluene	<10		17	10	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
trans-1,2-Dichloroethene	<24		69	24	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
trans-1,3-Dichloropropene	<25		69	25	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Trichloroethene	<11		35	11	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Trichlorofluoromethane	<30		69	30	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Vinyl chloride	<18		69	18	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50
Xylenes, Total	<15		35	15	ug/Kg	☼	09/13/19 10:20	09/26/19 13:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*	*09/13/19 10:20*	*09/26/19 13:36*	*50*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*	*09/13/19 10:20*	*09/26/19 13:36*	*50*
Dibromofluoromethane	*91*		*75 - 120*	*09/13/19 10:20*	*09/26/19 13:36*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*09/13/19 10:20*	*09/26/19 13:36*	*50*

Client Sample ID: SB-2 (3-4)

Date Collected: 09/13/19 10:15
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-4
Matrix: Solid
Percent Solids: 75.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<11		88	11	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
2-Methylnaphthalene	<8.0		88	8.0	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Acenaphthene	<7.9		43	7.9	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Acenaphthylene	<5.8		43	5.8	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Anthracene	<7.3		43	7.3	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Benzo[a]anthracene	**29**	**J**	43	5.9	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Benzo[a]pyrene	**45**		43	8.5	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Benzo[b]fluoranthene	**49**		43	9.4	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Benzo[g,h,i]perylene	**18**	**J**	43	14	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Benzo[k]fluoranthene	**22**	**J**	43	13	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1

Client Sample ID: SB-2 (3-4)

Date Collected: 09/13/19 10:15
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-4
Matrix: Solid
Percent Solids: 75.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**35**	**J**	43	12	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Dibenz(a,h)anthracene	**12**	**J**	43	8.4	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Fluoranthene	**56**		43	8.1	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Fluorene	<6.1		43	6.1	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Indeno[1,2,3-cd]pyrene	**26**	**J**	43	11	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Naphthalene	<6.7		43	6.7	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Phenanthrene	**28**	**J**	43	6.1	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1
Pyrene	**54**		43	8.7	ug/Kg	☼	09/27/19 15:41	09/28/19 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*43 - 145*	*09/27/19 15:41*	*09/28/19 19:09*	*1*
Nitrobenzene-d5 (Surr)	*74*		*37 - 147*	*09/27/19 15:41*	*09/28/19 19:09*	*1*
Terphenyl-d14 (Surr)	*84*		*42 - 157*	*09/27/19 15:41*	*09/28/19 19:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.5**		1.2	0.41	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Barium	**37**		1.2	0.14	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Cadmium	**0.23**	**J B**	0.24	0.043	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Chromium	**8.4**		1.2	0.60	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Lead	**41**		0.60	0.28	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Selenium	<0.71		1.2	0.71	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1
Silver	**1.5**		0.60	0.16	mg/Kg	☼	10/01/19 10:32	10/02/19 09:24	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.051**		0.020	0.0068	mg/Kg	☼	09/26/19 14:35	09/27/19 08:14	1

Client Sample ID: SB-3 (1-3)

Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-5
Matrix: Solid
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<26		56	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1,1-Trichloroethane	<21		56	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1,2,2-Tetrachloroethane	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1,2-Trichloroethane	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1-Dichloroethane	<23		56	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1-Dichloroethene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,1-Dichloropropene	<17		56	17	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2,3-Trichlorobenzene	<26		56	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2,4-Trichlorobenzene	<19		56	19	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2,4-Trimethylbenzene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2-Dibromo-3-Chloropropane	<110		280	110	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2-Dibromoethane	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2-Dichlorobenzene	<19		56	19	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2-Dichloroethane	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,2-Dichloropropane	<24		56	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,3,5-Trimethylbenzene	<21		56	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50

Client Sample ID: SB-3 (1-3)

Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-5

Matrix: Solid
Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,3-Dichloropropane	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
1,4-Dichlorobenzene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
2,2-Dichloropropane	<25		56	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
2-Chlorotoluene	<18		56	18	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
4-Chlorotoluene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Benzene	<8.2		14	8.2	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Bromobenzene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Bromochloromethane	<24		56	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Bromodichloromethane	<21		56	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Bromoform	<27		56	27	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Bromomethane	<45		170	45	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Carbon tetrachloride	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Chlorobenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Chloroethane	<28		56	28	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Chloroform	<21		110	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Chloromethane	<18		56	18	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
cis-1,2-Dichloroethene	<23		56	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
cis-1,3-Dichloropropene	<23		56	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Dibromochloromethane	<27		56	27	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Dibromomethane	<15		56	15	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Dichlorodifluoromethane	<38		170	38	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Ethylbenzene	<10		14	10	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Hexachlorobutadiene	<25		56	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Isopropyl ether	<16		56	16	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Isopropylbenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Methyl tert-butyl ether	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Methylene Chloride	**120**	**J B**	280	92	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Naphthalene	<19		56	19	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
n-Butylbenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
N-Propylbenzene	<23		56	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
p-Isopropyltoluene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
sec-Butylbenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Styrene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
tert-Butylbenzene	<22		56	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Tetrachloroethene	<21		56	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Toluene	<8.3		14	8.3	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
trans-1,2-Dichloroethene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
trans-1,3-Dichloropropene	<20		56	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Trichloroethene	<9.2		28	9.2	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Trichlorofluoromethane	<24		56	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Vinyl chloride	<15		56	15	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50
Xylenes, Total	<12		28	12	ug/Kg	☼	09/13/19 11:00	09/26/19 14:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 126*	*09/13/19 11:00*	*09/26/19 14:01*	*50*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*	*09/13/19 11:00*	*09/26/19 14:01*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*09/13/19 11:00*	*09/26/19 14:01*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 11:00*	*09/26/19 14:01*	*50*

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-4 (2-4)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid
Percent Solids: 88.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1,2,2-Tetrachloroethane	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1,2-Trichloroethane	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2,3-Trichlorobenzene	<30		64	30	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2-Dibromoethane	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2-Dichlorobenzene	<22		64	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,2-Dichloropropane	<28		64	28	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
2,2-Dichloropropane	<29		64	29	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
4-Chlorotoluene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Benzene	<9.4		16	9.4	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Bromobenzene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Bromochloromethane	<28		64	28	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Bromoform	<31		64	31	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Bromomethane	<51		190	51	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Carbon tetrachloride	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Chlorobenzene	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Chloroethane	<32		64	32	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Chloroform	<24		130	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Chloromethane	<21		64	21	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Dibromochloromethane	<31		64	31	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Dibromomethane	<17		64	17	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Ethylbenzene	<12		16	12	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Hexachlorobutadiene	<29		64	29	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Isopropyl ether	<18		64	18	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Isopropylbenzene	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Methylene Chloride	**150**	**J B**	320	110	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Naphthalene	<22		64	22	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
N-Propylbenzene	<27		64	27	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50

Client Sample ID: SB-4 (2-4)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid
Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Styrene	<25		64	25	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
tert-Butylbenzene	<26		64	26	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Tetrachloroethene	<24		64	24	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Toluene	<9.5		16	9.5	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
trans-1,2-Dichloroethene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Trichloroethene	<11		32	11	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Trichlorofluoromethane	<28		64	28	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Vinyl chloride	<17		64	17	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50
Xylenes, Total	<14		32	14	ug/Kg	☼	09/13/19 11:00	09/26/19 14:26	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 11:00*	*09/26/19 14:26*	*50*
4-Bromofluorobenzene (Surr)	*111*		*72 - 124*	*09/13/19 11:00*	*09/26/19 14:26*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*09/13/19 11:00*	*09/26/19 14:26*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 11:00*	*09/26/19 14:26*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**14**	**J**	75	9.1	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
2-Methylnaphthalene	**16**	**J**	75	6.8	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Acenaphthene	<6.7		37	6.7	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Acenaphthylene	**15**	**J**	37	4.9	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Anthracene	**21**	**J**	37	6.2	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Benzo[a]anthracene	**87**		37	5.0	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Benzo[a]pyrene	**120**		37	7.2	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Benzo[b]fluoranthene	**150**		37	8.0	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Benzo[g,h,i]perylene	**55**	**F1**	37	12	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Benzo[k]fluoranthene	**70**	**F1**	37	11	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Chrysene	**100**		37	10	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Dibenz(a,h)anthracene	**18**	**J F1**	37	7.2	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Fluoranthene	**150**		37	6.9	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Fluorene	<5.2		37	5.2	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Indeno[1,2,3-cd]pyrene	**65**	**F1**	37	9.6	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Naphthalene	**11**	**J**	37	5.7	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Phenanthrene	**78**		37	5.2	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1
Pyrene	**170**		37	7.4	ug/Kg	☼	09/27/19 15:41	09/28/19 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*43 - 145*	*09/27/19 15:41*	*09/28/19 19:35*	*1*
Nitrobenzene-d5 (Surr)	*63*		*37 - 147*	*09/27/19 15:41*	*09/28/19 19:35*	*1*
Terphenyl-d14 (Surr)	*95*		*42 - 157*	*09/27/19 15:41*	*09/28/19 19:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.8**		1.0	0.35	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1
Barium	**130**		1.0	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1
Cadmium	**0.44**	**F1 B**	0.21	0.037	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1
Chromium	**15**		1.0	0.51	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1

Client Sample ID: SB-4 (2-4)

Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid
Percent Solids: 88.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	300	F2	0.52	0.24	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1
Selenium	1.2	F1	1.0	0.61	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1
Silver	2.8		0.52	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 09:28	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.40		0.017	0.0058	mg/Kg	☼	09/26/19 14:35	09/27/19 08:16	1

Client Sample ID: SB-5 (2-4)

Date Collected: 09/13/19 11:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-7
Matrix: Solid
Percent Solids: 88.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		64	29	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2-Dibromoethane	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,2-Dichloropropane	<27		64	27	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,3-Dichlorobenzene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
2,2-Dichloropropane	<28		64	28	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
4-Chlorotoluene	<22		64	22	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Benzene	<9.3		16	9.3	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Bromobenzene	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Bromochloromethane	<27		64	27	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Bromoform	<31		64	31	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Bromomethane	<51		190	51	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Carbon tetrachloride	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Chlorobenzene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Chloroethane	<32		64	32	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Chloroform	<24		130	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Chloromethane	<20		64	20	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
cis-1,3-Dichloropropene	<26		64	26	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-5 (2-4)
Date Collected: 09/13/19 11:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-7
Matrix: Solid
Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	<31		64	31	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Dibromomethane	<17		64	17	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Ethylbenzene	<12		16	12	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Hexachlorobutadiene	<28		64	28	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Isopropyl ether	<18		64	18	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Isopropylbenzene	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Methylene Chloride	**140**	**J B**	320	100	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Naphthalene	<21		64	21	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
N-Propylbenzene	<26		64	26	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
sec-Butylbenzene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Styrene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
tert-Butylbenzene	<25		64	25	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Tetrachloroethene	<24		64	24	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Toluene	<9.3		16	9.3	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Trichloroethene	<10		32	10	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Vinyl chloride	<17		64	17	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50
Xylenes, Total	<14		32	14	ug/Kg	☼	09/13/19 11:40	09/26/19 14:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*	*09/13/19 11:40*	*09/26/19 14:51*	*50*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*	*09/13/19 11:40*	*09/26/19 14:51*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/13/19 11:40*	*09/26/19 14:51*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 11:40*	*09/26/19 14:51*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.0		74	9.0	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
2-Methylnaphthalene	<6.8		74	6.8	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Acenaphthene	<6.6		37	6.6	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Acenaphthylene	<4.8		37	4.8	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Anthracene	<6.1		37	6.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Benzo[a]anthracene	<4.9		37	4.9	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Benzo[a]pyrene	**8.8**	**J**	37	7.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Benzo[b]fluoranthene	**10**	**J**	37	7.9	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Benzo[g,h,i]perylene	<12		37	12	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Benzo[k]fluoranthene	<11		37	11	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Chrysene	<10		37	10	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Dibenz(a,h)anthracene	<7.1		37	7.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Fluoranthene	<6.8		37	6.8	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Fluorene	<5.2		37	5.2	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Indeno[1,2,3-cd]pyrene	<9.5		37	9.5	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Naphthalene	<5.7		37	5.7	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1
Phenanthrene	<5.1		37	5.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1

Client Sample ID: SB-5 (2-4)

Date Collected: 09/13/19 11:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-7

Matrix: Solid
Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<7.3		37	7.3	ug/Kg	☼	09/27/19 15:41	09/28/19 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*43 - 145*	*09/27/19 15:41*	*09/28/19 16:33*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 147*	*09/27/19 15:41*	*09/28/19 16:33*	*1*
Terphenyl-d14 (Surr)	*80*		*42 - 157*	*09/27/19 15:41*	*09/28/19 16:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.1**		0.99	0.34	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Barium	**11**		0.99	0.11	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Cadmium	**0.15**	**J B**	0.20	0.036	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Chromium	**4.8**		0.99	0.49	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Lead	**2.7**		0.50	0.23	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Selenium	<0.58		0.99	0.58	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1
Silver	**0.98**		0.50	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:18	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0060		0.018	0.0060	mg/Kg	☼	09/26/19 14:35	09/27/19 08:38	1

Client Sample ID: SB-6 (5-6)

Date Collected: 09/13/19 11:55
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-8

Matrix: Solid
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1-Dichloroethane	<29		71	29	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1-Dichloroethene	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,1-Dichloropropene	<21		71	21	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2,3-Trichlorobenzene	<32		71	32	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2,4-Trimethylbenzene	<25		71	25	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2-Dibromoethane	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2-Dichloroethane	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,2-Dichloropropane	<30		71	30	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,3-Dichlorobenzene	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,3-Dichloropropane	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
2,2-Dichloropropane	<31		71	31	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
2-Chlorotoluene	<22		71	22	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
4-Chlorotoluene	<25		71	25	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Benzene	<10		18	10	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50

Client Sample ID: SB-6 (5-6)

Date Collected: 09/13/19 11:55
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-8

Matrix: Solid
Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<25		71	25	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Bromochloromethane	<30		71	30	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Bromodichloromethane	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Bromoform	<34		71	34	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Bromomethane	<56		210	56	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Carbon tetrachloride	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Chlorobenzene	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Chloroethane	<36		71	36	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Chloroform	<26		140	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Chloromethane	<23		71	23	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
cis-1,2-Dichloroethene	<29		71	29	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
cis-1,3-Dichloropropene	<29		71	29	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Dibromochloromethane	<35		71	35	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Dibromomethane	<19		71	19	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Dichlorodifluoromethane	<48		210	48	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Ethylbenzene	<13		18	13	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Hexachlorobutadiene	<32		71	32	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Isopropyl ether	<20		71	20	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Isopropylbenzene	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Methyl tert-butyl ether	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Methylene Chloride	**150**	**J B**	350	120	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Naphthalene	<24		71	24	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
n-Butylbenzene	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
N-Propylbenzene	<29		71	29	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
p-Isopropyltoluene	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
sec-Butylbenzene	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Styrene	<27		71	27	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
tert-Butylbenzene	<28		71	28	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Tetrachloroethene	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Toluene	<10		18	10	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
trans-1,2-Dichloroethene	<25		71	25	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Trichloroethene	<12		35	12	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Trichlorofluoromethane	<30		71	30	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Vinyl chloride	<19		71	19	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50
Xylenes, Total	<16		35	16	ug/Kg	☼	09/13/19 11:55	09/26/19 15:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 11:55*	*09/26/19 15:16*	*50*
4-Bromofluorobenzene (Surr)	*111*		*72 - 124*	*09/13/19 11:55*	*09/26/19 15:16*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*09/13/19 11:55*	*09/26/19 15:16*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*09/13/19 11:55*	*09/26/19 15:16*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.7		80	9.7	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
2-Methylnaphthalene	<7.3		80	7.3	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Acenaphthene	<7.1		39	7.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Acenaphthylene	<5.2		39	5.2	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Anthracene	<6.6		39	6.6	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1

Client Sample ID: SB-6 (5-6)

Date Collected: 09/13/19 11:55
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-8

Matrix: Solid
Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<5.3		39	5.3	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Benzo[a]pyrene	**11**	**J**	39	7.7	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Benzo[b]fluoranthene	**13**	**J**	39	8.6	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Benzo[g,h,i]perylene	<13		39	13	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Benzo[k]fluoranthene	<12		39	12	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Chrysene	<11		39	11	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Dibenz(a,h)anthracene	<7.7		39	7.7	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Fluoranthene	<7.4		39	7.4	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Fluorene	<5.6		39	5.6	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Indeno[1,2,3-cd]pyrene	**11**	**J**	39	10	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Naphthalene	<6.1		39	6.1	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Phenanthrene	<5.5		39	5.5	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1
Pyrene	<7.9		39	7.9	ug/Kg	☼	09/27/19 15:41	09/28/19 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*43 - 145*	*09/27/19 15:41*	*09/28/19 16:59*	*1*
Nitrobenzene-d5 (Surr)	*58*		*37 - 147*	*09/27/19 15:41*	*09/28/19 16:59*	*1*
Terphenyl-d14 (Surr)	*81*		*42 - 157*	*09/27/19 15:41*	*09/28/19 16:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**		1.0	0.35	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Barium	**44**		1.0	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Cadmium	**0.072**	**J B**	0.21	0.037	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Chromium	**20**		1.0	0.51	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Lead	**8.0**		0.51	0.24	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Selenium	<0.60		1.0	0.60	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1
Silver	**4.1**		0.51	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.020	0.0065	mg/Kg	☼	09/26/19 14:35	09/27/19 08:40	1

Client Sample ID: DUP-01

Date Collected: 09/13/19 13:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-9

Matrix: Solid
Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1,1-Trichloroethane	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,1-Dichloropropene	<21		70	21	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50

Client Sample ID: DUP-01
Date Collected: 09/13/19 13:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-9
Matrix: Solid
Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2-Dichloroethane	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Benzene	<10		18	10	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Bromobenzene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Bromochloromethane	<30		70	30	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Bromodichloromethane	<26		70	26	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Bromoform	<34		70	34	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Bromomethane	<56		210	56	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Chlorobenzene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Chloroethane	<35		70	35	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Chloroform	<26		140	26	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Chloromethane	<22		70	22	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
cis-1,2-Dichloroethene	<29		70	29	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Dibromomethane	<19		70	19	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Ethylbenzene	<13		18	13	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Hexachlorobutadiene	<31		70	31	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Isopropyl ether	<19		70	19	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Methyl tert-butyl ether	<28		70	28	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Methylene Chloride	**150**	**J B**	350	110	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Naphthalene	<23		70	23	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
sec-Butylbenzene	<28		70	28	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Styrene	<27		70	27	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Toluene	<10		18	10	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
trans-1,2-Dichloroethene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Trichloroethene	<11		35	11	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Vinyl chloride	<18		70	18	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50
Xylenes, Total	<15		35	15	ug/Kg	☼	09/13/19 13:00	09/26/19 15:42	50

Client Sample ID: DUP-01
Date Collected: 09/13/19 13:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-9
Matrix: Solid
Percent Solids: 83.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 126*	*09/13/19 13:00*	*09/26/19 15:42*	*50*
4-Bromofluorobenzene (Surr)	*110*		*72 - 124*	*09/13/19 13:00*	*09/26/19 15:42*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/13/19 13:00*	*09/26/19 15:42*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*09/13/19 13:00*	*09/26/19 15:42*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.7		80	9.7	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
2-Methylnaphthalene	<7.3		80	7.3	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Acenaphthene	<7.2		40	7.2	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Acenaphthylene	<5.3		40	5.3	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Anthracene	<6.7		40	6.7	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Benzo[a]anthracene	<5.4		40	5.4	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Benzo[a]pyrene	**12**	**J**	40	7.7	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Benzo[b]fluoranthene	**13**	**J**	40	8.6	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Benzo[g,h,i]perylene	<13		40	13	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Benzo[k]fluoranthene	<12		40	12	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Chrysene	<11		40	11	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Dibenz(a,h)anthracene	<7.7		40	7.7	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Fluoranthene	<7.4		40	7.4	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Fluorene	<5.6		40	5.6	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Indeno[1,2,3-cd]pyrene	**11**	**J**	40	10	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Naphthalene	<6.1		40	6.1	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Phenanthrene	<5.6		40	5.6	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1
Pyrene	<7.9		40	7.9	ug/Kg	☼	09/27/19 15:41	09/28/19 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*	*X*	*43 - 145*	*09/27/19 15:41*	*09/28/19 17:25*	*1*
Nitrobenzene-d5 (Surr)	*40*		*37 - 147*	*09/27/19 15:41*	*09/28/19 17:25*	*1*
Terphenyl-d14 (Surr)	*65*		*42 - 157*	*09/27/19 15:41*	*09/28/19 17:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		1.0	0.35	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Barium	**53**		1.0	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Cadmium	**0.097**	**J B**	0.20	0.036	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Chromium	**20**		1.0	0.50	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Lead	**7.8**		0.51	0.23	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Selenium	<0.60		1.0	0.60	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1
Silver	**4.0**		0.51	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.019	0.0064	mg/Kg	☼	09/26/19 14:35	09/27/19 08:42	1

Client Sample ID: SB-7 (0.5-1.5)

Date Collected: 09/13/19 13:01
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-10
Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	240		76	9.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
2-Methylnaphthalene	320		76	6.9	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Acenaphthene	8.3	J	37	6.8	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Acenaphthylene	<5.0		37	5.0	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Anthracene	17	J	37	6.3	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Benzo[a]anthracene	70		37	5.1	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Benzo[a]pyrene	84		37	7.3	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Benzo[b]fluoranthene	130		37	8.1	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Benzo[g,h,i]perylene	39		37	12	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Benzo[k]fluoranthene	44		37	11	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Chrysene	84		37	10	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Dibenz(a,h)anthracene	21	J	37	7.3	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Fluoranthene	84		37	7.0	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Fluorene	8.3	J	37	5.3	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Indeno[1,2,3-cd]pyrene	54		37	9.8	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Naphthalene	180		37	5.8	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Phenanthrene	230		37	5.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1
Pyrene	73		37	7.5	ug/Kg	☼	09/27/19 15:41	09/30/19 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*43 - 145*	*09/27/19 15:41*	*09/30/19 18:25*	*1*
Nitrobenzene-d5 (Surr)	*44*		*37 - 147*	*09/27/19 15:41*	*09/30/19 18:25*	*1*
Terphenyl-d14 (Surr)	*68*		*42 - 157*	*09/27/19 15:41*	*09/30/19 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		1.0	0.35	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Barium	71		1.0	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Cadmium	0.23	B	0.21	0.037	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Chromium	7.8		1.0	0.51	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Lead	18		0.51	0.24	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Selenium	<0.60		1.0	0.60	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1
Silver	1.7		0.51	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:30	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0062	mg/Kg	☼	09/26/19 14:35	09/27/19 08:44	1

Client Sample ID: SB-7 (13.5-14.5)

Date Collected: 09/13/19 14:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-11
Matrix: Solid
Percent Solids: 93.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<26		57	26	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1,1-Trichloroethane	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1,2,2-Tetrachloroethane	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1,2-Trichloroethane	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1-Dichloroethane	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1-Dichloroethene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,1-Dichloropropene	<17		57	17	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50

Client Sample ID: SB-7 (13.5-14.5)
Date Collected: 09/13/19 14:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-11
Matrix: Solid
Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<26		57	26	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2,4-Trichlorobenzene	<19		57	19	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2,4-Trimethylbenzene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2-Dibromo-3-Chloropropane	<110		280	110	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2-Dibromoethane	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2-Dichlorobenzene	<19		57	19	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2-Dichloroethane	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,2-Dichloropropane	<24		57	24	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,3,5-Trimethylbenzene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,3-Dichlorobenzene	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,3-Dichloropropane	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
1,4-Dichlorobenzene	<21		57	21	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
2,2-Dichloropropane	<25		57	25	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
2-Chlorotoluene	<18		57	18	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
4-Chlorotoluene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Benzene	<8.3		14	8.3	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Bromobenzene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Bromochloromethane	<24		57	24	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Bromodichloromethane	<21		57	21	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Bromoform	<27		57	27	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Bromomethane	<45		170	45	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Carbon tetrachloride	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Chlorobenzene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Chloroethane	<29		57	29	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Chloroform	<21		110	21	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Chloromethane	<18		57	18	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
cis-1,2-Dichloroethene	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
cis-1,3-Dichloropropene	<24		57	24	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Dibromochloromethane	<28		57	28	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Dibromomethane	<15		57	15	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Dichlorodifluoromethane	<38		170	38	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Ethylbenzene	<10		14	10	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Hexachlorobutadiene	<25		57	25	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Isopropyl ether	<16		57	16	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Isopropylbenzene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Methyl tert-butyl ether	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Methylene Chloride	**110**	**J B**	280	92	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Naphthalene	<19		57	19	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
n-Butylbenzene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
N-Propylbenzene	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
p-Isopropyltoluene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
sec-Butylbenzene	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Styrene	<22		57	22	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
tert-Butylbenzene	<23		57	23	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Tetrachloroethene	<21		57	21	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Toluene	<8.3		14	8.3	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
trans-1,2-Dichloroethene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
trans-1,3-Dichloropropene	<20		57	20	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50

Client Sample ID: SB-7 (13.5-14.5)

Lab Sample ID: 500-170172-11
Date Collected: 09/13/19 14:00
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<9.3		28	9.3	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Trichlorofluoromethane	<24		57	24	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Vinyl chloride	<15		57	15	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50
Xylenes, Total	<12		28	12	ug/Kg	☼	09/13/19 14:00	09/26/19 16:07	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 14:00*	*09/26/19 16:07*	*50*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*	*09/13/19 14:00*	*09/26/19 16:07*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/13/19 14:00*	*09/26/19 16:07*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 14:00*	*09/26/19 16:07*	*50*

Client Sample ID: SB-8 (2-3)

Lab Sample ID: 500-170172-12
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		59	27	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1,1-Trichloroethane	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1,2,2-Tetrachloroethane	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1,2-Trichloroethane	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1-Dichloroethane	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1-Dichloroethene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,1-Dichloropropene	<18		59	18	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2,3-Trichlorobenzene	<27		59	27	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2,4-Trichlorobenzene	<20		59	20	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2,4-Trimethylbenzene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2-Dibromoethane	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2-Dichlorobenzene	<20		59	20	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2-Dichloroethane	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,2-Dichloropropane	<25		59	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,3,5-Trimethylbenzene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,3-Dichlorobenzene	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,3-Dichloropropane	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
1,4-Dichlorobenzene	<22		59	22	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
2,2-Dichloropropane	<26		59	26	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
2-Chlorotoluene	<19		59	19	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
4-Chlorotoluene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Benzene	<8.7		15	8.7	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Bromobenzene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Bromochloromethane	<25		59	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Bromodichloromethane	<22		59	22	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Bromoform	<29		59	29	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Bromomethane	<47		180	47	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Carbon tetrachloride	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Chlorobenzene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Chloroethane	<30		59	30	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Chloroform	<22		120	22	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50

Client Sample ID: SB-8 (2-3)

Lab Sample ID: 500-170172-12
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 90.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<19		59	19	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
cis-1,2-Dichloroethene	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
cis-1,3-Dichloropropene	<25		59	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Dibromochloromethane	<29		59	29	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Dibromomethane	<16		59	16	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Dichlorodifluoromethane	<40		180	40	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Ethylbenzene	<11		15	11	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Hexachlorobutadiene	<26		59	26	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Isopropyl ether	<16		59	16	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Isopropylbenzene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Methyl tert-butyl ether	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Methylene Chloride	**110**	**J B**	300	97	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Naphthalene	**24**	**J**	59	20	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
n-Butylbenzene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
N-Propylbenzene	<25		59	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
p-Isopropyltoluene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
sec-Butylbenzene	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Styrene	<23		59	23	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
tert-Butylbenzene	<24		59	24	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Tetrachloroethene	<22		59	22	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Toluene	**19**		15	8.7	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
trans-1,2-Dichloroethene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
trans-1,3-Dichloropropene	<21		59	21	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Trichloroethene	<9.7		30	9.7	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Trichlorofluoromethane	<25		59	25	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Vinyl chloride	<16		59	16	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50
Xylenes, Total	**40**		30	13	ug/Kg	☼	09/13/19 14:15	09/26/19 16:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 14:15*	*09/26/19 16:32*	*50*
4-Bromofluorobenzene (Surr)	*110*		*72 - 124*	*09/13/19 14:15*	*09/26/19 16:32*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/13/19 14:15*	*09/26/19 16:32*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 14:15*	*09/26/19 16:32*	*50*

Client Sample ID: SB-8 (3-4)

Lab Sample ID: 500-170172-13
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**32**	**J**	75	9.0	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
2-Methylnaphthalene	**46**	**J**	75	6.8	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Acenaphthene	<6.7		37	6.7	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Acenaphthylene	<4.9		37	4.9	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Anthracene	**23**	**J**	37	6.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Benzo[a]anthracene	**75**		37	5.0	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Benzo[a]pyrene	**110**		37	7.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Benzo[b]fluoranthene	**150**		37	8.0	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Benzo[g,h,i]perylene	<12		37	12	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Benzo[k]fluoranthene	**62**		37	11	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1

Client Sample ID: SB-8 (3-4)

Date Collected: 09/13/19 15:15
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-13
Matrix: Solid
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**79**		37	10	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Dibenz(a,h)anthracene	<7.2		37	7.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Fluoranthene	**170**		37	6.9	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Fluorene	**6.3**	**J**	37	5.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Indeno[1,2,3-cd]pyrene	**60**		37	9.6	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Naphthalene	**26**	**J**	37	5.7	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Phenanthrene	**89**		37	5.2	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1
Pyrene	**120**		37	7.4	ug/Kg	☼	09/27/19 15:41	09/30/19 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*43 - 145*	*09/27/19 15:41*	*09/30/19 18:54*	*1*
Nitrobenzene-d5 (Surr)	*53*		*37 - 147*	*09/27/19 15:41*	*09/30/19 18:54*	*1*
Terphenyl-d14 (Surr)	*81*		*42 - 157*	*09/27/19 15:41*	*09/30/19 18:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.9**		1.1	0.38	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Barium	**65**		1.1	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Cadmium	**0.30**	**B**	0.22	0.040	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Chromium	**13**		1.1	0.54	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Lead	**61**		0.55	0.25	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Selenium	<0.65		1.1	0.65	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1
Silver	**2.2**		0.55	0.14	mg/Kg	☼	10/01/19 10:32	10/02/19 10:34	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.050**		0.017	0.0058	mg/Kg	☼	09/26/19 14:35	09/27/19 08:46	1

Client Sample ID: SB-9 (1-3)

Date Collected: 09/13/19 15:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-14
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<35		77	35	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1,1-Trichloroethane	<29		77	29	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1,2,2-Tetrachloroethane	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1,2-Trichloroethane	<27		77	27	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1-Dichloroethane	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1-Dichloroethene	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,1-Dichloropropene	<23		77	23	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2,3-Trichlorobenzene	<35		77	35	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2,3-Trichloropropane	<32		150	32	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2,4-Trichlorobenzene	<26		77	26	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2,4-Trimethylbenzene	**310**		77	27	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2-Dibromo-3-Chloropropane	<150		380	150	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2-Dibromoethane	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2-Dichlorobenzene	<26		77	26	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2-Dichloroethane	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,2-Dichloropropane	<33		77	33	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,3,5-Trimethylbenzene	**78**		77	29	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-9 (1-3)
Date Collected: 09/13/19 15:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-14
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,3-Dichloropropane	<28		77	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
1,4-Dichlorobenzene	<28		77	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
2,2-Dichloropropane	<34		77	34	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
2-Chlorotoluene	<24		77	24	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
4-Chlorotoluene	<27		77	27	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Benzene	**63**		19	11	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Bromobenzene	<27		77	27	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Bromochloromethane	<33		77	33	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Bromodichloromethane	<29		77	29	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Bromoform	<37		77	37	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Bromomethane	<61		230	61	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Carbon tetrachloride	<29		77	29	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Chlorobenzene	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Chloroethane	<39		77	39	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Chloroform	<28		150	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Chloromethane	<25		77	25	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
cis-1,2-Dichloroethene	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
cis-1,3-Dichloropropene	<32		77	32	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Dibromochloromethane	<37		77	37	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Dibromomethane	<21		77	21	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Dichlorodifluoromethane	<52		230	52	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Ethylbenzene	**100**		19	14	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Hexachlorobutadiene	<34		77	34	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Isopropyl ether	<21		77	21	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Isopropylbenzene	**68**	**J**	77	29	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Methyl tert-butyl ether	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Methylene Chloride	**140**	**J B**	380	130	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Naphthalene	**500**		77	26	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
n-Butylbenzene	**36**	**J**	77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
N-Propylbenzene	**82**		77	32	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
p-Isopropyltoluene	<28		77	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
sec-Butylbenzene	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Styrene	<30		77	30	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
tert-Butylbenzene	<31		77	31	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Tetrachloroethene	**120**		77	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Toluene	**370**		19	11	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
trans-1,2-Dichloroethene	<27		77	27	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
trans-1,3-Dichloropropene	<28		77	28	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Trichloroethene	<13		38	13	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Trichlorofluoromethane	<33		77	33	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Vinyl chloride	<20		77	20	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50
Xylenes, Total	**980**		38	17	ug/Kg	☼	09/13/19 15:20	09/26/19 16:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 15:20*	*09/26/19 16:57*	*50*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*	*09/13/19 15:20*	*09/26/19 16:57*	*50*
Dibromofluoromethane	*91*		*75 - 120*	*09/13/19 15:20*	*09/26/19 16:57*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 15:20*	*09/26/19 16:57*	*50*

Client Sample ID: SB-9 (1-3)

Lab Sample ID: 500-170172-14
Date Collected: 09/13/19 15:20
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	450		400	48	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
2-Methylnaphthalene	590		400	36	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Acenaphthene	<35		200	35	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Acenaphthylene	<26		200	26	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Anthracene	130	J	200	33	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Benzo[a]anthracene	290		200	26	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Benzo[a]pyrene	410		200	38	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Benzo[b]fluoranthene	430		200	42	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Benzo[g,h,i]perylene	110	J	200	63	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Benzo[k]fluoranthene	260		200	58	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Chrysene	300		200	54	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Dibenz(a,h)anthracene	82	J	200	38	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Fluoranthene	520		200	36	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Fluorene	29	J	200	28	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Indeno[1,2,3-cd]pyrene	240		200	51	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Naphthalene	340		200	30	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Phenanthrene	580		200	27	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5
Pyrene	420		200	39	ug/Kg	☼	09/27/19 15:41	09/30/19 19:52	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*43 - 145*	*09/27/19 15:41*	*09/30/19 19:52*	*5*
Nitrobenzene-d5 (Surr)	*55*		*37 - 147*	*09/27/19 15:41*	*09/30/19 19:52*	*5*
Terphenyl-d14 (Surr)	*86*		*42 - 157*	*09/27/19 15:41*	*09/30/19 19:52*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		1.0	0.34	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Barium	94		1.0	0.11	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Cadmium	0.54	B	0.20	0.036	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Chromium	14		1.0	0.50	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Lead	56		0.50	0.23	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Selenium	1.2		1.0	0.59	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1
Silver	2.0		0.50	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.019	0.0062	mg/Kg	☼	09/26/19 14:35	09/27/19 08:48	1

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 500-170172-15
Date Collected: 09/13/19 15:25
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<50		110	50	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1,1-Trichloroethane	<41		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1,2,2-Tetrachloroethane	<43		110	43	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1,2-Trichloroethane	<38		110	38	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1-Dichloroethane	<44		110	44	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1-Dichloroethene	<42		110	42	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,1-Dichloropropene	<32		110	32	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50

Client Sample ID: SB-10 (2-4)
Date Collected: 09/13/19 15:25
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-15
Matrix: Solid
Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<49		110	49	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2,3-Trichloropropane	<44		210	44	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2,4-Trichlorobenzene	<37		110	37	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2,4-Trimethylbenzene	**1100**		110	38	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2-Dibromo-3-Chloropropane	<210		540	210	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2-Dibromoethane	<41		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2-Dichlorobenzene	<36		110	36	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2-Dichloroethane	<42		110	42	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,2-Dichloropropane	<46		110	46	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,3,5-Trimethylbenzene	**250**		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,3-Dichlorobenzene	<43		110	43	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,3-Dichloropropane	<39		110	39	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
1,4-Dichlorobenzene	<39		110	39	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
2,2-Dichloropropane	<48		110	48	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
2-Chlorotoluene	<34		110	34	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
4-Chlorotoluene	<38		110	38	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Benzene	**200**		27	16	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Bromobenzene	<38		110	38	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Bromochloromethane	<46		110	46	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Bromodichloromethane	<40		110	40	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Bromoform	<52		110	52	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Bromomethane	<85		320	85	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Carbon tetrachloride	<41		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Chlorobenzene	<41		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Chloroethane	<54		110	54	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Chloroform	<40		210	40	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Chloromethane	<34		110	34	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
cis-1,2-Dichloroethene	<44		110	44	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
cis-1,3-Dichloropropene	<45		110	45	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Dibromochloromethane	<52		110	52	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Dibromomethane	<29		110	29	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Dichlorodifluoromethane	<72		320	72	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Ethylbenzene	**350**		27	20	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Hexachlorobutadiene	<48		110	48	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Isopropyl ether	<30		110	30	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Isopropylbenzene	**260**		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Methyl tert-butyl ether	<42		110	42	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Methylene Chloride	**190**	**J B**	540	170	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Naphthalene	**1600**		110	36	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
n-Butylbenzene	**130**		110	42	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
N-Propylbenzene	**290**		110	44	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
p-Isopropyltoluene	**90**	**J**	110	39	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
sec-Butylbenzene	**93**	**J**	110	43	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Styrene	<41		110	41	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
tert-Butylbenzene	<43		110	43	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Tetrachloroethene	**740**		110	40	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Toluene	**1300**		27	16	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
trans-1,2-Dichloroethene	<38		110	38	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
trans-1,3-Dichloropropene	<39		110	39	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50

Client Sample ID: SB-10 (2-4)

Date Collected: 09/13/19 15:25
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-15

Matrix: Solid
Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<18		54	18	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Trichlorofluoromethane	<46		110	46	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Vinyl chloride	<28		110	28	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50
Xylenes, Total	**3200**		54	24	ug/Kg	☼	09/13/19 15:25	09/26/19 17:22	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*09/13/19 15:25*	*09/26/19 17:22*	*50*
4-Bromofluorobenzene (Surr)	*107*		*72 - 124*	*09/13/19 15:25*	*09/26/19 17:22*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/13/19 15:25*	*09/26/19 17:22*	*50*
Toluene-d8 (Surr)	*106*		*75 - 120*	*09/13/19 15:25*	*09/26/19 17:22*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**1600**		400	49	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
2-Methylnaphthalene	**2200**		400	37	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Acenaphthene	**180**	**J**	200	36	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Acenaphthylene	<26		200	26	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Anthracene	**370**		200	33	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Benzo[a]anthracene	**920**		200	27	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Benzo[a]pyrene	**880**		200	39	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Benzo[b]fluoranthene	**1300**		200	43	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Benzo[g,h,i]perylene	**240**		200	64	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Benzo[k]fluoranthene	**470**		200	59	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Chrysene	**850**		200	54	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Dibenz(a,h)anthracene	**150**	**J**	200	38	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Fluoranthene	**1900**		200	37	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Fluorene	**160**	**J**	200	28	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Indeno[1,2,3-cd]pyrene	**380**		200	52	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Naphthalene	**1300**		200	31	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Phenanthrene	**2300**		200	28	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5
Pyrene	**1500**		200	40	ug/Kg	☼	09/27/19 15:41	09/30/19 20:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*43 - 145*	*09/27/19 15:41*	*09/30/19 20:21*	*5*
Nitrobenzene-d5 (Surr)	*43*		*37 - 147*	*09/27/19 15:41*	*09/30/19 20:21*	*5*
Terphenyl-d14 (Surr)	*68*		*42 - 157*	*09/27/19 15:41*	*09/30/19 20:21*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.2**		5.3	1.8	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Barium	**110**		5.3	0.60	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Cadmium	**0.58**	**J B**	1.1	0.19	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Chromium	**10**		5.3	2.6	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Lead	**89**		2.6	1.2	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Selenium	<3.1		5.3	3.1	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5
Silver	**2.1**	**J**	2.6	0.68	mg/Kg	☼	10/01/19 10:32	10/02/19 10:42	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.060**		0.019	0.0063	mg/Kg	☼	09/26/19 14:35	09/27/19 08:50	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-11 (2-4)
Date Collected: 09/13/19 16:30
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-16
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1,1-Trichloroethane	<26		70	26	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,1-Dichloropropene	<21		70	21	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2,4-Trimethylbenzene	**58**	**J**	70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2-Dichloroethane	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,3,5-Trimethylbenzene	<26		70	26	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
1,4-Dichlorobenzene	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
4-Chlorotoluene	<24		70	24	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Benzene	**13**	**J**	17	10	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Bromobenzene	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Bromochloromethane	<30		70	30	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Bromodichloromethane	<26		70	26	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Bromoform	<34		70	34	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Bromomethane	<55		210	55	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Chlorobenzene	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Chloroethane	<35		70	35	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Chloroform	<26		140	26	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Chloromethane	<22		70	22	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
cis-1,2-Dichloroethene	<28		70	28	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Dibromomethane	<19		70	19	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Ethylbenzene	**16**	**J**	17	13	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Hexachlorobutadiene	<31		70	31	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Isopropyl ether	<19		70	19	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Methyl tert-butyl ether	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Methylene Chloride	**120**	**J B**	350	110	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Naphthalene	**93**		70	23	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50

Client Sample ID: SB-11 (2-4)
Date Collected: 09/13/19 16:30
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-16
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<28		70	28	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Styrene	<27		70	27	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Toluene	**71**		17	10	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
trans-1,2-Dichloroethene	<24		70	24	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Trichloroethene	<11		35	11	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Vinyl chloride	<18		70	18	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50
Xylenes, Total	**140**		35	15	ug/Kg	☼	09/13/19 16:30	09/26/19 17:47	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*09/13/19 16:30*	*09/26/19 17:47*	*50*
4-Bromofluorobenzene (Surr)	*113*		*72 - 124*	*09/13/19 16:30*	*09/26/19 17:47*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*09/13/19 16:30*	*09/26/19 17:47*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*	*09/13/19 16:30*	*09/26/19 17:47*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**18**	**J**	79	9.5	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
2-Methylnaphthalene	**19**	**J**	79	7.2	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Acenaphthene	**8.4**	**J**	39	7.0	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Acenaphthylene	**9.9**	**J**	39	5.1	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Anthracene	**20**	**J**	39	6.5	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Benzo[a]anthracene	**100**		39	5.2	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Benzo[a]pyrene	**110**		39	7.5	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Benzo[b]fluoranthene	**160**		39	8.4	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Benzo[g,h,i]perylene	**32**	**J F1**	39	13	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Benzo[k]fluoranthene	**46**		39	11	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Chrysene	**100**		39	11	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Dibenz(a,h)anthracene	<7.5	F1	39	7.5	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Fluoranthene	**140**		39	7.2	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Fluorene	<5.5		39	5.5	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Indeno[1,2,3-cd]pyrene	**36**	**J F1**	39	10	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Naphthalene	**15**	**J**	39	6.0	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Phenanthrene	**58**		39	5.4	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1
Pyrene	**130**		39	7.7	ug/Kg	☼	09/26/19 21:38	09/27/19 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*43 - 145*	*09/26/19 21:38*	*09/27/19 16:46*	*1*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*	*09/26/19 21:38*	*09/27/19 16:46*	*1*
Terphenyl-d14 (Surr)	*89*		*42 - 157*	*09/26/19 21:38*	*09/27/19 16:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		1.2	0.40	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1
Barium	**77**		1.2	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1
Cadmium	**0.19**	**J B**	0.23	0.042	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1
Chromium	**9.1**		1.2	0.58	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1

Client Sample ID: SB-11 (2-4)

Lab Sample ID: 500-170172-16
Date Collected: 09/13/19 16:30
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.1

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**190**		0.58	0.27	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1
Selenium	<0.69		1.2	0.69	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1
Silver	**1.6**		0.58	0.15	mg/Kg	☼	10/01/19 10:32	10/02/19 10:54	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.043**		0.019	0.0065	mg/Kg	☼	09/26/19 14:35	09/27/19 08:53	1

Client Sample ID: SB-12 (3-4)

Lab Sample ID: 500-170172-17
Date Collected: 09/13/19 16:45
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1,2,2-Tetrachloroethane	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1-Dichloroethane	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1-Dichloroethene	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,1-Dichloropropene	<21		72	21	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2,3-Trichloropropane	<30		140	30	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2,4-Trichlorobenzene	<24		72	24	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2,4-Trimethylbenzene	**82**		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2-Dibromoethane	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2-Dichloroethane	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,2-Dichloropropane	<31		72	31	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,3-Dichloropropane	<26		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
2,2-Dichloropropane	<32		72	32	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
2-Chlorotoluene	<22		72	22	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
4-Chlorotoluene	<25		72	25	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Benzene	<10		18	10	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Bromobenzene	<26		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Bromochloromethane	<31		72	31	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Bromodichloromethane	<27		72	27	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Bromoform	<35		72	35	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Bromomethane	<57		210	57	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Carbon tetrachloride	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Chlorobenzene	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Chloroethane	<36		72	36	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Chloroform	<27		140	27	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Chloromethane	<23		72	23	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
cis-1,2-Dichloroethene	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50

Client Sample ID: SB-12 (3-4)
Date Collected: 09/13/19 16:45
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-17
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	<35		72	35	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Dibromomethane	<19		72	19	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Dichlorodifluoromethane	<48		210	48	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Ethylbenzene	**20**		18	13	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Hexachlorobutadiene	<32		72	32	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Isopropyl ether	<20		72	20	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Isopropylbenzene	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Methyl tert-butyl ether	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Methylene Chloride	**140**	**J B**	360	120	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Naphthalene	**140**		72	24	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
n-Butylbenzene	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
N-Propylbenzene	<30		72	30	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
p-Isopropyltoluene	<26		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
sec-Butylbenzene	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Styrene	<28		72	28	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
tert-Butylbenzene	<29		72	29	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Tetrachloroethene	<27		72	27	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Toluene	**83**		18	11	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
trans-1,2-Dichloroethene	<25		72	25	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Trichloroethene	<12		36	12	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Trichlorofluoromethane	<31		72	31	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Vinyl chloride	<19		72	19	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50
Xylenes, Total	**210**		36	16	ug/Kg	☼	09/13/19 16:45	09/27/19 06:20	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*	*09/13/19 16:45*	*09/27/19 06:20*	*50*
4-Bromofluorobenzene (Surr)	*106*		*72 - 124*	*09/13/19 16:45*	*09/27/19 06:20*	*50*
Dibromofluoromethane	*98*		*75 - 120*	*09/13/19 16:45*	*09/27/19 06:20*	*50*
Toluene-d8 (Surr)	*100*		*75 - 120*	*09/13/19 16:45*	*09/27/19 06:20*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**270**		78	9.5	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
2-Methylnaphthalene	**320**		78	7.1	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Acenaphthene	<7.0		38	7.0	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Acenaphthylene	**43**		38	5.1	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Anthracene	**93**		38	6.5	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Benzo[a]anthracene	**310**		38	5.2	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Benzo[a]pyrene	**280**		38	7.5	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Benzo[b]fluoranthene	**580**		38	8.4	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Benzo[g,h,i]perylene	**100**		38	12	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Benzo[k]fluoranthene	**130**		38	11	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Chrysene	**370**		38	11	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Dibenz(a,h)anthracene	**24**	**J**	38	7.5	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Fluoranthene	**670**		38	7.2	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Fluorene	**36**	**J**	38	5.4	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Indeno[1,2,3-cd]pyrene	**110**		38	10	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Naphthalene	**210**		38	6.0	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1
Phenanthrene	**560**		38	5.4	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1

Client Sample ID: SB-12 (3-4)

Lab Sample ID: 500-170172-17
Date Collected: 09/13/19 16:45
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	660		38	7.7	ug/Kg	☼	09/26/19 21:38	09/27/19 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*43 - 145*	*09/26/19 21:38*	*09/27/19 17:48*	*1*
Nitrobenzene-d5 (Surr)	*65*		*37 - 147*	*09/26/19 21:38*	*09/27/19 17:48*	*1*
Terphenyl-d14 (Surr)	*86*		*42 - 157*	*09/26/19 21:38*	*09/27/19 17:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.9		1.2	0.40	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Barium	130		1.2	0.13	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Cadmium	0.35	B	0.24	0.042	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Chromium	8.4		1.2	0.58	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Lead	51		0.59	0.27	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Selenium	1.3		1.2	0.69	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1
Silver	2.2		0.59	0.15	mg/Kg	☼	10/01/19 10:32	10/02/19 10:58	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.019	0.0062	mg/Kg	☼	09/26/19 14:35	09/27/19 08:55	1

Client Sample ID: SB-13 (2-4)

Lab Sample ID: 500-170172-18
Date Collected: 09/13/19 16:50
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 91.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		60	28	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1,1-Trichloroethane	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1,2,2-Tetrachloroethane	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1,2-Trichloroethane	<21		60	21	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1-Dichloroethane	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1-Dichloroethene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,1-Dichloropropene	<18		60	18	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2,3-Trichlorobenzene	<27		60	27	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2,4-Trichlorobenzene	<20		60	20	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2,4-Trimethylbenzene	<21		60	21	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2-Dibromoethane	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2-Dichlorobenzene	<20		60	20	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2-Dichloroethane	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,2-Dichloropropane	<26		60	26	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,3,5-Trimethylbenzene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,3-Dichlorobenzene	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,3-Dichloropropane	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
1,4-Dichlorobenzene	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
2,2-Dichloropropane	<26		60	26	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
2-Chlorotoluene	<19		60	19	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
4-Chlorotoluene	<21		60	21	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Benzene	<8.7		15	8.7	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50

Client Sample ID: SB-13 (2-4)

Date Collected: 09/13/19 16:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-18

Matrix: Solid
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<21		60	21	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Bromochloromethane	<26		60	26	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Bromodichloromethane	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Bromoform	<29		60	29	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Bromomethane	<48		180	48	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Carbon tetrachloride	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Chlorobenzene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Chloroethane	<30		60	30	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Chloroform	<22		120	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Chloromethane	<19		60	19	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
cis-1,2-Dichloroethene	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
cis-1,3-Dichloropropene	<25		60	25	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Dibromochloromethane	<29		60	29	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Dibromomethane	<16		60	16	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Dichlorodifluoromethane	<40		180	40	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Ethylbenzene	<11		15	11	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Hexachlorobutadiene	<27		60	27	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Isopropyl ether	<16		60	16	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Isopropylbenzene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Methyl tert-butyl ether	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Methylene Chloride	**120**	**J B**	300	97	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Naphthalene	**25**	**J**	60	20	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
n-Butylbenzene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
N-Propylbenzene	<25		60	25	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
p-Isopropyltoluene	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
sec-Butylbenzene	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Styrene	<23		60	23	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
tert-Butylbenzene	<24		60	24	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Tetrachloroethene	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Toluene	<8.8		15	8.8	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
trans-1,2-Dichloroethene	<21		60	21	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
trans-1,3-Dichloropropene	<22		60	22	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Trichloroethene	<9.8		30	9.8	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Trichlorofluoromethane	<26		60	26	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Vinyl chloride	<16		60	16	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50
Xylenes, Total	<13		30	13	ug/Kg	☼	09/13/19 16:50	09/27/19 06:47	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*	*09/13/19 16:50*	*09/27/19 06:47*	*50*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*	*09/13/19 16:50*	*09/27/19 06:47*	*50*
Dibromofluoromethane	*98*		*75 - 120*	*09/13/19 16:50*	*09/27/19 06:47*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/13/19 16:50*	*09/27/19 06:47*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**84**		70	8.5	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
2-Methylnaphthalene	**110**		70	6.4	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Acenaphthene	**400**		34	6.2	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Acenaphthylene	**21**	**J**	34	4.6	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Anthracene	**590**		34	5.8	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1

Client Sample ID: SB-13 (2-4)

Date Collected: 09/13/19 16:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-18

Matrix: Solid
Percent Solids: 91.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	1000		34	4.7	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Benzo[a]pyrene	990		34	6.7	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Benzo[b]fluoranthene	1400		34	7.5	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Benzo[g,h,i]perylene	370		34	11	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Benzo[k]fluoranthene	460		34	10	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Chrysene	1100		34	9.4	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Dibenz(a,h)anthracene	110		34	6.7	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Fluorene	320		34	4.9	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Indeno[1,2,3-cd]pyrene	310		34	9.0	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1
Naphthalene	230		34	5.3	ug/Kg	☼	09/26/19 21:38	09/30/19 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*43 - 145*	*09/26/19 21:38*	*09/30/19 19:23*	*1*
Nitrobenzene-d5 (Surr)	*74*		*37 - 147*	*09/26/19 21:38*	*09/30/19 19:23*	*1*
Terphenyl-d14 (Surr)	*92*		*42 - 157*	*09/26/19 21:38*	*09/30/19 19:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	3700		170	32	ug/Kg	☼	09/26/19 21:38	10/01/19 13:23	5
Phenanthrene	3800		170	24	ug/Kg	☼	09/26/19 21:38	10/01/19 13:23	5
Pyrene	3000		170	34	ug/Kg	☼	09/26/19 21:38	10/01/19 13:23	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.5		0.95	0.32	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Barium	43		0.95	0.11	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Cadmium	0.16	J B	0.19	0.034	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Chromium	9.7		0.95	0.47	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Lead	21		0.47	0.22	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Selenium	0.68	J	0.95	0.56	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1
Silver	2.2		0.47	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 11:02	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.017	0.0057	mg/Kg	☼	09/26/19 14:35	09/27/19 08:57	1

Client Sample ID: TW-1

Date Collected: 09/13/19 15:25
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-19

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/26/19 19:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/26/19 19:11	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/26/19 19:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/26/19 19:11	1
1,1-Dichloroethane	3.3		1.0	0.41	ug/L			09/26/19 19:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/26/19 19:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/26/19 19:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/26/19 19:11	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: TW-1
Date Collected: 09/13/19 15:25
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/26/19 19:11	1
1,2,4-Trimethylbenzene	**15**		1.0	0.36	ug/L			09/26/19 19:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/26/19 19:11	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/26/19 19:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/26/19 19:11	1
1,3,5-Trimethylbenzene	**4.6**		1.0	0.25	ug/L			09/26/19 19:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/26/19 19:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/26/19 19:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/26/19 19:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/26/19 19:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/26/19 19:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/26/19 19:11	1
Benzene	**1.7**		0.50	0.15	ug/L			09/26/19 19:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/26/19 19:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/26/19 19:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/26/19 19:11	1
Bromoform	<0.48		1.0	0.48	ug/L			09/26/19 19:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/26/19 19:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/26/19 19:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/26/19 19:11	1
Chloroform	<0.37		2.0	0.37	ug/L			09/26/19 19:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/26/19 19:11	1
cis-1,2-Dichloroethene	**12**		1.0	0.41	ug/L			09/26/19 19:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/26/19 19:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/26/19 19:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/26/19 19:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/26/19 19:11	1
Ethylbenzene	**6.1**		0.50	0.18	ug/L			09/26/19 19:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/26/19 19:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/26/19 19:11	1
Isopropylbenzene	**1.0**		1.0	0.39	ug/L			09/26/19 19:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
Methylene Chloride	**2.1**	**J B**	5.0	1.6	ug/L			09/26/19 19:11	1
Naphthalene	**8.5**		1.0	0.34	ug/L			09/26/19 19:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
N-Propylbenzene	**2.7**		1.0	0.41	ug/L			09/26/19 19:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/26/19 19:11	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 19:11	1
Styrene	<0.39		1.0	0.39	ug/L			09/26/19 19:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 19:11	1
Tetrachloroethene	**0.42**	**J**	1.0	0.37	ug/L			09/26/19 19:11	1
Toluene	**0.79**		0.50	0.15	ug/L			09/26/19 19:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/26/19 19:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/26/19 19:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/26/19 19:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/26/19 19:11	1

Client Sample ID: TW-1

Date Collected: 09/13/19 15:25
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/26/19 19:11	1
Xylenes, Total	**13**		1.0	0.22	ug/L			09/26/19 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*09/26/19 19:11*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 124*		*09/26/19 19:11*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*09/26/19 19:11*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*09/26/19 19:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**1.4**	**J**	1.6	0.24	ug/L		09/19/19 09:17	09/22/19 23:16	1
2-Methylnaphthalene	**1.4**	**J**	1.6	0.052	ug/L		09/19/19 09:17	09/22/19 23:16	1
Acenaphthene	<0.25		0.80	0.25	ug/L		09/19/19 09:17	09/22/19 23:16	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		09/19/19 09:17	09/22/19 23:16	1
Anthracene	<0.27		0.80	0.27	ug/L		09/19/19 09:17	09/22/19 23:16	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		09/19/19 09:17	09/22/19 23:16	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		09/19/19 09:17	09/22/19 23:16	1
Benzo[b]fluoranthene	<0.064		0.16	0.064	ug/L		09/19/19 09:17	09/22/19 23:16	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		09/19/19 09:17	09/22/19 23:16	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		09/19/19 09:17	09/22/19 23:16	1
Chrysene	<0.054		0.16	0.054	ug/L		09/19/19 09:17	09/22/19 23:16	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		09/19/19 09:17	09/22/19 23:16	1
Fluoranthene	<0.36		0.80	0.36	ug/L		09/19/19 09:17	09/22/19 23:16	1
Fluorene	<0.19		0.80	0.19	ug/L		09/19/19 09:17	09/22/19 23:16	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		09/19/19 09:17	09/22/19 23:16	1
Naphthalene	**2.9**		0.80	0.25	ug/L		09/19/19 09:17	09/22/19 23:16	1
Phenanthrene	<0.24		0.80	0.24	ug/L		09/19/19 09:17	09/22/19 23:16	1
Pyrene	<0.34		0.80	0.34	ug/L		09/19/19 09:17	09/22/19 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*40*		*34 - 110*	*09/19/19 09:17*	*09/22/19 23:16*	*1*
Nitrobenzene-d5 (Surr)	*39*		*36 - 120*	*09/19/19 09:17*	*09/22/19 23:16*	*1*
Terphenyl-d14 (Surr)	*63*		*40 - 145*	*09/19/19 09:17*	*09/22/19 23:16*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0039**		0.0010	0.00023	mg/L		09/30/19 08:47	09/30/19 17:59	1
Barium	**0.12**		0.0025	0.00073	mg/L		09/30/19 08:47	09/30/19 17:59	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		09/30/19 08:47	09/30/19 17:59	1
Chromium	<0.0011		0.0050	0.0011	mg/L		09/30/19 08:47	09/30/19 17:59	1
Lead	**0.00058**		0.00050	0.00019	mg/L		09/30/19 08:47	09/30/19 17:59	1
Selenium	<0.00098		0.0025	0.00098	mg/L		09/30/19 08:47	09/30/19 17:59	1
Silver	<0.00012		0.00050	0.00012	mg/L		09/30/19 08:47	09/30/19 17:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		09/25/19 10:00	09/26/19 09:26	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: DUP-02
Date Collected: 09/13/19 15:35
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/27/19 07:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/27/19 07:42	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/27/19 07:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/27/19 07:42	1
1,1-Dichloroethane	**3.6**		1.0	0.41	ug/L			09/27/19 07:42	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/27/19 07:42	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/27/19 07:42	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/27/19 07:42	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/27/19 07:42	1
1,2,4-Trimethylbenzene	**15**		1.0	0.36	ug/L			09/27/19 07:42	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/27/19 07:42	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/27/19 07:42	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/27/19 07:42	1
1,3,5-Trimethylbenzene	**4.7**		1.0	0.25	ug/L			09/27/19 07:42	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/27/19 07:42	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/27/19 07:42	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/27/19 07:42	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/27/19 07:42	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/27/19 07:42	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/27/19 07:42	1
Benzene	**1.7**		0.50	0.15	ug/L			09/27/19 07:42	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/27/19 07:42	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/27/19 07:42	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/27/19 07:42	1
Bromoform	<0.48		1.0	0.48	ug/L			09/27/19 07:42	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/27/19 07:42	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/27/19 07:42	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/27/19 07:42	1
Chloroform	<0.37		2.0	0.37	ug/L			09/27/19 07:42	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/27/19 07:42	1
cis-1,2-Dichloroethene	**12**		1.0	0.41	ug/L			09/27/19 07:42	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/27/19 07:42	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/27/19 07:42	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/27/19 07:42	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/27/19 07:42	1
Ethylbenzene	**6.1**		0.50	0.18	ug/L			09/27/19 07:42	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/27/19 07:42	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/27/19 07:42	1
Isopropylbenzene	**1.1**		1.0	0.39	ug/L			09/27/19 07:42	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
Methylene Chloride	**1.9**	**J B**	5.0	1.6	ug/L			09/27/19 07:42	1
Naphthalene	**8.9**		1.0	0.34	ug/L			09/27/19 07:42	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
N-Propylbenzene	**2.7**		1.0	0.41	ug/L			09/27/19 07:42	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/27/19 07:42	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: DUP-02

Date Collected: 09/13/19 15:35
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 07:42	1
Styrene	<0.39		1.0	0.39	ug/L			09/27/19 07:42	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 07:42	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/27/19 07:42	1
Toluene	**0.75**		0.50	0.15	ug/L			09/27/19 07:42	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/27/19 07:42	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/27/19 07:42	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/27/19 07:42	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/27/19 07:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/27/19 07:42	1
Xylenes, Total	**13**		1.0	0.22	ug/L			09/27/19 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*09/27/19 07:42*	*1*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*		*09/27/19 07:42*	*1*
Dibromofluoromethane	*108*		*75 - 120*		*09/27/19 07:42*	*1*
Toluene-d8 (Surr)	*95*		*75 - 120*		*09/27/19 07:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**1.4**	**J**	1.6	0.24	ug/L		09/19/19 09:17	09/22/19 23:38	1
2-Methylnaphthalene	**1.4**	**J**	1.6	0.052	ug/L		09/19/19 09:17	09/22/19 23:38	1
Acenaphthene	<0.25		0.81	0.25	ug/L		09/19/19 09:17	09/22/19 23:38	1
Acenaphthylene	<0.22		0.81	0.22	ug/L		09/19/19 09:17	09/22/19 23:38	1
Anthracene	<0.27		0.81	0.27	ug/L		09/19/19 09:17	09/22/19 23:38	1
Benzo[a]anthracene	<0.046		0.16	0.046	ug/L		09/19/19 09:17	09/22/19 23:38	1
Benzo[a]pyrene	<0.080		0.16	0.080	ug/L		09/19/19 09:17	09/22/19 23:38	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		09/19/19 09:17	09/22/19 23:38	1
Benzo[g,h,i]perylene	<0.30		0.81	0.30	ug/L		09/19/19 09:17	09/22/19 23:38	1
Benzo[k]fluoranthene	<0.052		0.16	0.052	ug/L		09/19/19 09:17	09/22/19 23:38	1
Chrysene	<0.055		0.16	0.055	ug/L		09/19/19 09:17	09/22/19 23:38	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		09/19/19 09:17	09/22/19 23:38	1
Fluoranthene	<0.37		0.81	0.37	ug/L		09/19/19 09:17	09/22/19 23:38	1
Fluorene	<0.20		0.81	0.20	ug/L		09/19/19 09:17	09/22/19 23:38	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		09/19/19 09:17	09/22/19 23:38	1
Naphthalene	**2.9**		0.81	0.25	ug/L		09/19/19 09:17	09/22/19 23:38	1
Phenanthrene	<0.24		0.81	0.24	ug/L		09/19/19 09:17	09/22/19 23:38	1
Pyrene	<0.34		0.81	0.34	ug/L		09/19/19 09:17	09/22/19 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*34 - 110*	*09/19/19 09:17*	*09/22/19 23:38*	*1*
Nitrobenzene-d5 (Surr)	*38*		*36 - 120*	*09/19/19 09:17*	*09/22/19 23:38*	*1*
Terphenyl-d14 (Surr)	*67*		*40 - 145*	*09/19/19 09:17*	*09/22/19 23:38*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0042**		0.0010	0.00023	mg/L		09/30/19 08:47	09/30/19 18:01	1
Barium	**0.12**		0.0025	0.00073	mg/L		09/30/19 08:47	09/30/19 18:01	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		09/30/19 08:47	09/30/19 18:01	1
Chromium	<0.0011		0.0050	0.0011	mg/L		10/01/19 10:24	10/01/19 14:37	1

Client Sample ID: DUP-02

Lab Sample ID: 500-170172-20

Date Collected: 09/13/19 15:35

Matrix: Water

Date Received: 09/17/19 08:40

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.00035**	**J**	0.00050	0.00019	mg/L		09/30/19 08:47	09/30/19 18:01	1
Selenium	<0.00098		0.0025	0.00098	mg/L		09/30/19 08:47	09/30/19 18:01	1
Silver	<0.00012		0.00050	0.00012	mg/L		09/30/19 08:47	09/30/19 18:01	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		09/25/19 10:00	09/26/19 09:28	1

Client Sample ID: TW-2

Lab Sample ID: 500-170172-21

Date Collected: 09/13/19 16:40

Matrix: Water

Date Received: 09/17/19 08:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/27/19 05:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/27/19 05:25	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/27/19 05:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/27/19 05:25	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/27/19 05:25	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/27/19 05:25	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/27/19 05:25	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/27/19 05:25	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/27/19 05:25	1
1,2,4-Trimethylbenzene	**0.42**	**J**	1.0	0.36	ug/L			09/27/19 05:25	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/27/19 05:25	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/27/19 05:25	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/27/19 05:25	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/27/19 05:25	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:25	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/27/19 05:25	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/27/19 05:25	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/27/19 05:25	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/27/19 05:25	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/27/19 05:25	1
Benzene	<0.15		0.50	0.15	ug/L			09/27/19 05:25	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/27/19 05:25	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/27/19 05:25	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/27/19 05:25	1
Bromoform	<0.48		1.0	0.48	ug/L			09/27/19 05:25	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/27/19 05:25	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/27/19 05:25	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/27/19 05:25	1
Chloroform	<0.37		2.0	0.37	ug/L			09/27/19 05:25	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/27/19 05:25	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/27/19 05:25	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/27/19 05:25	1

Client Sample ID: TW-2
Date Collected: 09/13/19 16:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/27/19 05:25	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/27/19 05:25	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/27/19 05:25	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/27/19 05:25	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/27/19 05:25	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/27/19 05:25	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
Methylene Chloride	**2.8**	**J B**	5.0	1.6	ug/L			09/27/19 05:25	1
Naphthalene	**0.71**	**J**	1.0	0.34	ug/L			09/27/19 05:25	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/27/19 05:25	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/27/19 05:25	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:25	1
Styrene	<0.39		1.0	0.39	ug/L			09/27/19 05:25	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:25	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/27/19 05:25	1
Toluene	**0.31**	**J**	0.50	0.15	ug/L			09/27/19 05:25	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/27/19 05:25	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/27/19 05:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/27/19 05:25	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/27/19 05:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/27/19 05:25	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/27/19 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*		*09/27/19 05:25*	*1*
4-Bromofluorobenzene (Surr)	*124*		*72 - 124*		*09/27/19 05:25*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*09/27/19 05:25*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*09/27/19 05:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		09/19/19 09:17	09/23/19 00:01	1
2-Methylnaphthalene	<0.051		1.6	0.051	ug/L		09/19/19 09:17	09/23/19 00:01	1
Acenaphthene	<0.24		0.79	0.24	ug/L		09/19/19 09:17	09/23/19 00:01	1
Acenaphthylene	<0.21		0.79	0.21	ug/L		09/19/19 09:17	09/23/19 00:01	1
Anthracene	<0.26		0.79	0.26	ug/L		09/19/19 09:17	09/23/19 00:01	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		09/19/19 09:17	09/23/19 00:01	1
Benzo[a]pyrene	<0.078		0.16	0.078	ug/L		09/19/19 09:17	09/23/19 00:01	1
Benzo[b]fluoranthene	<0.064		0.16	0.064	ug/L		09/19/19 09:17	09/23/19 00:01	1
Benzo[g,h,i]perylene	<0.30		0.79	0.30	ug/L		09/19/19 09:17	09/23/19 00:01	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		09/19/19 09:17	09/23/19 00:01	1
Chrysene	<0.054		0.16	0.054	ug/L		09/19/19 09:17	09/23/19 00:01	1
Dibenz(a,h)anthracene	<0.040		0.24	0.040	ug/L		09/19/19 09:17	09/23/19 00:01	1
Fluoranthene	<0.36		0.79	0.36	ug/L		09/19/19 09:17	09/23/19 00:01	1
Fluorene	<0.19		0.79	0.19	ug/L		09/19/19 09:17	09/23/19 00:01	1
Indeno[1,2,3-cd]pyrene	<0.059		0.16	0.059	ug/L		09/19/19 09:17	09/23/19 00:01	1
Naphthalene	<0.24		0.79	0.24	ug/L		09/19/19 09:17	09/23/19 00:01	1
Phenanthrene	<0.24		0.79	0.24	ug/L		09/19/19 09:17	09/23/19 00:01	1

Client Sample ID: TW-2

Lab Sample ID: 500-170172-21

Date Collected: 09/13/19 16:40

Matrix: Water

Date Received: 09/17/19 08:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.34		0.79	0.34	ug/L		09/19/19 09:17	09/23/19 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 110*	*09/19/19 09:17*	*09/23/19 00:01*	*1*
Nitrobenzene-d5 (Surr)	*61*		*36 - 120*	*09/19/19 09:17*	*09/23/19 00:01*	*1*
Terphenyl-d14 (Surr)	*109*		*40 - 145*	*09/19/19 09:17*	*09/23/19 00:01*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00046**	**J**	0.0010	0.00023	mg/L		09/30/19 08:47	09/30/19 18:02	1
Barium	**0.10**		0.0025	0.00073	mg/L		09/30/19 08:47	09/30/19 18:02	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		09/30/19 08:47	09/30/19 18:02	1
Chromium	**0.0013**	**J B**	0.0050	0.0011	mg/L		09/30/19 08:47	09/30/19 18:02	1
Lead	<0.00019		0.00050	0.00019	mg/L		09/30/19 08:47	09/30/19 18:02	1
Selenium	**0.0013**	**J**	0.0025	0.00098	mg/L		09/30/19 08:47	09/30/19 18:02	1
Silver	<0.00012		0.00050	0.00012	mg/L		09/30/19 08:47	09/30/19 18:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		09/25/19 10:00	09/26/19 09:29	1

Client Sample ID: TB-01 (Trip Blank)

Lab Sample ID: 500-170172-22

Date Collected: 09/13/19 00:00

Matrix: Solid

Date Received: 09/17/19 08:40

Percent Solids: 100.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1-Dichloroethane	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1-Dichloroethene	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,1-Dichloropropene	<15		50	15	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2-Dibromoethane	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2-Dichloroethane	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,2-Dichloropropane	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,3-Dichloropropane	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
2,2-Dichloropropane	<22		50	22	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
2-Chlorotoluene	<16		50	16	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
4-Chlorotoluene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Benzene	<7.3		13	7.3	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50

Client Sample ID: TB-01 (Trip Blank)

Lab Sample ID: 500-170172-22

Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Matrix: Solid
Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Bromochloromethane	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Bromodichloromethane	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Bromoform	<24		50	24	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Bromomethane	<40		150	40	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Carbon tetrachloride	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Chlorobenzene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Chloroethane	<25		50	25	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Chloroform	<19		100	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Chloromethane	<16		50	16	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Dibromochloromethane	<24		50	24	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Dibromomethane	<14		50	14	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Dichlorodifluoromethane	<34		150	34	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Hexachlorobutadiene	<22		50	22	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Isopropyl ether	<14		50	14	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Isopropylbenzene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Methyl tert-butyl ether	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Methylene Chloride	<82		250	82	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Naphthalene	<17		50	17	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
n-Butylbenzene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
N-Propylbenzene	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
p-Isopropyltoluene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
sec-Butylbenzene	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Styrene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
tert-Butylbenzene	<20		50	20	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Tetrachloroethene	<19		50	19	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Toluene	<7.4		13	7.4	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Trichloroethene	<8.2		25	8.2	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Trichlorofluoromethane	<21		50	21	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Vinyl chloride	<13		50	13	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50
Xylenes, Total	<11		25	11	ug/Kg	☼	09/13/19 00:00	09/27/19 07:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*09/13/19 00:00*	*09/27/19 07:15*	*50*
4-Bromofluorobenzene (Surr)	*107*		*72 - 124*	*09/13/19 00:00*	*09/27/19 07:15*	*50*
Dibromofluoromethane	*98*		*75 - 120*	*09/13/19 00:00*	*09/27/19 07:15*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*09/13/19 00:00*	*09/27/19 07:15*	*50*

Client Sample ID: TB-02 (Trip Blank)

Lab Sample ID: 500-170172-23

Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/27/19 05:52	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: TB-02 (Trip Blank)
Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/27/19 05:52	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/27/19 05:52	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/27/19 05:52	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/27/19 05:52	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/27/19 05:52	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/27/19 05:52	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/27/19 05:52	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/27/19 05:52	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/27/19 05:52	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/27/19 05:52	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/27/19 05:52	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/27/19 05:52	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:52	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/27/19 05:52	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/27/19 05:52	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/27/19 05:52	1
Benzene	<0.15		0.50	0.15	ug/L			09/27/19 05:52	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/27/19 05:52	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/27/19 05:52	1
Bromoform	<0.48		1.0	0.48	ug/L			09/27/19 05:52	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/27/19 05:52	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/27/19 05:52	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/27/19 05:52	1
Chloroform	<0.37		2.0	0.37	ug/L			09/27/19 05:52	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/27/19 05:52	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/27/19 05:52	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/27/19 05:52	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/27/19 05:52	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/27/19 05:52	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/27/19 05:52	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/27/19 05:52	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/27/19 05:52	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/27/19 05:52	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
Methylene Chloride	**3.8**	**J B**	5.0	1.6	ug/L			09/27/19 05:52	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/27/19 05:52	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/27/19 05:52	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:52	1

Client Sample ID: TB-02 (Trip Blank)

Lab Sample ID: 500-170172-23
Date Collected: 09/13/19 00:00
Matrix: Water
Date Received: 09/17/19 08:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.39		1.0	0.39	ug/L			09/27/19 05:52	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/27/19 05:52	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/27/19 05:52	1
Toluene	<0.15		0.50	0.15	ug/L			09/27/19 05:52	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/27/19 05:52	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/27/19 05:52	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/27/19 05:52	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/27/19 05:52	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/27/19 05:52	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/27/19 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*09/27/19 05:52*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*		*09/27/19 05:52*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*09/27/19 05:52*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*09/27/19 05:52*	*1*

Client Sample ID: SB-3 (5-6)

Lab Sample ID: 500-170172-24
Date Collected: 09/13/19 11:00
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**49**	**J**	81	9.8	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
2-Methylnaphthalene	**50**	**J**	81	7.4	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Acenaphthene	**16**	**J**	40	7.2	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Acenaphthylene	**15**	**J**	40	5.3	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Anthracene	**53**		40	6.7	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Benzo[a]anthracene	**250**		40	5.4	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Benzo[a]pyrene	**270**		40	7.8	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Benzo[b]fluoranthene	**410**		40	8.7	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Benzo[g,h,i]perylene	**88**		40	13	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Benzo[k]fluoranthene	**120**		40	12	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Chrysene	**320**		40	11	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Dibenz(a,h)anthracene	**27**	**J**	40	7.8	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Fluoranthene	**530**		40	7.5	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Fluorene	**14**	**J**	40	5.7	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Indeno[1,2,3-cd]pyrene	**87**		40	10	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Naphthalene	**34**	**J**	40	6.2	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Phenanthrene	**250**		40	5.6	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1
Pyrene	**470**		40	8.0	ug/Kg	☼	09/26/19 21:38	09/27/19 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*43 - 145*	*09/26/19 21:38*	*09/27/19 17:21*	*1*
Nitrobenzene-d5 (Surr)	*61*		*37 - 147*	*09/26/19 21:38*	*09/27/19 17:21*	*1*
Terphenyl-d14 (Surr)	*81*		*42 - 157*	*09/26/19 21:38*	*09/27/19 17:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.0**		1.1	0.36	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1
Barium	**87**		1.1	0.12	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-3 (5-6)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-24
Matrix: Solid
Percent Solids: 82.5

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.36	B	0.21	0.038	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1
Chromium	11		1.1	0.52	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1
Lead	93		0.53	0.24	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1
Selenium	<0.62		1.1	0.62	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1
Silver	2.1		0.53	0.14	mg/Kg	☼	10/01/19 10:32	10/02/19 11:06	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.018	0.0061	mg/Kg	☼	09/26/19 14:35	09/27/19 09:03	1

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

GC/MS VOA

Prep Batch: 506135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-2	SB-1 (6-8)	Total/NA	Solid	5035	
500-170172-3	SB-2 (0.5-3)	Total/NA	Solid	5035	
500-170172-5	SB-3 (1-3)	Total/NA	Solid	5035	
500-170172-6	SB-4 (2-4)	Total/NA	Solid	5035	
500-170172-7	SB-5 (2-4)	Total/NA	Solid	5035	
500-170172-8	SB-6 (5-6)	Total/NA	Solid	5035	
500-170172-9	DUP-01	Total/NA	Solid	5035	
500-170172-11	SB-7 (13.5-14.5)	Total/NA	Solid	5035	
500-170172-12	SB-8 (2-3)	Total/NA	Solid	5035	
500-170172-14	SB-9 (1-3)	Total/NA	Solid	5035	
500-170172-15	SB-10 (2-4)	Total/NA	Solid	5035	
500-170172-16	SB-11 (2-4)	Total/NA	Solid	5035	
500-170172-17	SB-12 (3-4)	Total/NA	Solid	5035	
500-170172-18	SB-13 (2-4)	Total/NA	Solid	5035	
500-170172-22	TB-01 (Trip Blank)	Total/NA	Solid	5035	
LB3 500-506135/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-506135/22-A	Lab Control Sample	Total/NA	Solid	5035	
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	5035	
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	5035	

Analysis Batch: 506814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-2	SB-1 (6-8)	Total/NA	Solid	8260B	506135
500-170172-3	SB-2 (0.5-3)	Total/NA	Solid	8260B	506135
500-170172-5	SB-3 (1-3)	Total/NA	Solid	8260B	506135
500-170172-6	SB-4 (2-4)	Total/NA	Solid	8260B	506135
500-170172-7	SB-5 (2-4)	Total/NA	Solid	8260B	506135
500-170172-8	SB-6 (5-6)	Total/NA	Solid	8260B	506135
500-170172-9	DUP-01	Total/NA	Solid	8260B	506135
500-170172-11	SB-7 (13.5-14.5)	Total/NA	Solid	8260B	506135
500-170172-12	SB-8 (2-3)	Total/NA	Solid	8260B	506135
500-170172-14	SB-9 (1-3)	Total/NA	Solid	8260B	506135
500-170172-15	SB-10 (2-4)	Total/NA	Solid	8260B	506135
500-170172-16	SB-11 (2-4)	Total/NA	Solid	8260B	506135
LB3 500-506135/21-A	Method Blank	Total/NA	Solid	8260B	506135
MB 500-506814/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-506135/22-A	Lab Control Sample	Total/NA	Solid	8260B	506135
LCS 500-506814/4	Lab Control Sample	Total/NA	Solid	8260B	
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	8260B	506135
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	8260B	506135

Analysis Batch: 506823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Total/NA	Water	8260B	
MB 500-506823/7	Method Blank	Total/NA	Water	8260B	
LCS 500-506823/5	Lab Control Sample	Total/NA	Water	8260B	
500-170172-19 MS	TW-1	Total/NA	Water	8260B	
500-170172-19 MSD	TW-1	Total/NA	Water	8260B	

GC/MS VOA

Analysis Batch: 506947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-17	SB-12 (3-4)	Total/NA	Solid	8260B	506135
500-170172-18	SB-13 (2-4)	Total/NA	Solid	8260B	506135
500-170172-22	TB-01 (Trip Blank)	Total/NA	Solid	8260B	506135
MB 500-506947/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-506947/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 506948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-20	DUP-02	Total/NA	Water	8260B	
500-170172-21	TW-2	Total/NA	Water	8260B	
500-170172-23	TB-02 (Trip Blank)	Total/NA	Water	8260B	
MB 500-506948/6	Method Blank	Total/NA	Water	8260B	
LCS 500-506948/4	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 505695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Total/NA	Water	3510C	
500-170172-20	DUP-02	Total/NA	Water	3510C	
500-170172-21	TW-2	Total/NA	Water	3510C	
MB 500-505695/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-505695/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 505806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-505695/1-A	Method Blank	Total/NA	Water	8270D	505695
LCS 500-505695/2-A	Lab Control Sample	Total/NA	Water	8270D	505695

Analysis Batch: 506182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Total/NA	Water	8270D	505695
500-170172-20	DUP-02	Total/NA	Water	8270D	505695
500-170172-21	TW-2	Total/NA	Water	8270D	505695

Prep Batch: 507016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-16	SB-11 (2-4)	Total/NA	Solid	3541	
500-170172-17	SB-12 (3-4)	Total/NA	Solid	3541	
500-170172-18	SB-13 (2-4)	Total/NA	Solid	3541	
500-170172-18 - DL	SB-13 (2-4)	Total/NA	Solid	3541	
500-170172-24	SB-3 (5-6)	Total/NA	Solid	3541	
MB 500-507016/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-507016/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-170172-16 MS	SB-11 (2-4)	Total/NA	Solid	3541	
500-170172-16 MSD	SB-11 (2-4)	Total/NA	Solid	3541	

Analysis Batch: 507073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-16	SB-11 (2-4)	Total/NA	Solid	8270D	507016
500-170172-17	SB-12 (3-4)	Total/NA	Solid	8270D	507016

GC/MS Semi VOA (Continued)

Analysis Batch: 507073 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-24	SB-3 (5-6)	Total/NA	Solid	8270D	507016
500-170172-16 MS	SB-11 (2-4)	Total/NA	Solid	8270D	507016
500-170172-16 MSD	SB-11 (2-4)	Total/NA	Solid	8270D	507016

Analysis Batch: 507079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-507016/1-A	Method Blank	Total/NA	Solid	8270D	507016
LCS 500-507016/2-A	Lab Control Sample	Total/NA	Solid	8270D	507016

Prep Batch: 507202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	3541	
500-170172-4	SB-2 (3-4)	Total/NA	Solid	3541	
500-170172-6	SB-4 (2-4)	Total/NA	Solid	3541	
500-170172-7	SB-5 (2-4)	Total/NA	Solid	3541	
500-170172-8	SB-6 (5-6)	Total/NA	Solid	3541	
500-170172-9	DUP-01	Total/NA	Solid	3541	
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	3541	
500-170172-13	SB-8 (3-4)	Total/NA	Solid	3541	
500-170172-14	SB-9 (1-3)	Total/NA	Solid	3541	
500-170172-15	SB-10 (2-4)	Total/NA	Solid	3541	
MB 500-507202/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-507202/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	3541	
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	3541	

Analysis Batch: 507283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	8270D	507202
500-170172-4	SB-2 (3-4)	Total/NA	Solid	8270D	507202
500-170172-6	SB-4 (2-4)	Total/NA	Solid	8270D	507202
500-170172-7	SB-5 (2-4)	Total/NA	Solid	8270D	507202
500-170172-8	SB-6 (5-6)	Total/NA	Solid	8270D	507202
500-170172-9	DUP-01	Total/NA	Solid	8270D	507202
MB 500-507202/1-A	Method Blank	Total/NA	Solid	8270D	507202
LCS 500-507202/2-A	Lab Control Sample	Total/NA	Solid	8270D	507202
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	8270D	507202
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	8270D	507202

Analysis Batch: 507504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	8270D	507202
500-170172-13	SB-8 (3-4)	Total/NA	Solid	8270D	507202
500-170172-14	SB-9 (1-3)	Total/NA	Solid	8270D	507202
500-170172-15	SB-10 (2-4)	Total/NA	Solid	8270D	507202
500-170172-18	SB-13 (2-4)	Total/NA	Solid	8270D	507016

Analysis Batch: 507655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-18 - DL	SB-13 (2-4)	Total/NA	Solid	8270D	507016

Metals

Prep Batch: 506716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Dissolved	Water	7470A	
500-170172-20	DUP-02	Dissolved	Water	7470A	
500-170172-21	TW-2	Dissolved	Water	7470A	
MB 500-506716/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-506716/13-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 506912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	7471A	
500-170172-4	SB-2 (3-4)	Total/NA	Solid	7471A	
500-170172-6	SB-4 (2-4)	Total/NA	Solid	7471A	
500-170172-7	SB-5 (2-4)	Total/NA	Solid	7471A	
500-170172-8	SB-6 (5-6)	Total/NA	Solid	7471A	
500-170172-9	DUP-01	Total/NA	Solid	7471A	
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	7471A	
500-170172-13	SB-8 (3-4)	Total/NA	Solid	7471A	
500-170172-14	SB-9 (1-3)	Total/NA	Solid	7471A	
500-170172-15	SB-10 (2-4)	Total/NA	Solid	7471A	
500-170172-16	SB-11 (2-4)	Total/NA	Solid	7471A	
500-170172-17	SB-12 (3-4)	Total/NA	Solid	7471A	
500-170172-18	SB-13 (2-4)	Total/NA	Solid	7471A	
500-170172-24	SB-3 (5-6)	Total/NA	Solid	7471A	
MB 500-506912/12-A	Method Blank	Total/NA	Solid	7471A	
LCS 500-506912/13-A	Lab Control Sample	Total/NA	Solid	7471A	
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	7471A	
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	7471A	
500-170172-6 DU	SB-4 (2-4)	Total/NA	Solid	7471A	

Analysis Batch: 506918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Dissolved	Water	7470A	506716
500-170172-20	DUP-02	Dissolved	Water	7470A	506716
500-170172-21	TW-2	Dissolved	Water	7470A	506716
MB 500-506716/12-A	Method Blank	Total/NA	Water	7470A	506716
LCS 500-506716/13-A	Lab Control Sample	Total/NA	Water	7470A	506716

Analysis Batch: 507131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	7471A	506912
500-170172-4	SB-2 (3-4)	Total/NA	Solid	7471A	506912
500-170172-6	SB-4 (2-4)	Total/NA	Solid	7471A	506912
500-170172-7	SB-5 (2-4)	Total/NA	Solid	7471A	506912
500-170172-8	SB-6 (5-6)	Total/NA	Solid	7471A	506912
500-170172-9	DUP-01	Total/NA	Solid	7471A	506912
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	7471A	506912
500-170172-13	SB-8 (3-4)	Total/NA	Solid	7471A	506912
500-170172-14	SB-9 (1-3)	Total/NA	Solid	7471A	506912
500-170172-15	SB-10 (2-4)	Total/NA	Solid	7471A	506912
500-170172-16	SB-11 (2-4)	Total/NA	Solid	7471A	506912
500-170172-17	SB-12 (3-4)	Total/NA	Solid	7471A	506912
500-170172-18	SB-13 (2-4)	Total/NA	Solid	7471A	506912

Metals (Continued)

Analysis Batch: 507131 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-24	SB-3 (5-6)	Total/NA	Solid	7471A	506912
MB 500-506912/12-A	Method Blank	Total/NA	Solid	7471A	506912
LCS 500-506912/13-A	Lab Control Sample	Total/NA	Solid	7471A	506912
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	7471A	506912
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	7471A	506912
500-170172-6 DU	SB-4 (2-4)	Total/NA	Solid	7471A	506912

Prep Batch: 507443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Dissolved	Water	3005A	
500-170172-20	DUP-02	Dissolved	Water	3005A	
500-170172-21	TW-2	Dissolved	Water	3005A	
MB 500-507443/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-507443/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 507668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-19	TW-1	Dissolved	Water	6020A	507443
500-170172-20	DUP-02	Dissolved	Water	6020A	507443
500-170172-21	TW-2	Dissolved	Water	6020A	507443
MB 500-507443/1-A	Method Blank	Total Recoverable	Water	6020A	507443
LCS 500-507443/2-A	Lab Control Sample	Total Recoverable	Water	6020A	507443

Prep Batch: 507721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-20	DUP-02	Dissolved	Water	3005A	
MB 500-507721/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-507721/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 500-507721/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 507723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	3050B	
500-170172-4	SB-2 (3-4)	Total/NA	Solid	3050B	
500-170172-6	SB-4 (2-4)	Total/NA	Solid	3050B	
500-170172-7	SB-5 (2-4)	Total/NA	Solid	3050B	
500-170172-8	SB-6 (5-6)	Total/NA	Solid	3050B	
500-170172-9	DUP-01	Total/NA	Solid	3050B	
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	3050B	
500-170172-13	SB-8 (3-4)	Total/NA	Solid	3050B	
500-170172-14	SB-9 (1-3)	Total/NA	Solid	3050B	
500-170172-15	SB-10 (2-4)	Total/NA	Solid	3050B	
500-170172-16	SB-11 (2-4)	Total/NA	Solid	3050B	
500-170172-17	SB-12 (3-4)	Total/NA	Solid	3050B	
500-170172-18	SB-13 (2-4)	Total/NA	Solid	3050B	
500-170172-24	SB-3 (5-6)	Total/NA	Solid	3050B	
MB 500-507723/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-507723/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	3050B	
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	3050B	
500-170172-6 DU	SB-4 (2-4)	Total/NA	Solid	3050B	

Metals

Analysis Batch: 507795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-20	DUP-02	Dissolved	Water	6020A	507721
MB 500-507721/1-A	Method Blank	Total Recoverable	Water	6020A	507721
LCS 500-507721/2-A	Lab Control Sample	Total Recoverable	Water	6020A	507721
LCSD 500-507721/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020A	507721

Analysis Batch: 508029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	6010B	507723
500-170172-4	SB-2 (3-4)	Total/NA	Solid	6010B	507723
500-170172-6	SB-4 (2-4)	Total/NA	Solid	6010B	507723
500-170172-7	SB-5 (2-4)	Total/NA	Solid	6010B	507723
500-170172-8	SB-6 (5-6)	Total/NA	Solid	6010B	507723
500-170172-9	DUP-01	Total/NA	Solid	6010B	507723
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	6010B	507723
500-170172-13	SB-8 (3-4)	Total/NA	Solid	6010B	507723
500-170172-14	SB-9 (1-3)	Total/NA	Solid	6010B	507723
500-170172-15	SB-10 (2-4)	Total/NA	Solid	6010B	507723
500-170172-16	SB-11 (2-4)	Total/NA	Solid	6010B	507723
500-170172-17	SB-12 (3-4)	Total/NA	Solid	6010B	507723
500-170172-18	SB-13 (2-4)	Total/NA	Solid	6010B	507723
500-170172-24	SB-3 (5-6)	Total/NA	Solid	6010B	507723
MB 500-507723/1-A	Method Blank	Total/NA	Solid	6010B	507723
LCS 500-507723/2-A	Lab Control Sample	Total/NA	Solid	6010B	507723
500-170172-6 MS	SB-4 (2-4)	Total/NA	Solid	6010B	507723
500-170172-6 MSD	SB-4 (2-4)	Total/NA	Solid	6010B	507723
500-170172-6 DU	SB-4 (2-4)	Total/NA	Solid	6010B	507723

General Chemistry

Analysis Batch: 506658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-1	SB-1 (2-4)	Total/NA	Solid	Moisture	
500-170172-2	SB-1 (6-8)	Total/NA	Solid	Moisture	
500-170172-3	SB-2 (0.5-3)	Total/NA	Solid	Moisture	
500-170172-4	SB-2 (3-4)	Total/NA	Solid	Moisture	
500-170172-5	SB-3 (1-3)	Total/NA	Solid	Moisture	
500-170172-6	SB-4 (2-4)	Total/NA	Solid	Moisture	
500-170172-7	SB-5 (2-4)	Total/NA	Solid	Moisture	
500-170172-8	SB-6 (5-6)	Total/NA	Solid	Moisture	
500-170172-9	DUP-01	Total/NA	Solid	Moisture	
500-170172-10	SB-7 (0.5-1.5)	Total/NA	Solid	Moisture	
500-170172-11	SB-7 (13.5-14.5)	Total/NA	Solid	Moisture	
500-170172-12	SB-8 (2-3)	Total/NA	Solid	Moisture	
500-170172-13	SB-8 (3-4)	Total/NA	Solid	Moisture	
500-170172-14	SB-9 (1-3)	Total/NA	Solid	Moisture	
500-170172-15	SB-10 (2-4)	Total/NA	Solid	Moisture	
500-170172-16	SB-11 (2-4)	Total/NA	Solid	Moisture	
500-170172-17	SB-12 (3-4)	Total/NA	Solid	Moisture	
500-170172-18	SB-13 (2-4)	Total/NA	Solid	Moisture	
500-170172-22	TB-01 (Trip Blank)	Total/NA	Solid	Moisture	
500-170172-24	SB-3 (5-6)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 506658 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-170172-7 DU	SB-5 (2-4)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-170172-2	SB-1 (6-8)	94	110	90	102
500-170172-3	SB-2 (0.5-3)	95	112	91	101
500-170172-5	SB-3 (1-3)	93	109	90	102
500-170172-6	SB-4 (2-4)	96	111	90	102
500-170172-6 MS	SB-4 (2-4)	97	100	95	106
500-170172-6 MSD	SB-4 (2-4)	94	100	95	107
500-170172-7	SB-5 (2-4)	95	109	89	102
500-170172-8	SB-6 (5-6)	96	111	90	101
500-170172-9	DUP-01	94	110	89	101
500-170172-11	SB-7 (13.5-14.5)	96	112	89	102
500-170172-12	SB-8 (2-3)	96	110	89	102
500-170172-14	SB-9 (1-3)	96	105	91	102
500-170172-15	SB-10 (2-4)	97	107	89	106
500-170172-16	SB-11 (2-4)	96	113	90	103
500-170172-17	SB-12 (3-4)	100	106	98	100
500-170172-18	SB-13 (2-4)	102	105	98	102
500-170172-22	TB-01 (Trip Blank)	99	107	98	99
LB3 500-506135/21-A	Method Blank	93	108	89	102
LCS 500-506135/22-A	Lab Control Sample	95	99	96	108
LCS 500-506814/4	Lab Control Sample	90	100	93	107
LCS 500-506947/4	Lab Control Sample	98	103	106	104
MB 500-506814/6	Method Blank	91	110	89	102
MB 500-506947/6	Method Blank	103	112	99	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-170172-19	TW-1	100	108	103	102
500-170172-19 MS	TW-1	99	114	104	102
500-170172-19 MSD	TW-1	102	109	107	101
500-170172-20	DUP-02	114	117	108	95
500-170172-21	TW-2	104	124	95	105
500-170172-23	TB-02 (Trip Blank)	100	105	99	101
LCS 500-506823/5	Lab Control Sample	104	109	99	98
LCS 500-506948/4	Lab Control Sample	98	103	106	104
MB 500-506823/7	Method Blank	102	96	96	113
MB 500-506948/6	Method Blank	103	112	99	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

Surrogate Summary

Client: Stantec Consulting Corp.
Job ID: 500-170172-1
Project/Site: West Bend Brewery - 193706313

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(43-145)	(37-147)	(42-157)
500-170172-1	SB-1 (2-4)	78	70	81
500-170172-4	SB-2 (3-4)	66	74	84
500-170172-6	SB-4 (2-4)	74	63	95
500-170172-6 MS	SB-4 (2-4)	81	74	109
500-170172-6 MSD	SB-4 (2-4)	75	69	101
500-170172-7	SB-5 (2-4)	61	58	80
500-170172-8	SB-6 (5-6)	54	58	81
500-170172-9	DUP-01	41 X	40	65
500-170172-10	SB-7 (0.5-1.5)	53	44	68
500-170172-13	SB-8 (3-4)	60	53	81
500-170172-14	SB-9 (1-3)	70	55	86
500-170172-15	SB-10 (2-4)	57	43	68
500-170172-16	SB-11 (2-4)	83	70	89
500-170172-16 MS	SB-11 (2-4)	86	70	88
500-170172-17	SB-12 (3-4)	81	65	86
500-170172-18	SB-13 (2-4)	80	74	92
500-170172-18 - DL	SB-13 (2-4)	93	77	101
500-170172-24	SB-3 (5-6)	74	61	81
LCS 500-507016/2-A	Lab Control Sample	90	87	93
LCS 500-507202/2-A	Lab Control Sample	91	87	98
MB 500-507016/1-A	Method Blank	89	78	92
MB 500-507202/1-A	Method Blank	85	76	94

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID			
500-170172-16 MSD	SB-11 (2-4)			

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-170172-19	TW-1	40	39	63
500-170172-20	DUP-02	44	38	67
500-170172-21	TW-2	63	61	109

Surrogate Summary

Client: Stantec Consulting Corp. Job ID: 500-170172-1
Project/Site: West Bend Brewery - 193706313

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
LCS 500-505695/2-A	Lab Control Sample	78	89	96
MB 500-505695/1-A	Method Blank	78	92	99

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LB3 500-506135/21-A
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506135

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1-Dichloroethane	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1-Dichloroethene	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,1-Dichloropropene	<15		50	15	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2-Dibromoethane	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2-Dichloroethane	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,2-Dichloropropane	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,3-Dichloropropane	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
2,2-Dichloropropane	<22		50	22	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
2-Chlorotoluene	<16		50	16	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
4-Chlorotoluene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Benzene	<7.3		13	7.3	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Bromobenzene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Bromochloromethane	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Bromodichloromethane	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Bromoform	<24		50	24	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Bromomethane	<40		150	40	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Carbon tetrachloride	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Chlorobenzene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Chloroethane	<25		50	25	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Chloroform	<19		100	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Chloromethane	<16		50	16	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Dibromochloromethane	<24		50	24	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Dibromomethane	<14		50	14	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Hexachlorobutadiene	<22		50	22	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Isopropyl ether	<14		50	14	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Isopropylbenzene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Methylene Chloride	107	J	250	82	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Naphthalene	<17		50	17	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
n-Butylbenzene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
N-Propylbenzene	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50

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

Lab Sample ID: LB3 500-506135/21-A
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506135

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
sec-Butylbenzene	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Styrene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
tert-Butylbenzene	<20		50	20	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Tetrachloroethene	<19		50	19	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Toluene	<7.4		13	7.4	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Trichloroethene	<8.2		25	8.2	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Trichlorofluoromethane	<21		50	21	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Vinyl chloride	<13		50	13	ug/Kg		09/21/19 22:45	09/26/19 11:05	50
Xylenes, Total	<11		25	11	ug/Kg		09/21/19 22:45	09/26/19 11:05	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 126*	*09/21/19 22:45*	*09/26/19 11:05*	*50*
4-Bromofluorobenzene (Surr)	*108*		*72 - 124*	*09/21/19 22:45*	*09/26/19 11:05*	*50*
Dibromofluoromethane	*89*		*75 - 120*	*09/21/19 22:45*	*09/26/19 11:05*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*09/21/19 22:45*	*09/26/19 11:05*	*50*

Lab Sample ID: LCS 500-506135/22-A
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2500	2590		ug/Kg		103	70 - 125
1,1,1-Trichloroethane	2500	2360		ug/Kg		94	70 - 125
1,1,2,2-Tetrachloroethane	2500	2770		ug/Kg		111	62 - 140
1,1,2-Trichloroethane	2500	2580		ug/Kg		103	71 - 130
1,1-Dichloroethane	2500	2870		ug/Kg		115	70 - 125
1,1-Dichloroethene	2500	2190		ug/Kg		88	67 - 122
1,1-Dichloropropene	2500	2590		ug/Kg		103	70 - 121
1,2,3-Trichlorobenzene	2500	2490		ug/Kg		100	51 - 145
1,2,3-Trichloropropane	2500	2450		ug/Kg		98	50 - 133
1,2,4-Trichlorobenzene	2500	2450		ug/Kg		98	57 - 137
1,2,4-Trimethylbenzene	2500	2570		ug/Kg		103	70 - 123
1,2-Dibromo-3-Chloropropane	2500	2050		ug/Kg		82	56 - 123
1,2-Dibromoethane	2500	2610		ug/Kg		105	70 - 125
1,2-Dichlorobenzene	2500	2670		ug/Kg		107	70 - 125
1,2-Dichloroethane	2500	2480		ug/Kg		99	68 - 127
1,2-Dichloropropane	2500	3060		ug/Kg		122	67 - 130
1,3,5-Trimethylbenzene	2500	2600		ug/Kg		104	70 - 123
1,3-Dichlorobenzene	2500	2580		ug/Kg		103	70 - 125
1,3-Dichloropropane	2500	2730		ug/Kg		109	62 - 136
1,4-Dichlorobenzene	2500	2530		ug/Kg		101	70 - 120
2,2-Dichloropropane	2500	2430		ug/Kg		97	58 - 139
2-Chlorotoluene	2500	2560		ug/Kg		103	70 - 125
4-Chlorotoluene	2500	2450		ug/Kg		98	68 - 124
Benzene	2500	2580		ug/Kg		103	70 - 120

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

Lab Sample ID: LCS 500-506135/22-A
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	2550		ug/Kg		102	70 - 122
Bromochloromethane	2500	2450		ug/Kg		98	65 - 122
Bromodichloromethane	2500	2250		ug/Kg		90	69 - 120
Bromoform	2500	2240		ug/Kg		89	56 - 132
Bromomethane	2500	1640		ug/Kg		65	40 - 152
Carbon tetrachloride	2500	2080		ug/Kg		83	59 - 133
Chlorobenzene	2500	2630		ug/Kg		105	70 - 120
Chloroethane	2500	2050		ug/Kg		82	48 - 136
Chloroform	2500	2400		ug/Kg		96	70 - 120
Chloromethane	2500	2470		ug/Kg		99	56 - 152
cis-1,2-Dichloroethene	2500	2470		ug/Kg		99	70 - 125
cis-1,3-Dichloropropene	2500	2670		ug/Kg		107	64 - 127
Dibromochloromethane	2500	2340		ug/Kg		93	68 - 125
Dibromomethane	2500	2380		ug/Kg		95	70 - 120
Dichlorodifluoromethane	2500	1210		ug/Kg		49	40 - 159
Ethylbenzene	2500	2730		ug/Kg		109	70 - 123
Hexachlorobutadiene	2500	2790		ug/Kg		112	51 - 150
Isopropylbenzene	2500	2680		ug/Kg		107	70 - 126
Methyl tert-butyl ether	2500	2310		ug/Kg		92	55 - 123
Methylene Chloride	2500	2520		ug/Kg		101	69 - 125
Naphthalene	2500	2410		ug/Kg		96	53 - 144
n-Butylbenzene	2500	2560		ug/Kg		103	68 - 125
N-Propylbenzene	2500	2570		ug/Kg		103	69 - 127
p-Isopropyltoluene	2500	2540		ug/Kg		102	70 - 125
sec-Butylbenzene	2500	2690		ug/Kg		107	70 - 123
Styrene	2500	2560		ug/Kg		103	70 - 120
tert-Butylbenzene	2500	2630		ug/Kg		105	70 - 121
Tetrachloroethene	2500	2690		ug/Kg		108	70 - 128
Toluene	2500	2620		ug/Kg		105	70 - 125
trans-1,2-Dichloroethene	2500	2400		ug/Kg		96	70 - 125
trans-1,3-Dichloropropene	2500	2430		ug/Kg		97	62 - 128
Trichloroethene	2500	2430		ug/Kg		97	70 - 125
Trichlorofluoromethane	2500	1990		ug/Kg		79	55 - 128
Vinyl chloride	2500	2580		ug/Kg		103	64 - 126
Xylenes, Total	5000	5090		ug/Kg		102	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane	*96*		*75 - 120*
Toluene-d8 (Surr)	*108*		*75 - 120*

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<30		3160	2840		ug/Kg	☼	90	70 - 125

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

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<24		3160	2570		ug/Kg	☼	82	70 - 125
1,1,2,2-Tetrachloroethane	<26		3160	3170		ug/Kg	☼	100	62 - 140
1,1,2-Trichloroethane	<23		3160	2940		ug/Kg	☼	93	71 - 130
1,1-Dichloroethane	<26		3160	3240		ug/Kg	☼	103	70 - 125
1,1-Dichloroethene	<25		3160	2660		ug/Kg	☼	84	67 - 122
1,1-Dichloropropene	<19		3160	2930		ug/Kg	☼	93	70 - 121
1,2,3-Trichlorobenzene	<30		3160	2810		ug/Kg	☼	89	51 - 145
1,2,3-Trichloropropane	<27		3160	2960		ug/Kg	☼	94	50 - 133
1,2,4-Trichlorobenzene	<22		3160	2690		ug/Kg	☼	85	57 - 137
1,2,4-Trimethylbenzene	<23		3160	2870		ug/Kg	☼	91	70 - 123
1,2-Dibromo-3-Chloropropane	<130		3160	2330		ug/Kg	☼	74	56 - 123
1,2-Dibromoethane	<25		3160	2970		ug/Kg	☼	94	70 - 125
1,2-Dichlorobenzene	<22		3160	2920		ug/Kg	☼	93	70 - 125
1,2-Dichloroethane	<25		3160	2770		ug/Kg	☼	88	68 - 127
1,2-Dichloropropane	<28		3160	3360		ug/Kg	☼	107	67 - 130
1,3,5-Trimethylbenzene	<24		3160	2900		ug/Kg	☼	92	70 - 123
1,3-Dichlorobenzene	<26		3160	2890		ug/Kg	☼	92	70 - 125
1,3-Dichloropropane	<23		3160	3070		ug/Kg	☼	97	62 - 136
1,4-Dichlorobenzene	<23		3160	2810		ug/Kg	☼	89	70 - 120
2,2-Dichloropropane	<29		3160	2690		ug/Kg	☼	85	58 - 139
2-Chlorotoluene	<20		3160	2870		ug/Kg	☼	91	70 - 125
4-Chlorotoluene	<23		3160	2770		ug/Kg	☼	88	68 - 124
Benzene	<9.4		3160	2910		ug/Kg	☼	92	70 - 120
Bromobenzene	<23		3160	2920		ug/Kg	☼	92	70 - 122
Bromochloromethane	<28		3160	2800		ug/Kg	☼	89	65 - 122
Bromodichloromethane	<24		3160	2540		ug/Kg	☼	80	69 - 120
Bromoform	<31		3160	2550		ug/Kg	☼	81	56 - 132
Bromomethane	<51		3160	2050		ug/Kg	☼	65	40 - 152
Carbon tetrachloride	<25		3160	2340		ug/Kg	☼	74	59 - 133
Chlorobenzene	<25		3160	2900		ug/Kg	☼	92	70 - 120
Chloroethane	<32		3160	2830		ug/Kg	☼	90	48 - 136
Chloroform	<24		3160	2680		ug/Kg	☼	85	70 - 120
Chloromethane	<21		3160	3430		ug/Kg	☼	109	56 - 152
cis-1,2-Dichloroethene	<26		3160	2780		ug/Kg	☼	88	70 - 125
cis-1,3-Dichloropropene	<27		3160	2970		ug/Kg	☼	94	64 - 127
Dibromochloromethane	<31		3160	2610		ug/Kg	☼	83	68 - 125
Dibromomethane	<17		3160	2730		ug/Kg	☼	86	70 - 120
Dichlorodifluoromethane	<43		3160	2280		ug/Kg	☼	72	40 - 159
Ethylbenzene	<12		3160	2980		ug/Kg	☼	94	70 - 123
Hexachlorobutadiene	<29		3160	2990		ug/Kg	☼	95	51 - 150
Isopropylbenzene	<25		3160	2990		ug/Kg	☼	95	70 - 126
Methyl tert-butyl ether	<25		3160	2620		ug/Kg	☼	83	55 - 123
Methylene Chloride	150	J B	3160	2840		ug/Kg	☼	85	69 - 125
Naphthalene	<22		3160	2810		ug/Kg	☼	89	53 - 144
n-Butylbenzene	<25		3160	2870		ug/Kg	☼	91	68 - 125
N-Propylbenzene	<27		3160	2910		ug/Kg	☼	92	69 - 127
p-Isopropyltoluene	<23		3160	2860		ug/Kg	☼	90	70 - 125
sec-Butylbenzene	<26		3160	3030		ug/Kg	☼	96	70 - 123
Styrene	<25		3160	2860		ug/Kg	☼	91	70 - 120

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

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	<26		3160	2970		ug/Kg	☼	94	70 - 121
Tetrachloroethene	<24		3160	2980		ug/Kg	☼	95	70 - 128
Toluene	<9.5		3160	2890		ug/Kg	☼	92	70 - 125
trans-1,2-Dichloroethene	<23		3160	2740		ug/Kg	☼	87	70 - 125
trans-1,3-Dichloropropene	<23		3160	2800		ug/Kg	☼	89	62 - 128
Trichloroethene	<11		3160	2700		ug/Kg	☼	85	70 - 125
Trichlorofluoromethane	<28		3160	2390		ug/Kg	☼	76	55 - 128
Vinyl chloride	<17		3160	3380		ug/Kg	☼	107	64 - 126
Xylenes, Total	<14		6310	5620		ug/Kg	☼	89	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane	*95*		*75 - 120*
Toluene-d8 (Surr)	*106*		*75 - 120*

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<30		3160	2860		ug/Kg	☼	91	70 - 125	1	30
1,1,1-Trichloroethane	<24		3160	2660		ug/Kg	☼	84	70 - 125	3	30
1,1,2,2-Tetrachloroethane	<26		3160	3130		ug/Kg	☼	99	62 - 140	1	30
1,1,2-Trichloroethane	<23		3160	2830		ug/Kg	☼	90	71 - 130	4	30
1,1-Dichloroethane	<26		3160	3220		ug/Kg	☼	102	70 - 125	1	30
1,1-Dichloroethene	<25		3160	2600		ug/Kg	☼	82	67 - 122	2	30
1,1-Dichloropropene	<19		3160	2920		ug/Kg	☼	93	70 - 121	0	30
1,2,3-Trichlorobenzene	<30		3160	2900		ug/Kg	☼	92	51 - 145	3	30
1,2,3-Trichloropropane	<27		3160	2880		ug/Kg	☼	91	50 - 133	3	30
1,2,4-Trichlorobenzene	<22		3160	2810		ug/Kg	☼	89	57 - 137	4	30
1,2,4-Trimethylbenzene	<23		3160	2800		ug/Kg	☼	89	70 - 123	2	30
1,2-Dibromo-3-Chloropropane	<130		3160	2450		ug/Kg	☼	78	56 - 123	5	30
1,2-Dibromoethane	<25		3160	2960		ug/Kg	☼	94	70 - 125	1	30
1,2-Dichlorobenzene	<22		3160	2900		ug/Kg	☼	92	70 - 125	1	30
1,2-Dichloroethane	<25		3160	2770		ug/Kg	☼	88	68 - 127	0	30
1,2-Dichloropropane	<28		3160	3280		ug/Kg	☼	104	67 - 130	2	30
1,3,5-Trimethylbenzene	<24		3160	2850		ug/Kg	☼	90	70 - 123	2	30
1,3-Dichlorobenzene	<26		3160	2840		ug/Kg	☼	90	70 - 125	2	30
1,3-Dichloropropane	<23		3160	3020		ug/Kg	☼	96	62 - 136	2	30
1,4-Dichlorobenzene	<23		3160	2780		ug/Kg	☼	88	70 - 120	1	30
2,2-Dichloropropane	<29		3160	2780		ug/Kg	☼	88	58 - 139	3	30
2-Chlorotoluene	<20		3160	2820		ug/Kg	☼	89	70 - 125	2	30
4-Chlorotoluene	<23		3160	2710		ug/Kg	☼	86	68 - 124	2	30
Benzene	<9.4		3160	2850		ug/Kg	☼	90	70 - 120	2	30
Bromobenzene	<23		3160	2770		ug/Kg	☼	88	70 - 122	5	30
Bromochloromethane	<28		3160	2770		ug/Kg	☼	88	65 - 122	1	30
Bromodichloromethane	<24		3160	2470		ug/Kg	☼	78	69 - 120	3	30

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

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506135

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	<31		3160	2530		ug/Kg	☼	80	56 - 132	1	30
Bromomethane	<51		3160	2070		ug/Kg	☼	66	40 - 152	1	30
Carbon tetrachloride	<25		3160	2360		ug/Kg	☼	75	59 - 133	1	30
Chlorobenzene	<25		3160	2850		ug/Kg	☼	90	70 - 120	2	30
Chloroethane	<32		3160	2330		ug/Kg	☼	74	48 - 136	19	30
Chloroform	<24		3160	2610		ug/Kg	☼	83	70 - 120	2	30
Chloromethane	<21		3160	3480		ug/Kg	☼	110	56 - 152	1	30
cis-1,2-Dichloroethene	<26		3160	2770		ug/Kg	☼	88	70 - 125	1	30
cis-1,3-Dichloropropene	<27		3160	2940		ug/Kg	☼	93	64 - 127	1	30
Dibromochloromethane	<31		3160	2560		ug/Kg	☼	81	68 - 125	2	30
Dibromomethane	<17		3160	2660		ug/Kg	☼	84	70 - 120	2	30
Dichlorodifluoromethane	<43		3160	2310		ug/Kg	☼	73	40 - 159	1	30
Ethylbenzene	<12		3160	2990		ug/Kg	☼	95	70 - 123	1	30
Hexachlorobutadiene	<29		3160	2990		ug/Kg	☼	95	51 - 150	0	30
Isopropylbenzene	<25		3160	2910		ug/Kg	☼	92	70 - 126	3	30
Methyl tert-butyl ether	<25		3160	2630		ug/Kg	☼	83	55 - 123	0	30
Methylene Chloride	150	J B	3160	2870		ug/Kg	☼	86	69 - 125	1	30
Naphthalene	<22		3160	2880		ug/Kg	☼	91	53 - 144	2	30
n-Butylbenzene	<25		3160	2890		ug/Kg	☼	91	68 - 125	0	30
N-Propylbenzene	<27		3160	2830		ug/Kg	☼	90	69 - 127	3	30
p-Isopropyltoluene	<23		3160	2810		ug/Kg	☼	89	70 - 125	2	30
sec-Butylbenzene	<26		3160	2970		ug/Kg	☼	94	70 - 123	2	30
Styrene	<25		3160	2840		ug/Kg	☼	90	70 - 120	1	30
tert-Butylbenzene	<26		3160	2860		ug/Kg	☼	91	70 - 121	4	30
Tetrachloroethene	<24		3160	3000		ug/Kg	☼	95	70 - 128	1	30
Toluene	<9.5		3160	2900		ug/Kg	☼	92	70 - 125	0	30
trans-1,2-Dichloroethene	<23		3160	2760		ug/Kg	☼	88	70 - 125	1	30
trans-1,3-Dichloropropene	<23		3160	2740		ug/Kg	☼	87	62 - 128	2	30
Trichloroethene	<11		3160	2640		ug/Kg	☼	84	70 - 125	2	30
Trichlorofluoromethane	<28		3160	2330		ug/Kg	☼	74	55 - 128	2	30
Vinyl chloride	<17		3160	3450		ug/Kg	☼	109	64 - 126	2	30
Xylenes, Total	<14		6310	5640		ug/Kg	☼	89	70 - 125	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane	*95*		*75 - 120*
Toluene-d8 (Surr)	*107*		*75 - 120*

Lab Sample ID: MB 500-506814/6
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			09/26/19 10:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			09/26/19 10:40	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			09/26/19 10:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			09/26/19 10:40	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

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

Lab Sample ID: MB 500-506814/6
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			09/26/19 10:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			09/26/19 10:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			09/26/19 10:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			09/26/19 10:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			09/26/19 10:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			09/26/19 10:40	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			09/26/19 10:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			09/26/19 10:40	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			09/26/19 10:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 10:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			09/26/19 10:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			09/26/19 10:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			09/26/19 10:40	1
Benzene	<0.15		0.25	0.15	ug/Kg			09/26/19 10:40	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			09/26/19 10:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			09/26/19 10:40	1
Bromoform	<0.48		1.0	0.48	ug/Kg			09/26/19 10:40	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			09/26/19 10:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			09/26/19 10:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			09/26/19 10:40	1
Chloroform	<0.37		2.0	0.37	ug/Kg			09/26/19 10:40	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			09/26/19 10:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			09/26/19 10:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			09/26/19 10:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			09/26/19 10:40	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			09/26/19 10:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			09/26/19 10:40	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			09/26/19 10:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			09/26/19 10:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			09/26/19 10:40	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			09/26/19 10:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
Methylene Chloride	4.67	J	5.0	1.6	ug/Kg			09/26/19 10:40	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			09/26/19 10:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			09/26/19 10:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 10:40	1
Styrene	<0.39		1.0	0.39	ug/Kg			09/26/19 10:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 10:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			09/26/19 10:40	1

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

Lab Sample ID: MB 500-506814/6
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.25	0.15	ug/Kg			09/26/19 10:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			09/26/19 10:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			09/26/19 10:40	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			09/26/19 10:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			09/26/19 10:40	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			09/26/19 10:40	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			09/26/19 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 126*		*09/26/19 10:40*	*1*
4-Bromofluorobenzene (Surr)	*110*		*72 - 124*		*09/26/19 10:40*	*1*
Dibromofluoromethane	*89*		*75 - 120*		*09/26/19 10:40*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*09/26/19 10:40*	*1*

Lab Sample ID: LCS 500-506814/4
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	49.9		ug/Kg		100	70 - 125
1,1,1-Trichloroethane	50.0	46.8		ug/Kg		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	51.9		ug/Kg		104	62 - 140
1,1,2-Trichloroethane	50.0	49.2		ug/Kg		98	71 - 130
1,1-Dichloroethane	50.0	56.3		ug/Kg		113	70 - 125
1,1-Dichloroethene	50.0	45.0		ug/Kg		90	67 - 122
1,1-Dichloropropene	50.0	51.1		ug/Kg		102	70 - 121
1,2,3-Trichlorobenzene	50.0	46.9		ug/Kg		94	51 - 145
1,2,3-Trichloropropane	50.0	46.1		ug/Kg		92	50 - 133
1,2,4-Trichlorobenzene	50.0	48.9		ug/Kg		98	57 - 137
1,2,4-Trimethylbenzene	50.0	49.6		ug/Kg		99	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	39.0		ug/Kg		78	56 - 123
1,2-Dibromoethane	50.0	50.2		ug/Kg		100	70 - 125
1,2-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 125
1,2-Dichloroethane	50.0	48.6		ug/Kg		97	68 - 127
1,2-Dichloropropane	50.0	58.5		ug/Kg		117	67 - 130
1,3,5-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 123
1,3-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 125
1,3-Dichloropropane	50.0	52.3		ug/Kg		105	62 - 136
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 120
2,2-Dichloropropane	50.0	50.4		ug/Kg		101	58 - 139
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 125
4-Chlorotoluene	50.0	48.1		ug/Kg		96	68 - 124
Benzene	50.0	50.7		ug/Kg		101	70 - 120
Bromobenzene	50.0	48.6		ug/Kg		97	70 - 122
Bromochloromethane	50.0	49.2		ug/Kg		98	65 - 122
Bromodichloromethane	50.0	43.8		ug/Kg		88	69 - 120
Bromoform	50.0	44.9		ug/Kg		90	56 - 132
Bromomethane	50.0	36.1		ug/Kg		72	40 - 152

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

Lab Sample ID: LCS 500-506814/4
Matrix: Solid
Analysis Batch: 506814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	42.8		ug/Kg		86	59 - 133
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 120
Chloroethane	50.0	53.1		ug/Kg		106	48 - 136
Chloroform	50.0	46.3		ug/Kg		93	70 - 120
Chloromethane	50.0	58.5		ug/Kg		117	56 - 152
cis-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	70 - 125
cis-1,3-Dichloropropene	50.0	51.5		ug/Kg		103	64 - 127
Dibromochloromethane	50.0	45.8		ug/Kg		92	68 - 125
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 120
Dichlorodifluoromethane	50.0	40.0		ug/Kg		80	40 - 159
Ethylbenzene	50.0	53.5		ug/Kg		107	70 - 123
Hexachlorobutadiene	50.0	52.1		ug/Kg		104	51 - 150
Isopropylbenzene	50.0	51.5		ug/Kg		103	70 - 126
Methyl tert-butyl ether	50.0	44.2		ug/Kg		88	55 - 123
Methylene Chloride	50.0	48.1		ug/Kg		96	69 - 125
Naphthalene	50.0	44.7		ug/Kg		89	53 - 144
n-Butylbenzene	50.0	51.6		ug/Kg		103	68 - 125
N-Propylbenzene	50.0	50.7		ug/Kg		101	69 - 127
p-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 125
sec-Butylbenzene	50.0	52.4		ug/Kg		105	70 - 123
Styrene	50.0	50.3		ug/Kg		101	70 - 120
tert-Butylbenzene	50.0	50.7		ug/Kg		101	70 - 121
Tetrachloroethene	50.0	53.9		ug/Kg		108	70 - 128
Toluene	50.0	51.0		ug/Kg		102	70 - 125
trans-1,2-Dichloroethene	50.0	48.8		ug/Kg		98	70 - 125
trans-1,3-Dichloropropene	50.0	48.5		ug/Kg		97	62 - 128
Trichloroethene	50.0	48.4		ug/Kg		97	70 - 125
Trichlorofluoromethane	50.0	41.1		ug/Kg		82	55 - 128
Vinyl chloride	50.0	58.8		ug/Kg		118	64 - 126
Xylenes, Total	100	100		ug/Kg		100	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane	*93*		*75 - 120*
Toluene-d8 (Surr)	*107*		*75 - 120*

Lab Sample ID: MB 500-506823/7
Matrix: Water
Analysis Batch: 506823

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/26/19 10:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/26/19 10:24	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/26/19 10:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/26/19 10:24	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/26/19 10:24	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1

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

Lab Sample ID: MB 500-506823/7
Matrix: Water
Analysis Batch: 506823

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/26/19 10:24	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/26/19 10:24	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/26/19 10:24	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/26/19 10:24	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/26/19 10:24	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/26/19 10:24	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/26/19 10:24	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/26/19 10:24	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/26/19 10:24	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/26/19 10:24	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/26/19 10:24	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/26/19 10:24	1
Benzene	<0.15		0.50	0.15	ug/L			09/26/19 10:24	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/26/19 10:24	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/26/19 10:24	1
Bromoform	<0.48		1.0	0.48	ug/L			09/26/19 10:24	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/26/19 10:24	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/26/19 10:24	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/26/19 10:24	1
Chloroform	<0.37		2.0	0.37	ug/L			09/26/19 10:24	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/26/19 10:24	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/26/19 10:24	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/26/19 10:24	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/26/19 10:24	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/26/19 10:24	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/26/19 10:24	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/26/19 10:24	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/26/19 10:24	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/26/19 10:24	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
Methylene Chloride	5.08		5.0	1.6	ug/L			09/26/19 10:24	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/26/19 10:24	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/26/19 10:24	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 10:24	1
Styrene	<0.39		1.0	0.39	ug/L			09/26/19 10:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 10:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/26/19 10:24	1
Toluene	<0.15		0.50	0.15	ug/L			09/26/19 10:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/26/19 10:24	1

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

Lab Sample ID: MB 500-506823/7
Matrix: Water
Analysis Batch: 506823

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/26/19 10:24	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/26/19 10:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/26/19 10:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/26/19 10:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/26/19 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*09/26/19 10:24*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*09/26/19 10:24*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*09/26/19 10:24*	*1*
Toluene-d8 (Surr)	*113*		*75 - 120*		*09/26/19 10:24*	*1*

Lab Sample ID: LCS 500-506823/5
Matrix: Water
Analysis Batch: 506823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	45.9		ug/L		92	70 - 125
1,1,1-Trichloroethane	50.0	51.0		ug/L		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	53.8		ug/L		108	62 - 140
1,1,2-Trichloroethane	50.0	47.5		ug/L		95	71 - 130
1,1-Dichloroethane	50.0	55.7		ug/L		111	70 - 125
1,1-Dichloroethene	50.0	49.1		ug/L		98	67 - 122
1,1-Dichloropropene	50.0	50.7		ug/L		101	70 - 121
1,2,3-Trichlorobenzene	50.0	47.8		ug/L		96	51 - 145
1,2,3-Trichloropropane	50.0	55.0		ug/L		110	50 - 133
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	57 - 137
1,2,4-Trimethylbenzene	50.0	54.4		ug/L		109	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/L		102	56 - 123
1,2-Dibromoethane	50.0	50.9		ug/L		102	70 - 125
1,2-Dichlorobenzene	50.0	48.0		ug/L		96	70 - 125
1,2-Dichloroethane	50.0	51.2		ug/L		102	68 - 127
1,2-Dichloropropane	50.0	54.9		ug/L		110	67 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	70 - 123
1,3-Dichlorobenzene	50.0	51.8		ug/L		104	70 - 125
1,3-Dichloropropane	50.0	51.5		ug/L		103	62 - 136
1,4-Dichlorobenzene	50.0	50.2		ug/L		100	70 - 120
2,2-Dichloropropane	50.0	49.6		ug/L		99	58 - 139
2-Chlorotoluene	50.0	54.4		ug/L		109	70 - 125
4-Chlorotoluene	50.0	55.5		ug/L		111	68 - 124
Benzene	50.0	51.3		ug/L		103	70 - 120
Bromobenzene	50.0	52.6		ug/L		105	70 - 122
Bromochloromethane	50.0	49.2		ug/L		98	65 - 122
Bromodichloromethane	50.0	50.3		ug/L		101	69 - 120
Bromoform	50.0	40.8		ug/L		82	56 - 132
Bromomethane	50.0	51.8		ug/L		104	40 - 152
Carbon tetrachloride	50.0	48.8		ug/L		98	59 - 133
Chlorobenzene	50.0	48.2		ug/L		96	70 - 120

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

Lab Sample ID: LCS 500-506823/5
Matrix: Water
Analysis Batch: 506823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	48.5		ug/L		97	48 - 136
Chloroform	50.0	49.7		ug/L		99	70 - 120
Chloromethane	50.0	51.4		ug/L		103	56 - 152
cis-1,2-Dichloroethene	50.0	47.2		ug/L		94	70 - 125
cis-1,3-Dichloropropene	50.0	50.5		ug/L		101	64 - 127
Dibromochloromethane	50.0	48.9		ug/L		98	68 - 125
Dibromomethane	50.0	51.0		ug/L		102	70 - 120
Dichlorodifluoromethane	50.0	55.4		ug/L		111	40 - 159
Ethylbenzene	50.0	48.9		ug/L		98	70 - 123
Hexachlorobutadiene	50.0	50.7		ug/L		101	51 - 150
Isopropylbenzene	50.0	53.8		ug/L		108	70 - 126
Methyl tert-butyl ether	50.0	53.2		ug/L		106	55 - 123
Methylene Chloride	50.0	52.4		ug/L		105	69 - 125
Naphthalene	50.0	50.6		ug/L		101	53 - 144
n-Butylbenzene	50.0	52.6		ug/L		105	68 - 125
N-Propylbenzene	50.0	55.5		ug/L		111	69 - 127
p-Isopropyltoluene	50.0	53.9		ug/L		108	70 - 125
sec-Butylbenzene	50.0	55.7		ug/L		111	70 - 123
Styrene	50.0	48.3		ug/L		97	70 - 120
tert-Butylbenzene	50.0	56.1		ug/L		112	70 - 121
Tetrachloroethene	50.0	50.1		ug/L		100	70 - 128
Toluene	50.0	50.1		ug/L		100	70 - 125
trans-1,2-Dichloroethene	50.0	52.4		ug/L		105	70 - 125
trans-1,3-Dichloropropene	50.0	50.6		ug/L		101	62 - 128
Trichloroethene	50.0	51.8		ug/L		104	70 - 125
Trichlorofluoromethane	50.0	48.9		ug/L		98	55 - 128
Vinyl chloride	50.0	48.0		ug/L		96	64 - 126
Xylenes, Total	100	96.1		ug/L		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*
Dibromofluoromethane	*99*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: 500-170172-19 MS
Matrix: Water
Analysis Batch: 506823

Client Sample ID: TW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.8		ug/L		104	70 - 125
1,1,1-Trichloroethane	<0.38		50.0	50.4		ug/L		101	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	61.5		ug/L		123	62 - 140
1,1,2-Trichloroethane	<0.35		50.0	54.7		ug/L		109	71 - 130
1,1-Dichloroethane	3.3		50.0	59.1		ug/L		112	70 - 125
1,1-Dichloroethene	<0.39		50.0	53.1		ug/L		106	67 - 122
1,1-Dichloropropene	<0.30		50.0	51.6		ug/L		103	70 - 121
1,2,3-Trichlorobenzene	<0.46		50.0	55.6		ug/L		111	51 - 145

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

Lab Sample ID: 500-170172-19 MS
Matrix: Water
Analysis Batch: 506823

Client Sample ID: TW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	<0.41		50.0	61.3		ug/L		123	50 - 133
1,2,4-Trichlorobenzene	<0.34		50.0	53.8		ug/L		108	57 - 137
1,2,4-Trimethylbenzene	15		50.0	67.6		ug/L		106	70 - 123
1,2-Dibromo-3-Chloropropane	<2.0		50.0	53.1		ug/L		106	56 - 123
1,2-Dibromoethane	<0.39		50.0	54.7		ug/L		109	70 - 125
1,2-Dichlorobenzene	<0.33		50.0	53.5		ug/L		107	70 - 125
1,2-Dichloroethane	<0.39		50.0	50.5		ug/L		101	68 - 127
1,2-Dichloropropane	<0.43		50.0	59.4		ug/L		119	67 - 130
1,3,5-Trimethylbenzene	4.6		50.0	61.1		ug/L		113	70 - 123
1,3-Dichlorobenzene	<0.40		50.0	53.1		ug/L		106	70 - 125
1,3-Dichloropropane	<0.36		50.0	56.0		ug/L		112	62 - 136
1,4-Dichlorobenzene	<0.36		50.0	51.6		ug/L		103	70 - 120
2,2-Dichloropropane	<0.44		50.0	52.3		ug/L		105	58 - 139
2-Chlorotoluene	<0.31		50.0	58.5		ug/L		117	70 - 125
4-Chlorotoluene	<0.35		50.0	57.7		ug/L		115	68 - 124
Benzene	1.7		50.0	57.0		ug/L		110	70 - 120
Bromobenzene	<0.36		50.0	58.0		ug/L		116	70 - 122
Bromochloromethane	<0.43		50.0	56.4		ug/L		113	65 - 122
Bromodichloromethane	<0.37		50.0	57.7		ug/L		115	69 - 120
Bromoform	<0.48		50.0	44.2		ug/L		88	56 - 132
Bromomethane	<0.80		50.0	62.8		ug/L		126	40 - 152
Carbon tetrachloride	<0.38		50.0	48.4		ug/L		97	59 - 133
Chlorobenzene	<0.39		50.0	51.4		ug/L		103	70 - 120
Chloroethane	<0.51		50.0	60.9		ug/L		122	48 - 136
Chloroform	<0.37		50.0	53.7		ug/L		107	70 - 120
Chloromethane	<0.32		50.0	61.1		ug/L		122	56 - 152
cis-1,2-Dichloroethene	12		50.0	67.0		ug/L		109	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	53.6		ug/L		107	64 - 127
Dibromochloromethane	<0.49		50.0	51.6		ug/L		103	68 - 125
Dibromomethane	<0.27		50.0	57.8		ug/L		116	70 - 120
Dichlorodifluoromethane	<0.67		50.0	58.1		ug/L		116	40 - 159
Ethylbenzene	6.1		50.0	59.2		ug/L		106	70 - 123
Hexachlorobutadiene	<0.45		50.0	52.1		ug/L		104	51 - 150
Isopropylbenzene	1.0		50.0	58.5		ug/L		115	70 - 126
Methyl tert-butyl ether	<0.39		50.0	58.7		ug/L		117	55 - 123
Methylene Chloride	2.1	J B	50.0	60.9		ug/L		117	69 - 125
Naphthalene	8.5		50.0	70.3		ug/L		124	53 - 144
n-Butylbenzene	<0.39		50.0	55.7		ug/L		111	68 - 125
N-Propylbenzene	2.7		50.0	61.2		ug/L		117	69 - 127
p-Isopropyltoluene	<0.36		50.0	53.0		ug/L		106	70 - 125
sec-Butylbenzene	<0.40		50.0	53.8		ug/L		108	70 - 123
Styrene	<0.39		50.0	52.3		ug/L		105	70 - 120
tert-Butylbenzene	<0.40		50.0	54.0		ug/L		108	70 - 121
Tetrachloroethene	0.42	J	50.0	48.6		ug/L		96	70 - 128
Toluene	0.79		50.0	50.6		ug/L		100	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	54.5		ug/L		109	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	55.2		ug/L		110	62 - 128
Trichloroethene	<0.16		50.0	53.5		ug/L		107	70 - 125
Trichlorofluoromethane	<0.43		50.0	50.7		ug/L		101	55 - 128

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

Lab Sample ID: 500-170172-19 MS
Matrix: Water
Analysis Batch: 506823

Client Sample ID: TW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	<0.20		50.0	58.6		ug/L		117	64 - 126
Xylenes, Total	13		100	115		ug/L		102	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
4-Bromofluorobenzene (Surr)	*114*		*72 - 124*
Dibromofluoromethane	*104*		*75 - 120*
Toluene-d8 (Surr)	*102*		*75 - 120*

Lab Sample ID: 500-170172-19 MSD
Matrix: Water
Analysis Batch: 506823

Client Sample ID: TW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.0		ug/L		102	70 - 125	2	20
1,1,1-Trichloroethane	<0.38		50.0	54.3		ug/L		109	70 - 125	8	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	57.7		ug/L		115	62 - 140	6	20
1,1,2-Trichloroethane	<0.35		50.0	54.0		ug/L		108	71 - 130	1	20
1,1-Dichloroethane	3.3		50.0	60.5		ug/L		114	70 - 125	2	20
1,1-Dichloroethene	<0.39		50.0	53.3		ug/L		107	67 - 122	0	20
1,1-Dichloropropene	<0.30		50.0	54.5		ug/L		109	70 - 121	5	20
1,2,3-Trichlorobenzene	<0.46		50.0	52.1		ug/L		104	51 - 145	7	20
1,2,3-Trichloropropane	<0.41		50.0	59.5		ug/L		119	50 - 133	3	20
1,2,4-Trichlorobenzene	<0.34		50.0	49.7		ug/L		99	57 - 137	8	20
1,2,4-Trimethylbenzene	15		50.0	67.4		ug/L		105	70 - 123	0	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	52.2		ug/L		104	56 - 123	2	20
1,2-Dibromoethane	<0.39		50.0	53.7		ug/L		107	70 - 125	2	20
1,2-Dichlorobenzene	<0.33		50.0	51.9		ug/L		104	70 - 125	3	20
1,2-Dichloroethane	<0.39		50.0	54.9		ug/L		110	68 - 127	8	20
1,2-Dichloropropane	<0.43		50.0	59.7		ug/L		119	67 - 130	0	20
1,3,5-Trimethylbenzene	4.6		50.0	58.0		ug/L		107	70 - 123	5	20
1,3-Dichlorobenzene	<0.40		50.0	53.0		ug/L		106	70 - 125	0	20
1,3-Dichloropropane	<0.36		50.0	55.9		ug/L		112	62 - 136	0	20
1,4-Dichlorobenzene	<0.36		50.0	51.3		ug/L		103	70 - 120	1	20
2,2-Dichloropropane	<0.44		50.0	54.1		ug/L		108	58 - 139	3	20
2-Chlorotoluene	<0.31		50.0	55.8		ug/L		112	70 - 125	5	20
4-Chlorotoluene	<0.35		50.0	54.7		ug/L		109	68 - 124	5	20
Benzene	1.7		50.0	59.5		ug/L		116	70 - 120	4	20
Bromobenzene	<0.36		50.0	55.1		ug/L		110	70 - 122	5	20
Bromochloromethane	<0.43		50.0	55.5		ug/L		111	65 - 122	2	20
Bromodichloromethane	<0.37		50.0	52.9		ug/L		106	69 - 120	9	20
Bromoform	<0.48		50.0	44.5		ug/L		89	56 - 132	0	20
Bromomethane	<0.80		50.0	62.4		ug/L		125	40 - 152	1	20
Carbon tetrachloride	<0.38		50.0	51.7		ug/L		103	59 - 133	7	20
Chlorobenzene	<0.39		50.0	51.7		ug/L		103	70 - 120	1	20
Chloroethane	<0.51		50.0	59.9		ug/L		120	48 - 136	2	20
Chloroform	<0.37		50.0	55.5		ug/L		111	70 - 120	3	20
Chloromethane	<0.32		50.0	61.2		ug/L		122	56 - 152	0	20

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

Lab Sample ID: 500-170172-19 MSD
Matrix: Water
Analysis Batch: 506823

Client Sample ID: TW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	12		50.0	68.5		ug/L		112	70 - 125	2	20
cis-1,3-Dichloropropene	<0.42		50.0	51.9		ug/L		104	64 - 127	3	20
Dibromochloromethane	<0.49		50.0	51.9		ug/L		104	68 - 125	0	20
Dibromomethane	<0.27		50.0	55.4		ug/L		111	70 - 120	4	20
Dichlorodifluoromethane	<0.67		50.0	58.3		ug/L		117	40 - 159	0	20
Ethylbenzene	6.1		50.0	59.2		ug/L		106	70 - 123	0	20
Hexachlorobutadiene	<0.45		50.0	47.4		ug/L		95	51 - 150	10	20
Isopropylbenzene	1.0		50.0	55.9		ug/L		110	70 - 126	5	20
Methyl tert-butyl ether	<0.39		50.0	57.1		ug/L		114	55 - 123	3	20
Methylene Chloride	2.1	J B	50.0	59.7		ug/L		115	69 - 125	2	20
Naphthalene	8.5		50.0	64.9		ug/L		113	53 - 144	8	20
n-Butylbenzene	<0.39		50.0	53.9		ug/L		108	68 - 125	3	20
N-Propylbenzene	2.7		50.0	58.3		ug/L		111	69 - 127	5	20
p-Isopropyltoluene	<0.36		50.0	53.5		ug/L		107	70 - 125	1	20
sec-Butylbenzene	<0.40		50.0	54.9		ug/L		110	70 - 123	2	20
Styrene	<0.39		50.0	52.4		ug/L		105	70 - 120	0	20
tert-Butylbenzene	<0.40		50.0	53.3		ug/L		107	70 - 121	1	20
Tetrachloroethene	0.42	J	50.0	48.1		ug/L		95	70 - 128	1	20
Toluene	0.79		50.0	50.7		ug/L		100	70 - 125	0	20
trans-1,2-Dichloroethene	<0.35		50.0	54.1		ug/L		108	70 - 125	1	20
trans-1,3-Dichloropropene	<0.36		50.0	54.9		ug/L		110	62 - 128	0	20
Trichloroethene	<0.16		50.0	54.1		ug/L		108	70 - 125	1	20
Trichlorofluoromethane	<0.43		50.0	51.2		ug/L		102	55 - 128	1	20
Vinyl chloride	<0.20		50.0	59.8		ug/L		120	64 - 126	2	20
Xylenes, Total	13		100	115		ug/L		103	70 - 125	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*
Dibromofluoromethane	*107*		*75 - 120*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: MB 500-506947/6
Matrix: Solid
Analysis Batch: 506947

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			09/26/19 23:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			09/26/19 23:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			09/26/19 23:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			09/26/19 23:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			09/26/19 23:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			09/26/19 23:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			09/26/19 23:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			09/26/19 23:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			09/26/19 23:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

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

Lab Sample ID: MB 500-506947/6
Matrix: Solid
Analysis Batch: 506947

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			09/26/19 23:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			09/26/19 23:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			09/26/19 23:26	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			09/26/19 23:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 23:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			09/26/19 23:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			09/26/19 23:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			09/26/19 23:26	1
Benzene	<0.15		0.25	0.15	ug/Kg			09/26/19 23:26	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			09/26/19 23:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			09/26/19 23:26	1
Bromoform	<0.48		1.0	0.48	ug/Kg			09/26/19 23:26	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			09/26/19 23:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			09/26/19 23:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			09/26/19 23:26	1
Chloroform	<0.37		2.0	0.37	ug/Kg			09/26/19 23:26	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			09/26/19 23:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			09/26/19 23:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			09/26/19 23:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			09/26/19 23:26	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			09/26/19 23:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			09/26/19 23:26	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			09/26/19 23:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			09/26/19 23:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			09/26/19 23:26	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			09/26/19 23:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
Methylene Chloride	2.65	J	5.0	1.6	ug/Kg			09/26/19 23:26	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			09/26/19 23:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			09/26/19 23:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 23:26	1
Styrene	<0.39		1.0	0.39	ug/Kg			09/26/19 23:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			09/26/19 23:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			09/26/19 23:26	1
Toluene	<0.15		0.25	0.15	ug/Kg			09/26/19 23:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			09/26/19 23:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			09/26/19 23:26	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			09/26/19 23:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			09/26/19 23:26	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			09/26/19 23:26	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			09/26/19 23:26	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		09/26/19 23:26	1
4-Bromofluorobenzene (Surr)	112		72 - 124		09/26/19 23:26	1
Dibromofluoromethane	99		75 - 120		09/26/19 23:26	1
Toluene-d8 (Surr)	102		75 - 120		09/26/19 23:26	1

Lab Sample ID: LCS 500-506947/4
Matrix: Solid
Analysis Batch: 506947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.6		ug/Kg		97	70 - 125
1,1,1-Trichloroethane	50.0	48.8		ug/Kg		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	52.2		ug/Kg		104	62 - 140
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	71 - 130
1,1-Dichloroethane	50.0	50.3		ug/Kg		101	70 - 125
1,1-Dichloroethene	50.0	48.0		ug/Kg		96	67 - 122
1,1-Dichloropropene	50.0	47.4		ug/Kg		95	70 - 121
1,2,3-Trichlorobenzene	50.0	50.3		ug/Kg		101	51 - 145
1,2,3-Trichloropropane	50.0	50.4		ug/Kg		101	50 - 133
1,2,4-Trichlorobenzene	50.0	48.8		ug/Kg		98	57 - 137
1,2,4-Trimethylbenzene	50.0	49.3		ug/Kg		99	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	45.3		ug/Kg		91	56 - 123
1,2-Dibromoethane	50.0	49.7		ug/Kg		99	70 - 125
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 125
1,2-Dichloroethane	50.0	46.5		ug/Kg		93	68 - 127
1,2-Dichloropropane	50.0	55.0		ug/Kg		110	67 - 130
1,3,5-Trimethylbenzene	50.0	49.4		ug/Kg		99	70 - 123
1,3-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 125
1,3-Dichloropropane	50.0	52.0		ug/Kg		104	62 - 136
1,4-Dichlorobenzene	50.0	47.5		ug/Kg		95	70 - 120
2,2-Dichloropropane	50.0	49.3		ug/Kg		99	58 - 139
2-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 125
4-Chlorotoluene	50.0	49.3		ug/Kg		99	68 - 124
Benzene	50.0	51.5		ug/Kg		103	70 - 120
Bromobenzene	50.0	49.9		ug/Kg		100	70 - 122
Bromochloromethane	50.0	51.7		ug/Kg		103	65 - 122
Bromodichloromethane	50.0	52.3		ug/Kg		105	69 - 120
Bromoform	50.0	39.2		ug/Kg		78	56 - 132
Bromomethane	50.0	58.1		ug/Kg		116	40 - 152
Carbon tetrachloride	50.0	44.1		ug/Kg		88	59 - 133
Chlorobenzene	50.0	48.2		ug/Kg		96	70 - 120
Chloroethane	50.0	57.7		ug/Kg		115	48 - 136
Chloroform	50.0	50.1		ug/Kg		100	70 - 120
Chloromethane	50.0	55.5		ug/Kg		111	56 - 152
cis-1,2-Dichloroethene	50.0	51.8		ug/Kg		104	70 - 125
cis-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	64 - 127
Dibromochloromethane	50.0	48.6		ug/Kg		97	68 - 125
Dibromomethane	50.0	54.2		ug/Kg		108	70 - 120
Dichlorodifluoromethane	50.0	52.6		ug/Kg		105	40 - 159
Ethylbenzene	50.0	49.2		ug/Kg		98	70 - 123
Hexachlorobutadiene	50.0	47.6		ug/Kg		95	51 - 150

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

Lab Sample ID: LCS 500-506947/4
Matrix: Solid
Analysis Batch: 506947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	50.0	50.0		ug/Kg		100	70 - 126
Methyl tert-butyl ether	50.0	52.9		ug/Kg		106	55 - 123
Methylene Chloride	50.0	53.9		ug/Kg		108	69 - 125
Naphthalene	50.0	52.5		ug/Kg		105	53 - 144
n-Butylbenzene	50.0	50.0		ug/Kg		100	68 - 125
N-Propylbenzene	50.0	49.5		ug/Kg		99	69 - 127
p-Isopropyltoluene	50.0	48.5		ug/Kg		97	70 - 125
sec-Butylbenzene	50.0	48.5		ug/Kg		97	70 - 123
Styrene	50.0	48.6		ug/Kg		97	70 - 120
tert-Butylbenzene	50.0	48.9		ug/Kg		98	70 - 121
Tetrachloroethene	50.0	44.5		ug/Kg		89	70 - 128
Toluene	50.0	47.8		ug/Kg		96	70 - 125
trans-1,2-Dichloroethene	50.0	49.5		ug/Kg		99	70 - 125
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	62 - 128
Trichloroethene	50.0	49.1		ug/Kg		98	70 - 125
Trichlorofluoromethane	50.0	50.0		ug/Kg		100	55 - 128
Vinyl chloride	50.0	50.8		ug/Kg		102	64 - 126
Xylenes, Total	100	97.0		ug/Kg		97	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*
Dibromofluoromethane	*106*		*75 - 120*
Toluene-d8 (Surr)	*104*		*75 - 120*

Lab Sample ID: MB 500-506948/6
Matrix: Water
Analysis Batch: 506948

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			09/26/19 23:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/26/19 23:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			09/26/19 23:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/26/19 23:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			09/26/19 23:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			09/26/19 23:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			09/26/19 23:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			09/26/19 23:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			09/26/19 23:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			09/26/19 23:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			09/26/19 23:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			09/26/19 23:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			09/26/19 23:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			09/26/19 23:26	1

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

Lab Sample ID: MB 500-506948/6
Matrix: Water
Analysis Batch: 506948

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			09/26/19 23:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			09/26/19 23:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			09/26/19 23:26	1
Benzene	<0.15		0.50	0.15	ug/L			09/26/19 23:26	1
Bromobenzene	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			09/26/19 23:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			09/26/19 23:26	1
Bromoform	<0.48		1.0	0.48	ug/L			09/26/19 23:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			09/26/19 23:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			09/26/19 23:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
Chloroethane	<0.51		1.0	0.51	ug/L			09/26/19 23:26	1
Chloroform	<0.37		2.0	0.37	ug/L			09/26/19 23:26	1
Chloromethane	<0.32		1.0	0.32	ug/L			09/26/19 23:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			09/26/19 23:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			09/26/19 23:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			09/26/19 23:26	1
Dibromomethane	<0.27		1.0	0.27	ug/L			09/26/19 23:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			09/26/19 23:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			09/26/19 23:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			09/26/19 23:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			09/26/19 23:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
Methylene Chloride	2.65	J	5.0	1.6	ug/L			09/26/19 23:26	1
Naphthalene	<0.34		1.0	0.34	ug/L			09/26/19 23:26	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			09/26/19 23:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 23:26	1
Styrene	<0.39		1.0	0.39	ug/L			09/26/19 23:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			09/26/19 23:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/26/19 23:26	1
Toluene	<0.15		0.50	0.15	ug/L			09/26/19 23:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			09/26/19 23:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			09/26/19 23:26	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/26/19 23:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			09/26/19 23:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/26/19 23:26	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			09/26/19 23:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*09/26/19 23:26*	*1*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*		*09/26/19 23:26*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*09/26/19 23:26*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*09/26/19 23:26*	*1*

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

Lab Sample ID: LCS 500-506948/4
Matrix: Water
Analysis Batch: 506948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 125
1,1,1-Trichloroethane	50.0	48.8		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	52.2		ug/L		104	62 - 140
1,1,2-Trichloroethane	50.0	51.0		ug/L		102	71 - 130
1,1-Dichloroethane	50.0	50.3		ug/L		101	70 - 125
1,1-Dichloroethene	50.0	48.0		ug/L		96	67 - 122
1,1-Dichloropropene	50.0	47.4		ug/L		95	70 - 121
1,2,3-Trichlorobenzene	50.0	50.3		ug/L		101	51 - 145
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	50 - 133
1,2,4-Trichlorobenzene	50.0	48.8		ug/L		98	57 - 137
1,2,4-Trimethylbenzene	50.0	49.3		ug/L		99	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	45.3		ug/L		91	56 - 123
1,2-Dibromoethane	50.0	49.7		ug/L		99	70 - 125
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 125
1,2-Dichloroethane	50.0	46.5		ug/L		93	68 - 127
1,2-Dichloropropane	50.0	55.0		ug/L		110	67 - 130
1,3,5-Trimethylbenzene	50.0	49.4		ug/L		99	70 - 123
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 125
1,3-Dichloropropane	50.0	52.0		ug/L		104	62 - 136
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 120
2,2-Dichloropropane	50.0	49.3		ug/L		99	58 - 139
2-Chlorotoluene	50.0	48.3		ug/L		97	70 - 125
4-Chlorotoluene	50.0	49.3		ug/L		99	68 - 124
Benzene	50.0	51.5		ug/L		103	70 - 120
Bromobenzene	50.0	49.9		ug/L		100	70 - 122
Bromochloromethane	50.0	51.7		ug/L		103	65 - 122
Bromodichloromethane	50.0	52.3		ug/L		105	69 - 120
Bromoform	50.0	39.2		ug/L		78	56 - 132
Bromomethane	50.0	58.1		ug/L		116	40 - 152
Carbon tetrachloride	50.0	44.1		ug/L		88	59 - 133
Chlorobenzene	50.0	48.2		ug/L		96	70 - 120
Chloroethane	50.0	57.7		ug/L		115	48 - 136
Chloroform	50.0	50.1		ug/L		100	70 - 120
Chloromethane	50.0	55.5		ug/L		111	56 - 152
cis-1,2-Dichloroethene	50.0	51.8		ug/L		104	70 - 125
cis-1,3-Dichloropropene	50.0	51.2		ug/L		102	64 - 127
Dibromochloromethane	50.0	48.6		ug/L		97	68 - 125
Dibromomethane	50.0	54.2		ug/L		108	70 - 120
Dichlorodifluoromethane	50.0	52.6		ug/L		105	40 - 159
Ethylbenzene	50.0	49.2		ug/L		98	70 - 123
Hexachlorobutadiene	50.0	47.6		ug/L		95	51 - 150
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 126
Methyl tert-butyl ether	50.0	52.9		ug/L		106	55 - 123
Methylene Chloride	50.0	53.9		ug/L		108	69 - 125
Naphthalene	50.0	52.5		ug/L		105	53 - 144
n-Butylbenzene	50.0	50.0		ug/L		100	68 - 125
N-Propylbenzene	50.0	49.5		ug/L		99	69 - 127
p-Isopropyltoluene	50.0	48.5		ug/L		97	70 - 125

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

Lab Sample ID: LCS 500-506948/4
Matrix: Water
Analysis Batch: 506948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	50.0	48.5		ug/L		97	70 - 123
Styrene	50.0	48.6		ug/L		97	70 - 120
tert-Butylbenzene	50.0	48.9		ug/L		98	70 - 121
Tetrachloroethene	50.0	44.5		ug/L		89	70 - 128
Toluene	50.0	47.8		ug/L		96	70 - 125
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	70 - 125
trans-1,3-Dichloropropene	50.0	51.7		ug/L		103	62 - 128
Trichloroethene	50.0	49.1		ug/L		98	70 - 125
Trichlorofluoromethane	50.0	50.0		ug/L		100	55 - 128
Vinyl chloride	50.0	50.8		ug/L		102	64 - 126
Xylenes, Total	100	97.0		ug/L		97	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*
Dibromofluoromethane	*106*		*75 - 120*
Toluene-d8 (Surr)	*104*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-505695/1-A
Matrix: Water
Analysis Batch: 505806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		09/19/19 09:17	09/19/19 23:11	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		09/19/19 09:17	09/19/19 23:11	1
Acenaphthene	<0.25		0.80	0.25	ug/L		09/19/19 09:17	09/19/19 23:11	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		09/19/19 09:17	09/19/19 23:11	1
Anthracene	<0.27		0.80	0.27	ug/L		09/19/19 09:17	09/19/19 23:11	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		09/19/19 09:17	09/19/19 23:11	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		09/19/19 09:17	09/19/19 23:11	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		09/19/19 09:17	09/19/19 23:11	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		09/19/19 09:17	09/19/19 23:11	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		09/19/19 09:17	09/19/19 23:11	1
Chrysene	<0.055		0.16	0.055	ug/L		09/19/19 09:17	09/19/19 23:11	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		09/19/19 09:17	09/19/19 23:11	1
Fluoranthene	<0.36		0.80	0.36	ug/L		09/19/19 09:17	09/19/19 23:11	1
Fluorene	<0.20		0.80	0.20	ug/L		09/19/19 09:17	09/19/19 23:11	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		09/19/19 09:17	09/19/19 23:11	1
Naphthalene	<0.25		0.80	0.25	ug/L		09/19/19 09:17	09/19/19 23:11	1
Phenanthrene	<0.24		0.80	0.24	ug/L		09/19/19 09:17	09/19/19 23:11	1
Pyrene	<0.34		0.80	0.34	ug/L		09/19/19 09:17	09/19/19 23:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 110*	*09/19/19 09:17*	*09/19/19 23:11*	*1*
Nitrobenzene-d5 (Surr)	*92*		*36 - 120*	*09/19/19 09:17*	*09/19/19 23:11*	*1*
Terphenyl-d14 (Surr)	*99*		*40 - 145*	*09/19/19 09:17*	*09/19/19 23:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-505695/2-A
Matrix: Water
Analysis Batch: 505806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	32.0	20.1		ug/L		63	38 - 110
2-Methylnaphthalene	32.0	20.3		ug/L		63	34 - 110
Acenaphthene	32.0	23.8		ug/L		74	46 - 110
Acenaphthylene	32.0	23.3		ug/L		73	47 - 113
Anthracene	32.0	26.5		ug/L		83	67 - 118
Benzo[a]anthracene	32.0	27.8		ug/L		87	70 - 126
Benzo[a]pyrene	32.0	27.3		ug/L		85	70 - 135
Benzo[b]fluoranthene	32.0	29.1		ug/L		91	69 - 136
Benzo[g,h,i]perylene	32.0	28.7		ug/L		90	70 - 135
Benzo[k]fluoranthene	32.0	29.0		ug/L		90	70 - 133
Chrysene	32.0	27.1		ug/L		85	68 - 129
Dibenz(a,h)anthracene	32.0	24.5		ug/L		76	70 - 134
Fluoranthene	32.0	28.4		ug/L		89	68 - 126
Fluorene	32.0	24.8		ug/L		78	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	25.4		ug/L		79	65 - 133
Naphthalene	32.0	20.4		ug/L		64	36 - 110
Phenanthrene	32.0	25.9		ug/L		81	65 - 120
Pyrene	32.0	27.3		ug/L		85	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*34 - 110*
Nitrobenzene-d5 (Surr)	*89*		*36 - 120*
Terphenyl-d14 (Surr)	*96*		*40 - 145*

Lab Sample ID: MB 500-507016/1-A
Matrix: Solid
Analysis Batch: 507079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507016

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Acenaphthene	<6.0		33	6.0	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Anthracene	<5.6		33	5.6	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Chrysene	<9.1		33	9.1	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Fluoranthene	<6.2		33	6.2	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Fluorene	<4.7		33	4.7	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Naphthalene	<5.1		33	5.1	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Phenanthrene	<4.6		33	4.6	ug/Kg		09/26/19 21:38	09/27/19 11:57	1
Pyrene	<6.6		33	6.6	ug/Kg		09/26/19 21:38	09/27/19 11:57	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-507016/1-A
Matrix: Solid
Analysis Batch: 507079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507016

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	89		43 - 145	09/26/19 21:38	09/27/19 11:57	1
Nitrobenzene-d5 (Surr)	78		37 - 147	09/26/19 21:38	09/27/19 11:57	1
Terphenyl-d14 (Surr)	92		42 - 157	09/26/19 21:38	09/27/19 11:57	1

Lab Sample ID: LCS 500-507016/2-A
Matrix: Solid
Analysis Batch: 507079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507016

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	1330	1220		ug/Kg		92	68 - 111
2-Methylnaphthalene	1330	1230		ug/Kg		92	69 - 112
Acenaphthene	1330	1240		ug/Kg		93	65 - 124
Acenaphthylene	1330	1230		ug/Kg		92	68 - 120
Anthracene	1330	1220		ug/Kg		92	70 - 114
Benzo[a]anthracene	1330	1320		ug/Kg		99	67 - 122
Benzo[a]pyrene	1330	1310		ug/Kg		98	65 - 133
Benzo[b]fluoranthene	1330	1170		ug/Kg		88	69 - 129
Benzo[g,h,i]perylene	1330	1420		ug/Kg		106	72 - 131
Benzo[k]fluoranthene	1330	1360		ug/Kg		102	68 - 127
Chrysene	1330	1250		ug/Kg		93	63 - 120
Dibenz(a,h)anthracene	1330	1270		ug/Kg		95	64 - 131
Fluoranthene	1330	1300		ug/Kg		98	62 - 120
Fluorene	1330	1190		ug/Kg		89	62 - 120
Indeno[1,2,3-cd]pyrene	1330	1320		ug/Kg		99	68 - 130
Naphthalene	1330	1190		ug/Kg		89	63 - 110
Phenanthrene	1330	1180		ug/Kg		88	62 - 120
Pyrene	1330	1230		ug/Kg		92	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	90		43 - 145
Nitrobenzene-d5 (Surr)	87		37 - 147
Terphenyl-d14 (Surr)	93		42 - 157

Lab Sample ID: 500-170172-16 MS
Matrix: Solid
Analysis Batch: 507073

Client Sample ID: SB-11 (2-4)
Prep Type: Total/NA
Prep Batch: 507016

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	18	J	1580	1270		ug/Kg	☼	79	68 - 111
2-Methylnaphthalene	19	J	1580	1270		ug/Kg	☼	79	69 - 112
Acenaphthene	8.4	J	1580	1300		ug/Kg	☼	82	65 - 124
Acenaphthylene	9.9	J	1580	1320		ug/Kg	☼	83	68 - 120
Anthracene	20	J	1580	1360		ug/Kg	☼	85	70 - 114
Benzo[a]anthracene	100		1580	1420		ug/Kg	☼	83	67 - 122
Benzo[a]pyrene	110		1580	1450		ug/Kg	☼	85	65 - 133
Benzo[b]fluoranthene	160		1580	1580		ug/Kg	☼	90	69 - 129
Benzo[g,h,i]perylene	32	J F1	1580	593	F1	ug/Kg	☼	36	72 - 131
Benzo[k]fluoranthene	46		1580	1770		ug/Kg	☼	109	68 - 127

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-170172-16 MS
Matrix: Solid
Analysis Batch: 507073

Client Sample ID: SB-11 (2-4)
Prep Type: Total/NA
Prep Batch: 507016

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	100		1580	1460		ug/Kg	☼	86	63 - 120
Dibenz(a,h)anthracene	<7.5	F1	1580	770	F1	ug/Kg	☼	49	64 - 131
Fluoranthene	140		1580	1550		ug/Kg	☼	89	62 - 120
Fluorene	<5.5		1580	1340		ug/Kg	☼	85	62 - 120
Indeno[1,2,3-cd]pyrene	36	J F1	1580	736	F1	ug/Kg	☼	44	68 - 130
Naphthalene	15	J	1580	1280		ug/Kg	☼	80	63 - 110
Phenanthrene	58		1580	1360		ug/Kg	☼	82	62 - 120
Pyrene	130		1580	1430		ug/Kg	☼	83	61 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*43 - 145*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*
Terphenyl-d14 (Surr)	*88*		*42 - 157*

Lab Sample ID: 500-170172-16 MSD
Matrix: Solid
Analysis Batch: 507073

Client Sample ID: SB-11 (2-4)
Prep Type: Total/NA
Prep Batch: 507016

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	18	J	1570	1210		ug/Kg	☼				
2-Methylnaphthalene	19	J	1570	1230		ug/Kg	☼				
Acenaphthene	8.4	J	1570	1320		ug/Kg	☼				
Acenaphthylene	9.9	J	1570	1320		ug/Kg	☼				
Anthracene	20	J	1570	2020		ug/Kg	☼				
Benzo[a]anthracene	100		1570	3380	E	ug/Kg	☼				
Benzo[a]pyrene	110		1570	3050	E	ug/Kg	☼				
Benzo[b]fluoranthene	160		1570	4320	E	ug/Kg	☼				
Benzo[g,h,i]perylene	32	J F1	1570	844		ug/Kg	☼				
Benzo[k]fluoranthene	46		1570	2110		ug/Kg	☼				
Chrysene	100		1570	3230	E	ug/Kg	☼				
Dibenz(a,h)anthracene	<7.5	F1	1570	831		ug/Kg	☼				
Fluoranthene	140		1570	5880	E	ug/Kg	☼				
Fluorene	<5.5		1570	1350		ug/Kg	☼				
Indeno[1,2,3-cd]pyrene	36	J F1	1570	1080		ug/Kg	☼				
Naphthalene	15	J	1570	1280		ug/Kg	☼				
Phenanthrene	58		1570	2470		ug/Kg	☼				
Pyrene	130		1570	4530	E	ug/Kg	☼				

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl			
Nitrobenzene-d5 (Surr)			
Terphenyl-d14 (Surr)			

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-507202/1-A
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Acenaphthene	<6.0		33	6.0	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Anthracene	<5.6		33	5.6	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Chrysene	<9.1		33	9.1	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Fluoranthene	<6.2		33	6.2	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Fluorene	<4.7		33	4.7	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Naphthalene	<5.1		33	5.1	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Phenanthrene	<4.6		33	4.6	ug/Kg		09/27/19 15:41	09/28/19 13:57	1
Pyrene	<6.6		33	6.6	ug/Kg		09/27/19 15:41	09/28/19 13:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*43 - 145*	*09/27/19 15:41*	*09/28/19 13:57*	*1*
Nitrobenzene-d5 (Surr)	*76*		*37 - 147*	*09/27/19 15:41*	*09/28/19 13:57*	*1*
Terphenyl-d14 (Surr)	*94*		*42 - 157*	*09/27/19 15:41*	*09/28/19 13:57*	*1*

Lab Sample ID: LCS 500-507202/2-A
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	1330	1310		ug/Kg		98	68 - 111
2-Methylnaphthalene	1330	1310		ug/Kg		99	69 - 112
Acenaphthene	1330	1350		ug/Kg		101	65 - 124
Acenaphthylene	1330	1330		ug/Kg		100	68 - 120
Anthracene	1330	1320		ug/Kg		99	70 - 114
Benzo[a]anthracene	1330	1400		ug/Kg		105	67 - 122
Benzo[a]pyrene	1330	1380		ug/Kg		104	65 - 133
Benzo[b]fluoranthene	1330	1250		ug/Kg		94	69 - 129
Benzo[g,h,i]perylene	1330	1500		ug/Kg		112	72 - 131
Benzo[k]fluoranthene	1330	1460		ug/Kg		109	68 - 127
Chrysene	1330	1310		ug/Kg		98	63 - 120
Dibenz(a,h)anthracene	1330	1330		ug/Kg		100	64 - 131
Fluoranthene	1330	1340		ug/Kg		101	62 - 120
Fluorene	1330	1290		ug/Kg		97	62 - 120
Indeno[1,2,3-cd]pyrene	1330	1370		ug/Kg		103	68 - 130
Naphthalene	1330	1280		ug/Kg		96	63 - 110
Phenanthrene	1330	1360		ug/Kg		102	62 - 120
Pyrene	1330	1430		ug/Kg		107	61 - 128

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-507202/2-A
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507202

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	91		43 - 145
Nitrobenzene-d5 (Surr)	87		37 - 147
Terphenyl-d14 (Surr)	98		42 - 157

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	14	J	1510	1320		ug/Kg	☼	86	68 - 111
2-Methylnaphthalene	16	J	1510	1330		ug/Kg	☼	87	69 - 112
Acenaphthene	<6.7		1510	1390		ug/Kg	☼	92	65 - 124
Acenaphthylene	15	J	1510	1370		ug/Kg	☼	90	68 - 120
Anthracene	21	J	1510	1360		ug/Kg	☼	89	70 - 114
Benzo[a]anthracene	87		1510	1550		ug/Kg	☼	97	67 - 122
Benzo[a]pyrene	120		1510	1530		ug/Kg	☼	94	65 - 133
Benzo[b]fluoranthene	150		1510	1640		ug/Kg	☼	99	69 - 129
Benzo[g,h,i]perylene	55	F1	1510	870	F1	ug/Kg	☼	54	72 - 131
Benzo[k]fluoranthene	70	F1	1510	2020	F1	ug/Kg	☼	129	68 - 127
Chrysene	100		1510	1500		ug/Kg	☼	93	63 - 120
Dibenz(a,h)anthracene	18	J F1	1510	865	F1	ug/Kg	☼	56	64 - 131
Fluoranthene	150		1510	1470		ug/Kg	☼	87	62 - 120
Fluorene	<5.2		1510	1360		ug/Kg	☼	90	62 - 120
Indeno[1,2,3-cd]pyrene	65	F1	1510	925	F1	ug/Kg	☼	57	68 - 130
Naphthalene	11	J	1510	1270		ug/Kg	☼	84	63 - 110
Phenanthrene	78		1510	1480		ug/Kg	☼	93	62 - 120
Pyrene	170		1510	1840		ug/Kg	☼	111	61 - 128

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	81		43 - 145
Nitrobenzene-d5 (Surr)	74		37 - 147
Terphenyl-d14 (Surr)	109		42 - 157

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	14	J	1510	1230		ug/Kg	☼	80	68 - 111	7	30
2-Methylnaphthalene	16	J	1510	1230		ug/Kg	☼	80	69 - 112	8	30
Acenaphthene	<6.7		1510	1310		ug/Kg	☼	87	65 - 124	6	30
Acenaphthylene	15	J	1510	1280		ug/Kg	☼	84	68 - 120	6	30
Anthracene	21	J	1510	1300		ug/Kg	☼	85	70 - 114	4	30
Benzo[a]anthracene	87		1510	1420		ug/Kg	☼	89	67 - 122	8	30
Benzo[a]pyrene	120		1510	1450		ug/Kg	☼	88	65 - 133	6	30
Benzo[b]fluoranthene	150		1510	1490		ug/Kg	☼	89	69 - 129	9	30
Benzo[g,h,i]perylene	55	F1	1510	801	F1	ug/Kg	☼	49	72 - 131	8	30
Benzo[k]fluoranthene	70	F1	1510	1890		ug/Kg	☼	120	68 - 127	6	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 507283

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	100		1510	1360		ug/Kg	☼	84	63 - 120	9	30
Dibenz(a,h)anthracene	18	J F1	1510	789	F1	ug/Kg	☼	51	64 - 131	9	30
Fluoranthene	150		1510	1400		ug/Kg	☼	83	62 - 120	5	30
Fluorene	<5.2		1510	1260		ug/Kg	☼	84	62 - 120	7	30
Indeno[1,2,3-cd]pyrene	65	F1	1510	836	F1	ug/Kg	☼	51	68 - 130	10	30
Naphthalene	11	J	1510	1180		ug/Kg	☼	78	63 - 110	7	30
Phenanthrene	78		1510	1410		ug/Kg	☼	88	62 - 120	4	30
Pyrene	170		1510	1710		ug/Kg	☼	101	61 - 128	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*43 - 145*
Nitrobenzene-d5 (Surr)	*69*		*37 - 147*
Terphenyl-d14 (Surr)	*101*		*42 - 157*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-507723/1-A
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Barium	<0.11		1.0	0.11	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Cadmium	0.0485	J	0.20	0.036	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Chromium	<0.50		1.0	0.50	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Lead	<0.23		0.50	0.23	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Selenium	<0.59		1.0	0.59	mg/Kg		10/01/19 10:32	10/02/19 09:12	1
Silver	<0.13		0.50	0.13	mg/Kg		10/01/19 10:32	10/02/19 09:12	1

Lab Sample ID: LCS 500-507723/2-A
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	9.37		mg/Kg		94	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Chromium	20.0	19.4		mg/Kg		97	80 - 120
Lead	10.0	9.22		mg/Kg		92	80 - 120
Selenium	10.0	8.60		mg/Kg		86	80 - 120
Silver	5.00	4.72		mg/Kg		94	80 - 120

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.8		10.3	15.0		mg/Kg	☼	89	75 - 125
Barium	130		206	287		mg/Kg	☼	75	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.44	F1 B	5.16	4.21	F1	mg/Kg	☼	73	75 - 125
Chromium	15		20.6	36.9		mg/Kg	☼	108	75 - 125
Lead	300	F2	10.3	270	4	mg/Kg	☼	-309	75 - 125
Selenium	1.2	F1	10.3	7.62	F1	mg/Kg	☼	62	75 - 125
Silver	2.8		5.16	8.29		mg/Kg	☼	106	75 - 125

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.8		10.0	15.1		mg/Kg	☼	92	75 - 125	0	20
Barium	130		201	311		mg/Kg	☼	89	75 - 125	8	20
Cadmium	0.44	F1 B	5.02	4.55		mg/Kg	☼	82	75 - 125	8	20
Chromium	15		20.1	35.8		mg/Kg	☼	105	75 - 125	3	20
Lead	300	F2	10.0	334	4 F2	mg/Kg	☼	317	75 - 125	21	20
Selenium	1.2	F1	10.0	8.54	F1	mg/Kg	☼	73	75 - 125	11	20
Silver	2.8		5.02	7.30		mg/Kg	☼	89	75 - 125	13	20

Lab Sample ID: 500-170172-6 DU
Matrix: Solid
Analysis Batch: 508029

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 507723

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	5.8		5.77		mg/Kg	☼	0.7	20
Barium	130		134		mg/Kg	☼	2	20
Cadmium	0.44	F1 B	0.405		mg/Kg	☼	9	20
Chromium	15		14.9		mg/Kg	☼	2	20
Lead	300	F2	323		mg/Kg	☼	7	20
Selenium	1.2	F1	0.869	J F5	mg/Kg	☼	32	20
Silver	2.8		2.61		mg/Kg	☼	7	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-507443/1-A
Matrix: Water
Analysis Batch: 507668

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 507443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00023		0.0010	0.00023	mg/L		09/30/19 08:47	09/30/19 17:37	1
Barium	<0.00073		0.0025	0.00073	mg/L		09/30/19 08:47	09/30/19 17:37	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		09/30/19 08:47	09/30/19 17:37	1
Chromium	0.0329		0.0050	0.0011	mg/L		09/30/19 08:47	09/30/19 17:37	1
Lead	<0.00019		0.00050	0.00019	mg/L		09/30/19 08:47	09/30/19 17:37	1
Selenium	<0.00098		0.0025	0.00098	mg/L		09/30/19 08:47	09/30/19 17:37	1
Silver	<0.00012		0.00050	0.00012	mg/L		09/30/19 08:47	09/30/19 17:37	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-507443/2-A
Matrix: Water
Analysis Batch: 507668

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 507443

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0980		mg/L		98	80 - 120
Barium	0.500	0.461		mg/L		92	80 - 120
Cadmium	0.0500	0.0510		mg/L		102	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Lead	0.100	0.101		mg/L		101	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120
Silver	0.0500	0.0519		mg/L		104	80 - 120

Lab Sample ID: MB 500-507721/1-A
Matrix: Water
Analysis Batch: 507795

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 507721

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0011		0.0050	0.0011	mg/L		10/01/19 10:24	10/01/19 14:24	1

Lab Sample ID: LCS 500-507721/2-A
Matrix: Water
Analysis Batch: 507795

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 507721

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.199		mg/L		100	80 - 120

Lab Sample ID: LCSD 500-507721/3-A
Matrix: Water
Analysis Batch: 507795

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 507721

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.200	0.193		mg/L		97	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-506716/12-A
Matrix: Water
Analysis Batch: 506918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		09/25/19 10:00	09/26/19 09:17	1

Lab Sample ID: LCS 500-506716/13-A
Matrix: Water
Analysis Batch: 506918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00217		mg/L		109	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 500-506912/12-A
Matrix: Solid
Analysis Batch: 507131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0056		0.017	0.0056	mg/Kg		09/26/19 14:35	09/27/19 07:50	1

Lab Sample ID: LCS 500-506912/13-A
Matrix: Solid
Analysis Batch: 507131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.150		mg/Kg		90	80 - 120

Lab Sample ID: 500-170172-6 MS
Matrix: Solid
Analysis Batch: 507131

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506912

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.40		0.0867	0.503	4	mg/Kg	☼	124	75 - 125

Lab Sample ID: 500-170172-6 MSD
Matrix: Solid
Analysis Batch: 507131

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506912

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.40		0.0868	0.503	4	mg/Kg	☼	124	75 - 125	0	20

Lab Sample ID: 500-170172-6 DU
Matrix: Solid
Analysis Batch: 507131

Client Sample ID: SB-4 (2-4)
Prep Type: Total/NA
Prep Batch: 506912

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.40		0.400		mg/Kg	☼	1	20

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-1 (2-4)
Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-1 (2-4)
Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-1
Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 18:43	NRJ	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 09:20	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:11	MJG	TAL CHI

Client Sample ID: SB-1 (6-8)
Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-1 (6-8)
Date Collected: 09/13/19 09:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-2
Matrix: Solid
Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 09:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 13:10	EMA	TAL CHI

Client Sample ID: SB-2 (0.5-3)
Date Collected: 09/13/19 10:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-2 (0.5-3)
Date Collected: 09/13/19 10:20
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-3
Matrix: Solid
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 10:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 13:36	EMA	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-2 (3-4)
Date Collected: 09/13/19 10:15
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-2 (3-4)
Date Collected: 09/13/19 10:15
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-4
Matrix: Solid
Percent Solids: 75.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 19:09	NRJ	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 09:24	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:14	MJG	TAL CHI

Client Sample ID: SB-3 (1-3)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-3 (1-3)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-5
Matrix: Solid
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 14:01	EMA	TAL CHI

Client Sample ID: SB-4 (2-4)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-4 (2-4)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 14:26	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 19:35	NRJ	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-4 (2-4)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-6
Matrix: Solid
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 09:28	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:16	MJG	TAL CHI

Client Sample ID: SB-5 (2-4)
Date Collected: 09/13/19 11:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-5 (2-4)
Date Collected: 09/13/19 11:40
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-7
Matrix: Solid
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 11:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 14:51	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 16:33	NRJ	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:18	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:38	MJG	TAL CHI

Client Sample ID: SB-6 (5-6)
Date Collected: 09/13/19 11:55
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-6 (5-6)
Date Collected: 09/13/19 11:55
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-8
Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 11:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 15:16	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 16:59	NRJ	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:22	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:40	MJG	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: DUP-01
Date Collected: 09/13/19 13:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: DUP-01
Date Collected: 09/13/19 13:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-9
Matrix: Solid
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 13:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 15:42	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507283	09/28/19 17:25	NRJ	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:26	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:42	MJG	TAL CHI

Client Sample ID: SB-7 (0.5-1.5)
Date Collected: 09/13/19 13:01
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-7 (0.5-1.5)
Date Collected: 09/13/19 13:01
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-10
Matrix: Solid
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507504	09/30/19 18:25	DA1	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:30	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:44	MJG	TAL CHI

Client Sample ID: SB-7 (13.5-14.5)
Date Collected: 09/13/19 14:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-7 (13.5-14.5)
Lab Sample ID: 500-170172-11
Date Collected: 09/13/19 14:00
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 14:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 16:07	EMA	TAL CHI

Client Sample ID: SB-8 (2-3)
Lab Sample ID: 500-170172-12
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-8 (2-3)
Lab Sample ID: 500-170172-12
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 14:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 16:32	EMA	TAL CHI

Client Sample ID: SB-8 (3-4)
Lab Sample ID: 500-170172-13
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-8 (3-4)
Lab Sample ID: 500-170172-13
Date Collected: 09/13/19 15:15
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		1	507504	09/30/19 18:54	DA1	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:34	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:46	MJG	TAL CHI

Client Sample ID: SB-9 (1-3)
Lab Sample ID: 500-170172-14
Date Collected: 09/13/19 15:20
Matrix: Solid
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-9 (1-3)

Lab Sample ID: 500-170172-14
Date Collected: 09/13/19 15:20
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 15:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 16:57	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		5	507504	09/30/19 19:52	DA1	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:38	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:48	MJG	TAL CHI

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 500-170172-15
Date Collected: 09/13/19 15:25
Matrix: Solid
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 500-170172-15
Date Collected: 09/13/19 15:25
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 15:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 17:22	EMA	TAL CHI
Total/NA	Prep	3541			507202	09/27/19 15:41	ACK	TAL CHI
Total/NA	Analysis	8270D		5	507504	09/30/19 20:21	DA1	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		5	508029	10/02/19 10:42	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:50	MJG	TAL CHI

Client Sample ID: SB-11 (2-4)

Lab Sample ID: 500-170172-16
Date Collected: 09/13/19 16:30
Matrix: Solid
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-11 (2-4)

Lab Sample ID: 500-170172-16
Date Collected: 09/13/19 16:30
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 16:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506814	09/26/19 17:47	EMA	TAL CHI
Total/NA	Prep	3541			507016	09/26/19 21:38	JP1	TAL CHI
Total/NA	Analysis	8270D		1	507073	09/27/19 16:46	AJD	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-11 (2-4)
Date Collected: 09/13/19 16:30
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-16
Matrix: Solid
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:54	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:53	MJG	TAL CHI

Client Sample ID: SB-12 (3-4)
Date Collected: 09/13/19 16:45
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-12 (3-4)
Date Collected: 09/13/19 16:45
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-17
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 16:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506947	09/27/19 06:20	STW	TAL CHI
Total/NA	Prep	3541			507016	09/26/19 21:38	JP1	TAL CHI
Total/NA	Analysis	8270D		1	507073	09/27/19 17:48	AJD	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 10:58	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:55	MJG	TAL CHI

Client Sample ID: SB-13 (2-4)
Date Collected: 09/13/19 16:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-13 (2-4)
Date Collected: 09/13/19 16:50
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-18
Matrix: Solid
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 16:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506947	09/27/19 06:47	STW	TAL CHI
Total/NA	Prep	3541			507016	09/26/19 21:38	JP1	TAL CHI
Total/NA	Analysis	8270D		1	507504	09/30/19 19:23	DA1	TAL CHI
Total/NA	Prep	3541	DL		507016	09/26/19 21:38	JP1	TAL CHI
Total/NA	Analysis	8270D	DL	5	507655	10/01/19 13:23	AJD	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 11:02	EEN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: SB-13 (2-4)

Lab Sample ID: 500-170172-18
Date Collected: 09/13/19 16:50
Matrix: Solid
Date Received: 09/17/19 08:40
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 08:57	MJG	TAL CHI

Client Sample ID: TW-1

Lab Sample ID: 500-170172-19
Date Collected: 09/13/19 15:25
Matrix: Water
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506823	09/26/19 19:11	STW	TAL CHI
Total/NA	Prep	3510C			505695	09/19/19 09:17	DAK	TAL CHI
Total/NA	Analysis	8270D		1	506182	09/22/19 23:16	NRJ	TAL CHI
Dissolved	Prep	3005A			507443	09/30/19 08:47	BDE	TAL CHI
Dissolved	Analysis	6020A		1	507668	09/30/19 17:59	FXG	TAL CHI
Dissolved	Prep	7470A			506716	09/25/19 10:00	MJG	TAL CHI
Dissolved	Analysis	7470A		1	506918	09/26/19 09:26	MJG	TAL CHI

Client Sample ID: DUP-02

Lab Sample ID: 500-170172-20
Date Collected: 09/13/19 15:35
Matrix: Water
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506948	09/27/19 07:42	STW	TAL CHI
Total/NA	Prep	3510C			505695	09/19/19 09:17	DAK	TAL CHI
Total/NA	Analysis	8270D		1	506182	09/22/19 23:38	NRJ	TAL CHI
Dissolved	Prep	3005A			507443	09/30/19 08:47	BDE	TAL CHI
Dissolved	Analysis	6020A		1	507668	09/30/19 18:01	FXG	TAL CHI
Dissolved	Prep	3005A			507721	10/01/19 10:24	BDE	TAL CHI
Dissolved	Analysis	6020A		1	507795	10/01/19 14:37	FXG	TAL CHI
Dissolved	Prep	7470A			506716	09/25/19 10:00	MJG	TAL CHI
Dissolved	Analysis	7470A		1	506918	09/26/19 09:28	MJG	TAL CHI

Client Sample ID: TW-2

Lab Sample ID: 500-170172-21
Date Collected: 09/13/19 16:40
Matrix: Water
Date Received: 09/17/19 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506948	09/27/19 05:25	STW	TAL CHI
Total/NA	Prep	3510C			505695	09/19/19 09:17	DAK	TAL CHI
Total/NA	Analysis	8270D		1	506182	09/23/19 00:01	NRJ	TAL CHI
Dissolved	Prep	3005A			507443	09/30/19 08:47	BDE	TAL CHI
Dissolved	Analysis	6020A		1	507668	09/30/19 18:02	FXG	TAL CHI
Dissolved	Prep	7470A			506716	09/25/19 10:00	MJG	TAL CHI
Dissolved	Analysis	7470A		1	506918	09/26/19 09:29	MJG	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: West Bend Brewery - 193706313

Job ID: 500-170172-1

Client Sample ID: TB-01 (Trip Blank)
Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: TB-01 (Trip Blank)
Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-22
Matrix: Solid
Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			506135	09/13/19 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	506947	09/27/19 07:15	STW	TAL CHI

Client Sample ID: TB-02 (Trip Blank)
Date Collected: 09/13/19 00:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506948	09/27/19 05:52	STW	TAL CHI

Client Sample ID: SB-3 (5-6)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	506658	09/25/19 08:34	LWN	TAL CHI

Client Sample ID: SB-3 (5-6)
Date Collected: 09/13/19 11:00
Date Received: 09/17/19 08:40

Lab Sample ID: 500-170172-24
Matrix: Solid
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			507016	09/26/19 21:38	JP1	TAL CHI
Total/NA	Analysis	8270D		1	507073	09/27/19 17:21	AJD	TAL CHI
Total/NA	Prep	3050B			507723	10/01/19 10:32	BDE	TAL CHI
Total/NA	Analysis	6010B		1	508029	10/02/19 11:06	EEN	TAL CHI
Total/NA	Prep	7471A			506912	09/26/19 14:35	MJG	TAL CHI
Total/NA	Analysis	7471A		1	507131	09/27/19 09:03	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Stantec Consulting Corp. Job ID: 500-170172-1
Project/Site: West Bend Brewery - 193706313

Laboratory: Eurofins TestAmerica, Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-30-20
Georgia	State Program	N/A	04-30-20
Georgia (DW)	State	939	04-30-20
Hawaii	State	NA	04-30-20
Illinois	NELAP	IL00035	04-30-20
Indiana	State	C-IL-02	04-30-20
Iowa	State	082	05-01-20
Kansas	NELAP	E-10161	10-31-19
Kentucky (UST)	State	AI # 108083	04-30-20
Kentucky (UST)	State Program	66	04-30-20
Kentucky (WW)	State	KY90023	12-31-19
Louisiana	NELAP	02046	06-30-20
Mississippi	State	NA	04-30-20
New York	NELAP	12019	04-01-20
North Carolina (WW/SW)	State	291	12-31-19
North Dakota	State	R-194	04-30-20
Oklahoma	State	8908	08-31-20
South Carolina	State Program	77001	04-30-20
USDA	US Federal Programs	P330-18-00018	02-11-21
Wisconsin	State	999580010	08-31-20
Wyoming	State	8TMS-Q	04-30-20

Fredrick, Sandie

From: Simpson, Garrett <Garrett.Simpson@stantec.com>
Sent: Tuesday, September 17, 2019 3:42 PM
To: Fredrick, Sandie
Cc: Cull, Whitney; Gross, Erin
Subject: RE: Eurofins TestAmerica Sample Login Confirmation files from 500-170172 West Bend Brewery - 193706313 QUESTION

-External Email-

Hi Sandie,

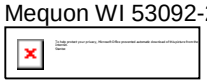
The sample from SB-3 must have been mislabeled. The correct label for the 8oz soil jar should be SB-3(5-6) and not SB-3(1-3).

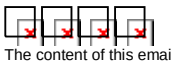
Sorry for the confusion, thanks!

Garrett Simpson
Geologic Staff

Direct: 262 643-9114
Mobile: 317 410-9228
Garrett.Simpson@stantec.com

Stantec
12075 Corporate Parkway Suite 200
Mequon WI 53092-2649





From: Gross, Erin <Erin.Gross@stantec.com>
Sent: Tuesday, September 17, 2019 3:32 PM
To: Simpson, Garrett <Garrett.Simpson@stantec.com>
Cc: Cull, Whitney <Whitney.Cull@stantec.com>
Subject: FW: Eurofins TestAmerica Sample Login Confirmation files from 500-170172 West Bend Brewery - 193706313 QUESTION

Hey guys,

Can you help troubleshoot?
"Didn't receive sample SB-3 (5-6), we received an 8oz with ID of SB-3 (1-3) and time of 1100, should it be SB-3 (5-6)?"

Feel free to respond directly to Sandie and just CC me in the response.

Thanks!

Erin Gross P.G.

Staff Geologist

Direct (Mequon office): 262-649-9110
Direct (Cottage Grove office): 608-839-2050
Mobile: 608-628-6278
Erin.Gross@stantec.com

Stantec
12075 Corporate Parkway Suite 200
Mequon WI 53092-2649

From: Sandie Fredrick <sandie.fredrick@testamericainc.com>
Sent: Tuesday, September 17, 2019 3:25 PM
To: Gross, Erin <Erin.Gross@stantec.com>
Subject: Eurofins TestAmerica Sample Login Confirmation files from 500-170172 West Bend Brewery - 193706313 QUESTION

Hello Erin,

FYI - See below and let me know please.

Narrative: Didn't receive sample SB-3 (5-6), we received an 8oz with ID of SB-3 (1-3) and time of 1100, should it be SB-3 (5-6)?

Attached, please find the Sample Confirmation files for job 500-170172; West Bend Brewery - 193706313

Please feel free to contact me if you have any questions.

Thank you.

Sandie Fredrick
Project Manager

Eurofins TestAmerica, Chicago
Phone: 920-261-1660

E-mail: sandie.fredrick@testamericainc.com
www.eurofinsus.com | www.testamericainc.com

Reference: [500-491658]
Attachments: 3

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: Project Feedback

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Garrett Simpson	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-74819-34848.1
Client Contact: Erin Gross	Phone: 262-643-9114	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 1 of 3
Company: Stantec Consulting Corp.				Job #: 500-170172

Address: 12075 Corporate Pkwy, Suite 200
City: Mequon
State, Zip: WI, 53092
Phone:
Email: erin.gross@stantec.com
Project Name: West Bend Brewery 193706313
Site:

500-170172 COC

Due Date Requested: —
TAT Requested (days): Standard
PO #: 193706313
WO #:
Project #: 50006565
SSOW#:

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC	PAH / RCRA	Total Number of containers	Special Instructions/Note:
				Preservation Code:				F	N		
1	SB-1 (2-4)	9/13/19	0950	G	Solid	-	N		X	1	
2	SB-1 (6-8)	9/13/19	0950	G	Solid	-	N	X		2	
3	SB-2 (0.5-3)	9/13/19	1020	G	Solid	-	N	X		2	
4	SB-2 (3-4)	9/13/19	1015	G	Solid	-	N		X	1	
5	SB-3 (1-3)	9/13/19	1100	G	Solid	-	N	X		2	
24	SB-3 (5-6)	9/13/19	1100	G	Solid	-	N		X	1	
6	SB-4 (2-4)	9/13/19	1140	G	Solid	-	N	X	X	6	
7	SB-5 (2-4)	9/13/19	1155	G	Solid	-	N	X	X	3	
8	SB-6 (5-6)	9/13/19	1300	G	Solid	-	N	X	X	3	
9	DUP-01	9/13/19	1301	G	Solid	-	N	X	X	3	
10	SB-7 (0.5-1.5)	9/13/19	1400	G	Solid	-	N		X	1	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: —

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Garrett Simpson	9/16/19	Stantec	Fed Ex	9/16/19	
2					9/17/19 0840	TT-ONT
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.3 → 0.7

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Garrett Simpson	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-74819-34848.2
Client Contact: Erin Gross	Phone: 262-643-9114	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 2 of 3
Company: Stantec Consulting Corp.				Job #: 500-170172

Address: 12075 Corporate Pkwy, Suite 200	Due Date Requested:	
City: Mequon	TAT Requested (days): Standard	
State, Zip: WI, 53092		
Phone:	PO #: 193706313	
Email: erin.gross@stantec.com	WO #:	
Project Name: West Bend Brewery 193706313	Project #: 50006565	
Site:	SSOW#:	

Analysis Requested

Preservation Codes:
(A) HCL, (B) NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, (F) MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, (N) None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC	PAH /RCRA	VOC	PAH	RCRA	Total Number of containers	Special Instructions/Note:
				Preservation Code:				F	N	A	N	B		
11	SB-7(13.5-14.5)	9/13/19	1400	G	Solid	-	N	X					2	
12	SB-8(2-3)	9/13/19	1515	G	Solid	-	N	X					2	
13	SB-8(3-4)	9/13/19	1515	G	Solid	-	N		X				1	
14	SB-9(1-3)	9/13/19	1520	G	Solid	-	N	X	X				3	
15	SB-10(2-4)	9/13/19	1525	G	Solid	-	N	X	X				3	
16	SB-11(2-4)	9/13/19	1630	G	Solid	-	N	X	X				3	
17	SB-12(3-4)	9/13/19	1645	G	Solid	-	N	X	X				3	
18	SB-13(2-4)	9/13/19	1650	G	Solid	-	N	X	X				3	
19	TW-1	9/13/19	1525	G	Water	Y	N	[redacted]	[redacted]	X	X	X	6	Only RCRA Metals were field
20	DUP-02	9/13/19	1535	G	Water	Y	N	[redacted]	[redacted]	X	X	X	6	filtered
21	TW-2	9/13/19	1640	G	Water	Y	N	[redacted]	[redacted]	X	X	X	6	—

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Garrett Simpson	Date/Time: 9/16/19 1600	Company: Stantec	Received by: FedEx
Relinquished by:	Date/Time:	Company:	Received by: Shirl Scott
Relinquished by:	Date/Time:	Company:	Received by:

Received by: FedEx	Date/Time: 9/16/19	Company		
Received by: Shirl Scott	Date/Time: 9/17/19 0800	Company DA-ETL		
Received by:	Date/Time:	Company		

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Garrett Simpson	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-74819-34848.3
Client Contact: Erin Gross	Phone: 262-643-9114	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 3 of 3
Company: Stantec Consulting Corp.				Job #: 500-170172

Address: 12075 Corporate Pkwy, Suite 200	Due Date Requested:
City: Mequon	TAT Requested (days): Standard
State, Zip: WI, 53092	
Phone:	PO #: 193706313
Email: erin.gross@stantec.com	WO #:
Project Name: West Bend Brewery 193706313	Project #: 50006565
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC	VOC	Total Number of containers	Special Instructions/Note:
				Preservation Code:				A	F		
22	TB-01 (trip blank)	—	—	—	~~Soil~~ Water	—	N		X		
23	TB-02 (trip blank)	—	—	—	Water	—	N	X			
					Water						
					Water						
					Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Garrett Simpson	Date/Time: 9/16/19 1600	Company: Stantec	Received by: Fed Ex	Date/Time: 9/16/19	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9/17/19 0840	Company TA-Chi
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

ORIGIN ID:RRLA (262) 202-5955
HARRIS BYERS
STANTEC CONSULTING
12075 CORPORATE PARKWAY

MEQUON, WI 53092
UNITED STATES US

SHIP DATE: 27AUG19
ACTWGT: 25.00 LB MAN
CAD: 525155/CAFE3211

TO

TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484-3101

(708) 534-5200 REF:

INV:
PO: DEPT:

FedEx Express

TUE - 17 SEP 10:30A
PRIORITY OVERNIGHT

7125 4940 7540

79 JOTA

60484
IL-US
ORD

FID 730145 16SEP19 MKEA 668C1/9D04/0C8A

500-170172 Waybill

480

Login Sample Receipt Checklist

Client: Stantec Consulting Corp. Job Number: 500-170172-1

Login Number: 170172 **List Source: Eurofins TestAmerica, Chicago**
List Number: 1
Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	0.7
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.	False	Refer to Job Narrative for details.
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-191456-1
Client Project/Site: WB Brew - 193707897

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Erin Gross

Authorized for release by:
11/30/2020 2:50:15 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Job ID: 500-191456-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-191456-1

Comments
No additional comments.

Receipt
The samples were received on 11/20/2020 9:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9º C.

Receipt Exceptions
Did not receive PAH bottles for sample 3. Received all bottles for sample 9 with ID of MW-8, logged per COC.

GC/MS VOA
Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: TW-7 (500-191456-8). Elevated reporting limits (RLs) are provided.

Method 8260B: Methylene chloride was detected in the following samples: TW-9 (500-191456-1), DUP 1 (500-191456-2), TW-3 (500-191456-3), TW-3 (500-191456-3[MS]), TW-3 (500-191456-3[MSD]), TW-5 (500-191456-5), TW-5 (500-191456-5[MS]), TW-5 (500-191456-5[MSD]), TW-6 (500-191456-7), TW-6 (500-191456-7[MS]), TW-6 (500-191456-7[MSD]) and Trip-HCL (500-191456-11). The method blanks associated with these samples was below the reporting limit for Methylene chloride. Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

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

GC/MS Semi VOA
Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 500-573716 and analytical batch 500-573752 were outside control limits. Sample matrix interference are suspected because the associated laboratory control sample (LCS) recoveries was within acceptance limits.

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

Metals
Method 6020A: The continuing calibration verification (CCV) associated with batch 500-573771 recovered above the upper control limit for Chromium.The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-9 — Lab Sample ID: 500-191456-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.1	J	5.0	1.6	ug/L	1		8260B	Total/NA
Toluene	0.18	J	0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: DUP 1 — Lab Sample ID: 500-191456-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.9	J	5.0	1.6	ug/L	1		8260B	Total/NA
Toluene	0.15	J	0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: TW-3 — Lab Sample ID: 500-191456-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.0	J	5.0	1.6	ug/L	1		8260B	Total/NA
Tetrachloroethene	6.4		1.0	0.37	ug/L	1		8260B	Total/NA
Toluene	0.17	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethene	0.17	J	0.50	0.16	ug/L	1		8260B	Total/NA
Arsenic	0.0046		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.19		0.0025	0.00073	mg/L	1		6020A	Dissolved
Cadmium	0.00017	J	0.00050	0.00017	mg/L	1		6020A	Dissolved
Chromium	0.015		0.0050	0.0011	mg/L	1		6020A	Dissolved
Lead	0.0065		0.00050	0.00019	mg/L	1		6020A	Dissolved
Selenium	0.0031		0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: DUP 2 — Lab Sample ID: 500-191456-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0026		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.16		0.0025	0.00073	mg/L	1		6020A	Dissolved
Chromium	0.0095		0.0050	0.0011	mg/L	1		6020A	Dissolved
Lead	0.0036		0.00050	0.00019	mg/L	1		6020A	Dissolved
Selenium	0.0026		0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: TW-5 — Lab Sample ID: 500-191456-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.1	J	5.0	1.6	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.46	J	1.0	0.37	ug/L	1		8260B	Total/NA
Arsenic	0.0011		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.23		0.0025	0.00073	mg/L	1		6020A	Dissolved
Lead	0.00079		0.00050	0.00019	mg/L	1		6020A	Dissolved
Selenium	0.0015	J	0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: DUP 3 — Lab Sample ID: 500-191456-6

No Detections.

Client Sample ID: TW-6 — Lab Sample ID: 500-191456-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.1	J	5.0	1.6	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.62	J	1.0	0.37	ug/L	1		8260B	Total/NA
Toluene	0.37	J	0.50	0.15	ug/L	1		8260B	Total/NA
Trichloroethene	0.23	J	0.50	0.16	ug/L	1		8260B	Total/NA
Arsenic	0.0010		0.0010	0.00023	mg/L	1		6020A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-6 (Continued) — Lab Sample ID: 500-191456-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14		0.0025	0.00073	mg/L	1		6020A	Dissolved
Selenium	0.0014	J	0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: TW-7 — Lab Sample ID: 500-191456-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	13		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	48		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	50		0.50	0.15	ug/L	1		8260B	Total/NA
Isopropylbenzene	44		1.0	0.39	ug/L	1		8260B	Total/NA
n-Butylbenzene	23		1.0	0.39	ug/L	1		8260B	Total/NA
N-Propylbenzene	120		1.0	0.41	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	5.7		1.0	0.36	ug/L	1		8260B	Total/NA
sec-Butylbenzene	11		1.0	0.40	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.95	J	1.0	0.40	ug/L	1		8260B	Total/NA
Toluene	41		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	180		1.0	0.22	ug/L	1		8260B	Total/NA
Ethylbenzene - DL	290		5.0	1.8	ug/L	10		8260B	Total/NA
Naphthalene - DL	150		10	3.4	ug/L	10		8260B	Total/NA
Arsenic	0.0072		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.24		0.0025	0.00073	mg/L	1		6020A	Dissolved
Chromium	0.018		0.0050	0.0011	mg/L	1		6020A	Dissolved
Lead	0.011		0.00050	0.00019	mg/L	1		6020A	Dissolved
Selenium	0.0015	J	0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: TW-8 — Lab Sample ID: 500-191456-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0013		0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.11		0.0025	0.00073	mg/L	1		6020A	Dissolved
Selenium	0.0026		0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: TW-4 — Lab Sample ID: 500-191456-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.31	J	0.50	0.15	ug/L	1		8260B	Total/NA
Toluene	0.60		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	0.27	J	1.0	0.22	ug/L	1		8260B	Total/NA
Arsenic	0.00079	J	0.0010	0.00023	mg/L	1		6020A	Dissolved
Barium	0.15		0.0025	0.00073	mg/L	1		6020A	Dissolved
Lead	0.00024	J	0.00050	0.00019	mg/L	1		6020A	Dissolved
Selenium	0.0026		0.0025	0.00098	mg/L	1		6020A	Dissolved

Client Sample ID: Trip-HCL — Lab Sample ID: 500-191456-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.3	J	5.0	1.6	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-191456-1	TW-9	Water	11/18/20 08:45	11/20/20 09:40	
500-191456-2	DUP 1	Water	11/18/20 08:47	11/20/20 09:40	
500-191456-3	TW-3	Water	11/18/20 11:10	11/20/20 09:40	
500-191456-4	DUP 2	Water	11/18/20 11:13	11/20/20 09:40	
500-191456-5	TW-5	Water	11/18/20 13:10	11/20/20 09:40	
500-191456-6	DUP 3	Water	11/18/20 13:12	11/20/20 09:40	
500-191456-7	TW-6	Water	11/18/20 13:35	11/20/20 09:40	
500-191456-8	TW-7	Water	11/18/20 05:50	11/20/20 09:40	
500-191456-9	TW-8	Water	11/18/20 17:05	11/20/20 09:40	
500-191456-10	TW-4	Water	11/18/20 17:25	11/20/20 09:40	
500-191456-11	Trip-HCL	Water	11/18/20 00:00	11/20/20 09:40	

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-9
Date Collected: 11/18/20 08:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 14:23	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 14:23	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 14:23	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 14:23	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 14:23	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 14:23	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 14:23	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 14:23	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 14:23	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 14:23	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 14:23	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 14:23	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 14:23	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:23	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 14:23	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 14:23	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 14:23	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 14:23	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 14:23	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 14:23	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 14:23	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 14:23	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 14:23	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 14:23	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 14:23	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 14:23	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 14:23	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 14:23	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 14:23	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 14:23	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 14:23	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 14:23	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 14:23	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 14:23	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
Methylene Chloride	**4.1**	**J**	5.0	1.6	ug/L			11/27/20 14:23	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 14:23	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 14:23	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-9
Date Collected: 11/18/20 08:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:23	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 14:23	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:23	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/27/20 14:23	1
Toluene	**0.18**	**J**	0.50	0.15	ug/L			11/27/20 14:23	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 14:23	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 14:23	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 14:23	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 14:23	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 14:23	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 126*		*11/27/20 14:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*		*11/27/20 14:23*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 120*		*11/27/20 14:23*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/27/20 14:23*	*1*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: DUP 1
Date Collected: 11/18/20 08:47
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 14:49	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 14:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 14:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 14:49	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 14:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 14:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 14:49	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 14:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 14:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 14:49	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 14:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 14:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 14:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:49	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 14:49	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 14:49	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 14:49	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 14:49	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 14:49	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 14:49	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 14:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 14:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 14:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 14:49	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 14:49	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 14:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 14:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 14:49	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 14:49	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 14:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 14:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 14:49	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 14:49	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 14:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
Methylene Chloride	**3.9**	**J**	5.0	1.6	ug/L			11/27/20 14:49	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 14:49	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 14:49	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: DUP 1
Date Collected: 11/18/20 08:47
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:49	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 14:49	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 14:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/27/20 14:49	1
Toluene	**0.15**	**J**	0.50	0.15	ug/L			11/27/20 14:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 14:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 14:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 14:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 14:49	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 14:49	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*75 - 126*		*11/27/20 14:49*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*		*11/27/20 14:49*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 120*		*11/27/20 14:49*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/27/20 14:49*	*1*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-3
Date Collected: 11/18/20 11:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 15:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 15:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 15:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 15:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 15:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 15:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 15:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 15:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 15:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 15:16	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 15:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 15:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 15:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 15:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 15:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 15:16	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 15:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 15:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 15:16	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 15:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 15:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 15:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
Chloroethane	<0.51	F1	1.0	0.51	ug/L			11/27/20 15:16	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 15:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 15:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 15:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 15:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 15:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 15:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 15:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 15:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 15:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 15:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
Methylene Chloride	**4.0**	**J**	5.0	1.6	ug/L			11/27/20 15:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 15:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 15:16	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-3

Date Collected: 11/18/20 11:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:16	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 15:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:16	1
Tetrachloroethene	**6.4**		1.0	0.37	ug/L			11/27/20 15:16	1
Toluene	**0.17**	**J**	0.50	0.15	ug/L			11/27/20 15:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 15:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 15:16	1
Trichloroethene	**0.17**	**J**	0.50	0.16	ug/L			11/27/20 15:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 15:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 15:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 126*		*11/27/20 15:16*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*		*11/27/20 15:16*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 120*		*11/27/20 15:16*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*11/27/20 15:16*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0046**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 19:28	1
Barium	**0.19**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 19:28	1
Cadmium	**0.00017**	**J**	0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 19:28	1
Chromium	**0.015**		0.0050	0.0011	mg/L		11/20/20 18:26	11/25/20 13:11	1
Lead	**0.0065**		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 19:28	1
Selenium	**0.0031**		0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 19:28	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 19:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:15	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: DUP 2

Date Collected: 11/18/20 11:13
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-4

Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0026**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 19:32	1
Barium	**0.16**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 19:32	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 19:32	1
Chromium	**0.0095**		0.0050	0.0011	mg/L		11/20/20 18:26	11/25/20 13:15	1
Lead	**0.0036**		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 19:32	1
Selenium	**0.0026**		0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 19:32	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 19:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:17	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-5
Date Collected: 11/18/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 15:43	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 15:43	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 15:43	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 15:43	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 15:43	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 15:43	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 15:43	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 15:43	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 15:43	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 15:43	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 15:43	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 15:43	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 15:43	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:43	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 15:43	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 15:43	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 15:43	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 15:43	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 15:43	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 15:43	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 15:43	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 15:43	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 15:43	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 15:43	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 15:43	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 15:43	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 15:43	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 15:43	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 15:43	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 15:43	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 15:43	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 15:43	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 15:43	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 15:43	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
Methylene Chloride	**4.1**	**J**	5.0	1.6	ug/L			11/27/20 15:43	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 15:43	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 15:43	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1

Client Sample ID: TW-5

Date Collected: 11/18/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:43	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 15:43	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 15:43	1
Tetrachloroethene	**0.46**	**J**	1.0	0.37	ug/L			11/27/20 15:43	1
Toluene	<0.15		0.50	0.15	ug/L			11/27/20 15:43	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 15:43	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 15:43	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 15:43	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 15:43	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 15:43	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 126*		*11/27/20 15:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*		*11/27/20 15:43*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 120*		*11/27/20 15:43*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/27/20 15:43*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.25		1.6	0.25	ug/L		11/24/20 07:31	11/24/20 15:32	1
2-Methylnaphthalene	<0.053		1.6	0.053	ug/L		11/24/20 07:31	11/24/20 15:32	1
Acenaphthene	<0.25		0.82	0.25	ug/L		11/24/20 07:31	11/24/20 15:32	1
Acenaphthylene	<0.22		0.82	0.22	ug/L		11/24/20 07:31	11/24/20 15:32	1
Anthracene	<0.27		0.82	0.27	ug/L		11/24/20 07:31	11/24/20 15:32	1
Benzo[a]anthracene	<0.046		0.16	0.046	ug/L		11/24/20 07:31	11/24/20 15:32	1
Benzo[a]pyrene	<0.081		0.16	0.081	ug/L		11/24/20 07:31	11/24/20 15:32	1
Benzo[b]fluoranthene	<0.066		0.16	0.066	ug/L		11/24/20 07:31	11/24/20 15:32	1
Benzo[g,h,i]perylene	<0.31		0.82	0.31	ug/L		11/24/20 07:31	11/24/20 15:32	1
Benzo[k]fluoranthene	<0.052		0.16	0.052	ug/L		11/24/20 07:31	11/24/20 15:32	1
Chrysene	<0.056		0.16	0.056	ug/L		11/24/20 07:31	11/24/20 15:32	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		11/24/20 07:31	11/24/20 15:32	1
Fluoranthene	<0.37		0.82	0.37	ug/L		11/24/20 07:31	11/24/20 15:32	1
Fluorene	<0.20		0.82	0.20	ug/L		11/24/20 07:31	11/24/20 15:32	1
Indeno[1,2,3-cd]pyrene	<0.061		0.16	0.061	ug/L		11/24/20 07:31	11/24/20 15:32	1
Naphthalene	<0.25		0.82	0.25	ug/L		11/24/20 07:31	11/24/20 15:32	1
Phenanthrene	<0.25		0.82	0.25	ug/L		11/24/20 07:31	11/24/20 15:32	1
Pyrene	<0.35		0.82	0.35	ug/L		11/24/20 07:31	11/24/20 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*34 - 110*	*11/24/20 07:31*	*11/24/20 15:32*	*1*
Nitrobenzene-d5 (Surr)	*61*		*36 - 120*	*11/24/20 07:31*	*11/24/20 15:32*	*1*
Terphenyl-d14 (Surr)	*106*		*40 - 145*	*11/24/20 07:31*	*11/24/20 15:32*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0011**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 19:35	1
Barium	**0.23**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 19:35	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 19:35	1
Chromium	<0.0011	^	0.0050	0.0011	mg/L		11/20/20 18:26	11/23/20 19:35	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-5
Date Collected: 11/18/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00079		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 19:35	1
Selenium	0.0015	J	0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 19:35	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 19:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:19	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: DUP 3

Date Collected: 11/18/20 13:12
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-6

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		11/24/20 07:31	11/24/20 15:59	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		11/24/20 07:31	11/24/20 15:59	1
Acenaphthene	<0.25		0.80	0.25	ug/L		11/24/20 07:31	11/24/20 15:59	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		11/24/20 07:31	11/24/20 15:59	1
Anthracene	<0.27		0.80	0.27	ug/L		11/24/20 07:31	11/24/20 15:59	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		11/24/20 07:31	11/24/20 15:59	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		11/24/20 07:31	11/24/20 15:59	1
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		11/24/20 07:31	11/24/20 15:59	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		11/24/20 07:31	11/24/20 15:59	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		11/24/20 07:31	11/24/20 15:59	1
Chrysene	<0.055		0.16	0.055	ug/L		11/24/20 07:31	11/24/20 15:59	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		11/24/20 07:31	11/24/20 15:59	1
Fluoranthene	<0.36		0.80	0.36	ug/L		11/24/20 07:31	11/24/20 15:59	1
Fluorene	<0.20		0.80	0.20	ug/L		11/24/20 07:31	11/24/20 15:59	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		11/24/20 07:31	11/24/20 15:59	1
Naphthalene	<0.25		0.80	0.25	ug/L		11/24/20 07:31	11/24/20 15:59	1
Phenanthrene	<0.24		0.80	0.24	ug/L		11/24/20 07:31	11/24/20 15:59	1
Pyrene	<0.34		0.80	0.34	ug/L		11/24/20 07:31	11/24/20 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*34 - 110*	*11/24/20 07:31*	*11/24/20 15:59*	*1*
Nitrobenzene-d5 (Surr)	*53*		*36 - 120*	*11/24/20 07:31*	*11/24/20 15:59*	*1*
Terphenyl-d14 (Surr)	*100*		*40 - 145*	*11/24/20 07:31*	*11/24/20 15:59*	*1*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-6
Date Collected: 11/18/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 16:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 16:09	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 16:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 16:09	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 16:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 16:09	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 16:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 16:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 16:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 16:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 16:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 16:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 16:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 16:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 16:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 16:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 16:09	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 16:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 16:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 16:09	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 16:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 16:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 16:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 16:09	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 16:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 16:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 16:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 16:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 16:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 16:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 16:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 16:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 16:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 16:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
Methylene Chloride	**4.1**	**J**	5.0	1.6	ug/L			11/27/20 16:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 16:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 16:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1

Client Sample ID: TW-6

Date Collected: 11/18/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 16:09	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 16:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 16:09	1
Tetrachloroethene	**0.62**	**J**	1.0	0.37	ug/L			11/27/20 16:09	1
Toluene	**0.37**	**J**	0.50	0.15	ug/L			11/27/20 16:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 16:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 16:09	1
Trichloroethene	**0.23**	**J**	0.50	0.16	ug/L			11/27/20 16:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 16:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 16:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*75 - 126*		*11/27/20 16:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*		*11/27/20 16:09*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 120*		*11/27/20 16:09*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/27/20 16:09*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.24	F1 F2	1.6	0.24	ug/L		11/24/20 07:31	11/24/20 16:25	1
2-Methylnaphthalene	<0.052	F1 F2	1.6	0.052	ug/L		11/24/20 07:31	11/24/20 16:25	1
Acenaphthene	<0.25	F1	0.79	0.25	ug/L		11/24/20 07:31	11/24/20 16:25	1
Acenaphthylene	<0.21	F1	0.79	0.21	ug/L		11/24/20 07:31	11/24/20 16:25	1
Anthracene	<0.27		0.79	0.27	ug/L		11/24/20 07:31	11/24/20 16:25	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		11/24/20 07:31	11/24/20 16:25	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		11/24/20 07:31	11/24/20 16:25	1
Benzo[b]fluoranthene	<0.064	F2	0.16	0.064	ug/L		11/24/20 07:31	11/24/20 16:25	1
Benzo[g,h,i]perylene	<0.30		0.79	0.30	ug/L		11/24/20 07:31	11/24/20 16:25	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		11/24/20 07:31	11/24/20 16:25	1
Chrysene	<0.054		0.16	0.054	ug/L		11/24/20 07:31	11/24/20 16:25	1
Dibenz(a,h)anthracene	<0.040		0.24	0.040	ug/L		11/24/20 07:31	11/24/20 16:25	1
Fluoranthene	<0.36		0.79	0.36	ug/L		11/24/20 07:31	11/24/20 16:25	1
Fluorene	<0.19	F1	0.79	0.19	ug/L		11/24/20 07:31	11/24/20 16:25	1
Indeno[1,2,3-cd]pyrene	<0.059		0.16	0.059	ug/L		11/24/20 07:31	11/24/20 16:25	1
Naphthalene	<0.25	F1	0.79	0.25	ug/L		11/24/20 07:31	11/24/20 16:25	1
Phenanthrene	<0.24		0.79	0.24	ug/L		11/24/20 07:31	11/24/20 16:25	1
Pyrene	<0.34		0.79	0.34	ug/L		11/24/20 07:31	11/24/20 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*34 - 110*	*11/24/20 07:31*	*11/24/20 16:25*	*1*
Nitrobenzene-d5 (Surr)	*47*		*36 - 120*	*11/24/20 07:31*	*11/24/20 16:25*	*1*
Terphenyl-d14 (Surr)	*81*		*40 - 145*	*11/24/20 07:31*	*11/24/20 16:25*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0010**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 19:59	1
Barium	**0.14**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 19:59	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 19:59	1
Chromium	<0.0011	^	0.0050	0.0011	mg/L		11/20/20 18:26	11/23/20 19:59	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-6
Date Collected: 11/18/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-7
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00019		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 19:59	1
Selenium	**0.0014**	**J**	0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 19:59	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 19:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:28	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-7
Date Collected: 11/18/20 05:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 16:36	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 16:36	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 16:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 16:36	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 16:36	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 16:36	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 16:36	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 16:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 16:36	1
1,2,4-Trimethylbenzene	**13**		1.0	0.36	ug/L			11/27/20 16:36	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 16:36	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 16:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 16:36	1
1,3,5-Trimethylbenzene	**48**		1.0	0.25	ug/L			11/27/20 16:36	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 16:36	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 16:36	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 16:36	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 16:36	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 16:36	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 16:36	1
Benzene	**50**		0.50	0.15	ug/L			11/27/20 16:36	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 16:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 16:36	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 16:36	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 16:36	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 16:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 16:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 16:36	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 16:36	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 16:36	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 16:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 16:36	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 16:36	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 16:36	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 16:36	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 16:36	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 16:36	1
Isopropylbenzene	**44**		1.0	0.39	ug/L			11/27/20 16:36	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/27/20 16:36	1
n-Butylbenzene	**23**		1.0	0.39	ug/L			11/27/20 16:36	1
N-Propylbenzene	**120**		1.0	0.41	ug/L			11/27/20 16:36	1
p-Isopropyltoluene	**5.7**		1.0	0.36	ug/L			11/27/20 16:36	1
sec-Butylbenzene	**11**		1.0	0.40	ug/L			11/27/20 16:36	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 16:36	1

Client Sample ID: TW-7

Date Collected: 11/18/20 05:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	**0.95**	**J**	1.0	0.40	ug/L			11/27/20 16:36	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/27/20 16:36	1
Toluene	**41**		0.50	0.15	ug/L			11/27/20 16:36	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 16:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 16:36	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 16:36	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 16:36	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 16:36	1
Xylenes, Total	**180**		1.0	0.22	ug/L			11/27/20 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*11/27/20 16:36*	*1*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*		*11/27/20 16:36*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 120*		*11/27/20 16:36*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/27/20 16:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**290**		5.0	1.8	ug/L			11/29/20 18:55	10
Naphthalene	**150**		10	3.4	ug/L			11/29/20 18:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*		*11/29/20 18:55*	*10*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*11/29/20 18:55*	*10*
Dibromofluoromethane (Surr)	*93*		*75 - 120*		*11/29/20 18:55*	*10*
Toluene-d8 (Surr)	*99*		*75 - 120*		*11/29/20 18:55*	*10*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0072**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 20:03	1
Barium	**0.24**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 20:03	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 20:03	1
Chromium	**0.018**		0.0050	0.0011	mg/L		11/20/20 18:26	11/25/20 13:18	1
Lead	**0.011**		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 20:03	1
Selenium	**0.0015**	**J**	0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 20:03	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 20:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:40	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-8

Date Collected: 11/18/20 17:05
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-9

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.26		1.7	0.26	ug/L		11/24/20 07:31	11/24/20 16:51	1
2-Methylnaphthalene	<0.057		1.7	0.057	ug/L		11/24/20 07:31	11/24/20 16:51	1
Acenaphthene	<0.27		0.87	0.27	ug/L		11/24/20 07:31	11/24/20 16:51	1
Acenaphthylene	<0.23		0.87	0.23	ug/L		11/24/20 07:31	11/24/20 16:51	1
Anthracene	<0.29		0.87	0.29	ug/L		11/24/20 07:31	11/24/20 16:51	1
Benzo[a]anthracene	<0.049		0.17	0.049	ug/L		11/24/20 07:31	11/24/20 16:51	1
Benzo[a]pyrene	<0.086		0.17	0.086	ug/L		11/24/20 07:31	11/24/20 16:51	1
Benzo[b]fluoranthene	<0.070		0.17	0.070	ug/L		11/24/20 07:31	11/24/20 16:51	1
Benzo[g,h,i]perylene	<0.33		0.87	0.33	ug/L		11/24/20 07:31	11/24/20 16:51	1
Benzo[k]fluoranthene	<0.056		0.17	0.056	ug/L		11/24/20 07:31	11/24/20 16:51	1
Chrysene	<0.059		0.17	0.059	ug/L		11/24/20 07:31	11/24/20 16:51	1
Dibenz(a,h)anthracene	<0.044		0.26	0.044	ug/L		11/24/20 07:31	11/24/20 16:51	1
Fluoranthene	<0.40		0.87	0.40	ug/L		11/24/20 07:31	11/24/20 16:51	1
Fluorene	<0.21		0.87	0.21	ug/L		11/24/20 07:31	11/24/20 16:51	1
Indeno[1,2,3-cd]pyrene	<0.065		0.17	0.065	ug/L		11/24/20 07:31	11/24/20 16:51	1
Naphthalene	<0.27		0.87	0.27	ug/L		11/24/20 07:31	11/24/20 16:51	1
Phenanthrene	<0.26		0.87	0.26	ug/L		11/24/20 07:31	11/24/20 16:51	1
Pyrene	<0.37		0.87	0.37	ug/L		11/24/20 07:31	11/24/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*34 - 110*	*11/24/20 07:31*	*11/24/20 16:51*	*1*
Nitrobenzene-d5 (Surr)	*56*		*36 - 120*	*11/24/20 07:31*	*11/24/20 16:51*	*1*
Terphenyl-d14 (Surr)	*107*		*40 - 145*	*11/24/20 07:31*	*11/24/20 16:51*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0013**		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 20:06	1
Barium	**0.11**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 20:06	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 20:06	1
Chromium	<0.0011	^	0.0050	0.0011	mg/L		11/20/20 18:26	11/23/20 20:06	1
Lead	<0.00019		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 20:06	1
Selenium	**0.0026**		0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 20:06	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 20:06	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:42	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-4
Date Collected: 11/18/20 17:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/30/20 13:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/30/20 13:19	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/30/20 13:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/30/20 13:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/30/20 13:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/30/20 13:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/30/20 13:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/30/20 13:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/30/20 13:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/30/20 13:19	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/30/20 13:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/30/20 13:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/30/20 13:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/30/20 13:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/30/20 13:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/30/20 13:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/30/20 13:19	1
Benzene	**0.31**	**J**	0.50	0.15	ug/L			11/30/20 13:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/30/20 13:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/30/20 13:19	1
Bromoform	<0.48		1.0	0.48	ug/L			11/30/20 13:19	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/30/20 13:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/30/20 13:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/30/20 13:19	1
Chloroform	<0.37		2.0	0.37	ug/L			11/30/20 13:19	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/30/20 13:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/30/20 13:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/30/20 13:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/30/20 13:19	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/30/20 13:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/30/20 13:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/30/20 13:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/30/20 13:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/30/20 13:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/30/20 13:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/30/20 13:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/30/20 13:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-4

Date Collected: 11/18/20 17:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/30/20 13:19	1
Styrene	<0.39		1.0	0.39	ug/L			11/30/20 13:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/30/20 13:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/30/20 13:19	1
Toluene	**0.60**		0.50	0.15	ug/L			11/30/20 13:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/30/20 13:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/30/20 13:19	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/30/20 13:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/30/20 13:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/30/20 13:19	1
Xylenes, Total	**0.27**	**J**	1.0	0.22	ug/L			11/30/20 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*11/30/20 13:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*11/30/20 13:19*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 120*		*11/30/20 13:19*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/30/20 13:19*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00079**	**J**	0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 20:10	1
Barium	**0.15**		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 20:10	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 20:10	1
Chromium	<0.0011	^	0.0050	0.0011	mg/L		11/20/20 18:26	11/23/20 20:10	1
Lead	**0.00024**	**J**	0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 20:10	1
Selenium	**0.0026**		0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 20:10	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 20:10	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:44	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: Trip-HCL
Date Collected: 11/18/20 00:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 13:56	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 13:56	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 13:56	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 13:56	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 13:56	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 13:56	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 13:56	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 13:56	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 13:56	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 13:56	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 13:56	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 13:56	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 13:56	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:56	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 13:56	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 13:56	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 13:56	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 13:56	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 13:56	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 13:56	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 13:56	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 13:56	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 13:56	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 13:56	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 13:56	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 13:56	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 13:56	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 13:56	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 13:56	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 13:56	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 13:56	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 13:56	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 13:56	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 13:56	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
Methylene Chloride	**4.3**	**J**	5.0	1.6	ug/L			11/27/20 13:56	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 13:56	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 13:56	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: Trip-HCL
Date Collected: 11/18/20 00:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:56	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 13:56	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/27/20 13:56	1
Toluene	<0.15		0.50	0.15	ug/L			11/27/20 13:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 13:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 13:56	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 13:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 13:56	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 13:56	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 126*		*11/27/20 13:56*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*		*11/27/20 13:56*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 120*		*11/27/20 13:56*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/27/20 13:56*	*1*

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

GC/MS VOA

Analysis Batch: 574166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-1	TW-9	Total/NA	Water	8260B	
500-191456-2	DUP 1	Total/NA	Water	8260B	
500-191456-3	TW-3	Total/NA	Water	8260B	
500-191456-5	TW-5	Total/NA	Water	8260B	
500-191456-7	TW-6	Total/NA	Water	8260B	
500-191456-8	TW-7	Total/NA	Water	8260B	
500-191456-11	Trip-HCL	Total/NA	Water	8260B	
MB 500-574166/6	Method Blank	Total/NA	Water	8260B	
LCS 500-574166/4	Lab Control Sample	Total/NA	Water	8260B	
500-191456-3 MS	TW-3	Total/NA	Water	8260B	
500-191456-3 MSD	TW-3	Total/NA	Water	8260B	

Analysis Batch: 574378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-8 - DL	TW-7	Total/NA	Water	8260B	
MB 500-574378/6	Method Blank	Total/NA	Water	8260B	
LCS 500-574378/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 574432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-10	TW-4	Total/NA	Water	8260B	
MB 500-574432/28	Method Blank	Total/NA	Water	8260B	
LCS 500-574432/5	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 573716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-5	TW-5	Total/NA	Water	3510C	
500-191456-6	DUP 3	Total/NA	Water	3510C	
500-191456-7	TW-6	Total/NA	Water	3510C	
500-191456-9	TW-8	Total/NA	Water	3510C	
MB 500-573716/1-A	Method Blank	Total/NA	Water	3510C	
LCS 500-573716/2-A	Lab Control Sample	Total/NA	Water	3510C	
500-191456-7 MS	TW-6	Total/NA	Water	3510C	
500-191456-7 MSD	TW-6	Total/NA	Water	3510C	

Analysis Batch: 573752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-5	TW-5	Total/NA	Water	8270D	573716
500-191456-6	DUP 3	Total/NA	Water	8270D	573716
500-191456-7	TW-6	Total/NA	Water	8270D	573716
500-191456-9	TW-8	Total/NA	Water	8270D	573716
MB 500-573716/1-A	Method Blank	Total/NA	Water	8270D	573716
LCS 500-573716/2-A	Lab Control Sample	Total/NA	Water	8270D	573716
500-191456-7 MS	TW-6	Total/NA	Water	8270D	573716
500-191456-7 MSD	TW-6	Total/NA	Water	8270D	573716

Metals

Prep Batch: 573374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-3	TW-3	Dissolved	Water	3005A	
500-191456-4	DUP 2	Dissolved	Water	3005A	
500-191456-5	TW-5	Dissolved	Water	3005A	
500-191456-7	TW-6	Dissolved	Water	3005A	
500-191456-8	TW-7	Dissolved	Water	3005A	
500-191456-9	TW-8	Dissolved	Water	3005A	
500-191456-10	TW-4	Dissolved	Water	3005A	
MB 500-573374/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-573374/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-191456-5 MS	TW-5	Dissolved	Water	3005A	
500-191456-5 MSD	TW-5	Dissolved	Water	3005A	
500-191456-5 DU	TW-5	Dissolved	Water	3005A	

Prep Batch: 573588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-3	TW-3	Dissolved	Water	7470A	
500-191456-4	DUP 2	Dissolved	Water	7470A	
500-191456-5	TW-5	Dissolved	Water	7470A	
500-191456-7	TW-6	Dissolved	Water	7470A	
500-191456-8	TW-7	Dissolved	Water	7470A	
500-191456-9	TW-8	Dissolved	Water	7470A	
500-191456-10	TW-4	Dissolved	Water	7470A	
MB 500-573588/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-573588/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-191456-5 MS	TW-5	Dissolved	Water	7470A	
500-191456-5 MSD	TW-5	Dissolved	Water	7470A	
500-191456-5 DU	TW-5	Dissolved	Water	7470A	

Analysis Batch: 573771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-3	TW-3	Dissolved	Water	6020A	573374
500-191456-4	DUP 2	Dissolved	Water	6020A	573374
500-191456-5	TW-5	Dissolved	Water	6020A	573374
500-191456-7	TW-6	Dissolved	Water	6020A	573374
500-191456-8	TW-7	Dissolved	Water	6020A	573374
500-191456-9	TW-8	Dissolved	Water	6020A	573374
500-191456-10	TW-4	Dissolved	Water	6020A	573374
MB 500-573374/1-A	Method Blank	Total Recoverable	Water	6020A	573374
LCS 500-573374/2-A	Lab Control Sample	Total Recoverable	Water	6020A	573374
500-191456-5 MS	TW-5	Dissolved	Water	6020A	573374
500-191456-5 MSD	TW-5	Dissolved	Water	6020A	573374
500-191456-5 DU	TW-5	Dissolved	Water	6020A	573374

Analysis Batch: 573782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-3	TW-3	Dissolved	Water	7470A	573588
500-191456-4	DUP 2	Dissolved	Water	7470A	573588
500-191456-5	TW-5	Dissolved	Water	7470A	573588
500-191456-7	TW-6	Dissolved	Water	7470A	573588
500-191456-8	TW-7	Dissolved	Water	7470A	573588
500-191456-9	TW-8	Dissolved	Water	7470A	573588

Metals (Continued)

Analysis Batch: 573782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-10	TW-4	Dissolved	Water	7470A	573588
MB 500-573588/12-A	Method Blank	Total/NA	Water	7470A	573588
LCS 500-573588/13-A	Lab Control Sample	Total/NA	Water	7470A	573588
500-191456-5 MS	TW-5	Dissolved	Water	7470A	573588
500-191456-5 MSD	TW-5	Dissolved	Water	7470A	573588
500-191456-5 DU	TW-5	Dissolved	Water	7470A	573588

Analysis Batch: 574090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191456-3	TW-3	Dissolved	Water	6020A	573374
500-191456-4	DUP 2	Dissolved	Water	6020A	573374
500-191456-8	TW-7	Dissolved	Water	6020A	573374

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-191456-1	TW-9	121	101	107	103
500-191456-2	DUP 1	123	103	105	102
500-191456-3	TW-3	122	101	107	101
500-191456-3 MS	TW-3	109	106	101	105
500-191456-3 MSD	TW-3	116	105	104	106
500-191456-5	TW-5	122	103	107	102
500-191456-7	TW-6	124	102	108	102
500-191456-8	TW-7	114	109	100	102
500-191456-8 - DL	TW-7	95	98	93	99
500-191456-10	TW-4	97	99	93	98
500-191456-11	Trip-HCL	120	105	106	102
LCS 500-574166/4	Lab Control Sample	112	94	101	105
LCS 500-574378/4	Lab Control Sample	89	100	90	100
LCS 500-574432/5	Lab Control Sample	95	98	94	98
MB 500-574166/6	Method Blank	122	104	107	101
MB 500-574378/6	Method Blank	97	99	92	99
MB 500-574432/28	Method Blank	93	99	90	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(34-110)	(36-120)	(40-145)
500-191456-5	TW-5	63	61	106
500-191456-6	DUP 3	62	53	100
500-191456-7	TW-6	55	47	81
500-191456-7 MS	TW-6	54	50	93
500-191456-7 MSD	TW-6	54	49	92
500-191456-9	TW-8	62	56	107
LCS 500-573716/2-A	Lab Control Sample	73	79	96
MB 500-573716/1-A	Method Blank	63	63	98

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-574166/6
Matrix: Water
Analysis Batch: 574166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/27/20 13:02	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/27/20 13:02	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/27/20 13:02	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/27/20 13:02	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/27/20 13:02	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/27/20 13:02	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/27/20 13:02	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/27/20 13:02	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/27/20 13:02	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/27/20 13:02	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/27/20 13:02	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/27/20 13:02	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/27/20 13:02	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:02	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/27/20 13:02	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/27/20 13:02	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/27/20 13:02	1
Benzene	<0.15		0.50	0.15	ug/L			11/27/20 13:02	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/27/20 13:02	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/27/20 13:02	1
Bromoform	<0.48		1.0	0.48	ug/L			11/27/20 13:02	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/27/20 13:02	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/27/20 13:02	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/27/20 13:02	1
Chloroform	<0.37		2.0	0.37	ug/L			11/27/20 13:02	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/27/20 13:02	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/27/20 13:02	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/27/20 13:02	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/27/20 13:02	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/27/20 13:02	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/27/20 13:02	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/27/20 13:02	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/27/20 13:02	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/27/20 13:02	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/27/20 13:02	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/27/20 13:02	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/27/20 13:02	1

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

Lab Sample ID: MB 500-574166/6
Matrix: Water
Analysis Batch: 574166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:02	1
Styrene	<0.39		1.0	0.39	ug/L			11/27/20 13:02	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/27/20 13:02	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/27/20 13:02	1
Toluene	<0.15		0.50	0.15	ug/L			11/27/20 13:02	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/27/20 13:02	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/27/20 13:02	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/27/20 13:02	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/27/20 13:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/27/20 13:02	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/27/20 13:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*75 - 126*		*11/27/20 13:02*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 124*		*11/27/20 13:02*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 120*		*11/27/20 13:02*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*11/27/20 13:02*	*1*

Lab Sample ID: LCS 500-574166/4
Matrix: Water
Analysis Batch: 574166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	46.0		ug/L		92	70 - 125
1,1,1-Trichloroethane	50.0	46.5		ug/L		93	70 - 125
1,1,2,2-Tetrachloroethane	50.0	40.5		ug/L		81	62 - 140
1,1,2-Trichloroethane	50.0	49.8		ug/L		100	71 - 130
1,1-Dichloroethane	50.0	47.2		ug/L		94	70 - 125
1,1-Dichloroethene	50.0	41.8		ug/L		84	67 - 122
1,1-Dichloropropene	50.0	46.9		ug/L		94	70 - 121
1,2,3-Trichlorobenzene	50.0	40.7		ug/L		81	51 - 145
1,2,3-Trichloropropane	50.0	50.5		ug/L		101	50 - 133
1,2,4-Trichlorobenzene	50.0	38.8		ug/L		78	57 - 137
1,2,4-Trimethylbenzene	50.0	46.1		ug/L		92	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	56 - 123
1,2-Dibromoethane	50.0	49.0		ug/L		98	70 - 125
1,2-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 125
1,2-Dichloroethane	50.0	53.4		ug/L		107	68 - 127
1,2-Dichloropropane	50.0	51.4		ug/L		103	67 - 130
1,3,5-Trimethylbenzene	50.0	44.8		ug/L		90	70 - 123
1,3-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 125
1,3-Dichloropropane	50.0	48.8		ug/L		98	62 - 136
1,4-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 120
2,2-Dichloropropane	50.0	50.5		ug/L		101	58 - 139
2-Chlorotoluene	50.0	41.6		ug/L		83	70 - 125
4-Chlorotoluene	50.0	45.4		ug/L		91	68 - 124
Benzene	50.0	44.6		ug/L		89	70 - 120

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

Lab Sample ID: LCS 500-574166/4
Matrix: Water
Analysis Batch: 574166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	43.9		ug/L		88	70 - 122
Bromochloromethane	50.0	46.3		ug/L		93	65 - 122
Bromodichloromethane	50.0	46.8		ug/L		94	69 - 120
Bromoform	50.0	46.6		ug/L		93	56 - 132
Bromomethane	50.0	36.7		ug/L		73	40 - 152
Carbon tetrachloride	50.0	45.5		ug/L		91	59 - 133
Chlorobenzene	50.0	48.6		ug/L		97	70 - 120
Chloroethane	50.0	64.8		ug/L		130	48 - 136
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	52.3		ug/L		105	56 - 152
cis-1,2-Dichloroethene	50.0	43.0		ug/L		86	70 - 125
cis-1,3-Dichloropropene	50.0	47.7		ug/L		95	64 - 127
Dibromochloromethane	50.0	47.9		ug/L		96	68 - 125
Dibromomethane	50.0	47.6		ug/L		95	70 - 120
Dichlorodifluoromethane	50.0	51.2		ug/L		102	40 - 159
Ethylbenzene	50.0	46.2		ug/L		92	70 - 123
Hexachlorobutadiene	50.0	41.6		ug/L		83	51 - 150
Isopropylbenzene	50.0	42.2		ug/L		84	70 - 126
Methyl tert-butyl ether	50.0	45.0		ug/L		90	55 - 123
Methylene Chloride	50.0	42.9		ug/L		86	69 - 125
Naphthalene	50.0	42.0		ug/L		84	53 - 144
n-Butylbenzene	50.0	46.3		ug/L		93	68 - 125
N-Propylbenzene	50.0	43.1		ug/L		86	69 - 127
p-Isopropyltoluene	50.0	48.2		ug/L		96	70 - 125
sec-Butylbenzene	50.0	46.6		ug/L		93	70 - 123
Styrene	50.0	44.8		ug/L		90	70 - 120
tert-Butylbenzene	50.0	47.0		ug/L		94	70 - 121
Tetrachloroethene	50.0	48.3		ug/L		97	70 - 128
Toluene	50.0	47.7		ug/L		95	70 - 125
trans-1,2-Dichloroethene	50.0	42.3		ug/L		85	70 - 125
trans-1,3-Dichloropropene	50.0	48.7		ug/L		97	62 - 128
Trichloroethene	50.0	49.5		ug/L		99	70 - 125
Trichlorofluoromethane	50.0	42.9		ug/L		86	55 - 128
Vinyl chloride	50.0	47.5		ug/L		95	64 - 126
Xylenes, Total	100	82.1		ug/L		82	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*
Dibromofluoromethane (Surr)	*101*		*75 - 120*
Toluene-d8 (Surr)	*105*		*75 - 120*

Lab Sample ID: 500-191456-3 MS
Matrix: Water
Analysis Batch: 574166

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<0.46		50.0	47.7		ug/L		95	70 - 125

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

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

Lab Sample ID: 500-191456-3 MS
Matrix: Water
Analysis Batch: 574166

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<0.38		50.0	47.5		ug/L		95	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	48.4		ug/L		97	62 - 140
1,1,2-Trichloroethane	<0.35		50.0	51.1		ug/L		102	71 - 130
1,1-Dichloroethane	<0.41		50.0	49.3		ug/L		99	70 - 125
1,1-Dichloroethene	<0.39		50.0	42.8		ug/L		86	67 - 122
1,1-Dichloropropene	<0.30		50.0	45.7		ug/L		91	70 - 121
1,2,3-Trichlorobenzene	<0.46		50.0	42.5		ug/L		85	51 - 145
1,2,3-Trichloropropane	<0.41		50.0	57.0		ug/L		114	50 - 133
1,2,4-Trichlorobenzene	<0.34		50.0	40.5		ug/L		81	57 - 137
1,2,4-Trimethylbenzene	<0.36		50.0	48.5		ug/L		97	70 - 123
1,2-Dibromo-3-Chloropropane	<2.0		50.0	55.6		ug/L		111	56 - 123
1,2-Dibromoethane	<0.39		50.0	52.0		ug/L		104	70 - 125
1,2-Dichlorobenzene	<0.33		50.0	46.7		ug/L		93	70 - 125
1,2-Dichloroethane	<0.39		50.0	54.2		ug/L		108	68 - 127
1,2-Dichloropropane	<0.43		50.0	55.0		ug/L		110	67 - 130
1,3,5-Trimethylbenzene	<0.25		50.0	48.4		ug/L		97	70 - 123
1,3-Dichlorobenzene	<0.40		50.0	48.3		ug/L		97	70 - 125
1,3-Dichloropropane	<0.36		50.0	52.2		ug/L		104	62 - 136
1,4-Dichlorobenzene	<0.36		50.0	48.4		ug/L		97	70 - 120
2,2-Dichloropropane	<0.44		50.0	49.0		ug/L		98	58 - 139
2-Chlorotoluene	<0.31		50.0	48.1		ug/L		96	70 - 125
4-Chlorotoluene	<0.35		50.0	49.3		ug/L		99	68 - 124
Benzene	<0.15		50.0	44.3		ug/L		89	70 - 120
Bromobenzene	<0.36		50.0	47.7		ug/L		95	70 - 122
Bromochloromethane	<0.43		50.0	48.5		ug/L		97	65 - 122
Bromodichloromethane	<0.37		50.0	49.7		ug/L		99	69 - 120
Bromoform	<0.48		50.0	51.1		ug/L		102	56 - 132
Bromomethane	<0.80		50.0	38.8		ug/L		78	40 - 152
Carbon tetrachloride	<0.38		50.0	44.9		ug/L		90	59 - 133
Chlorobenzene	<0.39		50.0	50.9		ug/L		102	70 - 120
Chloroethane	<0.51	F1	50.0	69.6	F1	ug/L		139	48 - 136
Chloroform	<0.37		50.0	46.8		ug/L		94	70 - 120
Chloromethane	<0.32		50.0	54.3		ug/L		109	56 - 152
cis-1,2-Dichloroethene	<0.41		50.0	45.2		ug/L		90	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	48.3		ug/L		97	64 - 127
Dibromochloromethane	<0.49		50.0	51.0		ug/L		102	68 - 125
Dibromomethane	<0.27		50.0	50.6		ug/L		101	70 - 120
Dichlorodifluoromethane	<0.67		50.0	49.2		ug/L		98	40 - 159
Ethylbenzene	<0.18		50.0	47.7		ug/L		95	70 - 123
Hexachlorobutadiene	<0.45		50.0	42.3		ug/L		85	51 - 150
Isopropylbenzene	<0.39		50.0	48.7		ug/L		97	70 - 126
Methyl tert-butyl ether	<0.39		50.0	47.7		ug/L		95	55 - 123
Methylene Chloride	4.0	J	50.0	47.6		ug/L		87	69 - 125
Naphthalene	<0.34		50.0	46.4		ug/L		93	53 - 144
n-Butylbenzene	<0.39		50.0	46.7		ug/L		93	68 - 125
N-Propylbenzene	<0.41		50.0	49.0		ug/L		98	69 - 127
p-Isopropyltoluene	<0.36		50.0	49.5		ug/L		99	70 - 125
sec-Butylbenzene	<0.40		50.0	48.8		ug/L		98	70 - 123
Styrene	<0.39		50.0	51.2		ug/L		102	70 - 120

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

Lab Sample ID: 500-191456-3 MS
Matrix: Water
Analysis Batch: 574166

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	<0.40		50.0	50.0		ug/L		100	70 - 121
Tetrachloroethene	6.4		50.0	55.3		ug/L		98	70 - 128
Toluene	0.17	J	50.0	50.1		ug/L		100	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	44.4		ug/L		89	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	49.4		ug/L		99	62 - 128
Trichloroethene	0.17	J	50.0	51.4		ug/L		102	70 - 125
Trichlorofluoromethane	<0.43		50.0	44.0		ug/L		88	55 - 128
Vinyl chloride	<0.20		50.0	47.3		ug/L		95	64 - 126
Xylenes, Total	<0.22		100	90.0		ug/L		90	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 126*
4-Bromofluorobenzene (Surr)	*106*		*72 - 124*
Dibromofluoromethane (Surr)	*101*		*75 - 120*
Toluene-d8 (Surr)	*105*		*75 - 120*

Lab Sample ID: 500-191456-3 MSD
Matrix: Water
Analysis Batch: 574166

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.46		50.0	50.6		ug/L		101	70 - 125	6	20
1,1,1-Trichloroethane	<0.38		50.0	49.9		ug/L		100	70 - 125	5	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	52.7		ug/L		105	62 - 140	8	20
1,1,2-Trichloroethane	<0.35		50.0	52.0		ug/L		104	71 - 130	2	20
1,1-Dichloroethane	<0.41		50.0	51.8		ug/L		104	70 - 125	5	20
1,1-Dichloroethene	<0.39		50.0	45.2		ug/L		90	67 - 122	5	20
1,1-Dichloropropene	<0.30		50.0	50.2		ug/L		100	70 - 121	9	20
1,2,3-Trichlorobenzene	<0.46		50.0	44.9		ug/L		90	51 - 145	6	20
1,2,3-Trichloropropane	<0.41		50.0	60.3		ug/L		121	50 - 133	6	20
1,2,4-Trichlorobenzene	<0.34		50.0	42.5		ug/L		85	57 - 137	5	20
1,2,4-Trimethylbenzene	<0.36		50.0	50.1		ug/L		100	70 - 123	3	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	58.2		ug/L		116	56 - 123	5	20
1,2-Dibromoethane	<0.39		50.0	52.6		ug/L		105	70 - 125	1	20
1,2-Dichlorobenzene	<0.33		50.0	47.7		ug/L		95	70 - 125	2	20
1,2-Dichloroethane	<0.39		50.0	56.6		ug/L		113	68 - 127	4	20
1,2-Dichloropropane	<0.43		50.0	55.2		ug/L		110	67 - 130	0	20
1,3,5-Trimethylbenzene	<0.25		50.0	50.4		ug/L		101	70 - 123	4	20
1,3-Dichlorobenzene	<0.40		50.0	50.0		ug/L		100	70 - 125	4	20
1,3-Dichloropropane	<0.36		50.0	48.9		ug/L		98	62 - 136	7	20
1,4-Dichlorobenzene	<0.36		50.0	49.7		ug/L		99	70 - 120	3	20
2,2-Dichloropropane	<0.44		50.0	53.5		ug/L		107	58 - 139	9	20
2-Chlorotoluene	<0.31		50.0	50.0		ug/L		100	70 - 125	4	20
4-Chlorotoluene	<0.35		50.0	50.0		ug/L		100	68 - 124	1	20
Benzene	<0.15		50.0	48.0		ug/L		96	70 - 120	8	20
Bromobenzene	<0.36		50.0	49.7		ug/L		99	70 - 122	4	20
Bromochloromethane	<0.43		50.0	50.1		ug/L		100	65 - 122	3	20
Bromodichloromethane	<0.37		50.0	49.8		ug/L		100	69 - 120	0	20

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

Lab Sample ID: 500-191456-3 MSD
Matrix: Water
Analysis Batch: 574166

Client Sample ID: TW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	<0.48		50.0	53.0		ug/L		106	56 - 132	4	20
Bromomethane	<0.80		50.0	42.1		ug/L		84	40 - 152	8	20
Carbon tetrachloride	<0.38		50.0	48.4		ug/L		97	59 - 133	7	20
Chlorobenzene	<0.39		50.0	51.5		ug/L		103	70 - 120	1	20
Chloroethane	<0.51	F1	50.0	75.2	F1	ug/L		150	48 - 136	8	20
Chloroform	<0.37		50.0	48.6		ug/L		97	70 - 120	4	20
Chloromethane	<0.32		50.0	59.5		ug/L		119	56 - 152	9	20
cis-1,2-Dichloroethene	<0.41		50.0	46.9		ug/L		94	70 - 125	4	20
cis-1,3-Dichloropropene	<0.42		50.0	49.1		ug/L		98	64 - 127	2	20
Dibromochloromethane	<0.49		50.0	51.6		ug/L		103	68 - 125	1	20
Dibromomethane	<0.27		50.0	51.2		ug/L		102	70 - 120	1	20
Dichlorodifluoromethane	<0.67		50.0	56.0		ug/L		112	40 - 159	13	20
Ethylbenzene	<0.18		50.0	49.0		ug/L		98	70 - 123	3	20
Hexachlorobutadiene	<0.45		50.0	45.2		ug/L		90	51 - 150	7	20
Isopropylbenzene	<0.39		50.0	51.1		ug/L		102	70 - 126	5	20
Methyl tert-butyl ether	<0.39		50.0	50.2		ug/L		100	55 - 123	5	20
Methylene Chloride	4.0	J	50.0	49.8		ug/L		92	69 - 125	5	20
Naphthalene	<0.34		50.0	48.6		ug/L		97	53 - 144	5	20
n-Butylbenzene	<0.39		50.0	46.3		ug/L		93	68 - 125	1	20
N-Propylbenzene	<0.41		50.0	50.5		ug/L		101	69 - 127	3	20
p-Isopropyltoluene	<0.36		50.0	51.1		ug/L		102	70 - 125	3	20
sec-Butylbenzene	<0.40		50.0	51.0		ug/L		102	70 - 123	4	20
Styrene	<0.39		50.0	52.4		ug/L		105	70 - 120	2	20
tert-Butylbenzene	<0.40		50.0	52.0		ug/L		104	70 - 121	4	20
Tetrachloroethene	6.4		50.0	56.4		ug/L		100	70 - 128	2	20
Toluene	0.17	J	50.0	51.5		ug/L		103	70 - 125	3	20
trans-1,2-Dichloroethene	<0.35		50.0	46.5		ug/L		93	70 - 125	5	20
trans-1,3-Dichloropropene	<0.36		50.0	47.1		ug/L		94	62 - 128	5	20
Trichloroethene	0.17	J	50.0	52.3		ug/L		104	70 - 125	2	20
Trichlorofluoromethane	<0.43		50.0	47.1		ug/L		94	55 - 128	7	20
Vinyl chloride	<0.20		50.0	51.7		ug/L		103	64 - 126	9	20
Xylenes, Total	<0.22		100	92.7		ug/L		93	70 - 125	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*
Dibromofluoromethane (Surr)	*104*		*75 - 120*
Toluene-d8 (Surr)	*106*		*75 - 120*

Lab Sample ID: MB 500-574378/6
Matrix: Water
Analysis Batch: 574378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/29/20 12:09	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/29/20 12:09	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/29/20 12:09	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/29/20 12:09	1

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

Lab Sample ID: MB 500-574378/6
Matrix: Water
Analysis Batch: 574378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/29/20 12:09	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/29/20 12:09	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/29/20 12:09	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/29/20 12:09	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/29/20 12:09	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/29/20 12:09	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/29/20 12:09	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/29/20 12:09	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/29/20 12:09	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/29/20 12:09	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/29/20 12:09	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/29/20 12:09	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/29/20 12:09	1
Benzene	<0.15		0.50	0.15	ug/L			11/29/20 12:09	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/29/20 12:09	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/29/20 12:09	1
Bromoform	<0.48		1.0	0.48	ug/L			11/29/20 12:09	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/29/20 12:09	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/29/20 12:09	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/29/20 12:09	1
Chloroform	<0.37		2.0	0.37	ug/L			11/29/20 12:09	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/29/20 12:09	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/29/20 12:09	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/29/20 12:09	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/29/20 12:09	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/29/20 12:09	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/29/20 12:09	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/29/20 12:09	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/29/20 12:09	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/29/20 12:09	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/29/20 12:09	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/29/20 12:09	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/29/20 12:09	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/29/20 12:09	1
Styrene	<0.39		1.0	0.39	ug/L			11/29/20 12:09	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/29/20 12:09	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/29/20 12:09	1

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

Lab Sample ID: MB 500-574378/6
Matrix: Water
Analysis Batch: 574378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			11/29/20 12:09	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/29/20 12:09	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/29/20 12:09	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/29/20 12:09	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/29/20 12:09	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/29/20 12:09	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/29/20 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*11/29/20 12:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*11/29/20 12:09*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 120*		*11/29/20 12:09*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*11/29/20 12:09*	*1*

Lab Sample ID: LCS 500-574378/4
Matrix: Water
Analysis Batch: 574378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	46.5		ug/L		93	70 - 125
1,1,1-Trichloroethane	50.0	49.5		ug/L		99	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.3		ug/L		93	62 - 140
1,1,2-Trichloroethane	50.0	44.1		ug/L		88	71 - 130
1,1-Dichloroethane	50.0	51.3		ug/L		103	70 - 125
1,1-Dichloroethene	50.0	50.3		ug/L		101	67 - 122
1,1-Dichloropropene	50.0	51.7		ug/L		103	70 - 121
1,2,3-Trichlorobenzene	50.0	41.9		ug/L		84	51 - 145
1,2,3-Trichloropropane	50.0	48.0		ug/L		96	50 - 133
1,2,4-Trichlorobenzene	50.0	45.8		ug/L		92	57 - 137
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	32.9		ug/L		66	56 - 123
1,2-Dibromoethane	50.0	44.2		ug/L		88	70 - 125
1,2-Dichlorobenzene	50.0	46.8		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	42.9		ug/L		86	68 - 127
1,2-Dichloropropane	50.0	51.6		ug/L		103	67 - 130
1,3,5-Trimethylbenzene	50.0	54.4		ug/L		109	70 - 123
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 125
1,3-Dichloropropane	50.0	45.3		ug/L		91	62 - 136
1,4-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 120
2,2-Dichloropropane	50.0	53.5		ug/L		107	58 - 139
2-Chlorotoluene	50.0	52.3		ug/L		105	70 - 125
4-Chlorotoluene	50.0	51.4		ug/L		103	68 - 124
Benzene	50.0	49.7		ug/L		99	70 - 120
Bromobenzene	50.0	50.8		ug/L		102	70 - 122
Bromochloromethane	50.0	45.6		ug/L		91	65 - 122
Bromodichloromethane	50.0	43.1		ug/L		86	69 - 120
Bromoform	50.0	38.8		ug/L		78	56 - 132
Bromomethane	50.0	47.0		ug/L		94	40 - 152

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

Lab Sample ID: LCS 500-574378/4
Matrix: Water
Analysis Batch: 574378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	50.3		ug/L		101	59 - 133
Chlorobenzene	50.0	47.0		ug/L		94	70 - 120
Chloroethane	50.0	47.3		ug/L		95	48 - 136
Chloroform	50.0	44.8		ug/L		90	70 - 120
Chloromethane	50.0	53.5		ug/L		107	56 - 152
cis-1,2-Dichloroethene	50.0	46.6		ug/L		93	70 - 125
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	64 - 127
Dibromochloromethane	50.0	41.4		ug/L		83	68 - 125
Dibromomethane	50.0	43.4		ug/L		87	70 - 120
Dichlorodifluoromethane	50.0	47.2		ug/L		94	40 - 159
Ethylbenzene	50.0	51.0		ug/L		102	70 - 123
Hexachlorobutadiene	50.0	53.3		ug/L		107	51 - 150
Isopropylbenzene	50.0	58.4		ug/L		117	70 - 126
Methyl tert-butyl ether	50.0	41.0		ug/L		82	55 - 123
Methylene Chloride	50.0	45.7		ug/L		91	69 - 125
Naphthalene	50.0	36.6		ug/L		73	53 - 144
n-Butylbenzene	50.0	53.1		ug/L		106	68 - 125
N-Propylbenzene	50.0	55.4		ug/L		111	69 - 127
p-Isopropyltoluene	50.0	54.6		ug/L		109	70 - 125
sec-Butylbenzene	50.0	55.4		ug/L		111	70 - 123
Styrene	50.0	48.1		ug/L		96	70 - 120
tert-Butylbenzene	50.0	54.7		ug/L		109	70 - 121
Tetrachloroethene	50.0	54.8		ug/L		110	70 - 128
Toluene	50.0	50.6		ug/L		101	70 - 125
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	43.3		ug/L		87	62 - 128
Trichloroethene	50.0	51.6		ug/L		103	70 - 125
Trichlorofluoromethane	50.0	43.1		ug/L		86	55 - 128
Vinyl chloride	50.0	48.0		ug/L		96	64 - 126
Xylenes, Total	100	96.3		ug/L		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane (Surr)	*90*		*75 - 120*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: MB 500-574432/28
Matrix: Water
Analysis Batch: 574432

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/30/20 12:04	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/30/20 12:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/30/20 12:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/30/20 12:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/30/20 12:04	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1

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

Lab Sample ID: MB 500-574432/28
Matrix: Water
Analysis Batch: 574432

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/30/20 12:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/30/20 12:04	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/30/20 12:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/30/20 12:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/30/20 12:04	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/30/20 12:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/30/20 12:04	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/30/20 12:04	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/30/20 12:04	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/30/20 12:04	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/30/20 12:04	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/30/20 12:04	1
Benzene	<0.15		0.50	0.15	ug/L			11/30/20 12:04	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/30/20 12:04	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/30/20 12:04	1
Bromoform	<0.48		1.0	0.48	ug/L			11/30/20 12:04	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/30/20 12:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/30/20 12:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/30/20 12:04	1
Chloroform	<0.37		2.0	0.37	ug/L			11/30/20 12:04	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/30/20 12:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/30/20 12:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/30/20 12:04	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/30/20 12:04	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/30/20 12:04	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/30/20 12:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/30/20 12:04	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/30/20 12:04	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/30/20 12:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/30/20 12:04	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/30/20 12:04	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/30/20 12:04	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/30/20 12:04	1
Styrene	<0.39		1.0	0.39	ug/L			11/30/20 12:04	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/30/20 12:04	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/30/20 12:04	1
Toluene	<0.15		0.50	0.15	ug/L			11/30/20 12:04	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/30/20 12:04	1

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

Lab Sample ID: MB 500-574432/28
Matrix: Water
Analysis Batch: 574432

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/30/20 12:04	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/30/20 12:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/30/20 12:04	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/30/20 12:04	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/30/20 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 126*		*11/30/20 12:04*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*11/30/20 12:04*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 120*		*11/30/20 12:04*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/30/20 12:04*	*1*

Lab Sample ID: LCS 500-574432/5
Matrix: Water
Analysis Batch: 574432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	44.5		ug/L		89	70 - 125
1,1,1-Trichloroethane	50.0	45.2		ug/L		90	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.0		ug/L		92	62 - 140
1,1,2-Trichloroethane	50.0	43.6		ug/L		87	71 - 130
1,1-Dichloroethane	50.0	48.4		ug/L		97	70 - 125
1,1-Dichloroethene	50.0	45.5		ug/L		91	67 - 122
1,1-Dichloropropene	50.0	47.5		ug/L		95	70 - 121
1,2,3-Trichlorobenzene	50.0	44.9		ug/L		90	51 - 145
1,2,3-Trichloropropane	50.0	46.2		ug/L		92	50 - 133
1,2,4-Trichlorobenzene	50.0	46.2		ug/L		92	57 - 137
1,2,4-Trimethylbenzene	50.0	48.1		ug/L		96	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	34.8		ug/L		70	56 - 123
1,2-Dibromoethane	50.0	43.9		ug/L		88	70 - 125
1,2-Dichlorobenzene	50.0	44.3		ug/L		89	70 - 125
1,2-Dichloroethane	50.0	43.4		ug/L		87	68 - 127
1,2-Dichloropropane	50.0	50.4		ug/L		101	67 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/L		97	70 - 123
1,3-Dichlorobenzene	50.0	46.2		ug/L		92	70 - 125
1,3-Dichloropropane	50.0	43.9		ug/L		88	62 - 136
1,4-Dichlorobenzene	50.0	45.0		ug/L		90	70 - 120
2,2-Dichloropropane	50.0	48.7		ug/L		97	58 - 139
2-Chlorotoluene	50.0	47.0		ug/L		94	70 - 125
4-Chlorotoluene	50.0	46.1		ug/L		92	68 - 124
Benzene	50.0	46.8		ug/L		94	70 - 120
Bromobenzene	50.0	47.3		ug/L		95	70 - 122
Bromochloromethane	50.0	45.7		ug/L		91	65 - 122
Bromodichloromethane	50.0	42.9		ug/L		86	69 - 120
Bromoform	50.0	39.6		ug/L		79	56 - 132
Bromomethane	50.0	45.8		ug/L		92	40 - 152
Carbon tetrachloride	50.0	46.1		ug/L		92	59 - 133
Chlorobenzene	50.0	44.4		ug/L		89	70 - 120

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

Lab Sample ID: LCS 500-574432/5
Matrix: Water
Analysis Batch: 574432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	45.8		ug/L		92	48 - 136
Chloroform	50.0	42.5		ug/L		85	70 - 120
Chloromethane	50.0	52.0		ug/L		104	56 - 152
cis-1,2-Dichloroethene	50.0	43.9		ug/L		88	70 - 125
cis-1,3-Dichloropropene	50.0	44.7		ug/L		89	64 - 127
Dibromochloromethane	50.0	40.8		ug/L		82	68 - 125
Dibromomethane	50.0	44.5		ug/L		89	70 - 120
Dichlorodifluoromethane	50.0	43.1		ug/L		86	40 - 159
Ethylbenzene	50.0	46.8		ug/L		94	70 - 123
Hexachlorobutadiene	50.0	52.3		ug/L		105	51 - 150
Isopropylbenzene	50.0	51.0		ug/L		102	70 - 126
Methyl tert-butyl ether	50.0	41.8		ug/L		84	55 - 123
Methylene Chloride	50.0	44.3		ug/L		89	69 - 125
Naphthalene	50.0	41.1		ug/L		82	53 - 144
n-Butylbenzene	50.0	47.4		ug/L		95	68 - 125
N-Propylbenzene	50.0	48.4		ug/L		97	69 - 127
p-Isopropyltoluene	50.0	48.3		ug/L		97	70 - 125
sec-Butylbenzene	50.0	48.9		ug/L		98	70 - 123
Styrene	50.0	45.5		ug/L		91	70 - 120
tert-Butylbenzene	50.0	48.2		ug/L		96	70 - 121
Tetrachloroethene	50.0	49.4		ug/L		99	70 - 128
Toluene	50.0	46.5		ug/L		93	70 - 125
trans-1,2-Dichloroethene	50.0	44.5		ug/L		89	70 - 125
trans-1,3-Dichloropropene	50.0	42.1		ug/L		84	62 - 128
Trichloroethene	50.0	47.5		ug/L		95	70 - 125
Trichlorofluoromethane	50.0	41.8		ug/L		84	55 - 128
Vinyl chloride	50.0	46.4		ug/L		93	64 - 126
Xylenes, Total	100	88.4		ug/L		88	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*
Dibromofluoromethane (Surr)	*94*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-573716/1-A
Matrix: Water
Analysis Batch: 573752

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.24		1.6	0.24	ug/L		11/24/20 07:31	11/24/20 14:39	1
2-Methylnaphthalene	<0.052		1.6	0.052	ug/L		11/24/20 07:31	11/24/20 14:39	1
Acenaphthene	<0.25		0.80	0.25	ug/L		11/24/20 07:31	11/24/20 14:39	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		11/24/20 07:31	11/24/20 14:39	1
Anthracene	<0.27		0.80	0.27	ug/L		11/24/20 07:31	11/24/20 14:39	1
Benzo[a]anthracene	<0.045		0.16	0.045	ug/L		11/24/20 07:31	11/24/20 14:39	1
Benzo[a]pyrene	<0.079		0.16	0.079	ug/L		11/24/20 07:31	11/24/20 14:39	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-573716/1-A
Matrix: Water
Analysis Batch: 573752

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		11/24/20 07:31	11/24/20 14:39	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		11/24/20 07:31	11/24/20 14:39	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		11/24/20 07:31	11/24/20 14:39	1
Chrysene	<0.055		0.16	0.055	ug/L		11/24/20 07:31	11/24/20 14:39	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		11/24/20 07:31	11/24/20 14:39	1
Fluoranthene	<0.36		0.80	0.36	ug/L		11/24/20 07:31	11/24/20 14:39	1
Fluorene	<0.20		0.80	0.20	ug/L		11/24/20 07:31	11/24/20 14:39	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		11/24/20 07:31	11/24/20 14:39	1
Naphthalene	<0.25		0.80	0.25	ug/L		11/24/20 07:31	11/24/20 14:39	1
Phenanthrene	<0.24		0.80	0.24	ug/L		11/24/20 07:31	11/24/20 14:39	1
Pyrene	<0.34		0.80	0.34	ug/L		11/24/20 07:31	11/24/20 14:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*34 - 110*	*11/24/20 07:31*	*11/24/20 14:39*	*1*
Nitrobenzene-d5 (Surr)	*63*		*36 - 120*	*11/24/20 07:31*	*11/24/20 14:39*	*1*
Terphenyl-d14 (Surr)	*98*		*40 - 145*	*11/24/20 07:31*	*11/24/20 14:39*	*1*

Lab Sample ID: LCS 500-573716/2-A
Matrix: Water
Analysis Batch: 573752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	32.0	13.8		ug/L		43	38 - 110
2-Methylnaphthalene	32.0	13.6		ug/L		42	34 - 110
Acenaphthene	32.0	17.0		ug/L		53	46 - 110
Acenaphthylene	32.0	18.4		ug/L		57	47 - 113
Anthracene	32.0	26.2		ug/L		82	67 - 118
Benzo[a]anthracene	32.0	26.4		ug/L		82	70 - 126
Benzo[a]pyrene	32.0	28.3		ug/L		89	70 - 135
Benzo[b]fluoranthene	32.0	27.6		ug/L		86	69 - 136
Benzo[g,h,i]perylene	32.0	28.6		ug/L		89	70 - 135
Benzo[k]fluoranthene	32.0	27.4		ug/L		86	70 - 133
Chrysene	32.0	26.7		ug/L		84	68 - 129
Dibenz(a,h)anthracene	32.0	30.5		ug/L		95	70 - 134
Fluoranthene	32.0	27.4		ug/L		86	68 - 126
Fluorene	32.0	20.3		ug/L		63	53 - 120
Indeno[1,2,3-cd]pyrene	32.0	30.3		ug/L		95	65 - 133
Naphthalene	32.0	13.5		ug/L		42	36 - 110
Phenanthrene	32.0	24.9		ug/L		78	65 - 120
Pyrene	32.0	26.6		ug/L		83	70 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*73*		*34 - 110*
Nitrobenzene-d5 (Surr)	*79*		*36 - 120*
Terphenyl-d14 (Surr)	*96*		*40 - 145*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-191456-7 MS
Matrix: Water
Analysis Batch: 573752

Client Sample ID: TW-6
Prep Type: Total/NA
Prep Batch: 573716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	<0.24	F1 F2	32.3	7.64	F1	ug/L		24	38 - 110
2-Methylnaphthalene	<0.052	F1 F2	32.3	7.62	F1	ug/L		24	34 - 110
Acenaphthene	<0.25	F1	32.3	12.2	F1	ug/L		38	46 - 110
Acenaphthylene	<0.21	F1	32.3	12.4	F1	ug/L		38	47 - 113
Anthracene	<0.27		32.3	25.3		ug/L		78	67 - 118
Benzo[a]anthracene	<0.045		32.3	26.4		ug/L		82	70 - 126
Benzo[a]pyrene	<0.079		32.3	29.8		ug/L		92	70 - 135
Benzo[b]fluoranthene	<0.064	F2	32.3	31.7		ug/L		98	69 - 136
Benzo[g,h,i]perylene	<0.30		32.3	28.5		ug/L		88	70 - 135
Benzo[k]fluoranthene	<0.051		32.3	31.1		ug/L		96	70 - 133
Chrysene	<0.054		32.3	29.7		ug/L		92	68 - 129
Dibenz(a,h)anthracene	<0.040		32.3	31.7		ug/L		98	70 - 134
Fluoranthene	<0.36		32.3	25.2		ug/L		78	68 - 126
Fluorene	<0.19	F1	32.3	17.8		ug/L		55	53 - 120
Indeno[1,2,3-cd]pyrene	<0.059		32.3	31.1		ug/L		96	65 - 133
Naphthalene	<0.25	F1	32.3	7.46	F1	ug/L		23	36 - 110
Phenanthrene	<0.24		32.3	23.8		ug/L		74	65 - 120
Pyrene	<0.34		32.3	26.6		ug/L		82	70 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*34 - 110*
Nitrobenzene-d5 (Surr)	*50*		*36 - 120*
Terphenyl-d14 (Surr)	*93*		*40 - 145*

Lab Sample ID: 500-191456-7 MSD
Matrix: Water
Analysis Batch: 573752

Client Sample ID: TW-6
Prep Type: Total/NA
Prep Batch: 573716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.24	F1 F2	32.5	9.78	F1 F2	ug/L		30	38 - 110	25	20
2-Methylnaphthalene	<0.052	F1 F2	32.5	9.53	F1 F2	ug/L		29	34 - 110	22	20
Acenaphthene	<0.25	F1	32.5	12.9	F1	ug/L		40	46 - 110	6	20
Acenaphthylene	<0.21	F1	32.5	13.0	F1	ug/L		40	47 - 113	5	20
Anthracene	<0.27		32.5	25.4		ug/L		78	67 - 118	1	20
Benzo[a]anthracene	<0.045		32.5	26.1		ug/L		80	70 - 126	1	20
Benzo[a]pyrene	<0.079		32.5	28.5		ug/L		88	70 - 135	4	20
Benzo[b]fluoranthene	<0.064	F2	32.5	24.5	F2	ug/L		76	69 - 136	25	20
Benzo[g,h,i]perylene	<0.30		32.5	23.8		ug/L		73	70 - 135	18	20
Benzo[k]fluoranthene	<0.051		32.5	25.9		ug/L		80	70 - 133	18	20
Chrysene	<0.054		32.5	26.1		ug/L		80	68 - 129	13	20
Dibenz(a,h)anthracene	<0.040		32.5	27.4		ug/L		84	70 - 134	15	20
Fluoranthene	<0.36		32.5	29.0		ug/L		89	68 - 126	14	20
Fluorene	<0.19	F1	32.5	16.4	F1	ug/L		51	53 - 120	8	20
Indeno[1,2,3-cd]pyrene	<0.059		32.5	26.8		ug/L		83	65 - 133	15	20
Naphthalene	<0.25	F1	32.5	8.65	F1	ug/L		27	36 - 110	15	20
Phenanthrene	<0.24		32.5	23.5		ug/L		72	65 - 120	1	20
Pyrene	<0.34		32.5	23.5		ug/L		72	70 - 126	12	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-191456-7 MSD
Matrix: Water
Analysis Batch: 573752

Client Sample ID: TW-6
Prep Type: Total/NA
Prep Batch: 573716

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	54		34 - 110
Nitrobenzene-d5 (Surr)	49		36 - 120
Terphenyl-d14 (Surr)	92		40 - 145

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-573374/1-A
Matrix: Water
Analysis Batch: 573771

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00023		0.0010	0.00023	mg/L		11/20/20 18:26	11/23/20 19:21	1
Barium	<0.00073		0.0025	0.00073	mg/L		11/20/20 18:26	11/23/20 19:21	1
Cadmium	<0.00017		0.00050	0.00017	mg/L		11/20/20 18:26	11/23/20 19:21	1
Chromium	<0.0011	^	0.0050	0.0011	mg/L		11/20/20 18:26	11/23/20 19:21	1
Lead	<0.00019		0.00050	0.00019	mg/L		11/20/20 18:26	11/23/20 19:21	1
Selenium	<0.00098		0.0025	0.00098	mg/L		11/20/20 18:26	11/23/20 19:21	1
Silver	<0.00012		0.00050	0.00012	mg/L		11/20/20 18:26	11/23/20 19:21	1

Lab Sample ID: LCS 500-573374/2-A
Matrix: Water
Analysis Batch: 573771

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.0920		mg/L		92	80 - 120
Barium	0.500	0.496		mg/L		99	80 - 120
Cadmium	0.0500	0.0493		mg/L		99	80 - 120
Chromium	0.200	0.214	^	mg/L		107	80 - 120
Lead	0.100	0.105		mg/L		105	80 - 120
Selenium	0.100	0.0950		mg/L		95	80 - 120
Silver	0.0500	0.0478		mg/L		96	80 - 120

Lab Sample ID: 500-191456-5 MS
Matrix: Water
Analysis Batch: 573771

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0011		0.100	0.104		mg/L		103	75 - 125
Barium	0.23		0.500	0.753		mg/L		106	75 - 125
Cadmium	<0.00017		0.0500	0.0531		mg/L		106	75 - 125
Chromium	<0.0011	^	0.200	0.222	^	mg/L		111	75 - 125
Lead	0.00079		0.100	0.113		mg/L		112	75 - 125
Selenium	0.0015	J	0.100	0.107		mg/L		105	75 - 125
Silver	<0.00012		0.0500	0.0497		mg/L		99	75 - 125

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-191456-5 MSD
Matrix: Water
Analysis Batch: 573771

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0011		0.100	0.0976		mg/L		97	75 - 125	6	20
Barium	0.23		0.500	0.716		mg/L		98	75 - 125	5	20
Cadmium	<0.00017		0.0500	0.0491		mg/L		98	75 - 125	8	20
Chromium	<0.0011	^	0.200	0.208	^	mg/L		104	75 - 125	7	20
Lead	0.00079		0.100	0.106		mg/L		106	75 - 125	6	20
Selenium	0.0015	J	0.100	0.101		mg/L		100	75 - 125	5	20
Silver	<0.00012		0.0500	0.0472		mg/L		94	75 - 125	5	20

Lab Sample ID: 500-191456-5 DU
Matrix: Water
Analysis Batch: 573771

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573374

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0011		0.00111		mg/L		2	20
Barium	0.23		0.233		mg/L		3	20
Cadmium	<0.00017		<0.00017		mg/L		NC	20
Chromium	<0.0011	^	<0.0011	^	mg/L		NC	20
Lead	0.00079		0.000871		mg/L		10	20
Selenium	0.0015	J	0.00155	J	mg/L		7	20
Silver	<0.00012		<0.00012		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-573588/12-A
Matrix: Water
Analysis Batch: 573782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000098		0.00020	0.000098	mg/L		11/23/20 09:30	11/24/20 07:11	1

Lab Sample ID: LCS 500-573588/13-A
Matrix: Water
Analysis Batch: 573782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00215		mg/L		107	80 - 120

Lab Sample ID: 500-191456-5 MS
Matrix: Water
Analysis Batch: 573782

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000098		0.00100	0.000959		mg/L		96	75 - 125

Lab Sample ID: 500-191456-5 MSD
Matrix: Water
Analysis Batch: 573782

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000098		0.00100	0.000967		mg/L		97	75 - 125	1	20

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 500-191456-5 DU
Matrix: Water
Analysis Batch: 573782

Client Sample ID: TW-5
Prep Type: Dissolved
Prep Batch: 573588

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	<0.000098			<0.000098		mg/L				NC	20

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-9
Date Collected: 11/18/20 08:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 14:23	PMF	TAL CHI

Client Sample ID: DUP 1
Date Collected: 11/18/20 08:47
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 14:49	PMF	TAL CHI

Client Sample ID: TW-3
Date Collected: 11/18/20 11:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 15:16	PMF	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 19:28	FXG	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	574090	11/25/20 13:11	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:15	MJG	TAL CHI

Client Sample ID: DUP 2
Date Collected: 11/18/20 11:13
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 19:32	FXG	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	574090	11/25/20 13:15	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:17	MJG	TAL CHI

Client Sample ID: TW-5
Date Collected: 11/18/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 15:43	PMF	TAL CHI
Total/NA	Prep	3510C			573716	11/24/20 07:31	CMC	TAL CHI
Total/NA	Analysis	8270D		1	573752	11/24/20 15:32	AJD	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 19:35	FXG	TAL CHI

Client Sample ID: TW-5
Date Collected: 11/18/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:19	MJG	TAL CHI

Client Sample ID: DUP 3
Date Collected: 11/18/20 13:12
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			573716	11/24/20 07:31	CMC	TAL CHI
Total/NA	Analysis	8270D		1	573752	11/24/20 15:59	AJD	TAL CHI

Client Sample ID: TW-6
Date Collected: 11/18/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 16:09	PMF	TAL CHI
Total/NA	Prep	3510C			573716	11/24/20 07:31	CMC	TAL CHI
Total/NA	Analysis	8270D		1	573752	11/24/20 16:25	AJD	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 19:59	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:28	MJG	TAL CHI

Client Sample ID: TW-7
Date Collected: 11/18/20 05:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	574378	11/29/20 18:55	PMF	TAL CHI
Total/NA	Analysis	8260B		1	574166	11/27/20 16:36	PMF	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 20:03	FXG	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	574090	11/25/20 13:18	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:40	MJG	TAL CHI

Client Sample ID: TW-8
Date Collected: 11/18/20 17:05
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			573716	11/24/20 07:31	CMC	TAL CHI
Total/NA	Analysis	8270D		1	573752	11/24/20 16:51	AJD	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Client Sample ID: TW-8
Date Collected: 11/18/20 17:05
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 20:06	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:42	MJG	TAL CHI

Client Sample ID: TW-4
Date Collected: 11/18/20 17:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574432	11/30/20 13:19	PMF	TAL CHI
Dissolved	Prep	3005A			573374	11/20/20 18:26	BDE	TAL CHI
Dissolved	Analysis	6020A		1	573771	11/23/20 20:10	FXG	TAL CHI
Dissolved	Prep	7470A			573588	11/23/20 09:30	MJG	TAL CHI
Dissolved	Analysis	7470A		1	573782	11/24/20 07:44	MJG	TAL CHI

Client Sample ID: Trip-HCL
Date Collected: 11/18/20 00:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191456-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	574166	11/27/20 13:56	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191456-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

Client Information
Client Contact: Erin Gross
Company: Stantec Consulting Corp
Address: 12075 Corporate Pkwy, Suite 200
City: Mequon
State, Zip: WI, 53092
Phone: 608 628 6278
Email: erin.gross@stantec.com
Project Name: WB Brewery
Site: WB Brew

500-191456 COC

Sampler: ENG
Phone: 608 628 6278
Due Date Requested: 11/30/20
TAT Requested (days): Standard (invoice by 11/30/20
PO #: 1937077897 ~~Add project number here~~
WO #:
Project #: 50006565
SSOW#:

Lab PM: Fredrick, Sandie
E-Mail: sandra.fredrick@eurofinset.com
Carrier Tracking No(s):
COC No: 500-87145-39227 4
Page: Page 4 of 5
Job #: 500-191456

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC	6010C, 7471B, 8270D	8260B - VOC	6020A, 7470A	8270D - PAH	Total Number of containers	Special Instructions/Note:
			Preservation Code:					N	N	A	D	N		
1	TW-9	11/18/2020	8:45	G	Water	N	N			X				
2	DUP 1		8:47	G	Water	N	N			X				
3	TW-3		11:10	G	Water	Y	N			X	X	X		field filter metals only
3	TW-3 MSMSD		11:11	G	Water	N	Y			X				"
4	DUP 2		11:13	G	Water	Y	N				X			"
5	TW-5		13:10	G	Water	Y	N			X	X	X		"
6	DUP 3		13:12	G	Water	N	N					X		
5	TW-5 MSMSD		13:14	G	Water	Y	Y				X			"
7	TW-6		13:35	G	Water	Y	N			X	X	X		"
7	TW-6 MSMSD		13:37	G	Water	N	N					X		
8	TW-7		15:50	G	Water	Y	N			X	X			"

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:		Date:		Time:	Method of Shipment: FedEx
Relinquished by: Erin Gross	Date/Time: 11/19/20, 13:45	Company: Stantec	Received by: Shari Scott	Date/Time: 11/20/20 0940	Company: ETA-CHI
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: 0.8 → 0.9

Ver: 01/16/2019

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: ENG	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-87145-39227.5
Client Contact: Erin Gross	Phone: 608 628 6278	E-Mail: sandra.fredrick@eurofinset.com		Page: Page 5 of 5
Company: Stantec Consulting Corp		Analysis Requested		Job #: 500-191456
Address: 12075 Corporate Pkwy, Suite 200	Due Date Requested: 11/30/20			Preservation Codes:
City: Mequon	TAT Requested (days): Standard (invoice by 11/30/20)			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: WI, 53092				
Phone: 608 628 6278	PO #: ~~Add project number here~~ 1937078977			Other:
Email: erin.gross@stantec.com	WO #:			
Project Name: WB Brewery	Project #: 50006565			
Site: WB Brew	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC	6010C, 7471B, 8270D	8260B - VOC	6020A, 7470A	8270D - PAH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	A	D	N		
9 ~~DUP-01~~ TW-8	11/18/20	17:05	G	Water	Y	N				X	X		field filter metals MNF
10 TW-4	11/18/20	17:25	G	Water	Y	N			X	X			" "
11 Trip - HCL	11/16-19/20	N/A	C	Water	N	N			X				
				Water									
				Water									
				Water									
				Water									

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx				
Relinquished by: Erin Gross	Date/Time: 11/19/20, 13:45	Company: Stantec	Received by: Chris Scott	Date/Time: 11/20/20 0940	Company: ETACHI		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2019

11/30/2020

ORIGIN ID:RRLA (262) 202-5955
REX KEY
STANTEC CONSULTING
12075 CORPORATE PARKWAY

MEQUON, WI 53092
UNITED STATES US

SHIP DATE: 11NOV20
ACTWGT: 25.00 LB MAN
CAD: 525155/CAFE3406

TO

TESTAMERICA CHICAGO
2417 BOND STREET

500-191456 Wayb

UNIVERSITY PARK IL 60484-3101

(708) 534-6200 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

FedEx
TRK# 0221 7125 4943 6374

FRI - 20 NOV AA
PRIORITY OVERNIGHT

79 JOTA

60484
IL-US
ORD

FID 730145 19NOV20 MKEA 56DC5/BAB9/05A2

Login Sample Receipt Checklist

Client: Stantec Consulting Corp. Job Number: 500-191456-1

Login Number: 191456 **List Source: Eurofins TestAmerica, Chicago**
List Number: 1
Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	0.9
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.	False	
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-191460-1
Client Project/Site: WB Brew - 193707897
Revision: 1

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Erin Gross

Authorized for release by:
12/23/2020 2:53:51 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Job ID: 500-191460-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-191460-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 12/7/2020. The report (revision 1) is being revised due to: Updated VOC results.

Receipt
The samples were received on 11/20/2020 9:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7º C and 0.9º C.

Receipt Exceptions
The following samples were submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): SB-16 2-4 (500-191460-25) and SB-23 2-4 (500-191460-26) Added to COC and logged in per bottles.

GC/MS VOA
Method 5035: sample vial has < 8 grams of soil in 10 ml of methanol. TW-4 0-2 (500-191460-14) and TW-6 2-4 (500-191460-17)

Method 8260B: The vendor of the field methanol bottles changed the VOA vial caps from a solid cap to a cap with an open septum due to COVID related supply chain issues. The alternate caps did not meet the quality standards required by Eurofins TestAmerica and may have allowed methanol to evaporate during extended storage times. A decrease in the methanol volume could cause a potential high bias; therefore, all samples with detections above the reporting limit have been dried and weighed to calculate the amount of sample and methanol contained in each bottle upon receipt at the laboratory. These adjusted sample volumes have been entered into the data system and the final results have been adjusted accordingly. Eurofins TestAmerica performed stability testing on these caps and vials and found that they were within control limits for evaporation for a period of at least three weeks. This indicates that there was likely no effect on the samples from the relatively short time between sample collection to analysis. The following samples are affected: TW-4 0-2 (500-191460-14), TW-6 2-4 (500-191460-17), TW-7 2-4 (500-191460-19) and SB-16 2-4 (500-191460-25)

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

GC/MS Semi VOA
Method 8270D: The following sample was diluted due to the nature of the sample matrix: VP-3 0-0.5 (500-191460-11). Elevated reporting limits (RLs) are provided.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SB-19 2-4 (500-191460-2), SB-19 2-4 (500-191460-2[MS]) and SB-19 2-4 (500-191460-2[MSD]). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: The following sample was diluted due to the nature of the sample matrix: VP-3 0-0.5 (500-191460-11). Elevated reporting limits (RLs) are provided.

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

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-17 2-4 — Lab Sample ID: 500-191460-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	5.1	J	34	4.7	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	11	J	34	6.4	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	12	J	34	4.8	ug/Kg	1	☼	8270D	Total/NA
Pyrene	9.0	J	34	6.9	ug/Kg	1	☼	8270D	Total/NA
Arsenic	1.0		0.99	0.34	mg/Kg	1	☼	6010C	Total/NA
Barium	14		0.99	0.11	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.044	J	0.20	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	6.4		0.99	0.49	mg/Kg	1	☼	6010C	Total/NA
Lead	2.8		0.50	0.23	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.011	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-19 2-4 — Lab Sample ID: 500-191460-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.3		1.1	0.37	mg/Kg	1	☼	6010C	Total/NA
Barium	76	V F1 F2	1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Chromium	19	F1	1.1	0.53	mg/Kg	1	☼	6010C	Total/NA
Lead	11	F1	0.54	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.057		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-14 0-2 — Lab Sample ID: 500-191460-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	11	J	36	6.6	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	5.2	J	36	4.8	ug/Kg	1	☼	8270D	Total/NA
Anthracene	31	J	36	6.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	140		36	4.9	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	180		36	7.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	230		36	7.9	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	68		36	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120		36	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	160		36	10	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	260		36	6.8	ug/Kg	1	☼	8270D	Total/NA
Fluorene	8.3	J	36	5.2	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	58		36	9.5	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	130		36	5.1	ug/Kg	1	☼	8270D	Total/NA
Pyrene	370		36	7.3	ug/Kg	1	☼	8270D	Total/NA
Arsenic	2.2		1.1	0.36	mg/Kg	1	☼	6010C	Total/NA
Barium	43		1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26		0.21	0.038	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.2		1.1	0.52	mg/Kg	1	☼	6010C	Total/NA
Lead	54		0.53	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.068		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-15 0-2 — Lab Sample ID: 500-191460-4

No Detections.

Client Sample ID: SB-15 2-4 — Lab Sample ID: 500-191460-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	6.5	J	39	5.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	7.9	J	39	7.6	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Client Sample ID: SB-15 2-4 (Continued)

Lab Sample ID: 500-191460-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	11	J	39	7.2	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	14	J	39	5.4	ug/Kg	1	☼	8270D	Total/NA
Pyrene	9.2	J	39	7.8	ug/Kg	1	☼	8270D	Total/NA
Arsenic	3.3		1.2	0.40	mg/Kg	1	☼	6010C	Total/NA
Barium	59		1.2	0.13	mg/Kg	1	☼	6010C	Total/NA
Chromium	18		1.2	0.58	mg/Kg	1	☼	6010C	Total/NA
Lead	11		0.59	0.27	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.036		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-18 0-2

Lab Sample ID: 500-191460-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	71	J	73	8.8	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	84		73	6.6	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	16	J	36	6.5	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	10	J	36	4.7	ug/Kg	1	☼	8270D	Total/NA
Anthracene	32	J	36	6.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	140		36	4.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	170		36	7.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	240		36	7.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	74		36	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	91		36	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	170		36	9.8	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	20	J	36	7.0	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	290		36	6.7	ug/Kg	1	☼	8270D	Total/NA
Fluorene	14	J	36	5.1	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	57		36	9.3	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	51		36	5.5	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	200		36	5.0	ug/Kg	1	☼	8270D	Total/NA
Pyrene	330		36	7.2	ug/Kg	1	☼	8270D	Total/NA
Arsenic	3.7		1.1	0.38	mg/Kg	1	☼	6010C	Total/NA
Barium	97		1.1	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.55		0.22	0.040	mg/Kg	1	☼	6010C	Total/NA
Chromium	14		1.1	0.54	mg/Kg	1	☼	6010C	Total/NA
Lead	79		0.55	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.045		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-18 2-4

Lab Sample ID: 500-191460-7

No Detections.

Client Sample ID: SB-21 2-4

Lab Sample ID: 500-191460-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	21	J	81	9.7	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	21	J	81	7.3	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	48		40	7.2	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	13	J	40	5.3	ug/Kg	1	☼	8270D	Total/NA
Anthracene	100		40	6.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	310		40	5.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	340		40	7.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	470		40	8.6	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	120		40	13	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-21 2-4 (Continued)

Lab Sample ID: 500-191460-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	150		40	12	ug/Kg	1	☼	8270D	Total/NA
Chrysene	320		40	11	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	38	J	40	7.7	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	820		40	7.4	ug/Kg	1	☼	8270D	Total/NA
Fluorene	41		40	5.6	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	130		40	10	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	22	J	40	6.1	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	500		40	5.6	ug/Kg	1	☼	8270D	Total/NA
Pyrene	570		40	7.9	ug/Kg	1	☼	8270D	Total/NA
Arsenic	3.0		1.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	100		1.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.048	J	0.24	0.044	mg/Kg	1	☼	6010C	Total/NA
Chromium	13		1.2	0.60	mg/Kg	1	☼	6010C	Total/NA
Lead	18		0.61	0.28	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.070		0.020	0.0065	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-22 2.5-5

Lab Sample ID: 500-191460-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	25	J	37	6.7	ug/Kg	1	☼	8270D	Total/NA
Anthracene	49		37	6.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	220		37	5.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	210		37	7.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	250		37	8.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	95		37	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	110		37	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	230		37	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	29	J	37	7.2	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	480		37	6.9	ug/Kg	1	☼	8270D	Total/NA
Fluorene	24	J	37	5.3	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	89		37	9.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	240		37	5.2	ug/Kg	1	☼	8270D	Total/NA
Pyrene	340		37	7.4	ug/Kg	1	☼	8270D	Total/NA
Arsenic	3.6		1.1	0.37	mg/Kg	1	☼	6010C	Total/NA
Barium	58		1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Chromium	12		1.1	0.54	mg/Kg	1	☼	6010C	Total/NA
Lead	11		0.54	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.029		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-22 5-6.5

Lab Sample ID: 500-191460-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.97		0.87	0.30	mg/Kg	1	☼	6010C	Total/NA
Barium	8.8		0.87	0.099	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.7		0.87	0.43	mg/Kg	1	☼	6010C	Total/NA
Lead	2.1		0.43	0.20	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0069	J	0.016	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: VP-3 0-0.5

Lab Sample ID: 500-191460-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	2500		380	46	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VP-3 0-0.5 (Continued) — Lab Sample ID: 500-191460-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	3100		380	35	ug/Kg	5	☼	8270D	Total/NA
Acenaphthene	230		190	34	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	76	J	190	25	ug/Kg	5	☼	8270D	Total/NA
Anthracene	470		190	31	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	1300		190	25	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2000		190	36	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	3100		190	41	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	790		190	60	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1000		190	55	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1800		190	51	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	180	J	190	36	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	3000		190	35	ug/Kg	5	☼	8270D	Total/NA
Fluorene	220		190	26	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	710		190	49	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	2100		190	29	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	3700		190	26	ug/Kg	5	☼	8270D	Total/NA
Pyrene	3900		190	37	ug/Kg	5	☼	8270D	Total/NA
Arsenic	47		4.9	1.7	mg/Kg	5	☼	6010C	Total/NA
Barium	100		4.9	0.56	mg/Kg	5	☼	6010C	Total/NA
Chromium	10		4.9	2.4	mg/Kg	5	☼	6010C	Total/NA
Lead	49		2.5	1.1	mg/Kg	5	☼	6010C	Total/NA
Mercury	0.12		0.017	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-20 0-2 — Lab Sample ID: 500-191460-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J	1.1	0.36	mg/Kg	1	☼	6010C	Total/NA
Barium	19		1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.079	J	0.21	0.038	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.5		1.1	0.53	mg/Kg	1	☼	6010C	Total/NA
Lead	5.0		0.53	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.010	J	0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-3 2-4 — Lab Sample ID: 500-191460-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.4		1.1	0.39	mg/Kg	1	☼	6010C	Total/NA
Barium	100		1.1	0.13	mg/Kg	1	☼	6010C	Total/NA
Chromium	19		1.1	0.57	mg/Kg	1	☼	6010C	Total/NA
Lead	16		0.57	0.26	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.037		0.020	0.0067	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-4 0-2 — Lab Sample ID: 500-191460-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	71		46	16	ug/Kg	50	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	19	J	46	17	ug/Kg	50	☼	8260B	Total/NA
Benzene	22		11	6.7	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	20		11	8.4	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	120		46	15	ug/Kg	50	☼	8260B	Total/NA
Toluene	86		11	6.8	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	210		23	10	ug/Kg	50	☼	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-4 0-2 (Continued) — Lab Sample ID: 500-191460-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	300		75	9.1	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	350		75	6.8	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	22	J	37	6.7	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	74		37	4.9	ug/Kg	1	☼	8270D	Total/NA
Anthracene	89		37	6.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	480		37	5.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	800		37	7.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1300		37	8.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	370		37	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	390		37	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	640		37	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	84		37	7.2	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	840		37	6.9	ug/Kg	1	☼	8270D	Total/NA
Fluorene	30	J	37	5.2	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	300		37	9.6	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	230		37	5.7	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	500		37	5.2	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1200		37	7.4	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.5		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Barium	130		1.0	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.47		0.21	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	23		1.0	0.51	mg/Kg	1	☼	6010C	Total/NA
Lead	110		0.52	0.24	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.72	J	1.0	0.61	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.45		0.018	0.0060	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-5 2-3 — Lab Sample ID: 500-191460-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	11	J	15	8.6	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	17	J	29	13	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: TW-5 3-4 — Lab Sample ID: 500-191460-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	71	J	76	9.2	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	87		76	7.0	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	7.7	J	38	6.8	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	16	J	38	5.0	ug/Kg	1	☼	8270D	Total/NA
Anthracene	25	J	38	6.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	94		38	5.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	160		38	7.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	250		38	8.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	120		38	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	81		38	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	120		38	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	35	J	38	7.3	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	170		38	7.0	ug/Kg	1	☼	8270D	Total/NA
Fluorene	7.9	J	38	5.3	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	90		38	9.8	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	58		38	5.8	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	130		38	5.3	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-5 3-4 (Continued)

Lab Sample ID: 500-191460-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	230		38	7.5	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.9		1.1	0.38	mg/Kg	1	☼	6010C	Total/NA
Barium	410		1.1	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.4		0.22	0.040	mg/Kg	1	☼	6010C	Total/NA
Chromium	20		1.1	0.55	mg/Kg	1	☼	6010C	Total/NA
Lead	240		0.56	0.26	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.19		0.018	0.0061	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-6 2-4

Lab Sample ID: 500-191460-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	640		89	32	ug/Kg	50	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	150		89	34	ug/Kg	50	☼	8260B	Total/NA
Benzene	130		22	13	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	210		22	16	ug/Kg	50	☼	8260B	Total/NA
Isopropylbenzene	160		89	34	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	810		89	30	ug/Kg	50	☼	8260B	Total/NA
n-Butylbenzene	81	J	89	34	ug/Kg	50	☼	8260B	Total/NA
N-Propylbenzene	170		89	37	ug/Kg	50	☼	8260B	Total/NA
p-Isopropyltoluene	52	J	89	32	ug/Kg	50	☼	8260B	Total/NA
sec-Butylbenzene	62	J	89	35	ug/Kg	50	☼	8260B	Total/NA
Tetrachloroethene	240		89	33	ug/Kg	50	☼	8260B	Total/NA
Toluene	870		22	13	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	1800		44	20	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: TW-6 4.5-6

Lab Sample ID: 500-191460-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	1200		81	9.7	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	1400		81	7.3	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	47		40	7.2	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	41		40	5.3	ug/Kg	1	☼	8270D	Total/NA
Anthracene	140		40	6.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	380		40	5.4	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	460		40	7.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	630		40	8.6	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	600		40	13	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	220		40	12	ug/Kg	1	☼	8270D	Total/NA
Chrysene	470		40	11	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	63		40	7.7	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	540		40	7.4	ug/Kg	1	☼	8270D	Total/NA
Fluorene	53		40	5.6	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	170		40	10	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	910		40	6.1	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	980		40	5.6	ug/Kg	1	☼	8270D	Total/NA
Pyrene	820		40	7.9	ug/Kg	1	☼	8270D	Total/NA
Arsenic	7.1		1.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	240		1.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.79		0.24	0.044	mg/Kg	1	☼	6010C	Total/NA
Chromium	11		1.2	0.60	mg/Kg	1	☼	6010C	Total/NA
Lead	56		0.61	0.28	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	1.2	0.72	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-6 4.5-6 (Continued) — Lab Sample ID: 500-191460-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.11		0.019	0.0064	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-7 2-4 — Lab Sample ID: 500-191460-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	78		59	20	ug/Kg	50	☼	8260B	Total/NA
Toluene	9.9	J	15	8.6	ug/Kg	50	☼	8260B	Total/NA
Xylenes, Total	14	J	29	13	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: TW-7 4-6 — Lab Sample ID: 500-191460-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.2		1.2	0.40	mg/Kg	1	☼	6010C	Total/NA
Barium	81		1.2	0.13	mg/Kg	1	☼	6010C	Total/NA
Chromium	24		1.2	0.58	mg/Kg	1	☼	6010C	Total/NA
Lead	11		0.59	0.27	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.80	J	1.2	0.69	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.025		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TW-8 4-6 — Lab Sample ID: 500-191460-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	540		72	8.7	ug/Kg	1	☼	8270D	Total/NA
2-Methylnaphthalene	720		72	6.6	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	44		36	6.4	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	64		36	4.7	ug/Kg	1	☼	8270D	Total/NA
Anthracene	130		36	6.0	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	540		36	4.8	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	780		36	6.9	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1000		36	7.7	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	390		36	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	350		36	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	600		36	9.8	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	75		36	6.9	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	910		36	6.6	ug/Kg	1	☼	8270D	Total/NA
Fluorene	48		36	5.0	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	240		36	9.3	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	530		36	5.5	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	660		36	5.0	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1300		36	7.1	ug/Kg	1	☼	8270D	Total/NA

Client Sample ID: DUP 4 — Lab Sample ID: 500-191460-22

No Detections.

Client Sample ID: DUP 5 — Lab Sample ID: 500-191460-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	7.0	J	76	7.0	ug/Kg	1	☼	8270D	Total/NA
Acenaphthene	15	J	38	6.8	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	5.9	J	38	5.0	ug/Kg	1	☼	8270D	Total/NA
Anthracene	38		38	6.3	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	130		38	5.1	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	130		38	7.3	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Client Sample ID: DUP 5 (Continued) — Lab Sample ID: 500-191460-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	170		38	8.2	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	57		38	12	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	60		38	11	ug/Kg	1	☼	8270D	Total/NA
Chrysene	130		38	10	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	16	J	38	7.3	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	280		38	7.0	ug/Kg	1	☼	8270D	Total/NA
Fluorene	13	J	38	5.3	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	54		38	9.8	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	160		38	5.3	ug/Kg	1	☼	8270D	Total/NA
Pyrene	210		38	7.5	ug/Kg	1	☼	8270D	Total/NA
Arsenic	4.2		1.1	0.37	mg/Kg	1	☼	6010C	Total/NA
Barium	74		1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Chromium	19		1.1	0.53	mg/Kg	1	☼	6010C	Total/NA
Lead	12		0.54	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.049		0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: Trip-MEOH — Lab Sample ID: 500-191460-24

No Detections.

Client Sample ID: SB-16 2-4 — Lab Sample ID: 500-191460-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1		1.1	0.37	mg/Kg	1	☼	6010C	Total/NA
Barium	13		1.1	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.049	J	0.22	0.039	mg/Kg	1	☼	6010C	Total/NA
Chromium	5.5		1.1	0.54	mg/Kg	1	☼	6010C	Total/NA
Lead	2.7		0.54	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.013	J	0.018	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-23 2-4 — Lab Sample ID: 500-191460-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Barium	10		1.0	0.12	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.2		1.0	0.51	mg/Kg	1	☼	6010C	Total/NA
Lead	3.5		0.51	0.24	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0095	J	0.017	0.0058	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010C	Metals (ICP)	SW846	TAL CHI
7471B	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI
7471B	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-191460-1	SB-17 2-4	Solid	11/16/20 10:25	11/20/20 09:40	
500-191460-2	SB-19 2-4	Solid	11/16/20 11:45	11/20/20 09:40	
500-191460-3	SB-14 0-2	Solid	11/16/20 12:10	11/20/20 09:40	
500-191460-4	SB-15 0-2	Solid	11/16/20 12:35	11/20/20 09:40	
500-191460-5	SB-15 2-4	Solid	11/16/20 12:25	11/20/20 09:40	
500-191460-6	SB-18 0-2	Solid	11/16/20 13:10	11/20/20 09:40	
500-191460-7	SB-18 2-4	Solid	11/16/20 13:10	11/20/20 09:40	
500-191460-8	SB-21 2-4	Solid	11/16/20 13:20	11/20/20 09:40	
500-191460-9	SB-22 2.5-5	Solid	11/16/20 13:30	11/20/20 09:40	
500-191460-10	SB-22 5-6.5	Solid	11/16/20 13:35	11/20/20 09:40	
500-191460-11	VP-3 0-0.5	Solid	11/16/20 14:55	11/20/20 09:40	
500-191460-12	SB-20 0-2	Solid	11/16/20 15:25	11/20/20 09:40	
500-191460-13	TW-3 2-4	Solid	11/17/20 13:20	11/20/20 09:40	
500-191460-14	TW-4 0-2	Solid	11/17/20 15:45	11/20/20 09:40	
500-191460-15	TW-5 2-3	Solid	11/18/20 09:20	11/20/20 09:40	
500-191460-16	TW-5 3-4	Solid	11/18/20 09:25	11/20/20 09:40	
500-191460-17	TW-6 2-4	Solid	11/18/20 11:30	11/20/20 09:40	
500-191460-18	TW-6 4.5-6	Solid	11/18/20 11:32	11/20/20 09:40	
500-191460-19	TW-7 2-4	Solid	11/18/20 13:55	11/20/20 09:40	
500-191460-20	TW-7 4-6	Solid	11/18/20 14:00	11/20/20 09:40	
500-191460-21	TW-8 4-6	Solid	11/18/20 14:35	11/20/20 09:40	
500-191460-22	DUP 4	Solid	11/18/20 13:57	11/20/20 09:40	
500-191460-23	DUP 5	Solid	11/16/20 13:22	11/20/20 09:40	
500-191460-24	Trip-MEOH	Solid	11/16/20 00:00	11/20/20 09:40	
500-191460-25	SB-16 2-4	Solid	11/16/20 16:25	11/20/20 09:40	
500-191460-26	SB-23 2-4	Solid	11/16/20 13:50	11/20/20 09:40	

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-17 2-4
Date Collected: 11/16/20 10:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-1
Matrix: Solid
Percent Solids: 92.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<26		55	26	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1,1-Trichloroethane	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1,2,2-Tetrachloroethane	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1,2-Trichloroethane	<19		55	19	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1-Dichloroethane	<23		55	23	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1-Dichloroethene	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,1-Dichloropropene	<16		55	16	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2,3-Trichlorobenzene	<25		55	25	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2,4-Trichlorobenzene	<19		55	19	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2,4-Trimethylbenzene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2-Dibromo-3-Chloropropane	<110		280	110	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2-Dibromoethane	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2-Dichlorobenzene	<18		55	18	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2-Dichloroethane	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,2-Dichloropropane	<24		55	24	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,3,5-Trimethylbenzene	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,3-Dichlorobenzene	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,3-Dichloropropane	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
1,4-Dichlorobenzene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
2,2-Dichloropropane	<25		55	25	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
2-Chlorotoluene	<17		55	17	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
4-Chlorotoluene	<19		55	19	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Benzene	<8.1		14	8.1	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Bromobenzene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Bromochloromethane	<24		55	24	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Bromodichloromethane	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Bromoform	<27		55	27	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Bromomethane	<44		170	44	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Carbon tetrachloride	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Chlorobenzene	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Chloroethane	<28		55	28	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Chloroform	<20		110	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Chloromethane	<18		55	18	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
cis-1,2-Dichloroethene	<23		55	23	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
cis-1,3-Dichloropropene	<23		55	23	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Dibromochloromethane	<27		55	27	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Dibromomethane	<15		55	15	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Dichlorodifluoromethane	<37		170	37	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Ethylbenzene	<10		14	10	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Hexachlorobutadiene	<25		55	25	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Isopropyl ether	<15		55	15	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Isopropylbenzene	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Methyl tert-butyl ether	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Methylene Chloride	<90		280	90	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Naphthalene	<18		55	18	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
n-Butylbenzene	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
N-Propylbenzene	<23		55	23	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
p-Isopropyltoluene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-17 2-4
Date Collected: 11/16/20 10:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-1
Matrix: Solid
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Styrene	<21		55	21	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
tert-Butylbenzene	<22		55	22	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Tetrachloroethene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Toluene	<8.1		14	8.1	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
trans-1,2-Dichloroethene	<19		55	19	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
trans-1,3-Dichloropropene	<20		55	20	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Trichloroethene	<9.1		28	9.1	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Trichlorofluoromethane	<24		55	24	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Vinyl chloride	<14		55	14	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50
Xylenes, Total	<12		28	12	ug/Kg	☼	11/16/20 10:25	11/28/20 01:31	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*11/16/20 10:25*	*11/28/20 01:31*	*50*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*	*11/16/20 10:25*	*11/28/20 01:31*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/16/20 10:25*	*11/28/20 01:31*	*50*
Toluene-d8 (Surr)	*96*		*75 - 120*	*11/16/20 10:25*	*11/28/20 01:31*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.5		70	8.5	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
2-Methylnaphthalene	<6.4		70	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Acenaphthene	<6.2		34	6.2	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Acenaphthylene	<4.6		34	4.6	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Anthracene	<5.8		34	5.8	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Benzo[a]anthracene	**5.1**	**J**	34	4.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Benzo[a]pyrene	<6.7		34	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Benzo[b]fluoranthene	<7.5		34	7.5	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Benzo[g,h,i]perylene	<11		34	11	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Benzo[k]fluoranthene	<10		34	10	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Chrysene	<9.4		34	9.4	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Dibenz(a,h)anthracene	<6.7		34	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Fluoranthene	**11**	**J**	34	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Fluorene	<4.9		34	4.9	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Indeno[1,2,3-cd]pyrene	<9.0		34	9.0	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Naphthalene	<5.3		34	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Phenanthrene	**12**	**J**	34	4.8	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1
Pyrene	**9.0**	**J**	34	6.9	ug/Kg	☼	11/24/20 16:02	11/25/20 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*43 - 145*	*11/24/20 16:02*	*11/25/20 16:39*	*1*
Nitrobenzene-d5 (Surr)	*76*		*37 - 147*	*11/24/20 16:02*	*11/25/20 16:39*	*1*
Terphenyl-d14 (Surr)	*87*		*42 - 157*	*11/24/20 16:02*	*11/25/20 16:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**		0.99	0.34	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1
Barium	**14**		0.99	0.11	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1
Cadmium	**0.044**	**J**	0.20	0.036	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1
Chromium	**6.4**		0.99	0.49	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-17 2-4
Date Collected: 11/16/20 10:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-1
Matrix: Solid
Percent Solids: 92.6

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**2.8**		0.50	0.23	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1
Selenium	<0.58		0.99	0.58	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1
Silver	<0.13		0.50	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 19:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.018	0.0059	mg/Kg	☼	12/03/20 13:15	12/04/20 10:00	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-19 2-4
Date Collected: 11/16/20 11:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-2
Matrix: Solid
Percent Solids: 81.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		73	34	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1,1-Trichloroethane	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1,2,2-Tetrachloroethane	<29		73	29	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1,2-Trichloroethane	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1-Dichloroethane	<30		73	30	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1-Dichloroethene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,1-Dichloropropene	<22		73	22	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2,3-Trichlorobenzene	<33		73	33	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2,3-Trichloropropane	<30		150	30	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2,4-Trichlorobenzene	<25		73	25	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2-Dibromoethane	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2-Dichlorobenzene	<24		73	24	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2-Dichloroethane	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,2-Dichloropropane	<31		73	31	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,3-Dichlorobenzene	<29		73	29	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,3-Dichloropropane	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
1,4-Dichlorobenzene	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
2,2-Dichloropropane	<32		73	32	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
2-Chlorotoluene	<23		73	23	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
4-Chlorotoluene	<25		73	25	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Benzene	<11		18	11	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Bromobenzene	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Bromochloromethane	<31		73	31	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Bromodichloromethane	<27		73	27	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Bromoform	<35		73	35	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Bromomethane	<58		220	58	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Carbon tetrachloride	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Chlorobenzene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Chloroethane	<37		73	37	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Chloroform	<27		150	27	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Chloromethane	<23		73	23	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
cis-1,2-Dichloroethene	<30		73	30	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
cis-1,3-Dichloropropene	<30		73	30	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Dibromochloromethane	<35		73	35	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Dibromomethane	<20		73	20	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Dichlorodifluoromethane	<49		220	49	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Ethylbenzene	<13		18	13	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Hexachlorobutadiene	<32		73	32	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Isopropyl ether	<20		73	20	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Isopropylbenzene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Methyl tert-butyl ether	<29		73	29	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Methylene Chloride	<120		360	120	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Naphthalene	<24		73	24	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
n-Butylbenzene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
N-Propylbenzene	<30		73	30	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
p-Isopropyltoluene	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50

Client Sample ID: SB-19 2-4
Date Collected: 11/16/20 11:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-2
Matrix: Solid
Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<29		73	29	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Styrene	<28		73	28	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
tert-Butylbenzene	<29		73	29	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Tetrachloroethene	<27		73	27	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Toluene	<11		18	11	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
trans-1,2-Dichloroethene	<25		73	25	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
trans-1,3-Dichloropropene	<26		73	26	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Trichloroethene	<12		36	12	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Trichlorofluoromethane	<31		73	31	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Vinyl chloride	<19		73	19	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50
Xylenes, Total	<16		36	16	ug/Kg	☼	11/16/20 11:45	11/28/20 01:56	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*11/16/20 11:45*	*11/28/20 01:56*	*50*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*	*11/16/20 11:45*	*11/28/20 01:56*	*50*
Dibromofluoromethane (Surr)	*91*		*75 - 120*	*11/16/20 11:45*	*11/28/20 01:56*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/16/20 11:45*	*11/28/20 01:56*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<49		410	49	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
2-Methylnaphthalene	<37		410	37	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Acenaphthene	<36		200	36	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Acenaphthylene	<27		200	27	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Anthracene	<34		200	34	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Benzo[a]anthracene	<27		200	27	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Benzo[a]pyrene	<39		200	39	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Benzo[b]fluoranthene	<44		200	44	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Benzo[g,h,i]perylene	<65	F1	200	65	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Benzo[k]fluoranthene	<60		200	60	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Chrysene	<55		200	55	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Dibenz(a,h)anthracene	<39		200	39	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Fluoranthene	<37		200	37	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Fluorene	<28		200	28	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Indeno[1,2,3-cd]pyrene	<52	F1	200	52	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Naphthalene	<31		200	31	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Phenanthrene	<28		200	28	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5
Pyrene	<40		200	40	ug/Kg	☼	11/24/20 16:02	11/26/20 02:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*43 - 145*	*11/24/20 16:02*	*11/26/20 02:16*	*5*
Nitrobenzene-d5 (Surr)	*61*		*37 - 147*	*11/24/20 16:02*	*11/26/20 02:16*	*5*
Terphenyl-d14 (Surr)	*94*		*42 - 157*	*11/24/20 16:02*	*11/26/20 02:16*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.3**		1.1	0.37	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1
Barium	**76**	**V F1 F2**	1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1
Cadmium	<0.039	F1 F2	0.22	0.039	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1
Chromium	**19**	**F1**	1.1	0.53	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-19 2-4
Date Collected: 11/16/20 11:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-2
Matrix: Solid
Percent Solids: 81.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**11**	**F1**	0.54	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1
Selenium	<0.63	F1 F2	1.1	0.63	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1
Silver	<0.14	F1 F2	0.54	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 19:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.057**		0.019	0.0064	mg/Kg	☼	12/03/20 13:15	12/04/20 10:03	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-14 0-2
Date Collected: 11/16/20 12:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-3
Matrix: Solid
Percent Solids: 86.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.0		74	9.0	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
2-Methylnaphthalene	<6.7		74	6.7	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Acenaphthene	**11**	**J**	36	6.6	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Acenaphthylene	**5.2**	**J**	36	4.8	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Anthracene	**31**	**J**	36	6.1	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Benzo[a]anthracene	**140**		36	4.9	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Benzo[a]pyrene	**180**		36	7.1	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Benzo[b]fluoranthene	**230**		36	7.9	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Benzo[g,h,i]perylene	**68**		36	12	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Benzo[k]fluoranthene	**120**		36	11	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Chrysene	**160**		36	10	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Dibenz(a,h)anthracene	<7.1		36	7.1	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Fluoranthene	**260**		36	6.8	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Fluorene	**8.3**	**J**	36	5.2	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Indeno[1,2,3-cd]pyrene	**58**		36	9.5	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Naphthalene	<5.6		36	5.6	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Phenanthrene	**130**		36	5.1	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1
Pyrene	**370**		36	7.3	ug/Kg	☼	11/24/20 16:02	11/28/20 06:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*11/24/20 16:02*	*11/28/20 06:04*	*1*
Nitrobenzene-d5 (Surr)	*59*		*37 - 147*	*11/24/20 16:02*	*11/28/20 06:04*	*1*
Terphenyl-d14 (Surr)	*133*		*42 - 157*	*11/24/20 16:02*	*11/28/20 06:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.2**		1.1	0.36	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Barium	**43**		1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Cadmium	**0.26**		0.21	0.038	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Chromium	**9.2**		1.1	0.52	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Lead	**54**		0.53	0.24	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Selenium	<0.62		1.1	0.62	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1
Silver	<0.14		0.53	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 19:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.068**		0.019	0.0063	mg/Kg	☼	12/03/20 13:15	12/04/20 10:11	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-15 0-2
Date Collected: 11/16/20 12:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-4
Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1,1-Trichloroethane	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,1-Dichloropropene	<21		70	21	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2-Dichloroethane	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Benzene	<10		18	10	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Bromobenzene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Bromochloromethane	<30		70	30	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Bromodichloromethane	<26		70	26	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Bromoform	<34		70	34	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Bromomethane	<56		210	56	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Chlorobenzene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Chloroethane	<35		70	35	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Chloroform	<26		140	26	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Chloromethane	<23		70	23	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
cis-1,2-Dichloroethene	<29		70	29	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Dibromomethane	<19		70	19	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Ethylbenzene	<13		18	13	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Hexachlorobutadiene	<31		70	31	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Isopropyl ether	<19		70	19	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Methyl tert-butyl ether	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Methylene Chloride	<110		350	110	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Naphthalene	<23		70	23	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-15 0-2
Date Collected: 11/16/20 12:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-4
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Styrene	<27		70	27	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Toluene	<10		18	10	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
trans-1,2-Dichloroethene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Trichloroethene	<12		35	12	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Vinyl chloride	<18		70	18	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50
Xylenes, Total	<15		35	15	ug/Kg	☼	11/16/20 12:35	11/28/20 02:20	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*11/16/20 12:35*	*11/28/20 02:20*	*50*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*	*11/16/20 12:35*	*11/28/20 02:20*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/16/20 12:35*	*11/28/20 02:20*	*50*
Toluene-d8 (Surr)	*96*		*75 - 120*	*11/16/20 12:35*	*11/28/20 02:20*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-15 2-4

Date Collected: 11/16/20 12:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-5

Matrix: Solid
Percent Solids: 83.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.5		79	9.5	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
2-Methylnaphthalene	<7.2		79	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Acenaphthene	<7.0		39	7.0	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Acenaphthylene	<5.1		39	5.1	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Anthracene	<6.5		39	6.5	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Benzo[a]anthracene	**6.5**	**J**	39	5.2	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Benzo[a]pyrene	**7.9**	**J**	39	7.6	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Benzo[b]fluoranthene	<8.4		39	8.4	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Benzo[g,h,i]perylene	<13		39	13	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Benzo[k]fluoranthene	<11		39	11	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Chrysene	<11		39	11	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Dibenz(a,h)anthracene	<7.5		39	7.5	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Fluoranthene	**11**	**J**	39	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Fluorene	<5.5		39	5.5	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Indeno[1,2,3-cd]pyrene	<10		39	10	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Naphthalene	<6.0		39	6.0	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Phenanthrene	**14**	**J**	39	5.4	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1
Pyrene	**9.2**	**J**	39	7.8	ug/Kg	☼	11/24/20 16:02	11/25/20 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*11/24/20 16:02*	*11/25/20 17:32*	*1*
Nitrobenzene-d5 (Surr)	*71*		*37 - 147*	*11/24/20 16:02*	*11/25/20 17:32*	*1*
Terphenyl-d14 (Surr)	*75*		*42 - 157*	*11/24/20 16:02*	*11/25/20 17:32*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.3**		1.2	0.40	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Barium	**59**		1.2	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Cadmium	<0.042		0.24	0.042	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Chromium	**18**		1.2	0.58	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Lead	**11**		0.59	0.27	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Selenium	<0.69		1.2	0.69	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1
Silver	<0.15		0.59	0.15	mg/Kg	☼	12/01/20 06:30	12/01/20 19:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.036**		0.019	0.0063	mg/Kg	☼	12/03/20 13:15	12/04/20 10:23	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-18 0-2

Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-6

Matrix: Solid
Percent Solids: 89.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	71	J	73	8.8	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
2-Methylnaphthalene	84		73	6.6	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Acenaphthene	16	J	36	6.5	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Acenaphthylene	10	J	36	4.7	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Anthracene	32	J	36	6.0	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Benzo[a]anthracene	140		36	4.8	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Benzo[a]pyrene	170		36	7.0	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Benzo[b]fluoranthene	240		36	7.8	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Benzo[g,h,i]perylene	74		36	12	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Benzo[k]fluoranthene	91		36	11	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Chrysene	170		36	9.8	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Dibenz(a,h)anthracene	20	J	36	7.0	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Fluoranthene	290		36	6.7	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Fluorene	14	J	36	5.1	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Indeno[1,2,3-cd]pyrene	57		36	9.3	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Naphthalene	51		36	5.5	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Phenanthrene	200		36	5.0	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1
Pyrene	330		36	7.2	ug/Kg	☼	11/24/20 16:02	11/26/20 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*87*		*43 - 145*	*11/24/20 16:02*	*11/26/20 04:12*	*1*
Nitrobenzene-d5 (Surr)	*61*		*37 - 147*	*11/24/20 16:02*	*11/26/20 04:12*	*1*
Terphenyl-d14 (Surr)	*127*		*42 - 157*	*11/24/20 16:02*	*11/26/20 04:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.7		1.1	0.38	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Barium	97		1.1	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Cadmium	0.55		0.22	0.040	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Chromium	14		1.1	0.54	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Lead	79		0.55	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Selenium	<0.65		1.1	0.65	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1
Silver	<0.14		0.55	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.017	0.0056	mg/Kg	☼	12/03/20 13:15	12/04/20 10:25	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-18 2-4
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-7
Matrix: Solid
Percent Solids: 91.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		62	28	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1,1-Trichloroethane	<23		62	23	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1,2,2-Tetrachloroethane	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1,2-Trichloroethane	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1-Dichloroethane	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1-Dichloroethene	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,1-Dichloropropene	<18		62	18	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2,3-Trichlorobenzene	<28		62	28	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2,3-Trichloropropane	<26		120	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2,4-Trichlorobenzene	<21		62	21	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2,4-Trimethylbenzene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2-Dibromo-3-Chloropropane	<120		310	120	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2-Dibromoethane	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2-Dichlorobenzene	<21		62	21	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2-Dichloroethane	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,2-Dichloropropane	<26		62	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,3,5-Trimethylbenzene	<23		62	23	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,3-Dichlorobenzene	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,3-Dichloropropane	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
1,4-Dichlorobenzene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
2,2-Dichloropropane	<27		62	27	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
2-Chlorotoluene	<19		62	19	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
4-Chlorotoluene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Benzene	<9.0		15	9.0	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Bromobenzene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Bromochloromethane	<26		62	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Bromodichloromethane	<23		62	23	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Bromoform	<30		62	30	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Bromomethane	<49		180	49	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Carbon tetrachloride	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Chlorobenzene	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Chloroethane	<31		62	31	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Chloroform	<23		120	23	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Chloromethane	<20		62	20	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
cis-1,2-Dichloroethene	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
cis-1,3-Dichloropropene	<26		62	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Dibromochloromethane	<30		62	30	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Dibromomethane	<17		62	17	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Dichlorodifluoromethane	<42		180	42	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Ethylbenzene	<11		15	11	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Hexachlorobutadiene	<27		62	27	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Isopropyl ether	<17		62	17	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Isopropylbenzene	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Methyl tert-butyl ether	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Methylene Chloride	<100		310	100	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Naphthalene	<21		62	21	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
n-Butylbenzene	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
N-Propylbenzene	<26		62	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
p-Isopropyltoluene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-18 2-4
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-7
Matrix: Solid
Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Styrene	<24		62	24	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
tert-Butylbenzene	<25		62	25	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Tetrachloroethene	<23		62	23	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Toluene	<9.1		15	9.1	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
trans-1,2-Dichloroethene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
trans-1,3-Dichloropropene	<22		62	22	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Trichloroethene	<10		31	10	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Trichlorofluoromethane	<26		62	26	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Vinyl chloride	<16		62	16	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50
Xylenes, Total	<14		31	14	ug/Kg	☼	11/16/20 13:10	11/28/20 02:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*11/16/20 13:10*	*11/28/20 02:45*	*50*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*	*11/16/20 13:10*	*11/28/20 02:45*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/16/20 13:10*	*11/28/20 02:45*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/16/20 13:10*	*11/28/20 02:45*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-21 2-4

Date Collected: 11/16/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-8

Matrix: Solid
Percent Solids: 80.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	21	J	81	9.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
2-Methylnaphthalene	21	J	81	7.3	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Acenaphthene	48		40	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Acenaphthylene	13	J	40	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Anthracene	100		40	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Benzo[a]anthracene	310		40	5.4	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Benzo[a]pyrene	340		40	7.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Benzo[b]fluoranthene	470		40	8.6	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Benzo[g,h,i]perylene	120		40	13	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Benzo[k]fluoranthene	150		40	12	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Chrysene	320		40	11	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Dibenz(a,h)anthracene	38	J	40	7.7	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Fluoranthene	820		40	7.4	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Fluorene	41		40	5.6	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Indeno[1,2,3-cd]pyrene	130		40	10	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Naphthalene	22	J	40	6.1	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Phenanthrene	500		40	5.6	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1
Pyrene	570		40	7.9	ug/Kg	☼	11/24/20 16:02	11/25/20 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*91*		*43 - 145*	*11/24/20 16:02*	*11/25/20 16:28*	*1*
Nitrobenzene-d5 (Surr)	*65*		*37 - 147*	*11/24/20 16:02*	*11/25/20 16:28*	*1*
Terphenyl-d14 (Surr)	*89*		*42 - 157*	*11/24/20 16:02*	*11/25/20 16:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.0		1.2	0.42	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Barium	100		1.2	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Cadmium	0.048	J	0.24	0.044	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Chromium	13		1.2	0.60	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Lead	18		0.61	0.28	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Selenium	<0.72		1.2	0.72	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1
Silver	<0.16		0.61	0.16	mg/Kg	☼	12/01/20 06:30	12/01/20 20:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.020	0.0065	mg/Kg	☼	12/03/20 13:15	12/04/20 10:27	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-22 2.5-5

Date Collected: 11/16/20 13:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-9

Matrix: Solid
Percent Solids: 87.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.1		76	9.1	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
2-Methylnaphthalene	<6.9		76	6.9	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Acenaphthene	**25**	**J**	37	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Acenaphthylene	<4.9		37	4.9	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Anthracene	**49**		37	6.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Benzo[a]anthracene	**220**		37	5.0	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Benzo[a]pyrene	**210**		37	7.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Benzo[b]fluoranthene	**250**		37	8.1	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Benzo[g,h,i]perylene	**95**		37	12	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Benzo[k]fluoranthene	**110**		37	11	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Chrysene	**230**		37	10	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Dibenz(a,h)anthracene	**29**	**J**	37	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Fluoranthene	**480**		37	6.9	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Fluorene	**24**	**J**	37	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Indeno[1,2,3-cd]pyrene	**89**		37	9.7	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Naphthalene	<5.8		37	5.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Phenanthrene	**240**		37	5.2	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1
Pyrene	**340**		37	7.4	ug/Kg	☼	11/24/20 16:02	11/25/20 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*43 - 145*	*11/24/20 16:02*	*11/25/20 15:30*	*1*
Nitrobenzene-d5 (Surr)	*63*		*37 - 147*	*11/24/20 16:02*	*11/25/20 15:30*	*1*
Terphenyl-d14 (Surr)	*92*		*42 - 157*	*11/24/20 16:02*	*11/25/20 15:30*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.6**		1.1	0.37	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Barium	**58**		1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Cadmium	<0.039		0.22	0.039	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Chromium	**12**		1.1	0.54	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Lead	**11**		0.54	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Selenium	<0.64		1.1	0.64	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1
Silver	<0.14		0.54	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:12	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.018	0.0061	mg/Kg	☼	12/03/20 13:15	12/04/20 10:29	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-22 5-6.5

Date Collected: 11/16/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-10

Matrix: Solid
Percent Solids: 96.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Acenaphthene	<6.0		33	6.0	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Acenaphthylene	<4.4		33	4.4	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Anthracene	<5.5		33	5.5	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Chrysene	<9.1		33	9.1	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Fluoranthene	<6.2		33	6.2	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Fluorene	<4.7		33	4.7	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Naphthalene	<5.1		33	5.1	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Phenanthrene	<4.6		33	4.6	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1
Pyrene	<6.6		33	6.6	ug/Kg	☼	11/24/20 16:02	11/25/20 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*93*		*43 - 145*	*11/24/20 16:02*	*11/25/20 13:33*	*1*
Nitrobenzene-d5 (Surr)	*66*		*37 - 147*	*11/24/20 16:02*	*11/25/20 13:33*	*1*
Terphenyl-d14 (Surr)	*96*		*42 - 157*	*11/24/20 16:02*	*11/25/20 13:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.97**		0.87	0.30	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Barium	**8.8**		0.87	0.099	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Cadmium	<0.031		0.17	0.031	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Chromium	**4.7**		0.87	0.43	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Lead	**2.1**		0.43	0.20	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Selenium	<0.51		0.87	0.51	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1
Silver	<0.11		0.43	0.11	mg/Kg	☼	12/01/20 06:30	12/01/20 20:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0069**	**J**	0.016	0.0054	mg/Kg	☼	12/03/20 13:15	12/04/20 10:31	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: VP-3 0-0.5

Date Collected: 11/16/20 14:55
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-11

Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	2500		380	46	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
2-Methylnaphthalene	3100		380	35	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Acenaphthene	230		190	34	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Acenaphthylene	76	J	190	25	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Anthracene	470		190	31	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Benzo[a]anthracene	1300		190	25	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Benzo[a]pyrene	2000		190	36	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Benzo[b]fluoranthene	3100		190	41	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Benzo[g,h,i]perylene	790		190	60	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Benzo[k]fluoranthene	1000		190	55	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Chrysene	1800		190	51	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Dibenz(a,h)anthracene	180	J	190	36	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Fluoranthene	3000		190	35	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Fluorene	220		190	26	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Indeno[1,2,3-cd]pyrene	710		190	49	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Naphthalene	2100		190	29	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Phenanthrene	3700		190	26	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5
Pyrene	3900		190	37	ug/Kg	☼	11/24/20 16:02	11/28/20 04:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*43 - 145*	*11/24/20 16:02*	*11/28/20 04:35*	*5*
Nitrobenzene-d5 (Surr)	*73*		*37 - 147*	*11/24/20 16:02*	*11/28/20 04:35*	*5*
Terphenyl-d14 (Surr)	*153*		*42 - 157*	*11/24/20 16:02*	*11/28/20 04:35*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	47		4.9	1.7	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Barium	100		4.9	0.56	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Cadmium	<0.18		0.98	0.18	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Chromium	10		4.9	2.4	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Lead	49		2.5	1.1	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Selenium	<2.9		4.9	2.9	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5
Silver	<0.63		2.5	0.63	mg/Kg	☼	12/01/20 06:30	12/01/20 20:19	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.017	0.0056	mg/Kg	☼	12/03/20 13:15	12/04/20 10:33	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-20 0-2
Date Collected: 11/16/20 15:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-12
Matrix: Solid
Percent Solids: 89.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1,2-Trichloroethane	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2-Dibromoethane	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,2-Dichloropropane	<27		64	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
2,2-Dichloropropane	<28		64	28	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
4-Chlorotoluene	<22		64	22	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Benzene	<9.4		16	9.4	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Bromobenzene	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Bromochloromethane	<27		64	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Bromoform	<31		64	31	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Bromomethane	<51		190	51	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Carbon tetrachloride	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Chlorobenzene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Chloroethane	<32		64	32	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Chloroform	<24		130	24	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Chloromethane	<21		64	21	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Dibromochloromethane	<31		64	31	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Dibromomethane	<17		64	17	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Ethylbenzene	<12		16	12	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Hexachlorobutadiene	<29		64	29	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Isopropyl ether	<18		64	18	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Isopropylbenzene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Methylene Chloride	<100		320	100	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Naphthalene	<21		64	21	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
N-Propylbenzene	<27		64	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-20 0-2
Date Collected: 11/16/20 15:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-12
Matrix: Solid
Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Styrene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
tert-Butylbenzene	<25		64	25	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Tetrachloroethene	<24		64	24	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Toluene	<9.4		16	9.4	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Trichloroethene	<11		32	11	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Vinyl chloride	<17		64	17	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50
Xylenes, Total	<14		32	14	ug/Kg	☼	11/16/20 15:25	11/28/20 03:10	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*	*11/16/20 15:25*	*11/28/20 03:10*	*50*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*	*11/16/20 15:25*	*11/28/20 03:10*	*50*
Dibromofluoromethane (Surr)	*88*		*75 - 120*	*11/16/20 15:25*	*11/28/20 03:10*	*50*
Toluene-d8 (Surr)	*98*		*75 - 120*	*11/16/20 15:25*	*11/28/20 03:10*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.6		71	8.6	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
2-Methylnaphthalene	<6.5		71	6.5	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Acenaphthene	<6.4		35	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Acenaphthylene	<4.7		35	4.7	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Anthracene	<5.9		35	5.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Benzo[a]anthracene	<4.8		35	4.8	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Benzo[a]pyrene	<6.9		35	6.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Benzo[b]fluoranthene	<7.6		35	7.6	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Benzo[g,h,i]perylene	<11		35	11	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Benzo[k]fluoranthene	<10		35	10	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Chrysene	<9.7		35	9.7	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Dibenz(a,h)anthracene	<6.8		35	6.8	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Fluoranthene	<6.6		35	6.6	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Fluorene	<5.0		35	5.0	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Indeno[1,2,3-cd]pyrene	<9.2		35	9.2	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Naphthalene	<5.4		35	5.4	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Phenanthrene	<4.9		35	4.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1
Pyrene	<7.0		35	7.0	ug/Kg	☼	11/24/20 16:02	11/25/20 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*43 - 145*	*11/24/20 16:02*	*11/25/20 14:02*	*1*
Nitrobenzene-d5 (Surr)	*68*		*37 - 147*	*11/24/20 16:02*	*11/25/20 14:02*	*1*
Terphenyl-d14 (Surr)	*100*		*42 - 157*	*11/24/20 16:02*	*11/25/20 14:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.50**	**J**	1.1	0.36	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1
Barium	**19**		1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1
Cadmium	**0.079**	**J**	0.21	0.038	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1
Chromium	**8.5**		1.1	0.53	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-20 0-2
Date Collected: 11/16/20 15:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-12
Matrix: Solid
Percent Solids: 89.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.0**		0.53	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1
Selenium	<0.63		1.1	0.63	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1
Silver	<0.14		0.53	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.018	0.0061	mg/Kg	☼	12/03/20 13:15	12/04/20 10:35	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-3 2-4
Date Collected: 11/17/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-13
Matrix: Solid
Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<35		75	35	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1,1-Trichloroethane	<28		75	28	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1,2,2-Tetrachloroethane	<30		75	30	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1,2-Trichloroethane	<26		75	26	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1-Dichloroethane	<31		75	31	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1-Dichloroethene	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,1-Dichloropropene	<22		75	22	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2,3-Trichlorobenzene	<34		75	34	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2,3-Trichloropropane	<31		150	31	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2,4-Trichlorobenzene	<26		75	26	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2,4-Trimethylbenzene	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2-Dibromoethane	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2-Dichlorobenzene	<25		75	25	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2-Dichloroethane	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,2-Dichloropropane	<32		75	32	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,3,5-Trimethylbenzene	<28		75	28	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,3-Dichlorobenzene	<30		75	30	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,3-Dichloropropane	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
1,4-Dichlorobenzene	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
2,2-Dichloropropane	<33		75	33	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
2-Chlorotoluene	<23		75	23	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
4-Chlorotoluene	<26		75	26	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Benzene	<11		19	11	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Bromobenzene	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Bromochloromethane	<32		75	32	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Bromodichloromethane	<28		75	28	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Bromoform	<36		75	36	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Bromomethane	<60		220	60	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Carbon tetrachloride	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Chlorobenzene	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Chloroethane	<38		75	38	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Chloroform	<28		150	28	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Chloromethane	<24		75	24	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
cis-1,2-Dichloroethene	<31		75	31	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
cis-1,3-Dichloropropene	<31		75	31	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Dibromochloromethane	<36		75	36	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Dibromomethane	<20		75	20	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Dichlorodifluoromethane	<50		220	50	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Ethylbenzene	<14		19	14	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Hexachlorobutadiene	<33		75	33	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Isopropyl ether	<21		75	21	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Isopropylbenzene	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Methyl tert-butyl ether	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Methylene Chloride	<120		370	120	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Naphthalene	<25		75	25	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
n-Butylbenzene	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
N-Propylbenzene	<31		75	31	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
p-Isopropyltoluene	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-3 2-4
Date Collected: 11/17/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-13
Matrix: Solid
Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<30		75	30	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Styrene	<29		75	29	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
tert-Butylbenzene	<30		75	30	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Tetrachloroethene	<28		75	28	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Toluene	<11		19	11	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
trans-1,2-Dichloroethene	<26		75	26	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
trans-1,3-Dichloropropene	<27		75	27	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Trichloroethene	<12		37	12	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Trichlorofluoromethane	<32		75	32	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Vinyl chloride	<20		75	20	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50
Xylenes, Total	<16		37	16	ug/Kg	☼	11/17/20 13:20	11/28/20 03:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*11/17/20 13:20*	*11/28/20 03:35*	*50*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*	*11/17/20 13:20*	*11/28/20 03:35*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/17/20 13:20*	*11/28/20 03:35*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/17/20 13:20*	*11/28/20 03:35*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.4**		1.1	0.39	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Barium	**100**		1.1	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Cadmium	<0.041		0.23	0.041	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Chromium	**19**		1.1	0.57	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Lead	**16**		0.57	0.26	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Selenium	<0.67		1.1	0.67	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1
Silver	<0.15		0.57	0.15	mg/Kg	☼	12/01/20 06:30	12/01/20 20:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.020	0.0067	mg/Kg	☼	12/03/20 13:15	12/04/20 10:37	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-4 0-2
Date Collected: 11/17/20 15:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-14
Matrix: Solid
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<21		46	21	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1,1-Trichloroethane	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1,2,2-Tetrachloroethane	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1,2-Trichloroethane	<16		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1-Dichloroethane	<19		46	19	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1-Dichloroethene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,1-Dichloropropene	<14		46	14	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2,3-Trichlorobenzene	<21		46	21	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2,3-Trichloropropane	<19		92	19	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2,4-Trichlorobenzene	<16		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2,4-Trimethylbenzene	**71**		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2-Dibromo-3-Chloropropane	<91		230	91	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2-Dibromoethane	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2-Dichlorobenzene	<15		46	15	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2-Dichloroethane	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,2-Dichloropropane	<20		46	20	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,3,5-Trimethylbenzene	**19**	**J**	46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,3-Dichlorobenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,3-Dichloropropane	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
1,4-Dichlorobenzene	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
2,2-Dichloropropane	<20		46	20	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
2-Chlorotoluene	<14		46	14	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
4-Chlorotoluene	<16		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Benzene	**22**		11	6.7	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Bromobenzene	<16		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Bromochloromethane	<20		46	20	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Bromodichloromethane	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Bromoform	<22		46	22	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Bromomethane	<37		140	37	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Carbon tetrachloride	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Chlorobenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Chloroethane	<23		46	23	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Chloroform	<17		92	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Chloromethane	<15		46	15	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
cis-1,2-Dichloroethene	<19		46	19	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
cis-1,3-Dichloropropene	<19		46	19	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Dibromochloromethane	<22		46	22	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Dibromomethane	<12		46	12	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Dichlorodifluoromethane	<31		140	31	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Ethylbenzene	**20**		11	8.4	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Hexachlorobutadiene	<20		46	20	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Isopropyl ether	<13		46	13	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Isopropylbenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Methyl tert-butyl ether	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Methylene Chloride	<75		230	75	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Naphthalene	**120**		46	15	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
n-Butylbenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
N-Propylbenzene	<19		46	19	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
p-Isopropyltoluene	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-4 0-2
Date Collected: 11/17/20 15:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-14
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Styrene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
tert-Butylbenzene	<18		46	18	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Tetrachloroethene	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Toluene	**86**		11	6.8	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
trans-1,2-Dichloroethene	<16		46	16	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
trans-1,3-Dichloropropene	<17		46	17	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Trichloroethene	<7.5		23	7.5	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Trichlorofluoromethane	<20		46	20	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Vinyl chloride	<12		46	12	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50
Xylenes, Total	**210**		23	10	ug/Kg	☼	11/17/20 15:45	11/28/20 04:00	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*11/17/20 15:45*	*11/28/20 04:00*	*50*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*	*11/17/20 15:45*	*11/28/20 04:00*	*50*
Dibromofluoromethane (Surr)	*90*		*75 - 120*	*11/17/20 15:45*	*11/28/20 04:00*	*50*
Toluene-d8 (Surr)	*98*		*75 - 120*	*11/17/20 15:45*	*11/28/20 04:00*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**300**		75	9.1	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
2-Methylnaphthalene	**350**		75	6.8	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Acenaphthene	**22**	**J**	37	6.7	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Acenaphthylene	**74**		37	4.9	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Anthracene	**89**		37	6.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Benzo[a]anthracene	**480**		37	5.0	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Benzo[a]pyrene	**800**		37	7.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Benzo[b]fluoranthene	**1300**		37	8.0	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Benzo[g,h,i]perylene	**370**		37	12	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Benzo[k]fluoranthene	**390**		37	11	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Chrysene	**640**		37	10	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Dibenz(a,h)anthracene	**84**		37	7.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Fluoranthene	**840**		37	6.9	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Fluorene	**30**	**J**	37	5.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Indeno[1,2,3-cd]pyrene	**300**		37	9.6	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Naphthalene	**230**		37	5.7	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Phenanthrene	**500**		37	5.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1
Pyrene	**1200**		37	7.4	ug/Kg	☼	11/24/20 16:02	11/28/20 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*43 - 145*	*11/24/20 16:02*	*11/28/20 05:05*	*1*
Nitrobenzene-d5 (Surr)	*74*		*37 - 147*	*11/24/20 16:02*	*11/28/20 05:05*	*1*
Terphenyl-d14 (Surr)	*146*		*42 - 157*	*11/24/20 16:02*	*11/28/20 05:05*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**		1.0	0.35	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1
Barium	**130**		1.0	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1
Cadmium	**0.47**		0.21	0.037	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1
Chromium	**23**		1.0	0.51	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-4 0-2

Date Collected: 11/17/20 15:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-14

Matrix: Solid
Percent Solids: 88.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**110**		0.52	0.24	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1
Selenium	**0.72**	**J**	1.0	0.61	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1
Silver	<0.13		0.52	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.45**		0.018	0.0060	mg/Kg	☼	12/03/20 13:15	12/04/20 10:40	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-5 2-3
Date Collected: 11/18/20 09:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-15
Matrix: Solid
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		58	27	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1,1-Trichloroethane	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1,2,2-Tetrachloroethane	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1,2-Trichloroethane	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1-Dichloroethane	<24		58	24	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1-Dichloroethene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,1-Dichloropropene	<17		58	17	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2,3-Trichlorobenzene	<27		58	27	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2,3-Trichloropropane	<24		120	24	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2,4-Trichlorobenzene	<20		58	20	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2,4-Trimethylbenzene	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2-Dibromo-3-Chloropropane	<120		290	120	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2-Dibromoethane	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2-Dichlorobenzene	<20		58	20	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2-Dichloroethane	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,2-Dichloropropane	<25		58	25	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,3,5-Trimethylbenzene	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,3-Dichlorobenzene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,3-Dichloropropane	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
1,4-Dichlorobenzene	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
2,2-Dichloropropane	<26		58	26	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
2-Chlorotoluene	<18		58	18	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
4-Chlorotoluene	<20		58	20	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Benzene	<8.5		15	8.5	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Bromobenzene	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Bromochloromethane	<25		58	25	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Bromodichloromethane	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Bromoform	<28		58	28	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Bromomethane	<47		180	47	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Carbon tetrachloride	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Chlorobenzene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Chloroethane	<29		58	29	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Chloroform	<22		120	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Chloromethane	<19		58	19	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
cis-1,2-Dichloroethene	<24		58	24	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
cis-1,3-Dichloropropene	<24		58	24	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Dibromochloromethane	<29		58	29	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Dibromomethane	<16		58	16	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Dichlorodifluoromethane	<39		180	39	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Ethylbenzene	<11		15	11	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Hexachlorobutadiene	<26		58	26	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Isopropyl ether	<16		58	16	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Isopropylbenzene	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Methyl tert-butyl ether	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Methylene Chloride	<95		290	95	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Naphthalene	<20		58	20	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
n-Butylbenzene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
N-Propylbenzene	<24		58	24	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
p-Isopropyltoluene	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-5 2-3
Date Collected: 11/18/20 09:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-15
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Styrene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
tert-Butylbenzene	<23		58	23	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Tetrachloroethene	<22		58	22	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Toluene	**11**	**J**	15	8.6	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
trans-1,2-Dichloroethene	<20		58	20	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
trans-1,3-Dichloropropene	<21		58	21	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Trichloroethene	<9.6		29	9.6	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Trichlorofluoromethane	<25		58	25	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Vinyl chloride	<15		58	15	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50
Xylenes, Total	**17**	**J**	29	13	ug/Kg	☼	11/18/20 09:20	11/28/20 04:25	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*	*11/18/20 09:20*	*11/28/20 04:25*	*50*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*	*11/18/20 09:20*	*11/28/20 04:25*	*50*
Dibromofluoromethane (Surr)	*88*		*75 - 120*	*11/18/20 09:20*	*11/28/20 04:25*	*50*
Toluene-d8 (Surr)	*98*		*75 - 120*	*11/18/20 09:20*	*11/28/20 04:25*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-5 3-4
Date Collected: 11/18/20 09:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-16
Matrix: Solid
Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	71	J	76	9.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
2-Methylnaphthalene	87		76	7.0	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Acenaphthene	7.7	J	38	6.8	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Acenaphthylene	16	J	38	5.0	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Anthracene	25	J	38	6.3	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Benzo[a]anthracene	94		38	5.1	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Benzo[a]pyrene	160		38	7.3	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Benzo[b]fluoranthene	250		38	8.2	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Benzo[g,h,i]perylene	120		38	12	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Benzo[k]fluoranthene	81		38	11	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Chrysene	120		38	10	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Dibenz(a,h)anthracene	35	J	38	7.3	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Fluoranthene	170		38	7.0	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Fluorene	7.9	J	38	5.3	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Indeno[1,2,3-cd]pyrene	90		38	9.8	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Naphthalene	58		38	5.8	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Phenanthrene	130		38	5.3	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1
Pyrene	230		38	7.5	ug/Kg	☼	11/24/20 16:02	11/28/20 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*43 - 145*	*11/24/20 16:02*	*11/28/20 05:34*	*1*
Nitrobenzene-d5 (Surr)	*55*		*37 - 147*	*11/24/20 16:02*	*11/28/20 05:34*	*1*
Terphenyl-d14 (Surr)	*120*		*42 - 157*	*11/24/20 16:02*	*11/28/20 05:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9		1.1	0.38	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Barium	410		1.1	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Cadmium	1.4		0.22	0.040	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Chromium	20		1.1	0.55	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Lead	240		0.56	0.26	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Selenium	<0.65		1.1	0.65	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1
Silver	<0.14		0.56	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.018	0.0061	mg/Kg	☼	12/03/20 13:15	12/04/20 10:44	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-6 2-4
Date Collected: 11/18/20 11:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-17
Matrix: Solid
Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<41		89	41	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1,1-Trichloroethane	<34		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1,2,2-Tetrachloroethane	<35		89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1,2-Trichloroethane	<31		89	31	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1-Dichloroethane	<36		89	36	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1-Dichloroethene	<35		89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,1-Dichloropropene	<26		89	26	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2,3-Trichlorobenzene	<41		89	41	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2,3-Trichloropropane	<37		180	37	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2,4-Trichlorobenzene	<30		89	30	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2,4-Trimethylbenzene	**640**		89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2-Dibromo-3-Chloropropane	<180		440	180	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2-Dibromoethane	<34		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2-Dichlorobenzene	<30		89	30	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2-Dichloroethane	<35		89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,2-Dichloropropane	<38		89	38	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,3,5-Trimethylbenzene	**150**		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,3-Dichlorobenzene	<36		89	36	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,3-Dichloropropane	<32		89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
1,4-Dichlorobenzene	<32		89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
2,2-Dichloropropane	<39		89	39	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
2-Chlorotoluene	<28		89	28	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
4-Chlorotoluene	<31		89	31	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Benzene	**130**		22	13	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Bromobenzene	<32		89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Bromochloromethane	<38		89	38	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Bromodichloromethane	<33		89	33	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Bromoform	<43		89	43	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Bromomethane	<71		270	71	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Carbon tetrachloride	<34		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Chlorobenzene	<34		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Chloroethane	<45		89	45	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Chloroform	<33		180	33	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Chloromethane	<28		89	28	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
cis-1,2-Dichloroethene	<36		89	36	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
cis-1,3-Dichloropropene	<37		89	37	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Dibromochloromethane	<43		89	43	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Dibromomethane	<24		89	24	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Dichlorodifluoromethane	<60		270	60	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Ethylbenzene	**210**		22	16	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Hexachlorobutadiene	<40		89	40	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Isopropyl ether	<25		89	25	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Isopropylbenzene	**160**		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Methyl tert-butyl ether	<35		89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Methylene Chloride	<140		440	140	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Naphthalene	**810**		89	30	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
n-Butylbenzene	**81**	**J**	89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
N-Propylbenzene	**170**		89	37	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
p-Isopropyltoluene	**52**	**J**	89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-6 2-4
Date Collected: 11/18/20 11:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-17
Matrix: Solid
Percent Solids: 86.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**62**	**J**	89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Styrene	<34		89	34	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
tert-Butylbenzene	<35		89	35	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Tetrachloroethene	**240**		89	33	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Toluene	**870**		22	13	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
trans-1,2-Dichloroethene	<31		89	31	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
trans-1,3-Dichloropropene	<32		89	32	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Trichloroethene	<15		44	15	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Trichlorofluoromethane	<38		89	38	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Vinyl chloride	<23		89	23	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50
Xylenes, Total	**1800**		44	20	ug/Kg	☼	11/18/20 11:30	11/28/20 04:50	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*11/18/20 11:30*	*11/28/20 04:50*	*50*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*	*11/18/20 11:30*	*11/28/20 04:50*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/18/20 11:30*	*11/28/20 04:50*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*11/18/20 11:30*	*11/28/20 04:50*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-6 4.5-6
Date Collected: 11/18/20 11:32
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-18
Matrix: Solid
Percent Solids: 81.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	1200		81	9.7	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
2-Methylnaphthalene	1400		81	7.3	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Acenaphthene	47		40	7.2	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Acenaphthylene	41		40	5.3	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Anthracene	140		40	6.7	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Benzo[a]anthracene	380		40	5.4	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Benzo[a]pyrene	460		40	7.7	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Benzo[b]fluoranthene	630		40	8.6	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Benzo[g,h,i]perylene	600		40	13	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Benzo[k]fluoranthene	220		40	12	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Chrysene	470		40	11	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Dibenz(a,h)anthracene	63		40	7.7	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Fluoranthene	540		40	7.4	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Fluorene	53		40	5.6	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Indeno[1,2,3-cd]pyrene	170		40	10	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Naphthalene	910		40	6.1	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Phenanthrene	980		40	5.6	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1
Pyrene	820		40	7.9	ug/Kg	☼	11/24/20 16:02	11/28/20 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*91*		*43 - 145*	*11/24/20 16:02*	*11/28/20 03:36*	*1*
Nitrobenzene-d5 (Surr)	*69*		*37 - 147*	*11/24/20 16:02*	*11/28/20 03:36*	*1*
Terphenyl-d14 (Surr)	*150*		*42 - 157*	*11/24/20 16:02*	*11/28/20 03:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		1.2	0.42	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Barium	240		1.2	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Cadmium	0.79		0.24	0.044	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Chromium	11		1.2	0.60	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Lead	56		0.61	0.28	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Selenium	1.1	J	1.2	0.72	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1
Silver	<0.16		0.61	0.16	mg/Kg	☼	12/01/20 06:30	12/01/20 20:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.019	0.0064	mg/Kg	☼	12/03/20 13:15	12/04/20 10:51	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-7 2-4
Date Collected: 11/18/20 13:55
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-19
Matrix: Solid
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		59	27	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1,1-Trichloroethane	<22		59	22	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1,2,2-Tetrachloroethane	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1,2-Trichloroethane	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1-Dichloroethane	<24		59	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1-Dichloroethene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,1-Dichloropropene	<18		59	18	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2,3-Trichlorobenzene	<27		59	27	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2,3-Trichloropropane	<24		120	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2,4-Trichlorobenzene	<20		59	20	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2,4-Trimethylbenzene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2-Dibromo-3-Chloropropane	<120		290	120	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2-Dibromoethane	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2-Dichlorobenzene	<20		59	20	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2-Dichloroethane	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,2-Dichloropropane	<25		59	25	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,3,5-Trimethylbenzene	<22		59	22	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,3-Dichlorobenzene	<24		59	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,3-Dichloropropane	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
1,4-Dichlorobenzene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
2,2-Dichloropropane	<26		59	26	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
2-Chlorotoluene	<18		59	18	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
4-Chlorotoluene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Benzene	<8.6		15	8.6	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Bromobenzene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Bromochloromethane	<25		59	25	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Bromodichloromethane	<22		59	22	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Bromoform	<28		59	28	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Bromomethane	<47		180	47	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Carbon tetrachloride	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Chlorobenzene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Chloroethane	<30		59	30	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Chloroform	<22		120	22	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Chloromethane	<19		59	19	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
cis-1,2-Dichloroethene	<24		59	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
cis-1,3-Dichloropropene	<24		59	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Dibromochloromethane	<29		59	29	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Dibromomethane	<16		59	16	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Dichlorodifluoromethane	<40		180	40	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Ethylbenzene	<11		15	11	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Hexachlorobutadiene	<26		59	26	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Isopropyl ether	<16		59	16	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Isopropylbenzene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Methyl tert-butyl ether	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Methylene Chloride	<96		290	96	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Naphthalene	**78**		59	20	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
n-Butylbenzene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
N-Propylbenzene	<24		59	24	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
p-Isopropyltoluene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-7 2-4
Date Collected: 11/18/20 13:55
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-19
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Styrene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
tert-Butylbenzene	<23		59	23	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Tetrachloroethene	<22		59	22	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Toluene	**9.9**	**J**	15	8.6	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
trans-1,2-Dichloroethene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
trans-1,3-Dichloropropene	<21		59	21	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Trichloroethene	<9.6		29	9.6	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Trichlorofluoromethane	<25		59	25	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Vinyl chloride	<15		59	15	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50
Xylenes, Total	**14**	**J**	29	13	ug/Kg	☼	11/18/20 13:55	11/28/20 05:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*11/18/20 13:55*	*11/28/20 05:15*	*50*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*	*11/18/20 13:55*	*11/28/20 05:15*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/18/20 13:55*	*11/28/20 05:15*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/18/20 13:55*	*11/28/20 05:15*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-7 4-6
Date Collected: 11/18/20 14:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-20
Matrix: Solid
Percent Solids: 80.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.2		1.2	0.40	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Barium	81		1.2	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Cadmium	<0.042		0.24	0.042	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Chromium	24		1.2	0.58	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Lead	11		0.59	0.27	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Selenium	0.80	J	1.2	0.69	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1
Silver	<0.15		0.59	0.15	mg/Kg	☼	12/01/20 06:30	12/01/20 20:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.019	0.0063	mg/Kg	☼	12/03/20 13:15	12/04/20 10:53	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-8 4-6
Date Collected: 11/18/20 14:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-21
Matrix: Solid
Percent Solids: 89.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	540		72	8.7	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
2-Methylnaphthalene	720		72	6.6	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Acenaphthene	44		36	6.4	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Acenaphthylene	64		36	4.7	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Anthracene	130		36	6.0	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Benzo[a]anthracene	540		36	4.8	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Benzo[a]pyrene	780		36	6.9	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Benzo[b]fluoranthene	1000		36	7.7	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Benzo[g,h,i]perylene	390		36	12	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Benzo[k]fluoranthene	350		36	11	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Chrysene	600		36	9.8	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Dibenz(a,h)anthracene	75		36	6.9	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Fluoranthene	910		36	6.6	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Fluorene	48		36	5.0	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Indeno[1,2,3-cd]pyrene	240		36	9.3	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Naphthalene	530		36	5.5	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Phenanthrene	660		36	5.0	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1
Pyrene	1300		36	7.1	ug/Kg	☼	11/24/20 16:02	11/28/20 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*93*		*43 - 145*	*11/24/20 16:02*	*11/28/20 04:05*	*1*
Nitrobenzene-d5 (Surr)	*73*		*37 - 147*	*11/24/20 16:02*	*11/28/20 04:05*	*1*
Terphenyl-d14 (Surr)	*150*		*42 - 157*	*11/24/20 16:02*	*11/28/20 04:05*	*1*

Client Sample ID: DUP 4
Date Collected: 11/18/20 13:57
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-22
Matrix: Solid
Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		67	31	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1,1-Trichloroethane	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1,2,2-Tetrachloroethane	<27		67	27	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1,2-Trichloroethane	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1-Dichloroethane	<28		67	28	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1-Dichloroethene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,1-Dichloropropene	<20		67	20	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2,3-Trichlorobenzene	<31		67	31	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2,3-Trichloropropane	<28		130	28	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2,4-Trichlorobenzene	<23		67	23	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2-Dibromoethane	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2-Dichlorobenzene	<22		67	22	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2-Dichloroethane	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,2-Dichloropropane	<29		67	29	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,3,5-Trimethylbenzene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,3-Dichlorobenzene	<27		67	27	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,3-Dichloropropane	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
1,4-Dichlorobenzene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
2,2-Dichloropropane	<30		67	30	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
2-Chlorotoluene	<21		67	21	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
4-Chlorotoluene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Benzene	<9.8		17	9.8	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Bromobenzene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Bromochloromethane	<29		67	29	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Bromodichloromethane	<25		67	25	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Bromoform	<33		67	33	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Bromomethane	<54		200	54	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Carbon tetrachloride	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Chlorobenzene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Chloroethane	<34		67	34	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Chloroform	<25		130	25	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Chloromethane	<22		67	22	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
cis-1,2-Dichloroethene	<27		67	27	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
cis-1,3-Dichloropropene	<28		67	28	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Dibromochloromethane	<33		67	33	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Dibromomethane	<18		67	18	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Dichlorodifluoromethane	<45		200	45	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Ethylbenzene	<12		17	12	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Hexachlorobutadiene	<30		67	30	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Isopropyl ether	<19		67	19	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Isopropylbenzene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Methyl tert-butyl ether	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Methylene Chloride	<110		340	110	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Naphthalene	<22		67	22	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
n-Butylbenzene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
N-Propylbenzene	<28		67	28	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
p-Isopropyltoluene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: DUP 4
Date Collected: 11/18/20 13:57
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-22
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<27		67	27	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Styrene	<26		67	26	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
tert-Butylbenzene	<27		67	27	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Tetrachloroethene	<25		67	25	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Toluene	<9.9		17	9.9	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
trans-1,2-Dichloroethene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
trans-1,3-Dichloropropene	<24		67	24	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Trichloroethene	<11		34	11	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Trichlorofluoromethane	<29		67	29	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Vinyl chloride	<18		67	18	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50
Xylenes, Total	<15		34	15	ug/Kg	☼	11/18/20 13:57	11/28/20 05:40	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*11/18/20 13:57*	*11/28/20 05:40*	*50*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*	*11/18/20 13:57*	*11/28/20 05:40*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/18/20 13:57*	*11/28/20 05:40*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/18/20 13:57*	*11/28/20 05:40*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: DUP 5
Date Collected: 11/16/20 13:22
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-23
Matrix: Solid
Percent Solids: 83.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.2		76	9.2	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
2-Methylnaphthalene	**7.0**	**J**	76	7.0	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Acenaphthene	**15**	**J**	38	6.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Acenaphthylene	**5.9**	**J**	38	5.0	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Anthracene	**38**		38	6.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Benzo[a]anthracene	**130**		38	5.1	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Benzo[a]pyrene	**130**		38	7.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Benzo[b]fluoranthene	**170**		38	8.2	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Benzo[g,h,i]perylene	**57**		38	12	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Benzo[k]fluoranthene	**60**		38	11	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Chrysene	**130**		38	10	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Dibenz(a,h)anthracene	**16**	**J**	38	7.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Fluoranthene	**280**		38	7.0	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Fluorene	**13**	**J**	38	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Indeno[1,2,3-cd]pyrene	**54**		38	9.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Naphthalene	<5.8		38	5.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Phenanthrene	**160**		38	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1
Pyrene	**210**		38	7.5	ug/Kg	☼	11/24/20 16:02	11/25/20 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*43 - 145*	*11/24/20 16:02*	*11/25/20 15:59*	*1*
Nitrobenzene-d5 (Surr)	*63*		*37 - 147*	*11/24/20 16:02*	*11/25/20 15:59*	*1*
Terphenyl-d14 (Surr)	*92*		*42 - 157*	*11/24/20 16:02*	*11/25/20 15:59*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**		1.1	0.37	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Barium	**74**		1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Cadmium	<0.039		0.21	0.039	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Chromium	**19**		1.1	0.53	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Lead	**12**		0.54	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Selenium	<0.63		1.1	0.63	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1
Silver	<0.14		0.54	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.049**		0.019	0.0063	mg/Kg	☼	12/03/20 13:15	12/04/20 10:55	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: Trip-MEOH
Date Collected: 11/16/20 00:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-24
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1-Dichloroethane	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1-Dichloroethene	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,1-Dichloropropene	<15		50	15	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2-Dibromoethane	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2-Dichloroethane	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,2-Dichloropropane	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,3-Dichloropropane	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
2,2-Dichloropropane	<22		50	22	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
2-Chlorotoluene	<16		50	16	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
4-Chlorotoluene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Benzene	<7.3		13	7.3	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Bromobenzene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Bromochloromethane	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Bromodichloromethane	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Bromoform	<24		50	24	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Bromomethane	<40		150	40	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Carbon tetrachloride	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Chlorobenzene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Chloroethane	<25		50	25	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Chloroform	<19		100	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Chloromethane	<16		50	16	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Dibromochloromethane	<24		50	24	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Dibromomethane	<14		50	14	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Hexachlorobutadiene	<22		50	22	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Isopropyl ether	<14		50	14	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Isopropylbenzene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Methylene Chloride	<82		250	82	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Naphthalene	<17		50	17	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
n-Butylbenzene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
N-Propylbenzene	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
p-Isopropyltoluene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: Trip-MEOH
Date Collected: 11/16/20 00:00
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-24
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Styrene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
tert-Butylbenzene	<20		50	20	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Tetrachloroethene	<19		50	19	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Toluene	<7.4		13	7.4	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Trichloroethene	<8.2		25	8.2	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Trichlorofluoromethane	<21		50	21	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Vinyl chloride	<13		50	13	ug/Kg		11/16/20 00:00	11/28/20 01:05	50
Xylenes, Total	<11		25	11	ug/Kg		11/16/20 00:00	11/28/20 01:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*11/16/20 00:00*	*11/28/20 01:05*	*50*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*	*11/16/20 00:00*	*11/28/20 01:05*	*50*
Dibromofluoromethane (Surr)	*88*		*75 - 120*	*11/16/20 00:00*	*11/28/20 01:05*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*11/16/20 00:00*	*11/28/20 01:05*	*50*

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-16 2-4
Date Collected: 11/16/20 16:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-25
Matrix: Solid
Percent Solids: 89.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<20		42	20	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1,1-Trichloroethane	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1,2,2-Tetrachloroethane	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1,2-Trichloroethane	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1-Dichloroethane	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1-Dichloroethene	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,1-Dichloropropene	<13		42	13	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2,3-Trichlorobenzene	<19		42	19	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2,3-Trichloropropane	<18		85	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2,4-Trichlorobenzene	<14		42	14	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2,4-Trimethylbenzene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2-Dibromo-3-Chloropropane	<84		210	84	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2-Dibromoethane	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2-Dichlorobenzene	<14		42	14	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2-Dichloroethane	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,2-Dichloropropane	<18		42	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,3,5-Trimethylbenzene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,3-Dichlorobenzene	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,3-Dichloropropane	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
1,4-Dichlorobenzene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
2,2-Dichloropropane	<19		42	19	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
2-Chlorotoluene	<13		42	13	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
4-Chlorotoluene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Benzene	<6.2		11	6.2	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Bromobenzene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Bromochloromethane	<18		42	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Bromodichloromethane	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Bromoform	<20		42	20	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Bromomethane	<34		130	34	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Carbon tetrachloride	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Chlorobenzene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Chloroethane	<21		42	21	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Chloroform	<16		85	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Chloromethane	<14		42	14	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
cis-1,2-Dichloroethene	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
cis-1,3-Dichloropropene	<18		42	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Dibromochloromethane	<21		42	21	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Dibromomethane	<11		42	11	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Dichlorodifluoromethane	<29		130	29	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Ethylbenzene	<7.7		11	7.7	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Hexachlorobutadiene	<19		42	19	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Isopropyl ether	<12		42	12	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Isopropylbenzene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Methyl tert-butyl ether	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Methylene Chloride	<69		210	69	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Naphthalene	<14		42	14	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
n-Butylbenzene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
N-Propylbenzene	<18		42	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
p-Isopropyltoluene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-16 2-4
Date Collected: 11/16/20 16:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-25
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Styrene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
tert-Butylbenzene	<17		42	17	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Tetrachloroethene	<16		42	16	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Toluene	<6.2		11	6.2	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
trans-1,2-Dichloroethene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
trans-1,3-Dichloropropene	<15		42	15	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Trichloroethene	<6.9		21	6.9	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Trichlorofluoromethane	<18		42	18	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Vinyl chloride	<11		42	11	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50
Xylenes, Total	<9.3		21	9.3	ug/Kg	☼	11/16/20 16:25	11/28/20 06:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*11/16/20 16:25*	*11/28/20 06:05*	*50*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*	*11/16/20 16:25*	*11/28/20 06:05*	*50*
Dibromofluoromethane (Surr)	*88*		*75 - 120*	*11/16/20 16:25*	*11/28/20 06:05*	*50*
Toluene-d8 (Surr)	*98*		*75 - 120*	*11/16/20 16:25*	*11/28/20 06:05*	*50*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.9		74	8.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
2-Methylnaphthalene	<6.7		74	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Acenaphthene	<6.6		36	6.6	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Acenaphthylene	<4.8		36	4.8	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Anthracene	<6.1		36	6.1	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Benzo[a]anthracene	<4.9		36	4.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Benzo[a]pyrene	<7.1		36	7.1	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Benzo[b]fluoranthene	<7.9		36	7.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Benzo[g,h,i]perylene	<12		36	12	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Benzo[k]fluoranthene	<11		36	11	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Chrysene	<9.9		36	9.9	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Dibenz(a,h)anthracene	<7.0		36	7.0	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Fluoranthene	<6.8		36	6.8	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Fluorene	<5.1		36	5.1	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Indeno[1,2,3-cd]pyrene	<9.5		36	9.5	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Naphthalene	<5.6		36	5.6	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Phenanthrene	<5.1		36	5.1	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1
Pyrene	<7.2		36	7.2	ug/Kg	☼	11/24/20 16:02	11/25/20 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*43 - 145*	*11/24/20 16:02*	*11/25/20 14:31*	*1*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*	*11/24/20 16:02*	*11/25/20 14:31*	*1*
Terphenyl-d14 (Surr)	*98*		*42 - 157*	*11/24/20 16:02*	*11/25/20 14:31*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.1**		1.1	0.37	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1
Barium	**13**		1.1	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1
Cadmium	**0.049**	**J**	0.22	0.039	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1
Chromium	**5.5**		1.1	0.54	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-16 2-4
Date Collected: 11/16/20 16:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-25
Matrix: Solid
Percent Solids: 89.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**2.7**		0.54	0.25	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1
Selenium	<0.64		1.1	0.64	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1
Silver	<0.14		0.54	0.14	mg/Kg	☼	12/01/20 06:30	12/01/20 20:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.018	0.0059	mg/Kg	☼	12/03/20 13:15	12/04/20 10:57	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-23 2-4

Date Collected: 11/16/20 13:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-26

Matrix: Solid
Percent Solids: 94.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.5		70	8.5	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
2-Methylnaphthalene	<6.4		70	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Acenaphthene	<6.2		34	6.2	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Acenaphthylene	<4.6		34	4.6	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Anthracene	<5.8		34	5.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Benzo[a]anthracene	<4.7		34	4.7	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Benzo[a]pyrene	<6.7		34	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Benzo[b]fluoranthene	<7.5		34	7.5	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Benzo[g,h,i]perylene	<11		34	11	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Benzo[k]fluoranthene	<10		34	10	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Chrysene	<9.5		34	9.5	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Dibenz(a,h)anthracene	<6.7		34	6.7	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Fluoranthene	<6.4		34	6.4	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Fluorene	<4.9		34	4.9	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Indeno[1,2,3-cd]pyrene	<9.0		34	9.0	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Naphthalene	<5.3		34	5.3	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Phenanthrene	<4.8		34	4.8	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1
Pyrene	<6.9		34	6.9	ug/Kg	☼	11/24/20 16:02	11/25/20 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*101*		*43 - 145*	*11/24/20 16:02*	*11/25/20 15:01*	*1*
Nitrobenzene-d5 (Surr)	*72*		*37 - 147*	*11/24/20 16:02*	*11/25/20 15:01*	*1*
Terphenyl-d14 (Surr)	*103*		*42 - 157*	*11/24/20 16:02*	*11/25/20 15:01*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.4**		1.0	0.35	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Barium	**10**		1.0	0.12	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Cadmium	<0.037		0.21	0.037	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Chromium	**7.2**		1.0	0.51	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Lead	**3.5**		0.51	0.24	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Selenium	<0.60		1.0	0.60	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1
Silver	<0.13		0.51	0.13	mg/Kg	☼	12/01/20 06:30	12/01/20 20:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0095**	**J**	0.017	0.0058	mg/Kg	☼	12/03/20 13:15	12/04/20 10:59	1

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
V	Serial Dilution exceeds the control limits

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

GC/MS VOA

Prep Batch: 573409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	5035	
500-191460-2	SB-19 2-4	Total/NA	Solid	5035	
500-191460-4	SB-15 0-2	Total/NA	Solid	5035	
500-191460-7	SB-18 2-4	Total/NA	Solid	5035	
500-191460-12	SB-20 0-2	Total/NA	Solid	5035	
500-191460-13	TW-3 2-4	Total/NA	Solid	5035	
500-191460-14	TW-4 0-2	Total/NA	Solid	5035	
500-191460-15	TW-5 2-3	Total/NA	Solid	5035	
500-191460-17	TW-6 2-4	Total/NA	Solid	5035	
500-191460-22	DUP 4	Total/NA	Solid	5035	
500-191460-24	Trip-MEOH	Total/NA	Solid	5035	
500-191460-25	SB-16 2-4	Total/NA	Solid	5035	
LB3 500-573409/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-573409/22-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 573412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-19	TW-7 2-4	Total/NA	Solid	5035	
LB3 500-573412/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-573412/22-A	Lab Control Sample	Total/NA	Solid	5035	
500-191460-19 MS	TW-7 2-4	Total/NA	Solid	5035	
500-191460-19 MSD	TW-7 2-4	Total/NA	Solid	5035	

Analysis Batch: 573726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-573409/21-A	Method Blank	Total/NA	Solid	8260B	573409
MB 500-573726/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-573409/22-A	Lab Control Sample	Total/NA	Solid	8260B	573409
LCS 500-573726/5	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 574288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	8260B	573409
500-191460-2	SB-19 2-4	Total/NA	Solid	8260B	573409
500-191460-4	SB-15 0-2	Total/NA	Solid	8260B	573409
500-191460-7	SB-18 2-4	Total/NA	Solid	8260B	573409
500-191460-12	SB-20 0-2	Total/NA	Solid	8260B	573409
500-191460-13	TW-3 2-4	Total/NA	Solid	8260B	573409
500-191460-14	TW-4 0-2	Total/NA	Solid	8260B	573409
500-191460-15	TW-5 2-3	Total/NA	Solid	8260B	573409
500-191460-17	TW-6 2-4	Total/NA	Solid	8260B	573409
500-191460-19	TW-7 2-4	Total/NA	Solid	8260B	573412
500-191460-22	DUP 4	Total/NA	Solid	8260B	573409
500-191460-24	Trip-MEOH	Total/NA	Solid	8260B	573409
500-191460-25	SB-16 2-4	Total/NA	Solid	8260B	573409
LB3 500-573412/21-A	Method Blank	Total/NA	Solid	8260B	573412
MB 500-574288/8	Method Blank	Total/NA	Solid	8260B	
LCS 500-573412/22-A	Lab Control Sample	Total/NA	Solid	8260B	573412
LCS 500-574288/4	Lab Control Sample	Total/NA	Solid	8260B	
500-191460-19 MS	TW-7 2-4	Total/NA	Solid	8260B	573412
500-191460-19 MSD	TW-7 2-4	Total/NA	Solid	8260B	573412

GC/MS Semi VOA

Prep Batch: 573874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	3541	
500-191460-2	SB-19 2-4	Total/NA	Solid	3541	
500-191460-3	SB-14 0-2	Total/NA	Solid	3541	
500-191460-5	SB-15 2-4	Total/NA	Solid	3541	
500-191460-6	SB-18 0-2	Total/NA	Solid	3541	
500-191460-8	SB-21 2-4	Total/NA	Solid	3541	
500-191460-9	SB-22 2.5-5	Total/NA	Solid	3541	
500-191460-10	SB-22 5-6.5	Total/NA	Solid	3541	
500-191460-11	VP-3 0-0.5	Total/NA	Solid	3541	
500-191460-12	SB-20 0-2	Total/NA	Solid	3541	
500-191460-14	TW-4 0-2	Total/NA	Solid	3541	
500-191460-16	TW-5 3-4	Total/NA	Solid	3541	
500-191460-18	TW-6 4.5-6	Total/NA	Solid	3541	
500-191460-21	TW-8 4-6	Total/NA	Solid	3541	
500-191460-23	DUP 5	Total/NA	Solid	3541	
500-191460-25	SB-16 2-4	Total/NA	Solid	3541	
500-191460-26	SB-23 2-4	Total/NA	Solid	3541	
MB 500-573874/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-573874/2-A	Lab Control Sample	Total/NA	Solid	3541	
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	3541	
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	3541	

Analysis Batch: 574007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	8270D	573874
500-191460-5	SB-15 2-4	Total/NA	Solid	8270D	573874
MB 500-573874/1-A	Method Blank	Total/NA	Solid	8270D	573874
LCS 500-573874/2-A	Lab Control Sample	Total/NA	Solid	8270D	573874

Analysis Batch: 574013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-8	SB-21 2-4	Total/NA	Solid	8270D	573874
500-191460-9	SB-22 2.5-5	Total/NA	Solid	8270D	573874
500-191460-10	SB-22 5-6.5	Total/NA	Solid	8270D	573874
500-191460-12	SB-20 0-2	Total/NA	Solid	8270D	573874
500-191460-23	DUP 5	Total/NA	Solid	8270D	573874
500-191460-25	SB-16 2-4	Total/NA	Solid	8270D	573874
500-191460-26	SB-23 2-4	Total/NA	Solid	8270D	573874

Analysis Batch: 574112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-2	SB-19 2-4	Total/NA	Solid	8270D	573874
500-191460-6	SB-18 0-2	Total/NA	Solid	8270D	573874
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	8270D	573874
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	8270D	573874

Analysis Batch: 574301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-3	SB-14 0-2	Total/NA	Solid	8270D	573874
500-191460-11	VP-3 0-0.5	Total/NA	Solid	8270D	573874
500-191460-14	TW-4 0-2	Total/NA	Solid	8270D	573874

GC/MS Semi VOA (Continued)

Analysis Batch: 574301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-16	TW-5 3-4	Total/NA	Solid	8270D	573874
500-191460-18	TW-6 4.5-6	Total/NA	Solid	8270D	573874
500-191460-21	TW-8 4-6	Total/NA	Solid	8270D	573874

Metals

Prep Batch: 574627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	3050B	
500-191460-2	SB-19 2-4	Total/NA	Solid	3050B	
500-191460-3	SB-14 0-2	Total/NA	Solid	3050B	
500-191460-5	SB-15 2-4	Total/NA	Solid	3050B	
500-191460-6	SB-18 0-2	Total/NA	Solid	3050B	
500-191460-8	SB-21 2-4	Total/NA	Solid	3050B	
500-191460-9	SB-22 2.5-5	Total/NA	Solid	3050B	
500-191460-10	SB-22 5-6.5	Total/NA	Solid	3050B	
500-191460-11	VP-3 0-0.5	Total/NA	Solid	3050B	
500-191460-12	SB-20 0-2	Total/NA	Solid	3050B	
500-191460-13	TW-3 2-4	Total/NA	Solid	3050B	
500-191460-14	TW-4 0-2	Total/NA	Solid	3050B	
500-191460-16	TW-5 3-4	Total/NA	Solid	3050B	
500-191460-18	TW-6 4.5-6	Total/NA	Solid	3050B	
500-191460-20	TW-7 4-6	Total/NA	Solid	3050B	
500-191460-23	DUP 5	Total/NA	Solid	3050B	
500-191460-25	SB-16 2-4	Total/NA	Solid	3050B	
500-191460-26	SB-23 2-4	Total/NA	Solid	3050B	
MB 500-574627/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-574627/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	3050B	
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	3050B	
500-191460-2 DU	SB-19 2-4	Total/NA	Solid	3050B	

Analysis Batch: 574859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	6010C	574627
500-191460-2	SB-19 2-4	Total/NA	Solid	6010C	574627
500-191460-3	SB-14 0-2	Total/NA	Solid	6010C	574627
500-191460-5	SB-15 2-4	Total/NA	Solid	6010C	574627
500-191460-6	SB-18 0-2	Total/NA	Solid	6010C	574627
500-191460-8	SB-21 2-4	Total/NA	Solid	6010C	574627
500-191460-9	SB-22 2.5-5	Total/NA	Solid	6010C	574627
500-191460-10	SB-22 5-6.5	Total/NA	Solid	6010C	574627
500-191460-11	VP-3 0-0.5	Total/NA	Solid	6010C	574627
500-191460-12	SB-20 0-2	Total/NA	Solid	6010C	574627
500-191460-13	TW-3 2-4	Total/NA	Solid	6010C	574627
500-191460-14	TW-4 0-2	Total/NA	Solid	6010C	574627
500-191460-16	TW-5 3-4	Total/NA	Solid	6010C	574627
500-191460-18	TW-6 4.5-6	Total/NA	Solid	6010C	574627
500-191460-20	TW-7 4-6	Total/NA	Solid	6010C	574627
500-191460-23	DUP 5	Total/NA	Solid	6010C	574627
500-191460-25	SB-16 2-4	Total/NA	Solid	6010C	574627

Metals (Continued)

Analysis Batch: 574859 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-26	SB-23 2-4	Total/NA	Solid	6010C	574627
MB 500-574627/1-A	Method Blank	Total/NA	Solid	6010C	574627
LCS 500-574627/2-A	Lab Control Sample	Total/NA	Solid	6010C	574627
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	6010C	574627
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	6010C	574627
500-191460-2 DU	SB-19 2-4	Total/NA	Solid	6010C	574627

Prep Batch: 575135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	7471B	
500-191460-2	SB-19 2-4	Total/NA	Solid	7471B	
500-191460-3	SB-14 0-2	Total/NA	Solid	7471B	
500-191460-5	SB-15 2-4	Total/NA	Solid	7471B	
500-191460-6	SB-18 0-2	Total/NA	Solid	7471B	
500-191460-8	SB-21 2-4	Total/NA	Solid	7471B	
500-191460-9	SB-22 2.5-5	Total/NA	Solid	7471B	
500-191460-10	SB-22 5-6.5	Total/NA	Solid	7471B	
500-191460-11	VP-3 0-0.5	Total/NA	Solid	7471B	
500-191460-12	SB-20 0-2	Total/NA	Solid	7471B	
500-191460-13	TW-3 2-4	Total/NA	Solid	7471B	
500-191460-14	TW-4 0-2	Total/NA	Solid	7471B	
500-191460-16	TW-5 3-4	Total/NA	Solid	7471B	
500-191460-18	TW-6 4.5-6	Total/NA	Solid	7471B	
500-191460-20	TW-7 4-6	Total/NA	Solid	7471B	
500-191460-23	DUP 5	Total/NA	Solid	7471B	
500-191460-25	SB-16 2-4	Total/NA	Solid	7471B	
500-191460-26	SB-23 2-4	Total/NA	Solid	7471B	
MB 500-575135/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-575135/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	7471B	
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	7471B	
500-191460-2 DU	SB-19 2-4	Total/NA	Solid	7471B	

Analysis Batch: 575400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	7471B	575135
500-191460-2	SB-19 2-4	Total/NA	Solid	7471B	575135
500-191460-3	SB-14 0-2	Total/NA	Solid	7471B	575135
500-191460-5	SB-15 2-4	Total/NA	Solid	7471B	575135
500-191460-6	SB-18 0-2	Total/NA	Solid	7471B	575135
500-191460-8	SB-21 2-4	Total/NA	Solid	7471B	575135
500-191460-9	SB-22 2.5-5	Total/NA	Solid	7471B	575135
500-191460-10	SB-22 5-6.5	Total/NA	Solid	7471B	575135
500-191460-11	VP-3 0-0.5	Total/NA	Solid	7471B	575135
500-191460-12	SB-20 0-2	Total/NA	Solid	7471B	575135
500-191460-13	TW-3 2-4	Total/NA	Solid	7471B	575135
500-191460-14	TW-4 0-2	Total/NA	Solid	7471B	575135
500-191460-16	TW-5 3-4	Total/NA	Solid	7471B	575135
500-191460-18	TW-6 4.5-6	Total/NA	Solid	7471B	575135
500-191460-20	TW-7 4-6	Total/NA	Solid	7471B	575135
500-191460-23	DUP 5	Total/NA	Solid	7471B	575135

Metals (Continued)

Analysis Batch: 575400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-25	SB-16 2-4	Total/NA	Solid	7471B	575135
500-191460-26	SB-23 2-4	Total/NA	Solid	7471B	575135
MB 500-575135/12-A	Method Blank	Total/NA	Solid	7471B	575135
LCS 500-575135/13-A	Lab Control Sample	Total/NA	Solid	7471B	575135
500-191460-2 MS	SB-19 2-4	Total/NA	Solid	7471B	575135
500-191460-2 MSD	SB-19 2-4	Total/NA	Solid	7471B	575135
500-191460-2 DU	SB-19 2-4	Total/NA	Solid	7471B	575135

General Chemistry

Analysis Batch: 573994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-1	SB-17 2-4	Total/NA	Solid	Moisture	
500-191460-2	SB-19 2-4	Total/NA	Solid	Moisture	
500-191460-3	SB-14 0-2	Total/NA	Solid	Moisture	
500-191460-4	SB-15 0-2	Total/NA	Solid	Moisture	
500-191460-5	SB-15 2-4	Total/NA	Solid	Moisture	
500-191460-6	SB-18 0-2	Total/NA	Solid	Moisture	
500-191460-7	SB-18 2-4	Total/NA	Solid	Moisture	
500-191460-8	SB-21 2-4	Total/NA	Solid	Moisture	
500-191460-9	SB-22 2.5-5	Total/NA	Solid	Moisture	
500-191460-10	SB-22 5-6.5	Total/NA	Solid	Moisture	
500-191460-11	VP-3 0-0.5	Total/NA	Solid	Moisture	
500-191460-12	SB-20 0-2	Total/NA	Solid	Moisture	
500-191460-13	TW-3 2-4	Total/NA	Solid	Moisture	
500-191460-14	TW-4 0-2	Total/NA	Solid	Moisture	
500-191460-15	TW-5 2-3	Total/NA	Solid	Moisture	
500-191460-16	TW-5 3-4	Total/NA	Solid	Moisture	
500-191460-17	TW-6 2-4	Total/NA	Solid	Moisture	
500-191460-18	TW-6 4.5-6	Total/NA	Solid	Moisture	
500-191460-19	TW-7 2-4	Total/NA	Solid	Moisture	
500-191460-20	TW-7 4-6	Total/NA	Solid	Moisture	
500-191460-10 DU	SB-22 5-6.5	Total/NA	Solid	Moisture	

Analysis Batch: 574003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-191460-21	TW-8 4-6	Total/NA	Solid	Moisture	
500-191460-22	DUP 4	Total/NA	Solid	Moisture	
500-191460-23	DUP 5	Total/NA	Solid	Moisture	
500-191460-25	SB-16 2-4	Total/NA	Solid	Moisture	
500-191460-26	SB-23 2-4	Total/NA	Solid	Moisture	
500-191460-26 DU	SB-23 2-4	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-191460-1	SB-17 2-4	96	94	89	96
500-191460-2	SB-19 2-4	99	100	91	97
500-191460-4	SB-15 0-2	99	97	89	96
500-191460-7	SB-18 2-4	99	98	89	97
500-191460-12	SB-20 0-2	98	98	88	98
500-191460-13	TW-3 2-4	97	97	89	97
500-191460-14	TW-4 0-2	101	100	90	98
500-191460-15	TW-5 2-3	98	96	88	98
500-191460-17	TW-6 2-4	101	101	89	99
500-191460-19	TW-7 2-4	101	99	89	97
500-191460-19 MS	TW-7 2-4	98	99	93	99
500-191460-19 MSD	TW-7 2-4	99	102	96	97
500-191460-22	DUP 4	99	98	89	97
500-191460-24	Trip-MEOH	96	98	88	99
500-191460-25	SB-16 2-4	97	100	88	98
LB3 500-573409/21-A	Method Blank	97	96	92	94
LB3 500-573412/21-A	Method Blank	95	94	89	96
LCS 500-573409/22-A	Lab Control Sample	98	100	94	98
LCS 500-573412/22-A	Lab Control Sample	96	98	95	97
LCS 500-573726/5	Lab Control Sample	96	96	94	98
LCS 500-574288/4	Lab Control Sample	99	101	95	98
MB 500-573726/7	Method Blank	98	97	93	96
MB 500-574288/8	Method Blank	96	98	93	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(43-145)	(37-147)	(42-157)
500-191460-1	SB-17 2-4	90	76	87
500-191460-2	SB-19 2-4	90	61	94
500-191460-2 MS	SB-19 2-4	93	74	104
500-191460-2 MSD	SB-19 2-4	101	79	105
500-191460-3	SB-14 0-2	77	59	133
500-191460-5	SB-15 2-4	77	71	75
500-191460-6	SB-18 0-2	87	61	127
500-191460-8	SB-21 2-4	91	65	89
500-191460-9	SB-22 2.5-5	88	63	92
500-191460-10	SB-22 5-6.5	93	66	96
500-191460-11	VP-3 0-0.5	96	73	153
500-191460-12	SB-20 0-2	97	68	100
500-191460-14	TW-4 0-2	97	74	146
500-191460-16	TW-5 3-4	73	55	120

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(43-145)	(37-147)	(42-157)
500-191460-18	TW-6 4.5-6	91	69	150
500-191460-21	TW-8 4-6	93	73	150
500-191460-23	DUP 5	88	63	92
500-191460-25	SB-16 2-4	96	70	98
500-191460-26	SB-23 2-4	101	72	103
LCS 500-573874/2-A	Lab Control Sample	97	96	100
MB 500-573874/1-A	Method Blank	99	84	92

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LB3 500-573409/21-A
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573409

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1-Dichloroethane	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1-Dichloroethene	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,1-Dichloropropene	<15		50	15	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2-Dibromoethane	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2-Dichloroethane	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,2-Dichloropropane	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,3-Dichloropropane	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
2,2-Dichloropropane	<22		50	22	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
2-Chlorotoluene	<16		50	16	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
4-Chlorotoluene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Benzene	<7.3		13	7.3	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Bromobenzene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Bromochloromethane	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Bromodichloromethane	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Bromoform	<24		50	24	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Bromomethane	<40		150	40	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Carbon tetrachloride	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Chlorobenzene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Chloroethane	<25		50	25	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Chloroform	<19		100	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Chloromethane	<16		50	16	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Dibromochloromethane	<24		50	24	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Dibromomethane	<14		50	14	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Hexachlorobutadiene	<22		50	22	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Isopropyl ether	<14		50	14	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Isopropylbenzene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Methylene Chloride	<82		250	82	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Naphthalene	<17		50	17	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
n-Butylbenzene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
N-Propylbenzene	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50

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

Lab Sample ID: LB3 500-573409/21-A
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573409

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
sec-Butylbenzene	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Styrene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
tert-Butylbenzene	<20		50	20	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Tetrachloroethene	<19		50	19	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Toluene	<7.4		13	7.4	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Trichloroethene	<8.2		25	8.2	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Trichlorofluoromethane	<21		50	21	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Vinyl chloride	<13		50	13	ug/Kg		11/11/20 23:45	11/24/20 13:04	50
Xylenes, Total	<11		25	11	ug/Kg		11/11/20 23:45	11/24/20 13:04	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*11/11/20 23:45*	*11/24/20 13:04*	*50*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*	*11/11/20 23:45*	*11/24/20 13:04*	*50*
Dibromofluoromethane (Surr)	*92*		*75 - 120*	*11/11/20 23:45*	*11/24/20 13:04*	*50*
Toluene-d8 (Surr)	*94*		*75 - 120*	*11/11/20 23:45*	*11/24/20 13:04*	*50*

Lab Sample ID: LCS 500-573409/22-A
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2500	2700		ug/Kg		108	70 - 125
1,1,1-Trichloroethane	2500	2670		ug/Kg		107	70 - 125
1,1,2,2-Tetrachloroethane	2500	2850		ug/Kg		114	62 - 140
1,1,2-Trichloroethane	2500	2650		ug/Kg		106	71 - 130
1,1-Dichloroethane	2500	2930		ug/Kg		117	70 - 125
1,1-Dichloroethene	2500	2520		ug/Kg		101	67 - 122
1,1-Dichloropropene	2500	2770		ug/Kg		111	70 - 121
1,2,3-Trichlorobenzene	2500	2490		ug/Kg		99	51 - 145
1,2,3-Trichloropropane	2500	2820		ug/Kg		113	50 - 133
1,2,4-Trichlorobenzene	2500	2700		ug/Kg		108	57 - 137
1,2,4-Trimethylbenzene	2500	2940		ug/Kg		118	70 - 123
1,2-Dibromo-3-Chloropropane	2500	2130		ug/Kg		85	56 - 123
1,2-Dibromoethane	2500	2670		ug/Kg		107	70 - 125
1,2-Dichlorobenzene	2500	2720		ug/Kg		109	70 - 125
1,2-Dichloroethane	2500	2670		ug/Kg		107	68 - 127
1,2-Dichloropropane	2500	3060		ug/Kg		122	67 - 130
1,3,5-Trimethylbenzene	2500	2960		ug/Kg		118	70 - 123
1,3-Dichlorobenzene	2500	2830		ug/Kg		113	70 - 125
1,3-Dichloropropane	2500	2720		ug/Kg		109	62 - 136
1,4-Dichlorobenzene	2500	2730		ug/Kg		109	70 - 120
2,2-Dichloropropane	2500	2770		ug/Kg		111	58 - 139
2-Chlorotoluene	2500	2860		ug/Kg		115	70 - 125
4-Chlorotoluene	2500	2820		ug/Kg		113	68 - 124
Benzene	2500	2830		ug/Kg		113	70 - 120

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

Lab Sample ID: LCS 500-573409/22-A
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	2900		ug/Kg		116	70 - 122
Bromochloromethane	2500	2640		ug/Kg		106	65 - 122
Bromodichloromethane	2500	2540		ug/Kg		102	69 - 120
Bromoform	2500	2320		ug/Kg		93	56 - 132
Bromomethane	2500	2100		ug/Kg		84	40 - 152
Carbon tetrachloride	2500	2660		ug/Kg		107	59 - 133
Chlorobenzene	2500	2650		ug/Kg		106	70 - 120
Chloroethane	2500	2650		ug/Kg		106	48 - 136
Chloroform	2500	2600		ug/Kg		104	70 - 120
Chloromethane	2500	2890		ug/Kg		116	56 - 152
cis-1,2-Dichloroethene	2500	2650		ug/Kg		106	70 - 125
cis-1,3-Dichloropropene	2500	2690		ug/Kg		108	64 - 127
Dibromochloromethane	2500	2360		ug/Kg		94	68 - 125
Dibromomethane	2500	2650		ug/Kg		106	70 - 120
Dichlorodifluoromethane	2500	1570		ug/Kg		63	40 - 159
Ethylbenzene	2500	2790		ug/Kg		112	70 - 123
Hexachlorobutadiene	2500	3050		ug/Kg		122	51 - 150
Isopropylbenzene	2500	3070		ug/Kg		123	70 - 126
Methyl tert-butyl ether	2500	2600		ug/Kg		104	55 - 123
Methylene Chloride	2500	2710		ug/Kg		108	69 - 125
Naphthalene	2500	2260		ug/Kg		91	53 - 144
n-Butylbenzene	2500	2840		ug/Kg		113	68 - 125
N-Propylbenzene	2500	2900		ug/Kg		116	69 - 127
p-Isopropyltoluene	2500	2950		ug/Kg		118	70 - 125
sec-Butylbenzene	2500	2980		ug/Kg		119	70 - 123
Styrene	2500	2770		ug/Kg		111	70 - 120
tert-Butylbenzene	2500	2960		ug/Kg		118	70 - 121
Tetrachloroethene	2500	2840		ug/Kg		114	70 - 128
Toluene	2500	2760		ug/Kg		110	70 - 125
trans-1,2-Dichloroethene	2500	2550		ug/Kg		102	70 - 125
trans-1,3-Dichloropropene	2500	2540		ug/Kg		101	62 - 128
Trichloroethene	2500	2800		ug/Kg		112	70 - 125
Trichlorofluoromethane	2500	2700		ug/Kg		108	55 - 128
Vinyl chloride	2500	2670		ug/Kg		107	64 - 126
Xylenes, Total	5000	5340		ug/Kg		107	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane (Surr)	*94*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: LB3 500-573412/21-A
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573412

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		11/20/20 23:45	11/28/20 00:40	50

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

Lab Sample ID: LB3 500-573412/21-A
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573412

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,1-Dichloroethane	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,1-Dichloroethene	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,1-Dichloropropene	<15		50	15	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2-Dibromoethane	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2-Dichloroethane	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,2-Dichloropropane	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,3-Dichloropropane	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
2,2-Dichloropropane	<22		50	22	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
2-Chlorotoluene	<16		50	16	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
4-Chlorotoluene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Benzene	<7.3		13	7.3	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Bromobenzene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Bromochloromethane	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Bromodichloromethane	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Bromoform	<24		50	24	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Bromomethane	<40		150	40	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Carbon tetrachloride	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Chlorobenzene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Chloroethane	<25		50	25	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Chloroform	<19		100	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Chloromethane	<16		50	16	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Dibromochloromethane	<24		50	24	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Dibromomethane	<14		50	14	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Hexachlorobutadiene	<22		50	22	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Isopropyl ether	<14		50	14	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Isopropylbenzene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Methylene Chloride	<82		250	82	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Naphthalene	<17		50	17	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
n-Butylbenzene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
N-Propylbenzene	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
p-Isopropyltoluene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
sec-Butylbenzene	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50

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

Lab Sample ID: LB3 500-573412/21-A
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573412

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
tert-Butylbenzene	<20		50	20	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Tetrachloroethene	<19		50	19	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Toluene	<7.4		13	7.4	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Trichloroethene	<8.2		25	8.2	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Trichlorofluoromethane	<21		50	21	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Vinyl chloride	<13		50	13	ug/Kg		11/20/20 23:45	11/28/20 00:40	50
Xylenes, Total	<11		25	11	ug/Kg		11/20/20 23:45	11/28/20 00:40	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*	*11/20/20 23:45*	*11/28/20 00:40*	*50*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*	*11/20/20 23:45*	*11/28/20 00:40*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 120*	*11/20/20 23:45*	*11/28/20 00:40*	*50*
Toluene-d8 (Surr)	*96*		*75 - 120*	*11/20/20 23:45*	*11/28/20 00:40*	*50*

Lab Sample ID: LCS 500-573412/22-A
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2500	2580		ug/Kg		103	70 - 125
1,1,1-Trichloroethane	2500	2520		ug/Kg		101	70 - 125
1,1,2,2-Tetrachloroethane	2500	2640		ug/Kg		106	62 - 140
1,1,2-Trichloroethane	2500	2500		ug/Kg		100	71 - 130
1,1-Dichloroethane	2500	2730		ug/Kg		109	70 - 125
1,1-Dichloroethene	2500	2370		ug/Kg		95	67 - 122
1,1-Dichloropropene	2500	2600		ug/Kg		104	70 - 121
1,2,3-Trichlorobenzene	2500	2640		ug/Kg		106	51 - 145
1,2,3-Trichloropropane	2500	2700		ug/Kg		108	50 - 133
1,2,4-Trichlorobenzene	2500	2610		ug/Kg		105	57 - 137
1,2,4-Trimethylbenzene	2500	2750		ug/Kg		110	70 - 123
1,2-Dibromo-3-Chloropropane	2500	1850		ug/Kg		74	56 - 123
1,2-Dibromoethane	2500	2550		ug/Kg		102	70 - 125
1,2-Dichlorobenzene	2500	2570		ug/Kg		103	70 - 125
1,2-Dichloroethane	2500	2510		ug/Kg		100	68 - 127
1,2-Dichloropropane	2500	2880		ug/Kg		115	67 - 130
1,3,5-Trimethylbenzene	2500	2760		ug/Kg		110	70 - 123
1,3-Dichlorobenzene	2500	2650		ug/Kg		106	70 - 125
1,3-Dichloropropane	2500	2590		ug/Kg		104	62 - 136
1,4-Dichlorobenzene	2500	2600		ug/Kg		104	70 - 120
2,2-Dichloropropane	2500	2640		ug/Kg		105	58 - 139
2-Chlorotoluene	2500	2680		ug/Kg		107	70 - 125
4-Chlorotoluene	2500	2630		ug/Kg		105	68 - 124
Benzene	2500	2670		ug/Kg		107	70 - 120
Bromobenzene	2500	2690		ug/Kg		108	70 - 122
Bromochloromethane	2500	2530		ug/Kg		101	65 - 122

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

Lab Sample ID: LCS 500-573412/22-A
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	2500	2400		ug/Kg		96	69 - 120
Bromoform	2500	2240		ug/Kg		89	56 - 132
Bromomethane	2500	1890		ug/Kg		76	40 - 152
Carbon tetrachloride	2500	2510		ug/Kg		101	59 - 133
Chlorobenzene	2500	2540		ug/Kg		102	70 - 120
Chloroethane	2500	2550		ug/Kg		102	48 - 136
Chloroform	2500	2430		ug/Kg		97	70 - 120
Chloromethane	2500	2590		ug/Kg		104	56 - 152
cis-1,2-Dichloroethene	2500	2520		ug/Kg		101	70 - 125
cis-1,3-Dichloropropene	2500	2500		ug/Kg		100	64 - 127
Dibromochloromethane	2500	2290		ug/Kg		92	68 - 125
Dibromomethane	2500	2540		ug/Kg		102	70 - 120
Dichlorodifluoromethane	2500	1400		ug/Kg		56	40 - 159
Ethylbenzene	2500	2660		ug/Kg		106	70 - 123
Hexachlorobutadiene	2500	2830		ug/Kg		113	51 - 150
Isopropylbenzene	2500	2880		ug/Kg		115	70 - 126
Methyl tert-butyl ether	2500	2430		ug/Kg		97	55 - 123
Methylene Chloride	2500	2570		ug/Kg		103	69 - 125
Naphthalene	2500	2270		ug/Kg		91	53 - 144
n-Butylbenzene	2500	2640		ug/Kg		106	68 - 125
N-Propylbenzene	2500	2710		ug/Kg		109	69 - 127
p-Isopropyltoluene	2500	2730		ug/Kg		109	70 - 125
sec-Butylbenzene	2500	2770		ug/Kg		111	70 - 123
Styrene	2500	2650		ug/Kg		106	70 - 120
tert-Butylbenzene	2500	2760		ug/Kg		111	70 - 121
Tetrachloroethene	2500	2690		ug/Kg		108	70 - 128
Toluene	2500	2630		ug/Kg		105	70 - 125
trans-1,2-Dichloroethene	2500	2440		ug/Kg		98	70 - 125
trans-1,3-Dichloropropene	2500	2360		ug/Kg		94	62 - 128
Trichloroethene	2500	2680		ug/Kg		107	70 - 125
Trichlorofluoromethane	2500	2520		ug/Kg		101	55 - 128
Vinyl chloride	2500	2460		ug/Kg		98	64 - 126
Xylenes, Total	5000	5070		ug/Kg		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*
Dibromofluoromethane (Surr)	*95*		*75 - 120*
Toluene-d8 (Surr)	*97*		*75 - 120*

Lab Sample ID: 500-191460-19 MS
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: TW-7 2-4
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<27		3520	3440		ug/Kg	☼	98	70 - 125
1,1,1-Trichloroethane	<22		3520	3450		ug/Kg	☼	98	70 - 125
1,1,2,2-Tetrachloroethane	<23		3520	3710		ug/Kg	☼	105	62 - 140

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

Lab Sample ID: 500-191460-19 MS
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: TW-7 2-4
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	<21		3520	3460		ug/Kg	☼	98	71 - 130
1,1-Dichloroethane	<24		3520	3810		ug/Kg	☼	108	70 - 125
1,1-Dichloroethene	<23		3520	3460		ug/Kg	☼	98	67 - 122
1,1-Dichloropropene	<18		3520	3620		ug/Kg	☼	103	70 - 121
1,2,3-Trichlorobenzene	<27		3520	3240		ug/Kg	☼	92	51 - 145
1,2,3-Trichloropropane	<24		3520	3700		ug/Kg	☼	105	50 - 133
1,2,4-Trichlorobenzene	<20		3520	3420		ug/Kg	☼	97	57 - 137
1,2,4-Trimethylbenzene	<21		3520	3750		ug/Kg	☼	106	70 - 123
1,2-Dibromo-3-Chloropropane	<120		3520	2470		ug/Kg	☼	70	56 - 123
1,2-Dibromoethane	<23		3520	3550		ug/Kg	☼	101	70 - 125
1,2-Dichlorobenzene	<20		3520	3520		ug/Kg	☼	100	70 - 125
1,2-Dichloroethane	<23		3520	3560		ug/Kg	☼	101	68 - 127
1,2-Dichloropropane	<25		3520	3970		ug/Kg	☼	113	67 - 130
1,3,5-Trimethylbenzene	<22		3520	3790		ug/Kg	☼	108	70 - 123
1,3-Dichlorobenzene	<24		3520	3640		ug/Kg	☼	103	70 - 125
1,3-Dichloropropane	<21		3520	3650		ug/Kg	☼	104	62 - 136
1,4-Dichlorobenzene	<21		3520	3530		ug/Kg	☼	100	70 - 120
2,2-Dichloropropane	<26		3520	3620		ug/Kg	☼	103	58 - 139
2-Chlorotoluene	<18		3520	3660		ug/Kg	☼	104	70 - 125
4-Chlorotoluene	<21		3520	3620		ug/Kg	☼	103	68 - 124
Benzene	<8.6		3520	3670		ug/Kg	☼	104	70 - 120
Bromobenzene	<21		3520	3750		ug/Kg	☼	106	70 - 122
Bromochloromethane	<25		3520	3610		ug/Kg	☼	103	65 - 122
Bromodichloromethane	<22		3520	3240		ug/Kg	☼	92	69 - 120
Bromoform	<28		3520	2910		ug/Kg	☼	82	56 - 132
Bromomethane	<47		3520	2290		ug/Kg	☼	65	40 - 152
Carbon tetrachloride	<23		3520	3420		ug/Kg	☼	97	59 - 133
Chlorobenzene	<23		3520	3460		ug/Kg	☼	98	70 - 120
Chloroethane	<30		3520	1980		ug/Kg	☼	56	48 - 136
Chloroform	<22		3520	3350		ug/Kg	☼	95	70 - 120
Chloromethane	<19		3520	3880		ug/Kg	☼	110	56 - 152
cis-1,2-Dichloroethene	<24		3520	3460		ug/Kg	☼	98	70 - 125
cis-1,3-Dichloropropene	<24		3520	3440		ug/Kg	☼	98	64 - 127
Dibromochloromethane	<29		3520	3070		ug/Kg	☼	87	68 - 125
Dibromomethane	<16		3520	3520		ug/Kg	☼	100	70 - 120
Dichlorodifluoromethane	<40		3520	3270		ug/Kg	☼	93	40 - 159
Ethylbenzene	<11		3520	3620		ug/Kg	☼	103	70 - 123
Hexachlorobutadiene	<26		3520	3960		ug/Kg	☼	113	51 - 150
Isopropylbenzene	<23		3520	3940		ug/Kg	☼	112	70 - 126
Methyl tert-butyl ether	<23		3520	3370		ug/Kg	☼	96	55 - 123
Methylene Chloride	<96		3520	3570		ug/Kg	☼	101	69 - 125
Naphthalene	78		3520	3000		ug/Kg	☼	82	53 - 144
n-Butylbenzene	<23		3520	3570		ug/Kg	☼	101	68 - 125
N-Propylbenzene	<24		3520	3740		ug/Kg	☼	106	69 - 127
p-Isopropyltoluene	<21		3520	3740		ug/Kg	☼	106	70 - 125
sec-Butylbenzene	<23		3520	3800		ug/Kg	☼	108	70 - 123
Styrene	<23		3520	3570		ug/Kg	☼	101	70 - 120
tert-Butylbenzene	<23		3520	3830		ug/Kg	☼	109	70 - 121
Tetrachloroethene	<22		3520	3670		ug/Kg	☼	104	70 - 128

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

Lab Sample ID: 500-191460-19 MS
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: TW-7 2-4
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	9.9	J	3520	3660		ug/Kg	☼	103	70 - 125
trans-1,2-Dichloroethene	<21		3520	3450		ug/Kg	☼	98	70 - 125
trans-1,3-Dichloropropene	<21		3520	3220		ug/Kg	☼	91	62 - 128
Trichloroethene	<9.6		3520	3660		ug/Kg	☼	104	70 - 125
Trichlorofluoromethane	<25		3520	2770		ug/Kg	☼	79	55 - 128
Vinyl chloride	<15		3520	3350		ug/Kg	☼	95	64 - 126
Xylenes, Total	14	J	7050	6890		ug/Kg	☼	98	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane (Surr)	*93*		*75 - 120*
Toluene-d8 (Surr)	*99*		*75 - 120*

Lab Sample ID: 500-191460-19 MSD
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: TW-7 2-4
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<27		3520	3340		ug/Kg	☼	95	70 - 125	3	30
1,1,1-Trichloroethane	<22		3520	3470		ug/Kg	☼	99	70 - 125	1	30
1,1,2,2-Tetrachloroethane	<23		3520	3770		ug/Kg	☼	107	62 - 140	2	30
1,1,2-Trichloroethane	<21		3520	3350		ug/Kg	☼	95	71 - 130	3	30
1,1-Dichloroethane	<24		3520	3760		ug/Kg	☼	107	70 - 125	1	30
1,1-Dichloroethene	<23		3520	3430		ug/Kg	☼	97	67 - 122	1	30
1,1-Dichloropropene	<18		3520	3580		ug/Kg	☼	102	70 - 121	1	30
1,2,3-Trichlorobenzene	<27		3520	3720		ug/Kg	☼	105	51 - 145	14	30
1,2,3-Trichloropropane	<24		3520	3850		ug/Kg	☼	109	50 - 133	4	30
1,2,4-Trichlorobenzene	<20		3520	3270		ug/Kg	☼	93	57 - 137	4	30
1,2,4-Trimethylbenzene	<21		3520	3620		ug/Kg	☼	103	70 - 123	4	30
1,2-Dibromo-3-Chloropropane	<120		3520	2810		ug/Kg	☼	80	56 - 123	13	30
1,2-Dibromoethane	<23		3520	3520		ug/Kg	☼	100	70 - 125	1	30
1,2-Dichlorobenzene	<20		3520	3420		ug/Kg	☼	97	70 - 125	3	30
1,2-Dichloroethane	<23		3520	3440		ug/Kg	☼	98	68 - 127	3	30
1,2-Dichloropropane	<25		3520	3900		ug/Kg	☼	111	67 - 130	2	30
1,3,5-Trimethylbenzene	<22		3520	3700		ug/Kg	☼	105	70 - 123	3	30
1,3-Dichlorobenzene	<24		3520	3460		ug/Kg	☼	98	70 - 125	5	30
1,3-Dichloropropane	<21		3520	3500		ug/Kg	☼	99	62 - 136	4	30
1,4-Dichlorobenzene	<21		3520	3370		ug/Kg	☼	96	70 - 120	5	30
2,2-Dichloropropane	<26		3520	3610		ug/Kg	☼	103	58 - 139	0	30
2-Chlorotoluene	<18		3520	3620		ug/Kg	☼	103	70 - 125	1	30
4-Chlorotoluene	<21		3520	3510		ug/Kg	☼	100	68 - 124	3	30
Benzene	<8.6		3520	3640		ug/Kg	☼	103	70 - 120	1	30
Bromobenzene	<21		3520	3710		ug/Kg	☼	105	70 - 122	1	30
Bromochloromethane	<25		3520	3550		ug/Kg	☼	101	65 - 122	2	30
Bromodichloromethane	<22		3520	3200		ug/Kg	☼	91	69 - 120	1	30
Bromoform	<28		3520	2900		ug/Kg	☼	82	56 - 132	0	30
Bromomethane	<47		3520	2530		ug/Kg	☼	72	40 - 152	10	30

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

Lab Sample ID: 500-191460-19 MSD
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: TW-7 2-4
Prep Type: Total/NA
Prep Batch: 573412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon tetrachloride	<23		3520	3410		ug/Kg	☼	97	59 - 133	0	30
Chlorobenzene	<23		3520	3310		ug/Kg	☼	94	70 - 120	4	30
Chloroethane	<30		3520	2330		ug/Kg	☼	66	48 - 136	16	30
Chloroform	<22		3520	3350		ug/Kg	☼	95	70 - 120	0	30
Chloromethane	<19		3520	4280		ug/Kg	☼	122	56 - 152	10	30
cis-1,2-Dichloroethene	<24		3520	3460		ug/Kg	☼	98	70 - 125	0	30
cis-1,3-Dichloropropene	<24		3520	3320		ug/Kg	☼	94	64 - 127	3	30
Dibromochloromethane	<29		3520	2990		ug/Kg	☼	85	68 - 125	3	30
Dibromomethane	<16		3520	3410		ug/Kg	☼	97	70 - 120	3	30
Dichlorodifluoromethane	<40		3520	3690		ug/Kg	☼	105	40 - 159	12	30
Ethylbenzene	<11		3520	3470		ug/Kg	☼	98	70 - 123	4	30
Hexachlorobutadiene	<26		3520	3700		ug/Kg	☼	105	51 - 150	7	30
Isopropylbenzene	<23		3520	3920		ug/Kg	☼	111	70 - 126	0	30
Methyl tert-butyl ether	<23		3520	3370		ug/Kg	☼	96	55 - 123	0	30
Methylene Chloride	<96		3520	3540		ug/Kg	☼	100	69 - 125	1	30
Naphthalene	78		3520	3370		ug/Kg	☼	93	53 - 144	12	30
n-Butylbenzene	<23		3520	3310		ug/Kg	☼	94	68 - 125	8	30
N-Propylbenzene	<24		3520	3620		ug/Kg	☼	103	69 - 127	3	30
p-Isopropyltoluene	<21		3520	3570		ug/Kg	☼	101	70 - 125	5	30
sec-Butylbenzene	<23		3520	3730		ug/Kg	☼	106	70 - 123	2	30
Styrene	<23		3520	3440		ug/Kg	☼	98	70 - 120	4	30
tert-Butylbenzene	<23		3520	3830		ug/Kg	☼	109	70 - 121	0	30
Tetrachloroethene	<22		3520	3420		ug/Kg	☼	97	70 - 128	7	30
Toluene	9.9	J	3520	3450		ug/Kg	☼	98	70 - 125	6	30
trans-1,2-Dichloroethene	<21		3520	3410		ug/Kg	☼	97	70 - 125	1	30
trans-1,3-Dichloropropene	<21		3520	3130		ug/Kg	☼	89	62 - 128	3	30
Trichloroethene	<9.6		3520	3600		ug/Kg	☼	102	70 - 125	2	30
Trichlorofluoromethane	<25		3520	3150		ug/Kg	☼	89	55 - 128	13	30
Vinyl chloride	<15		3520	3770		ug/Kg	☼	107	64 - 126	12	30
Xylenes, Total	14	J	7050	6610		ug/Kg	☼	94	70 - 125	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*
Dibromofluoromethane (Surr)	*96*		*75 - 120*
Toluene-d8 (Surr)	*97*		*75 - 120*

Lab Sample ID: MB 500-573726/7
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			11/24/20 12:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			11/24/20 12:13	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			11/24/20 12:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			11/24/20 12:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			11/24/20 12:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1

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

Lab Sample ID: MB 500-573726/7
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			11/24/20 12:13	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			11/24/20 12:13	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			11/24/20 12:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			11/24/20 12:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			11/24/20 12:13	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			11/24/20 12:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			11/24/20 12:13	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			11/24/20 12:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			11/24/20 12:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			11/24/20 12:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			11/24/20 12:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			11/24/20 12:13	1
Benzene	<0.15		0.25	0.15	ug/Kg			11/24/20 12:13	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			11/24/20 12:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			11/24/20 12:13	1
Bromoform	<0.48		1.0	0.48	ug/Kg			11/24/20 12:13	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			11/24/20 12:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			11/24/20 12:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			11/24/20 12:13	1
Chloroform	<0.37		2.0	0.37	ug/Kg			11/24/20 12:13	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			11/24/20 12:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			11/24/20 12:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			11/24/20 12:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			11/24/20 12:13	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			11/24/20 12:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			11/24/20 12:13	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			11/24/20 12:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			11/24/20 12:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			11/24/20 12:13	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			11/24/20 12:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			11/24/20 12:13	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			11/24/20 12:13	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			11/24/20 12:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/24/20 12:13	1
Styrene	<0.39		1.0	0.39	ug/Kg			11/24/20 12:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/24/20 12:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			11/24/20 12:13	1
Toluene	<0.15		0.25	0.15	ug/Kg			11/24/20 12:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			11/24/20 12:13	1

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

Lab Sample ID: MB 500-573726/7
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			11/24/20 12:13	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			11/24/20 12:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			11/24/20 12:13	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			11/24/20 12:13	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			11/24/20 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*		*11/24/20 12:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*11/24/20 12:13*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 120*		*11/24/20 12:13*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*11/24/20 12:13*	*1*

Lab Sample ID: LCS 500-573726/5
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 125
1,1,1-Trichloroethane	50.0	46.0		ug/Kg		92	70 - 125
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	62 - 140
1,1,2-Trichloroethane	50.0	43.8		ug/Kg		88	71 - 130
1,1-Dichloroethane	50.0	49.7		ug/Kg		99	70 - 125
1,1-Dichloroethene	50.0	46.3		ug/Kg		93	67 - 122
1,1-Dichloropropene	50.0	48.8		ug/Kg		98	70 - 121
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	51 - 145
1,2,3-Trichloropropane	50.0	45.6		ug/Kg		91	50 - 133
1,2,4-Trichlorobenzene	50.0	48.9		ug/Kg		98	57 - 137
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	36.7		ug/Kg		73	56 - 123
1,2-Dibromoethane	50.0	44.9		ug/Kg		90	70 - 125
1,2-Dichlorobenzene	50.0	44.4		ug/Kg		89	70 - 125
1,2-Dichloroethane	50.0	44.7		ug/Kg		89	68 - 127
1,2-Dichloropropane	50.0	50.7		ug/Kg		101	67 - 130
1,3,5-Trimethylbenzene	50.0	48.4		ug/Kg		97	70 - 123
1,3-Dichlorobenzene	50.0	46.4		ug/Kg		93	70 - 125
1,3-Dichloropropane	50.0	45.3		ug/Kg		91	62 - 136
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 120
2,2-Dichloropropane	50.0	50.5		ug/Kg		101	58 - 139
2-Chlorotoluene	50.0	46.6		ug/Kg		93	70 - 125
4-Chlorotoluene	50.0	46.3		ug/Kg		93	68 - 124
Benzene	50.0	47.8		ug/Kg		96	70 - 120
Bromobenzene	50.0	46.9		ug/Kg		94	70 - 122
Bromochloromethane	50.0	45.9		ug/Kg		92	65 - 122
Bromodichloromethane	50.0	42.8		ug/Kg		86	69 - 120
Bromoform	50.0	39.8		ug/Kg		80	56 - 132
Bromomethane	50.0	48.6		ug/Kg		97	40 - 152
Carbon tetrachloride	50.0	47.2		ug/Kg		94	59 - 133
Chlorobenzene	50.0	44.4		ug/Kg		89	70 - 120

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

Lab Sample ID: LCS 500-573726/5
Matrix: Solid
Analysis Batch: 573726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	49.2		ug/Kg		98	48 - 136
Chloroform	50.0	43.8		ug/Kg		88	70 - 120
Chloromethane	50.0	57.5		ug/Kg		115	56 - 152
cis-1,2-Dichloroethene	50.0	44.8		ug/Kg		90	70 - 125
cis-1,3-Dichloropropene	50.0	44.1		ug/Kg		88	64 - 127
Dibromochloromethane	50.0	40.3		ug/Kg		81	68 - 125
Dibromomethane	50.0	44.9		ug/Kg		90	70 - 120
Dichlorodifluoromethane	50.0	54.2		ug/Kg		108	40 - 159
Ethylbenzene	50.0	47.3		ug/Kg		95	70 - 123
Hexachlorobutadiene	50.0	51.1		ug/Kg		102	51 - 150
Isopropylbenzene	50.0	50.2		ug/Kg		100	70 - 126
Methyl tert-butyl ether	50.0	42.9		ug/Kg		86	55 - 123
Methylene Chloride	50.0	46.0		ug/Kg		92	69 - 125
Naphthalene	50.0	42.5		ug/Kg		85	53 - 144
n-Butylbenzene	50.0	48.0		ug/Kg		96	68 - 125
N-Propylbenzene	50.0	48.7		ug/Kg		97	69 - 127
p-Isopropyltoluene	50.0	48.4		ug/Kg		97	70 - 125
sec-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 123
Styrene	50.0	45.6		ug/Kg		91	70 - 120
tert-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 121
Tetrachloroethene	50.0	48.9		ug/Kg		98	70 - 128
Toluene	50.0	46.8		ug/Kg		94	70 - 125
trans-1,2-Dichloroethene	50.0	46.1		ug/Kg		92	70 - 125
trans-1,3-Dichloropropene	50.0	42.0		ug/Kg		84	62 - 128
Trichloroethene	50.0	48.3		ug/Kg		97	70 - 125
Trichlorofluoromethane	50.0	44.7		ug/Kg		89	55 - 128
Vinyl chloride	50.0	50.7		ug/Kg		101	64 - 126
Xylenes, Total	100	89.4		ug/Kg		89	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*
Dibromofluoromethane (Surr)	*94*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: MB 500-574288/8
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			11/28/20 00:15	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			11/28/20 00:15	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			11/28/20 00:15	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			11/28/20 00:15	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			11/28/20 00:15	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			11/28/20 00:15	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			11/28/20 00:15	1

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

Lab Sample ID: MB 500-574288/8
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			11/28/20 00:15	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			11/28/20 00:15	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			11/28/20 00:15	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			11/28/20 00:15	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			11/28/20 00:15	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			11/28/20 00:15	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			11/28/20 00:15	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			11/28/20 00:15	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			11/28/20 00:15	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			11/28/20 00:15	1
Benzene	<0.15		0.25	0.15	ug/Kg			11/28/20 00:15	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			11/28/20 00:15	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			11/28/20 00:15	1
Bromoform	<0.48		1.0	0.48	ug/Kg			11/28/20 00:15	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			11/28/20 00:15	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			11/28/20 00:15	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			11/28/20 00:15	1
Chloroform	<0.37		2.0	0.37	ug/Kg			11/28/20 00:15	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			11/28/20 00:15	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			11/28/20 00:15	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			11/28/20 00:15	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			11/28/20 00:15	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			11/28/20 00:15	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			11/28/20 00:15	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			11/28/20 00:15	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			11/28/20 00:15	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			11/28/20 00:15	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			11/28/20 00:15	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			11/28/20 00:15	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			11/28/20 00:15	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			11/28/20 00:15	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/28/20 00:15	1
Styrene	<0.39		1.0	0.39	ug/Kg			11/28/20 00:15	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/28/20 00:15	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			11/28/20 00:15	1
Toluene	<0.15		0.25	0.15	ug/Kg			11/28/20 00:15	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			11/28/20 00:15	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			11/28/20 00:15	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			11/28/20 00:15	1

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

Lab Sample ID: MB 500-574288/8
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			11/28/20 00:15	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			11/28/20 00:15	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			11/28/20 00:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*		*11/28/20 00:15*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*11/28/20 00:15*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 120*		*11/28/20 00:15*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*11/28/20 00:15*	*1*

Lab Sample ID: LCS 500-574288/4
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 125
1,1,1-Trichloroethane	50.0	51.1		ug/Kg		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	55.4		ug/Kg		111	62 - 140
1,1,2-Trichloroethane	50.0	51.4		ug/Kg		103	71 - 130
1,1-Dichloroethane	50.0	55.8		ug/Kg		112	70 - 125
1,1-Dichloroethene	50.0	51.2		ug/Kg		102	67 - 122
1,1-Dichloropropene	50.0	52.3		ug/Kg		105	70 - 121
1,2,3-Trichlorobenzene	50.0	49.4		ug/Kg		99	51 - 145
1,2,3-Trichloropropane	50.0	56.3		ug/Kg		113	50 - 133
1,2,4-Trichlorobenzene	50.0	48.7		ug/Kg		97	57 - 137
1,2,4-Trimethylbenzene	50.0	54.9		ug/Kg		110	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	40.8		ug/Kg		82	56 - 123
1,2-Dibromoethane	50.0	51.8		ug/Kg		104	70 - 125
1,2-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 125
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	68 - 127
1,2-Dichloropropane	50.0	58.5		ug/Kg		117	67 - 130
1,3,5-Trimethylbenzene	50.0	55.3		ug/Kg		111	70 - 123
1,3-Dichlorobenzene	50.0	52.4		ug/Kg		105	70 - 125
1,3-Dichloropropane	50.0	52.4		ug/Kg		105	62 - 136
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 120
2,2-Dichloropropane	50.0	53.5		ug/Kg		107	58 - 139
2-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 125
4-Chlorotoluene	50.0	52.8		ug/Kg		106	68 - 124
Benzene	50.0	53.8		ug/Kg		108	70 - 120
Bromobenzene	50.0	54.7		ug/Kg		109	70 - 122
Bromochloromethane	50.0	52.9		ug/Kg		106	65 - 122
Bromodichloromethane	50.0	49.3		ug/Kg		99	69 - 120
Bromoform	50.0	46.0		ug/Kg		92	56 - 132
Bromomethane	50.0	50.2		ug/Kg		100	40 - 152
Carbon tetrachloride	50.0	51.4		ug/Kg		103	59 - 133
Chlorobenzene	50.0	49.7		ug/Kg		99	70 - 120
Chloroethane	50.0	50.8		ug/Kg		102	48 - 136
Chloroform	50.0	49.4		ug/Kg		99	70 - 120

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

Lab Sample ID: LCS 500-574288/4
Matrix: Solid
Analysis Batch: 574288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	58.3		ug/Kg		117	56 - 152
cis-1,2-Dichloroethene	50.0	51.0		ug/Kg		102	70 - 125
cis-1,3-Dichloropropene	50.0	50.9		ug/Kg		102	64 - 127
Dibromochloromethane	50.0	46.8		ug/Kg		94	68 - 125
Dibromomethane	50.0	51.9		ug/Kg		104	70 - 120
Dichlorodifluoromethane	50.0	49.8		ug/Kg		100	40 - 159
Ethylbenzene	50.0	51.6		ug/Kg		103	70 - 123
Hexachlorobutadiene	50.0	57.4		ug/Kg		115	51 - 150
Isopropylbenzene	50.0	58.6		ug/Kg		117	70 - 126
Methyl tert-butyl ether	50.0	49.3		ug/Kg		99	55 - 123
Methylene Chloride	50.0	53.6		ug/Kg		107	69 - 125
Naphthalene	50.0	46.6		ug/Kg		93	53 - 144
n-Butylbenzene	50.0	50.7		ug/Kg		101	68 - 125
N-Propylbenzene	50.0	54.5		ug/Kg		109	69 - 127
p-Isopropyltoluene	50.0	53.8		ug/Kg		108	70 - 125
sec-Butylbenzene	50.0	55.7		ug/Kg		111	70 - 123
Styrene	50.0	51.0		ug/Kg		102	70 - 120
tert-Butylbenzene	50.0	56.3		ug/Kg		113	70 - 121
Tetrachloroethene	50.0	52.7		ug/Kg		105	70 - 128
Toluene	50.0	52.0		ug/Kg		104	70 - 125
trans-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	70 - 125
trans-1,3-Dichloropropene	50.0	47.7		ug/Kg		95	62 - 128
Trichloroethene	50.0	53.8		ug/Kg		108	70 - 125
Trichlorofluoromethane	50.0	44.5		ug/Kg		89	55 - 128
Vinyl chloride	50.0	50.3		ug/Kg		101	64 - 126
Xylenes, Total	100	98.0		ug/Kg		98	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*
Dibromofluoromethane (Surr)	*95*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-573874/1-A
Matrix: Solid
Analysis Batch: 574007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Acenaphthene	<6.0		33	6.0	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Anthracene	<5.6		33	5.6	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		11/24/20 16:02	11/25/20 12:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-573874/1-A
Matrix: Solid
Analysis Batch: 574007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Chrysene	<9.1		33	9.1	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Fluoranthene	<6.2		33	6.2	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Fluorene	<4.7		33	4.7	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Naphthalene	<5.1		33	5.1	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Phenanthrene	<4.6		33	4.6	ug/Kg		11/24/20 16:02	11/25/20 12:13	1
Pyrene	<6.6		33	6.6	ug/Kg		11/24/20 16:02	11/25/20 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*99*		*43 - 145*	*11/24/20 16:02*	*11/25/20 12:13*	*1*
Nitrobenzene-d5 (Surr)	*84*		*37 - 147*	*11/24/20 16:02*	*11/25/20 12:13*	*1*
Terphenyl-d14 (Surr)	*92*		*42 - 157*	*11/24/20 16:02*	*11/25/20 12:13*	*1*

Lab Sample ID: LCS 500-573874/2-A
Matrix: Solid
Analysis Batch: 574007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	1330	1230		ug/Kg		92	68 - 111
2-Methylnaphthalene	1330	1260		ug/Kg		94	69 - 112
Acenaphthene	1330	1280		ug/Kg		96	65 - 124
Acenaphthylene	1330	1250		ug/Kg		94	68 - 120
Anthracene	1330	1250		ug/Kg		94	70 - 114
Benzo[a]anthracene	1330	1260		ug/Kg		95	67 - 122
Benzo[a]pyrene	1330	1230		ug/Kg		92	65 - 133
Benzo[b]fluoranthene	1330	1330		ug/Kg		100	69 - 129
Benzo[g,h,i]perylene	1330	1200		ug/Kg		90	72 - 131
Benzo[k]fluoranthene	1330	1310		ug/Kg		98	68 - 127
Chrysene	1330	1260		ug/Kg		95	63 - 120
Dibenz(a,h)anthracene	1330	1260		ug/Kg		94	64 - 131
Fluoranthene	1330	1390		ug/Kg		104	62 - 120
Fluorene	1330	1230		ug/Kg		92	62 - 120
Indeno[1,2,3-cd]pyrene	1330	1270		ug/Kg		96	68 - 130
Naphthalene	1330	1240		ug/Kg		93	63 - 110
Phenanthrene	1330	1240		ug/Kg		93	62 - 120
Pyrene	1330	1280		ug/Kg		96	61 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*97*		*43 - 145*
Nitrobenzene-d5 (Surr)	*96*		*37 - 147*
Terphenyl-d14 (Surr)	*100*		*42 - 157*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-191460-2 MS
Matrix: Solid
Analysis Batch: 574112

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 573874

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	<49		1550	1470		ug/Kg	☼	95	68 - 111
2-Methylnaphthalene	<37		1550	1500		ug/Kg	☼	97	69 - 112
Acenaphthene	<36		1550	1420		ug/Kg	☼	92	65 - 124
Acenaphthylene	<27		1550	1490		ug/Kg	☼	96	68 - 120
Anthracene	<34		1550	1560		ug/Kg	☼	101	70 - 114
Benzo[a]anthracene	<27		1550	1430		ug/Kg	☼	92	67 - 122
Benzo[a]pyrene	<39		1550	1500		ug/Kg	☼	97	65 - 133
Benzo[b]fluoranthene	<44		1550	1570		ug/Kg	☼	102	69 - 129
Benzo[g,h,i]perylene	<65	F1	1550	831	F1	ug/Kg	☼	54	72 - 131
Benzo[k]fluoranthene	<60		1550	1680		ug/Kg	☼	108	68 - 127
Chrysene	<55		1550	1440		ug/Kg	☼	93	63 - 120
Dibenz(a,h)anthracene	<39		1550	1040		ug/Kg	☼	67	64 - 131
Fluoranthene	<37		1550	1680		ug/Kg	☼	108	62 - 120
Fluorene	<28		1550	1500		ug/Kg	☼	97	62 - 120
Indeno[1,2,3-cd]pyrene	<52	F1	1550	1020	F1	ug/Kg	☼	66	68 - 130
Naphthalene	<31		1550	1400		ug/Kg	☼	91	63 - 110
Phenanthrene	<28		1550	1510		ug/Kg	☼	97	62 - 120
Pyrene	<40		1550	1590		ug/Kg	☼	103	61 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*93*		*43 - 145*
Nitrobenzene-d5 (Surr)	*74*		*37 - 147*
Terphenyl-d14 (Surr)	*104*		*42 - 157*

Lab Sample ID: 500-191460-2 MSD
Matrix: Solid
Analysis Batch: 574112

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 573874

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	<49		1580	1530		ug/Kg	☼	97	68 - 111	4	30
2-Methylnaphthalene	<37		1580	1540		ug/Kg	☼	98	69 - 112	2	30
Acenaphthene	<36		1580	1430		ug/Kg	☼	91	65 - 124	1	30
Acenaphthylene	<27		1580	1540		ug/Kg	☼	98	68 - 120	3	30
Anthracene	<34		1580	1500		ug/Kg	☼	95	70 - 114	4	30
Benzo[a]anthracene	<27		1580	1480		ug/Kg	☼	94	67 - 122	4	30
Benzo[a]pyrene	<39		1580	1560		ug/Kg	☼	99	65 - 133	4	30
Benzo[b]fluoranthene	<44		1580	1720		ug/Kg	☼	109	69 - 129	9	30
Benzo[g,h,i]perylene	<65	F1	1580	1000	F1	ug/Kg	☼	63	72 - 131	19	30
Benzo[k]fluoranthene	<60		1580	1780		ug/Kg	☼	113	68 - 127	6	30
Chrysene	<55		1580	1410		ug/Kg	☼	90	63 - 120	2	30
Dibenz(a,h)anthracene	<39		1580	1150		ug/Kg	☼	73	64 - 131	10	30
Fluoranthene	<37		1580	1690		ug/Kg	☼	107	62 - 120	0	30
Fluorene	<28		1580	1490		ug/Kg	☼	94	62 - 120	1	30
Indeno[1,2,3-cd]pyrene	<52	F1	1580	1080		ug/Kg	☼	68	68 - 130	5	30
Naphthalene	<31		1580	1470		ug/Kg	☼	93	63 - 110	4	30
Phenanthrene	<28		1580	1500		ug/Kg	☼	95	62 - 120	1	30
Pyrene	<40		1580	1700		ug/Kg	☼	108	61 - 128	7	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-191460-2 MSD
Matrix: Solid
Analysis Batch: 574112

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 573874

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*101*		*43 - 145*
Nitrobenzene-d5 (Surr)	*79*		*37 - 147*
Terphenyl-d14 (Surr)	*105*		*42 - 157*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-574627/1-A
Matrix: Solid
Analysis Batch: 574859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Barium	<0.11		1.0	0.11	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Cadmium	<0.036		0.20	0.036	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Chromium	<0.50		1.0	0.50	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Lead	<0.23		0.50	0.23	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Selenium	<0.59		1.0	0.59	mg/Kg		12/01/20 06:30	12/01/20 19:26	1
Silver	<0.13		0.50	0.13	mg/Kg		12/01/20 06:30	12/01/20 19:26	1

Lab Sample ID: LCS 500-574627/2-A
Matrix: Solid
Analysis Batch: 574859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	9.41		mg/Kg		94	80 - 120
Barium	200	198		mg/Kg		99	80 - 120
Cadmium	5.00	4.63		mg/Kg		93	80 - 120
Chromium	20.0	19.3		mg/Kg		96	80 - 120
Lead	10.0	9.49		mg/Kg		95	80 - 120
Selenium	10.0	8.81		mg/Kg		88	80 - 120
Silver	5.00	4.54		mg/Kg		91	80 - 120

Lab Sample ID: 500-191460-2 MS
Matrix: Solid
Analysis Batch: 574859

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 574627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.3		10.7	13.2		mg/Kg	☼	84	75 - 125
Barium	76	V F1 F2	213	251		mg/Kg	☼	82	75 - 125
Cadmium	<0.039	F1 F2	5.33	3.49	F1	mg/Kg	☼	65	75 - 125
Chromium	19	F1	21.3	38.7		mg/Kg	☼	95	75 - 125
Lead	11	F1	10.7	22.5		mg/Kg	☼	105	75 - 125
Selenium	<0.63	F1 F2	10.7	7.03	F1	mg/Kg	☼	66	75 - 125
Silver	<0.14	F1 F2	5.33	3.51	F1	mg/Kg	☼	66	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 500-191460-2 MSD
Matrix: Solid
Analysis Batch: 574859

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 574627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.3		11.2	13.3		mg/Kg	☼	80	75 - 125	1	20
Barium	76	V F1 F2	225	369	F1 F2	mg/Kg	☼	130	75 - 125	38	20
Cadmium	<0.039	F1 F2	5.62	4.87	F2	mg/Kg	☼	87	75 - 125	33	20
Chromium	19	F1	22.5	34.1	F1	mg/Kg	☼	69	75 - 125	13	20
Lead	11	F1	11.2	25.9	F1	mg/Kg	☼	131	75 - 125	14	20
Selenium	<0.63	F1 F2	11.2	9.53	F2	mg/Kg	☼	85	75 - 125	30	20
Silver	<0.14	F1 F2	5.62	4.80	F2	mg/Kg	☼	85	75 - 125	31	20

Lab Sample ID: 500-191460-2 DU
Matrix: Solid
Analysis Batch: 574859

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 574627

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	4.3		4.28		mg/Kg	☼	0.5	20
Barium	76	V F1 F2	79.9		mg/Kg	☼	5	20
Cadmium	<0.039	F1 F2	<0.042		mg/Kg	☼	NC	20
Chromium	19	F1	18.3		mg/Kg	☼	1	20
Lead	11	F1	10.3		mg/Kg	☼	9	20
Selenium	<0.63	F1 F2	<0.69		mg/Kg	☼	NC	20
Silver	<0.14	F1 F2	<0.15		mg/Kg	☼	NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-575135/12-A
Matrix: Solid
Analysis Batch: 575400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 575135

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0056		0.017	0.0056	mg/Kg		12/03/20 13:15	12/04/20 09:52	1

Lab Sample ID: LCS 500-575135/13-A
Matrix: Solid
Analysis Batch: 575400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 575135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.154		mg/Kg		92	80 - 120

Lab Sample ID: 500-191460-2 MS
Matrix: Solid
Analysis Batch: 575400

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 575135

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.057		0.0953	0.133		mg/Kg	☼	80	75 - 125

Lab Sample ID: 500-191460-2 MSD
Matrix: Solid
Analysis Batch: 575400

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 575135

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.057		0.0959	0.130		mg/Kg	☼	76	75 - 125	3	20

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: 500-191460-2 DU
Matrix: Solid
Analysis Batch: 575400

Client Sample ID: SB-19 2-4
Prep Type: Total/NA
Prep Batch: 575135

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.057			0.0481		mg/Kg	☼			17	20

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-17 2-4
Date Collected: 11/16/20 10:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-17 2-4
Date Collected: 11/16/20 10:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-1
Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 10:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 01:31	PMF	TAL CHI
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574007	11/25/20 16:39	AJD	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 19:33	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:00	MJG	TAL CHI

Client Sample ID: SB-19 2-4
Date Collected: 11/16/20 11:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-19 2-4
Date Collected: 11/16/20 11:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-2
Matrix: Solid
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 11:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 01:56	PMF	TAL CHI
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		5	574112	11/26/20 02:16	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 19:37	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:03	MJG	TAL CHI

Client Sample ID: SB-14 0-2
Date Collected: 11/16/20 12:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-14 0-2

Lab Sample ID: 500-191460-3
Date Collected: 11/16/20 12:10
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574301	11/28/20 06:04	SS	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 19:53	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:11	MJG	TAL CHI

Client Sample ID: SB-15 0-2

Lab Sample ID: 500-191460-4
Date Collected: 11/16/20 12:35
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-15 0-2

Lab Sample ID: 500-191460-4
Date Collected: 11/16/20 12:35
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 12:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 02:20	PMF	TAL CHI

Client Sample ID: SB-15 2-4

Lab Sample ID: 500-191460-5
Date Collected: 11/16/20 12:25
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-15 2-4

Lab Sample ID: 500-191460-5
Date Collected: 11/16/20 12:25
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574007	11/25/20 17:32	AJD	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 19:56	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:23	MJG	TAL CHI

Client Sample ID: SB-18 0-2
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-18 0-2
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-6
Matrix: Solid
Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574112	11/26/20 04:12	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:06	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:25	MJG	TAL CHI

Client Sample ID: SB-18 2-4
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-18 2-4
Date Collected: 11/16/20 13:10
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-7
Matrix: Solid
Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 13:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 02:45	PMF	TAL CHI

Client Sample ID: SB-21 2-4
Date Collected: 11/16/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-21 2-4
Date Collected: 11/16/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-8
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 16:28	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:09	EEN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-21 2-4
Date Collected: 11/16/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-8
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:27	MJG	TAL CHI

Client Sample ID: SB-22 2.5-5
Date Collected: 11/16/20 13:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-22 2.5-5
Date Collected: 11/16/20 13:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-9
Matrix: Solid
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 15:30	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:12	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:29	MJG	TAL CHI

Client Sample ID: SB-22 5-6.5
Date Collected: 11/16/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-22 5-6.5
Date Collected: 11/16/20 13:35
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-10
Matrix: Solid
Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 13:33	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:16	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:31	MJG	TAL CHI

Client Sample ID: VP-3 0-0.5
Date Collected: 11/16/20 14:55
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: VP-3 0-0.5
Date Collected: 11/16/20 14:55
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-11
Matrix: Solid
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		5	574301	11/28/20 04:35	SS	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		5	574859	12/01/20 20:19	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:33	MJG	TAL CHI

Client Sample ID: SB-20 0-2
Date Collected: 11/16/20 15:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: SB-20 0-2
Date Collected: 11/16/20 15:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-12
Matrix: Solid
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 15:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 03:10	PMF	TAL CHI
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 14:02	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:22	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:35	MJG	TAL CHI

Client Sample ID: TW-3 2-4
Date Collected: 11/17/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-3 2-4
Date Collected: 11/17/20 13:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-13
Matrix: Solid
Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/17/20 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 03:35	PMF	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:26	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:37	MJG	TAL CHI

Client Sample ID: TW-4 0-2
Date Collected: 11/17/20 15:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-4 0-2
Date Collected: 11/17/20 15:45
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-14
Matrix: Solid
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/17/20 15:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 04:00	PMF	TAL CHI
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574301	11/28/20 05:05	SS	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:29	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:40	MJG	TAL CHI

Client Sample ID: TW-5 2-3
Date Collected: 11/18/20 09:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-5 2-3
Date Collected: 11/18/20 09:20
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-15
Matrix: Solid
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/18/20 09:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 04:25	PMF	TAL CHI

Client Sample ID: TW-5 3-4
Date Collected: 11/18/20 09:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-5 3-4
Date Collected: 11/18/20 09:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-16
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574301	11/28/20 05:34	SS	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:33	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:44	MJG	TAL CHI

Client Sample ID: TW-6 2-4
Date Collected: 11/18/20 11:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-6 2-4
Date Collected: 11/18/20 11:30
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-17
Matrix: Solid
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/18/20 11:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 04:50	PMF	TAL CHI

Client Sample ID: TW-6 4.5-6
Date Collected: 11/18/20 11:32
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-6 4.5-6
Date Collected: 11/18/20 11:32
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-18
Matrix: Solid
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574301	11/28/20 03:36	SS	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:36	EEN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-6 4.5-6

Lab Sample ID: 500-191460-18
Date Collected: 11/18/20 11:32
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:51	MJG	TAL CHI

Client Sample ID: TW-7 2-4

Lab Sample ID: 500-191460-19
Date Collected: 11/18/20 13:55
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-7 2-4

Lab Sample ID: 500-191460-19
Date Collected: 11/18/20 13:55
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573412	11/18/20 13:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 05:15	PMF	TAL CHI

Client Sample ID: TW-7 4-6

Lab Sample ID: 500-191460-20
Date Collected: 11/18/20 14:00
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	573994	11/25/20 08:04	LWN	TAL CHI

Client Sample ID: TW-7 4-6

Lab Sample ID: 500-191460-20
Date Collected: 11/18/20 14:00
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:45	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:53	MJG	TAL CHI

Client Sample ID: TW-8 4-6

Lab Sample ID: 500-191460-21
Date Collected: 11/18/20 14:35
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	574003	11/25/20 08:55	LWN	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: TW-8 4-6
Lab Sample ID: 500-191460-21
Date Collected: 11/18/20 14:35
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574301	11/28/20 04:05	SS	TAL CHI

Client Sample ID: DUP 4
Lab Sample ID: 500-191460-22
Date Collected: 11/18/20 13:57
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	574003	11/25/20 08:55	LWN	TAL CHI

Client Sample ID: DUP 4
Lab Sample ID: 500-191460-22
Date Collected: 11/18/20 13:57
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/18/20 13:57	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 05:40	PMF	TAL CHI

Client Sample ID: DUP 5
Lab Sample ID: 500-191460-23
Date Collected: 11/16/20 13:22
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	574003	11/25/20 08:55	LWN	TAL CHI

Client Sample ID: DUP 5
Lab Sample ID: 500-191460-23
Date Collected: 11/16/20 13:22
Matrix: Solid
Date Received: 11/20/20 09:40
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 15:59	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:49	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:55	MJG	TAL CHI

Client Sample ID: Trip-MEOH
Lab Sample ID: 500-191460-24
Date Collected: 11/16/20 00:00
Matrix: Solid
Date Received: 11/20/20 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 01:05	PMF	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Client Sample ID: SB-16 2-4
Date Collected: 11/16/20 16:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	574003	11/25/20 08:55	LWN	TAL CHI

Client Sample ID: SB-16 2-4
Date Collected: 11/16/20 16:25
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-25
Matrix: Solid
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			573409	11/16/20 16:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	574288	11/28/20 06:05	PMF	TAL CHI
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 14:31	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:52	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:57	MJG	TAL CHI

Client Sample ID: SB-23 2-4
Date Collected: 11/16/20 13:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	574003	11/25/20 08:55	LWN	TAL CHI

Client Sample ID: SB-23 2-4
Date Collected: 11/16/20 13:50
Date Received: 11/20/20 09:40

Lab Sample ID: 500-191460-26
Matrix: Solid
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			573874	11/24/20 16:02	JP1	TAL CHI
Total/NA	Analysis	8270D		1	574013	11/25/20 15:01	NRJ	TAL CHI
Total/NA	Prep	3050B			574627	12/01/20 06:30	LMN	TAL CHI
Total/NA	Analysis	6010C		1	574859	12/01/20 20:55	EEN	TAL CHI
Total/NA	Prep	7471B			575135	12/03/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	575400	12/04/20 10:59	MJG	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Project/Site: WB Brew - 193707897

Job ID: 500-191460-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

Client Information

Client Contact: Erin Gross
Company: Stantec Consulting Corp
Address: 12075 Corporate Pkwy, Suite 200
City: Mequon
State, Zip: WI, 53092
Phone: 608 & 628 6278
Email: erin.gross@stantec.com
Project Name: WB Brewery
Site: WI & WB Brew

500-191460 COC

Sampler: ENG
Phone: 608 628 6278
Due Date Requested: Standard (11/30/20)
TAT Requested (days): (invoice by standard 11/30/20)
PO #: ~~Add project number here~~ 1935907897
WO #:
Project #: 50006565
SSOW#:

Lab PM: Fredrick, Sandie
E-Mail: sandra.fredrick@eurofinset.com
Carrier Tracking No(s):
COC No: 500-87145-39227.1
Page: Page 1 of 5
Job #: 500-191460

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC	6010C, 7471B, 8270D	8260B - VOC	6020A, 7470A	8270D - PAH											Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	A	D	N												
1 SB-17 2-4	11/16/20	10:25	C	Solid	N	N	X	X															
2 SB-19 2-4		11:45	C	Solid	N	N	X	X															
3 SB-14 0-2		12:10	C	Solid	N	N		X															
4 SB-15 0-2		12:35	C	Solid	N	N	X																
5 SB-15 2-4		12:25	C	Solid	N	N		X															
6 SB-18 0-2		13:10	C	Solid	N	N		X															
7 SB-18 2-4		13:10	C	Solid	N	N	X																
8 SB-21 2-4		13:20	C	Solid	N	N		X															
9 SB-22 2.5-5		13:30	C	Solid	N	N		X															
10 SB-22 5-6.5		13:35	C	Solid	N	N		X															
11 VP-3 0-0.5		14:55	G	Solid	N	N		X															

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date	Time	Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Erin Gross	11/19/20, 13:45	Stantec	Shari Scott	11/20/20 0940	BACHL

Custody Seals Intact: ☐ Yes ☐ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.6→0.7, 0.8→0.9

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: ZNG	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-87145-39227 2
Client Contact: Erin Gross	Phone: 608 628 6278	E-Mail: sandra.fredrick@eurofinset.com		Page: Page 2 of 5
Company: Stantec Consulting Corp.				Job #: 500-191460
Address: 12075 Corporate Pkwy, Suite 200	Due Date Requested: 11/30/2020			
City: Mequon	TAT Requested (days): standard (invoice by 11/30/20)			
State, Zip: WI, 53092				
Phone: 608 628 6278	PO #: 193707897 ~~Add project number here~~			
Email: erin.gross@stantec.com	WO #:			
Project Name: WB Brewery	Project #: 50006565			
Site: WB Brew	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC	6010C, 7471B, 6270D	8260B - VOC	6020A, 7470A	8270D - PAH	6010C, 7471B (RCRA metals)	Total Number of containers	Special Instructions/Note:
	Preservation Code:							N	N	A	D	N	2		
12	SB-20 0-2	11/16/20	15:25	C	Solid	N	N	X	X						
13	TW-3 2-4	11/17/20	13:20	C	Solid	N	N	X					X		
14	TW-4 0-2	11/17/20	15:45	C	Solid	N	N	X	X						
15	TW-5 2-3	11/18/20	9:20	C	Solid	N	N	X							
16	TW-5 3-4		9:25	C	Solid	N	N		X						
17	TW-6 2-4		11:30	C	Solid	N	N	X							
18	TW-6 4.5-6		11:32	C	Solid	N	N		X						
19	TW-7 2-4		13:55	C	Solid	N	N	X							
20	TW-7 4-6		14:00	C	Solid	N	N						X		
21	TW-8 4-6		14:35	C	Solid	N	N					X			
22	DUP 4		13:57	C	Solid	N	N	X							

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date:	Time:	Method of Shipment: FedEx
Relinquished by: Erin Gross	Date/Time: 11/19/20 13:45	Company: Stantec	Received by: Shirin Scott
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: 11/20/20 0940 Company: BDA CHI
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: Company:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

Client Information	Sampler: ENG	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-87145-39227.3
Client Contact: Erin Gross	Phone: 608 628 6278	E-Mail: sandra.fredrick@eurofinset.com		Page: Page 3 of 5
Company: Stantec Consulting Corp.				Job #: 500-191460
Address: 12075 Corporate Pkwy, Suite 200	Due Date Requested: 11/30/20			
City: Mequon	TAT Requested (days): Standard (invoice by 11/30/20)			
State, Zip: WI, 53092				
Phone: 608 628 6278	PO #: 4937007897			
Email: erin.gross@stantec.com	WO #:			
Project Name: WB Brewery	Project #: 50006565			
Site: WB Brew	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOC	6010C, 7471B, 8270D	8260B - VOC	6020A, 7470A	8270D - PAH										Total Number of containers	Special Instructions/Note:
				Preservation Code:				N	N	A	D	N											
19	TW-7 2-4 MSMSD	11/18/20	13:58	C	Solid	N	Y	X															
23	DUP 5	11/16/20	13:22	C	Solid	N	N		X														
2	SB-19 2-4 MSMSD	11/16/20	11:47	C	Solid	N	Y		X														
24	Trip - MEOH	11/16-19/20	N/A	C	Solid	N	N	X															
25	SB-14 2-4	11/16/20	1625		Solid			X	X														Added by TH
26	SB-23 2-4	↓	1350		Solid				X														
					Solid																		
					Solid																		
					Water																		
					Water																		
					Water																		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Erin Gross	11/19/20, 13:45	Stantec	Sheri Scott	11/20/20 0940	BETA ATL
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 500-191460-1

Login Number: 191460
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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	0.7,0.9
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.	False	Received extra samples not listed on COC.
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C – CPAH CALCULATIONS

Soil Summary Laboratory Detection Results: cPAH calculations
Former West Bend Brewing Property: West Bend, WI

Cumulative Carcinogenic Polycyclic Aromatic Hydrocarbon Calculation Results
Former West Bend Brewing Property: West Bend, WI

Sample Location					SB-1	SB-2	SB-3	SB-4	SB-5	SB-6 / TW-1	SB-7 / TW-2	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13
Sample Date					9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19	9/13/19
Sample ID					SB-1 2-4	SB-2 3-4	SB-3 5-6	SB-4 2-4	SB-5 2-4	SB-6 5-6	SB-7 0.5-1.5	SB-8 3-4	SB-9 1-3	SB-10 2-4	SB-11 2-4	SB-12 3-4	SB-13 2-4
Sample Depth					2 - 4 ft	3 - 4 ft	5 - 6 ft	2 - 4 ft	2 - 4 ft	5 - 6 ft	0.5 - 1.5 ft	3 - 4 ft	1 - 3 ft	2 - 4 ft	2 - 4 ft	3 - 4 ft	2 - 4 ft
Ground Surface Cover					Grass / Topsoil	Concrete	Asphalt	Asphalt	Grass / Topsoil	Grass / Topsoil	Asphalt	Grass / Topsoil	Asphalt	Asphalt	Asphalt	Grass / Topsoil	Grass / Topsoil
Sample Type and USCS Classification	Units	Wisconsin DC- NI RCL	Wisconsin DC- I RCL	Wisconsin GW RCL	Fill, Black Flecks	SC	PT	SC	SW	CH	Fill, Coal / Ash	SC	Fill, Coal/ Cinders	Fill, Cinders/ Slag	SC	Fill, Black/Metallic Pieces	GWS
Polycyclic Aromatic Hydrocarbons (EPA Method 8270D)																	
1-Methylnaphthalene	mg/kg	17.6	72.7	n/v	0.017 J	<0.00024	0.049 J	0.014 J	<0.009	<0.009	0.24	0.032	0.45	1.6	0.018 J	0.27	0.084
2-Methylnaphthalene	mg/kg	239	3,010	n/v	0.015 J	<0.000051	0.05 J	0.016 J	<0.0068	<0.0068	0.32	0.046	0.59	2.2	0.019 J	0.32	0.11
Acenaphthene	mg/kg	3,590	45,200	n/v	0.099	<0.00024	0.016 J	<0.0067	<0.0066	<0.0066	0.0083 J	<0.0066	<0.0066	0.18	0.0084 J	<0.0066	0.40
Acenaphthylene	mg/kg	n/v	n/v	n/v	<0.0046	<0.00021	0.015 J	0.015 J	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	0.0099 J	0.043	0.021 J
Anthracene	mg/kg	17,900	100,000	196.94	0.25	<0.00026	0.053	0.021 J	<0.0061	<0.0061	0.017 J	0.023	0.13 J	0.37	0.020	0.093	0.59
Benzo(a)anthracene	mg/kg	1.14	20.8	n/v	1.10	0.029 J	0.25	0.087	<0.0049	<0.0049	0.07	0.075	0.29	0.92	0.1	0.31	1.0
Benzo(a)pyrene	mg/kg	0.115	2.11	0.470	1.0	0.045	0.27	0.12	0.0088 J	0.011 J	0.084	0.11	0.41	0.88	0.11	0.28	0.99
Benzo(b)fluoranthene	mg/kg	1.15	21.1	0.478	1.10	0.049	0.41	0.15	0.01 J	0.013 J	0.13	0.15	0.43	1.3	0.16	0.58	1.4
Benzo(g,h,i)perylene	mg/kg	n/v	n/v	n/v	0.45	0.018	0.088	0.055 F1	<0.012	<0.012	0.039	<0.012	0.11 J	0.24	0.032 J F1	0.10	0.37
Benzo(k)fluoranthene	mg/kg	11.5	211	n/v	0.49	0.022	0.12	0.070 F1	<0.011	<0.011	0.044	0.062	0.26	0.47	0.046	0.13	0.46
Chrysene	mg/kg	115	2,110	0.144	1.10	0.035	0.32	0.10	<0.010	<0.010	0.084	0.079	0.3	0.85	0.1	0.37	1.10
Dibenz(a,h)anthracene	mg/kg	0.115	2.11	n/v	0.140	0.012	0.027	0.018 J F1	<0.0071	<0.0071	0.021	<0.0071	0.082 J	0.15	<0.0071	0.024 J	0.11
Fluoranthene	mg/kg	2,390	30,100	88.877	1.70	0.056	0.53	0.15	<0.0068	<0.0068	0.084	0.17	0.52	1.9	0.14	0.67	3.70
Fluorene	mg/kg	2,390	30,100	14.829	0.076	<0.00019	0.014	<0.0052	<0.0052	<0.0052	0.0083 J	0.0063 J	0.029 J	0.16	<0.0052	0.036	0.32
Indeno(1,2,3-cd)pyrene	mg/kg	1.15	21.1	n/v	0.42	0.026	0.087	0.065 F1	<0.0095	0.011 J	0.054	0.06	0.24	0.38	0.036 J F1	0.11	0.31
Naphthalene	mg/kg	5.52	24.1	0.6582	<0.0054	<0.0054	0.034	0.011 J	<0.0057	<0.0057	0.18	0.026 J	0.34	1.3	0.015 J	0.21	0.23
Phenanthrene	mg/kg	n/v	n/v	n/v	0.98	0.028	0.25	0.078	<0.0051	<0.0051	0.23	0.089	0.58	2.3	0.058	0.56	3.80
Pyrene	mg/kg	1,790	22,600	54.546	1.60	0.054	0.47	0.17	<0.0073	<0.0073	0.073	0.12	0.42	1.5	0.13	0.66	3.00
cPAH Risk		5.0E-06	n/v	n/v	**1.2E-05**	5.90E-07	3.20E-06	1.5E-06	1.60E-07	1.80E-07	1.10E-06	1.30E-06	**5.10E-06**	**1.10E-05**	1.30E-06	3.50E-06	**1.20E-05**
Exceedance Count		0	n/v	n/v	0	0	0	0	0	0	0	0	0	0	0	0	0
HI		1.0	n/v	n/v	0.058	0.0026	0.0161	0.007	0.0006	0.0007	0.0072	0.0067	0.028	0.0681	0.0065	0.019	0.0609
Cumulative CR		1.0E-05	n/v	n/v	**1.2E-05**	5.90E-07	3.30E-06	1.5E-06	1.6E-07	1.90E-07	1.20E-06	1.3E-06	5.2E-06	**1.20E-05**	1.3E-06	3.60E-06	**1.20E-05**

x = Failing cPAH calculation. This site will either need further cleanup to lower contaminant levels or the construction of a cap/cover to address the PAH direct-contact pathway to meet non-industrial standards.
x = Passing cPAH calculation. PAH levels are below direct-contact concern.
cPAH = Carcinogenic Polycyclic Aromatic Hydrocarbons on a cumulative basis
Exceeds WDNR RCL for non-industrial direct contact
Exceeds WDNR RCL for industrial direct contact
Exceeds WDNR RCL for protection of groundwater

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.005			0.	9.8E-10
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		1.	8.7E-06	*cPAH*	0.0562	8.7E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.099			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.25			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		1.1	9.6E-07	*cPAH*		9.6E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.1	9.6E-07	*cPAH*		9.6E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.45				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.49	4.3E-08	*cPAH*		4.3E-08
Chrysene	218-01-9	-	115.	115.	ca		1.1	9.6E-09	*cPAH*		9.6E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.14	1.2E-06	*cPAH*		1.2E-06
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		1.7			0.0007	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.076			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.42	3.7E-07	*cPAH*		3.7E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.017			0.	9.7E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.015			0.0001	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.98				
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.6			0.0009	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.2E-05	0	0.058	1.2E-05
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

18. 03/14/2017

Bottom-Line:

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.005			0.	9.8E-10
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.045	3.9E-07	*cPAH*	0.0025	3.9E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		2.40E-04			0.	
Acenaphthylene	208-96-8	-	-				2.10E-04				
Anthracene	120-12-7	17,900.	-	17,900.	nc		2.60E-04			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.029	2.5E-08	*cPAH*		2.5E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.049	4.3E-08	*cPAH*		4.3E-08
Benzo[g,h,i]perylene	191-24-2	-	-				0.018				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.022	1.9E-09	*cPAH*		1.9E-09
Chrysene	218-01-9	-	115.	115.	ca		0.035	3.0E-10	*cPAH*		3.0E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.012	1.0E-07	*cPAH*		1.0E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.056			0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		1.90E-04			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.026	2.3E-08	*cPAH*		2.3E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		2.40E-04			0.	1.4E-11
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		5.10E-05			0.	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.028				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.054			0.	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

5.9E-07	0	0.0026	5.9E-07
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.034			0.0002	6.2E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.27	2.3E-06	*cPAH*	0.0152	2.3E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.016			0.	
Acenaphthylene	208-96-8	-	-				0.015				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.053			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.25	2.2E-07	*cPAH*		2.2E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.41	3.6E-07	*cPAH*		3.6E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.088				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.12	1.0E-08	*cPAH*		1.0E-08
Chrysene	218-01-9	-	115.	115.	ca		0.32	2.8E-09	*cPAH*		2.8E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.027	2.3E-07	*cPAH*		2.3E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.53			0.0002	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.014			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.087	7.6E-08	*cPAH*		7.6E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.049			0.	2.8E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.05			0.0002	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.25				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.47			0.0003	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

3.2E-06	0	0.0161	3.3E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.011			0.0001	2.0E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.12	1.0E-06	*cPAH*	0.0067	1.0E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.015				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.021			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.087	7.6E-08	*cPAH*		7.6E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.15	1.3E-07	*cPAH*		1.3E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.055				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.07	6.1E-09	*cPAH*		6.1E-09
Chrysene	218-01-9	-	115.	115.	ca		0.1	8.7E-10	*cPAH*		8.7E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.018	1.6E-07	*cPAH*		1.6E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.15			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.005			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.065	5.7E-08	*cPAH*		5.7E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.014			0.	8.0E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.016			0.0001	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.078				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.17			0.0001	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.5E-06	0	0.007	1.5E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.006			0.	1.0E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.009	7.7E-08	*cPAH*	0.0005	7.7E-08
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.006			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.005	4.3E-09	*cPAH*		4.3E-09
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.01	8.7E-09	*cPAH*		8.7E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.012				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.011	9.6E-10	*cPAH*		9.6E-10
Chrysene	218-01-9	-	115.	115.	ca		0.01	8.7E-11	*cPAH*		8.7E-11
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.007	6.2E-08	*cPAH*		6.2E-08
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.007			0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.005			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.01	8.3E-09	*cPAH*		8.3E-09
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.009			0.	5.1E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.007			0.	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.005				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.007			0.	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.6E-07	0	0.0006	1.6E-07
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.006			0.	1.0E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.011	9.6E-08	*cPAH*	0.0006	9.6E-08
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.006			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.005	4.3E-09	*cPAH*		4.3E-09
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.013	1.1E-08	*cPAH*		1.1E-08
Benzo[g,h,i]perylene	191-24-2	-	-				0.012				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.011	9.6E-10	*cPAH*		9.6E-10
Chrysene	218-01-9	-	115.	115.	ca		0.01	8.7E-11	*cPAH*		8.7E-11
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.007	6.2E-08	*cPAH*		6.2E-08
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.007			0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.005			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.011	9.6E-09	*cPAH*		9.6E-09
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.009			0.	5.1E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.007			0.	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.005				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.007			0.	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.8E-07	0	0.0007	1.9E-07
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.18			0.001	3.3E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.084	7.3E-07	*cPAH*	0.0047	7.3E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.008			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.017			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.07	6.1E-08	*cPAH*		6.1E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.13	1.1E-07	*cPAH*		1.1E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.039				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.044	3.8E-09	*cPAH*		3.8E-09
Chrysene	218-01-9	-	115.	115.	ca		0.084	7.3E-10	*cPAH*		7.3E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.021	1.8E-07	*cPAH*		1.8E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.084			0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.008			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.054	4.7E-08	*cPAH*		4.7E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.24			0.0001	1.4E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.32			0.0013	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.23				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.073			0.	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.1E-06	0	0.0072	1.2E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.026			0.0001	4.7E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.11	9.6E-07	*cPAH*	0.0062	9.6E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.023			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.075	6.6E-08	*cPAH*		6.6E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.15	1.3E-07	*cPAH*		1.3E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.012				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.062	5.4E-09	*cPAH*		5.4E-09
Chrysene	218-01-9	-	115.	115.	ca		0.079	6.9E-10	*cPAH*		6.9E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.007	6.2E-08	*cPAH*		6.2E-08
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.17			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.006			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.06	5.2E-08	*cPAH*		5.2E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.032			0.	1.8E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.046			0.0002	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.089				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.12			0.0001	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.3E-06	0	0.0067	1.3E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk cPAH Risk Threshold: **5.00E-06** cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.34			0.0019	6.2E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.41	3.6E-06	*cPAH*	0.023	3.6E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.13			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.29	2.5E-07	*cPAH*		2.5E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.43	3.7E-07	*cPAH*		3.7E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.11				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.26	2.3E-08	*cPAH*		2.3E-08
Chrysene	218-01-9	-	115.	115.	ca		0.3	2.6E-09	*cPAH*		2.6E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.082	7.1E-07	*cPAH*		7.1E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.52			0.0002	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.029			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.24	2.1E-07	*cPAH*		2.1E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.45			0.0001	2.6E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.59			0.0025	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.58				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.42			0.0002	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

5.1E-06	0	0.028	5.2E-06
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		1.3			0.0073	2.4E-07
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.88	7.7E-06	*cPAH*	0.0494	7.7E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.18			0.0001	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.37			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.92	8.1E-07	*cPAH*		8.1E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.3	1.1E-06	*cPAH*		1.1E-06
Benzo[g,h,i]perylene	191-24-2	-	-				0.24				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.47	4.1E-08	*cPAH*		4.1E-08
Chrysene	218-01-9	-	115.	115.	ca		0.85	7.4E-09	*cPAH*		7.4E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.15	1.3E-06	*cPAH*		1.3E-06
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		1.9			0.0008	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.16			0.0001	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.38	3.3E-07	*cPAH*		3.3E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		1.6			0.0004	9.1E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		2.2			0.0092	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				2.3				
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.5			0.0008	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.1E-05	0	0.0681	1.2E-05
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.015			0.0001	2.7E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.11	9.6E-07	*cPAH*	0.0062	9.6E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.008			0.	
Acenaphthylene	208-96-8	-	-				0.01				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.02			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.1	8.8E-08	*cPAH*		8.8E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.16	1.4E-07	*cPAH*		1.4E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.032				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.046	4.0E-09	*cPAH*		4.0E-09
Chrysene	218-01-9	-	115.	115.	ca		0.1	8.7E-10	*cPAH*		8.7E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.007	6.2E-08	*cPAH*		6.2E-08
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.14			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.005			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.036	3.1E-08	*cPAH*		3.1E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.018			0.	1.0E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.019			0.0001	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.058				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.13			0.0001	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.3E-06	0	0.0065	1.3E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.21			0.0012	3.8E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.28	2.4E-06	*cPAH*	0.0157	2.4E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.007			0.	
Acenaphthylene	208-96-8	-	-				0.043				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.093			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.31	2.7E-07	*cPAH*		2.7E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.58	5.0E-07	*cPAH*		5.0E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.1				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.13	1.1E-08	*cPAH*		1.1E-08
Chrysene	218-01-9	-	115.	115.	ca		0.37	3.2E-09	*cPAH*		3.2E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.024	2.1E-07	*cPAH*		2.1E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.67			0.0003	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.036			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.11	9.6E-08	*cPAH*		9.6E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.27			0.0001	1.5E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.32			0.0013	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.56				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.66			0.0004	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

3.5E-06	0	0.019	3.6E-06
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.23			0.0013	4.2E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.99	8.6E-06	*cPAH*	0.0556	8.6E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.4			0.0001	
Acenaphthylene	208-96-8	-	-				0.021				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.59			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		1.	8.8E-07	*cPAH*		8.8E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.4	1.2E-06	*cPAH*		1.2E-06
Benzo[g,h,i]perylene	191-24-2	-	-				0.37				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.46	4.0E-08	*cPAH*		4.0E-08
Chrysene	218-01-9	-	115.	115.	ca		1.1	9.6E-09	*cPAH*		9.6E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.11	9.6E-07	*cPAH*		9.6E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		3.7			0.0015	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.32			0.0001	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.31	2.7E-07	*cPAH*		2.7E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.084			0.	4.8E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.11			0.0005	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				3.8				
Pyrene	129-00-0	1,790.	-	1,790.	nc		3.			0.0017	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.2E-05	0	0.0609	1.2E-05
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

18. 03/14/2017

Bottom-Line:

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.006			0.	1.0E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.18	1.6E-06	*cPAH*	0.0101	1.6E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.011			0.	
Acenaphthylene	208-96-8	-	-				0.005				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.031			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.14	1.2E-07	*cPAH*		1.2E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.23	2.0E-07	*cPAH*		2.0E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.068				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.12	1.0E-08	*cPAH*		1.0E-08
Chrysene	218-01-9	-	115.	115.	ca		0.16	1.4E-09	*cPAH*		1.4E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.007	6.2E-08	*cPAH*		6.2E-08
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.26			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.008			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.058	5.0E-08	*cPAH*		5.0E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.009			0.	5.1E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.007			0.	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.13				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.37			0.0002	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

2.0E-06	0	0.0105	2.0E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.051			0.0003	9.2E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.17	1.5E-06	*cPAH*	0.0096	1.5E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.016			0.	
Acenaphthylene	208-96-8	-	-				0.01				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.032			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.14	1.2E-07	*cPAH*		1.2E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.24	2.1E-07	*cPAH*		2.1E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.074				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.091	7.9E-09	*cPAH*		7.9E-09
Chrysene	218-01-9	-	115.	115.	ca		0.17	1.5E-09	*cPAH*		1.5E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.02	1.7E-07	*cPAH*		1.7E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.29			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.014			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.057	5.0E-08	*cPAH*		5.0E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.071			0.	4.0E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.084			0.0004	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.2				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.33			0.0002	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

2.0E-06	0	0.0105	2.1E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.022			0.0001	4.0E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.34	3.0E-06	*cPAH*	0.0191	3.0E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.048			0.	
Acenaphthylene	208-96-8	-	-				0.013				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.1			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.31	2.7E-07	*cPAH*		2.7E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.47	4.1E-07	*cPAH*		4.1E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.12				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.15	1.3E-08	*cPAH*		1.3E-08
Chrysene	218-01-9	-	115.	115.	ca		0.32	2.8E-09	*cPAH*		2.8E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.038	3.3E-07	*cPAH*		3.3E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.82			0.0003	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.041			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.13	1.1E-07	*cPAH*		1.1E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.021			0.	1.2E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.021			0.0001	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.5				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.57			0.0003	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

4.1E-06	0	0.02	4.1E-06
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.006			0.	1.1E-09
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.13	1.1E-06	*cPAH*	0.0073	1.1E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.015			0.	
Acenaphthylene	208-96-8	-	-				0.006				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.038			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.13	1.1E-07	*cPAH*		1.1E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.17	1.5E-07	*cPAH*		1.5E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.057				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.06	5.2E-09	*cPAH*		5.2E-09
Chrysene	218-01-9	-	115.	115.	ca		0.13	1.1E-09	*cPAH*		1.1E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.016	1.4E-07	*cPAH*		1.4E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.28			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.013			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.054	4.7E-08	*cPAH*		4.7E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.009			0.	5.2E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.007			0.	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.16				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.21			0.0001	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

1.6E-06	0	0.0076	1.6E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.23			0.0013	4.2E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.8	7.0E-06	*cPAH*	0.0449	7.0E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.022			0.	
Acenaphthylene	208-96-8	-	-				0.074				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.089			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.48	4.2E-07	*cPAH*		4.2E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.3	1.1E-06	*cPAH*		1.1E-06
Benzo[g,h,i]perylene	191-24-2	-	-				0.37				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.39	3.4E-08	*cPAH*		3.4E-08
Chrysene	218-01-9	-	115.	115.	ca		0.64	5.6E-09	*cPAH*		5.6E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.084	7.3E-07	*cPAH*		7.3E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.84			0.0004	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.03			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.3	2.6E-07	*cPAH*		2.6E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.3			0.0001	1.7E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.35			0.0015	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.5				
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.2			0.0007	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

9.5E-06	0	0.0488	9.6E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

18. 03/14/2017

Bottom-Line:

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.058			0.0003	1.1E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.16	1.4E-06	*cPAH*	0.009	1.4E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.008			0.	
Acenaphthylene	208-96-8	-	-				0.016				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.025			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.094	8.2E-08	*cPAH*		8.2E-08
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.25	2.2E-07	*cPAH*		2.2E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.12				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.081	7.0E-09	*cPAH*		7.0E-09
Chrysene	218-01-9	-	115.	115.	ca		0.12	1.0E-09	*cPAH*		1.0E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.035	3.0E-07	*cPAH*		3.0E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.17			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.008			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.09	7.8E-08	*cPAH*		7.8E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.071			0.	4.0E-09
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.087			0.0004	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.13				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.23			0.0001	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

2.1E-06	0	0.0099	2.1E-06
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017 Yes, levels are below direct-contact concern.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

								cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk			
								cPAH Risk Threshold: **5.00E-06**			Target CR used: **1.00E-06**
Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.91			0.0051	1.6E-07
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.46	4.0E-06	*cPAH*	0.0258	4.0E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.047			0.	
Acenaphthylene	208-96-8	-	-				0.041				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.14			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.38	3.3E-07	*cPAH*		3.3E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.63	5.5E-07	*cPAH*		5.5E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.6				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.22	1.9E-08	*cPAH*		1.9E-08
Chrysene	218-01-9	-	115.	115.	ca		0.47	4.1E-09	*cPAH*		4.1E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.063	5.5E-07	*cPAH*		5.5E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.54			0.0002	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.053			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.17	1.5E-07	*cPAH*		1.5E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		1.2			0.0003	6.8E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		1.4			0.0059	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.98				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.82			0.0005	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

5.6E-06	0	0.0378	5.8E-06
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance not assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.53			0.003	9.6E-08
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.78	6.8E-06	*cPAH*	0.0438	6.8E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.044			0.	
Acenaphthylene	208-96-8	-	-				0.064				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.13			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.54	4.7E-07	*cPAH*		4.7E-07
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		1.	8.7E-07	*cPAH*		8.7E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.39				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.35	3.0E-08	*cPAH*		3.0E-08
Chrysene	218-01-9	-	115.	115.	ca		0.6	5.2E-09	*cPAH*		5.2E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.075	6.5E-07	*cPAH*		6.5E-07
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.91			0.0004	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.048			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.24	2.1E-07	*cPAH*		2.1E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.54			0.0001	3.1E-08
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.72			0.003	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				0.66				
Pyrene	129-00-0	1,790.	-	1,790.	nc		1.3			0.0007	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

9.0E-06	0	0.0511	9.1E-06
↑ cPAH Risk ≤ 5e-06 (to pass)	↑ Exceedance Count = 0 (to pass)	↑ HI ≤ 1.0 (to pass)	↑ Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: *http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search* (Chicago as climatic zone).
Not-to-Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide).
Basis: **ca** = cancer; **nc** = non-cancer; **Csat** = soil saturation concentration; **ceiling** = 10%.

For 7 cPAHs: Individual exceedance <u>not</u> assessed, but assessed via a separate cumulative-only cancer risk threshold level of 5e-06.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: *http://pubs.usgs.gov/sir/2011/5202* .

1. ***Enter data in yellow cells.*** Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
2. ***After completing data entry, click "Get Summary" in Row 924 .***

(Contaminants not listed can be added starting at Row 912.)

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAHs / Comparison / Hazard Index / Cumulative Cancer Risk: cPAH Risk Threshold: **5.00E-06** — cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: **1.00E-06** — Cancer Risk (CR) from Data
Benzene	71-43-2	106.	1.6	1.6	ca						
Ethylbenzene	100-41-4	4,080.	8.02	8.02	ca						
Toluene	108-88-3	5,240.	-	818.	Csat						
Xylenes	1330-20-7	818.	-	260.	Csat						
Methyl tert-Butyl Ether (MTBE)	1634-04-4	22,100.	63.8	63.8	ca						
Dichloroethane, 1,2-	107-06-2	43.7	0.652	0.652	ca						
Dibromoethane, 1,2-	106-93-4	100.	0.05	0.05	ca						
Trichloroethylene	79-01-6	5.68	1.3	1.3	ca						
Tetrachloroethylene	127-18-4	109.	33.	33.	ca						
Vinyl Chloride	75-01-4	89.2	0.067	0.067	ca						
Dichloroethylene, 1,1-	75-35-4	320.	-	320.	nc						
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc						
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc						
Trichloroethane, 1,1,1-	71-55-6	11,500.	-	640.	Csat						
Carbon Tetrachloride	56-23-5	131.	0.916	0.916	ca						
Trimethylbenzene, 1,2,4-	95-63-6	373.	-	219.	Csat						
Trimethylbenzene, 1,3,5-	108-67-8	339.	-	182.	Csat						
Dioxane, 1,4-	123-91-1	1,020.	5.72	5.72	ca						
Naphthalene	91-20-3	178.	5.52	5.52	ca		2.1			0.0118	3.8E-07
Nonane, n-	111-84-2	13.4	-	6.86	Csat						
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		2.	1.7E-05	*cPAH*	0.1124	1.7E-05
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.23			0.0001	
Acenaphthylene	208-96-8	-	-				0.076				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.47			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		1.3	1.1E-06	*cPAH*		1.1E-06
Benzo(j)fluoranthene	205-82-3	-	0.424	0.424	ca						
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		3.1	2.7E-06	*cPAH*		2.7E-06
Benzo[g,h,i]perylene	191-24-2	-	-				0.79				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		1.	8.7E-08	*cPAH*		8.7E-08
Chrysene	218-01-9	-	115.	115.	ca		1.8	1.6E-08	*cPAH*		1.6E-08
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.18	1.6E-06	*cPAH*		1.6E-06
Dibenzo(a,e)pyrene	192-65-4	-	0.042	0.042	ca						
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.59E-04	4.59E-04	ca						
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		3.			0.0013	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.22			0.0001	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.71	6.2E-07	*cPAH*		6.2E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		2.5			0.0006	1.4E-07
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		3.1			0.013	
Nitropyrene, 4-	57835-92-4	-	0.424	0.424	ca						
Perylene	198-55-0	-	-								
Phenanthrene	85-01-8	-	-				3.7				
Pyrene	129-00-0	1,790.	-	1,790.	nc		3.9			0.0022	
Methylcholanthrene, 3-	56-49-5	-	0.006	0.006	ca						
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.					
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.					
Barium	7440-39-3	15,300.	-	15,300.	nc	364.					
Beryllium and compounds	7440-41-7	156.	1,830.	156.	nc						
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.					
Calcium	7440-70-2	-	-			14,536.					
Chromium(VI)	18540-29-9	234.	0.301	0.301	ca						
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling						
Chromium, Total	7440-47-3	-	-			44.					
Cobalt	7440-48-4	23.4	487.	23.4	nc	22.					
Copper	7440-50-8	3,130.	-	3,130.	nc	35.					
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat						
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.					
Magnesium	7439-95-4	-	-			8,290.					
Lead and Compounds	7439-92-1	400.	-	400.		52.					
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.					
Molybdenum	7439-98-7	391.	-	391.	nc						
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.					
Selenium	7782-49-2	391.	-	391.	nc						
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.					
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.					
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.					
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.411	0.038	0.038	ca						
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.137	0.012	0.012	ca						
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.37	0.124	0.124	ca						
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.37	0.121	0.121	ca						
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.37	0.122	0.122	ca						

Find ... Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	cPAH Risk	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Test1Chem(DRO)	Wis. DRO										
Test2Chem(GRO)	Wis. GRO										
Test3Chem(TPH)	TPH										

Type BRRTS No. Here (If Known)

2.4E-05	0	0.1413	2.4E-05
cPAH Risk ≤ 5e-06 (to pass)	Exceedance Count = 0 (to pass)	HI ≤ 1.0 (to pass)	Cumulative CR ≤ 1e-05 (to pass)

Bottom-Line:

18. 03/14/2017

NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.