



February 28, 2024

Ms. Lisa Dunning
Task Order Contracting Officer's Representative
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

**Subject: Contract No. 68HERH19D0018; Task Order No. 68HE0719F0190
31st & Prospect Development Site
2501, 2503, and 2505 East 30th Street; 3012 Prospect Avenue; and 3005, 3009, 3011, and
3015 Wabash Avenue, Kansas City, Jackson County, Missouri
Phase II Environmental Site Assessment, Quarter 8**

Dear Ms. Dunning:

Toeroek Associates, Inc. (Toeroek) and our teaming subcontractor, Tetra Tech, Inc. (Tetra Tech), (hereafter "Toeroek Team") are pleased to present the Phase II Environmental Site Assessment (ESA), Quarter 8 report regarding the 31st & Prospect Development Site (the Site) in Kansas City, Jackson County, Missouri.

This deliverable has been reviewed internally as part of Tetra Tech's quality assurance program, as well as Toeroek's quality assurance program, and is consistent with Toeroek's Quality Management Plan for the Resource Conservation and Recovery Act (RCRA) Enforcement and Permitting Assistance (REPA) contract. Documentation of this review is retained in the Toeroek Team's project files.

If you have any questions or comments, please contact Greg Hanna at 720-898-4102 or Kaitlyn Mitchell at 816-412-1742.

Sincerely,

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Enclosure

cc: Amber Krueger, EPA Region 7 (cover letter only)
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**TARGETED BROWNFIELDS ASSESSMENT
PHASE II ENVIRONMENTAL SITE ASSESSMENT, QUARTER 8**

**31st & PROSPECT DEVELOPMENT SITE
2501, 2503, AND 2505 EAST 30th STREET; 3012 PROSPECT AVENUE;
AND 3005, 3009, 3011, AND 3015 WABASH AVENUE
KANSAS CITY, JACKSON COUNTY, MISSOURI**



Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked Toeroek Associates, Inc. (Toeroek) and its teaming subcontractor, Tetra Tech, Inc., (hereafter “Toeroek Team”) with providing technical support to the EPA Region 7 Brownfields Program under Contract 68HERH19D0018, Task Order 68HE0719F0190. EPA Region 7 requested the Toeroek Team conduct a Phase II Environmental Site Assessment (ESA) as part of a Targeted Brownfields Assessment (TBA) of a portion of the 31st & Prospect Development Site (the Site). The Site includes eight parcels of land at 2501, 2503, and 2505 East 30th Street; 3012 Prospect Avenue; and 3005, 3009, 3011, and 3015 Wabash Avenue in Kansas City, Jackson County, Missouri ([Appendix A, Figure 1](#)).

The Toeroek Team performed this Phase II ESA based on results of previous investigations by CEG Assessments (CEG) (2016), Ramboll Environ (Ramboll) (2016), and SCS Engineers (SCS) (2018, 2019). The previous investigations occurred over a larger portion of the 31st & Prospect Development Site, a 52-parcel area. During previous investigations in the larger, 52-parcel area, a plume of volatile organic compounds (VOCs) in groundwater was identified under the eight parcels that now constitute the Site. According to the Brownfields Assessment Application (EPA 2020), the previous property owners, CRV, LLC, and the City of Kansas City, Missouri, were interested in redeveloping the property, contingent on the findings of this Phase II ESA. The Site has since been sold. The current owner of the property is LCKC 3p Development Partners, LLC (Kansas City, Missouri [KCMO] 2024).

The scope of this Phase II ESA included collection of subsurface soil, soil-gas, and groundwater samples in January 2022 (Quarter 1 of 2022 sampling event), to confirm or eliminate recognized environmental conditions (RECs) identified during the previous Phase I ESA (SCS 2018) and multiple Phase II ESAs (CEG 2016, Ramboll 2016, SCS 2019). In addition, the Toeroek Team installed three permanent groundwater monitoring wells on the Site in January 2022 for long-term groundwater monitoring that will aid potential remediation under the State of Missouri’s Brownfields/Voluntary Cleanup Program (BVCP) (Toeroek 2022a). The Toeroek Team concluded quarterly groundwater sampling of these monitoring wells. This report details the fourth sampling event of 2023, (Quarter 8) of eight (minimum) total quarterly sampling events planned for the Site. Currently, there are no plans under the current contract to continue further quarterly sampling.

This Phase II ESA, Quarter 8 report is consistent with ASTM International (ASTM) Standard E1903-19 for Phase II ESAs, and otherwise complies with EPA’s “All Appropriate Inquiries” Rule (Title 40 *Code of Federal Regulations* Part 312).

1.1 PURPOSE

Purposes of this Phase II ESA were to: (1) confirm or eliminate RECs identified during previous investigations; (2) acquire information regarding nature and concentration of contaminants present at the Site in soil and/or groundwater; (3) assess potential impacts on the Site and risks posed by hazardous substances that would support informed business decisions about the Site; and (4) where applicable, satisfy the innocent purchaser defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

1.2 SPECIAL TERMS AND CONDITIONS

No special terms or conditions were identified during the Phase II ESA, Quarter 8 sampling event.

2.0 BACKGROUND AND SITE HISTORY

This section specifies the location of the Site and its features, describes the physical setting, recounts the history of the Site, discusses land uses at the Site and adjacent properties, and relates results of previous investigations.

2.1 SITE DESCRIPTION AND FEATURES

The Site is in Kansas City, Jackson County, Missouri, and appears on the Kansas City, Missouri – Kansas Quadrangle, U.S. Geological Survey (USGS) 7.5-minute topographic series map (USGS 2021) ([Appendix A, Figure 1](#)). The Site consists of eight vacant parcels encompassing approximately 1 acre of land. Coordinates at the approximate center of the Site are 39.071081 degrees north latitude and 94.553162 degrees west longitude.

2.2 PHYSICAL SETTING

The Site lies within the east-central portion of the City of Kansas City, Missouri. It is bounded north by East 30th Street, with residential buildings beyond; east by Prospect Avenue, with commercial businesses beyond; south-southeast by Rent-A-Center Furniture Store and associated parking lot, with the Kansas City Public Library and associated parking lot, and East 31st Street beyond; west by Wabash Avenue, with residential buildings beyond; and north-northwest by a vacant building, with East 30th Street beyond.

2.2.1 Geologic Setting

Jackson County is within west-central Missouri, in the Iowa and Missouri Deep Loess Hills Resource Area of the Central Feed Grains and Livestock Region of the United States. The Missouri River is the northern boundary of Jackson County. The northern part of Jackson County is a near-level flood plain of the Missouri River. Adjacent to the flood plain and to the south are moderately sloping to steep, loess-covered bluffs and hills. The remainder of Jackson County, which includes the Site area, consists of gently to moderately sloping uplands and flood plains of the Blue River, Little Blue River, Sni-A-Bar Creek, and their tributaries (U.S. Department of Agriculture [USDA] 1984).

The upper bedrock formation in the vicinity of the Site consists of the middle Kansas City Group, Missourian Series, Pennsylvania System (Missouri Bureau of Geology and Mines 1917). Underlying the Kansas City Group are the shales of the Pleasanton Group. Underlying the Pleasanton Group are predominantly shales of the Marmaton and Cherokee Groups of the Desmoinesian Series (Missouri Department of Natural Resources [MoDNR] 1997). Shale bedrock was encountered at depths of

approximately 18 to 24 feet (ft) below ground surface (bgs) during the Quarter 1 sampling event in January 2022 (Toeroek 2022a).

Soil at the Site has been classified according to the USDA Soil Conservation Services Web Soil Survey, reviewed in January 2022. The soil consists of urban land, Harvester Complex with 2 to 9 percent slopes. This soil type is moderately well drained with high runoff and consists of silt loam from 0 to 7 inches deep, silty clay loam from 7 to 31 inches deep, and clay loam from 31 to 80 inches deep (USDA 2022).

2.2.2 Hydrogeology

Land surface elevations in Jackson County range from 1,105 ft above mean sea level (amsl) on the divide in the south-central part of the county to 690 ft amsl at normal water level on the Missouri River, which is the northern county line for most of Jackson County (USDA 1984). Local topographic elevation at the center of the Site is approximately 980 ft amsl (USGS 2021).

Local Pennsylvanian-age bedrock units generally yield low quantities of marginal quality groundwater high in dissolved solids—particularly chlorides, iron, and bicarbonates (Stohr, St. Ivany, and Williams 1981).

Currently, groundwater is not used for drinking water at or near the Site. The City of Kansas City derives approximately 80 percent of its drinking water from the Missouri River and approximately 20 percent from a well field in the Missouri River Aquifer. The potable water passes through a 240-million-gallon-per-day (MGD) treatment plant before servicing customers inside and outside Kansas City (KC Water 2022). No private drinking water wells are within a 1-mile radius of the Site (MoDNR 2022).

Numerous drainageways dissect the bedrock in this area and flow toward the Missouri River. The Site is relatively flat and slopes to the northwest. Shallow groundwater perches seasonally at the top of bedrock or other competent layers in the subsurface. Transient water also may be encountered within fracture zones and along bedding planes, and frequently discharges at bedrock outcrops (Stohr, St. Ivany, and Williams 1981).

The hydrologic gradient at the Site is not known but may be inferred to be consistent with the topographic gradient, which extends primarily in the north-northwest direction. Groundwater depth and direction likely vary with seasonal changes, precipitation, and other unknown hydrogeologic features. The static water level, measured at the Site during the Quarter 6 sampling event, was approximately 969 to 972 ft amsl.

2.2.3 Hydrology

Most of the Site is flat and slopes to the north-northwest toward U.S. Highway 49 and to the Missouri River beyond, which is approximately 3.4 miles north-northwest of the Site.

2.2.4 Meteorology

Annual average rainfall in the City of Kansas City, Missouri is 37 inches. Average summer highs are approximately 89 degrees Fahrenheit (°F). Average winter lows are approximately 21°F (National Weather Service 2022).

2.3 SITE HISTORY AND LAND USE

The Site has been developed since at least 1896 and has included mixed residential and commercial areas, with Prospect Avenue as a commercial corridor and residential properties west of Prospect Avenue.

A 5,000-square-foot building was present on the 3012 Prospect Avenue property from as early as 1951 through 2017, when it was demolished (SCS 2018). Historically, commercial and retail businesses at that parcel included automobile service facilities, filling stations, and dry cleaners.

2.4 ADJACENT PROPERTY USE

Surrounding properties have been developed since the late 1800s and early 1900s, and historically have hosted residences and various commercial businesses, including automobile service facilities, filling stations, printing facilities, and dry cleaners (SCS 2018).

2.5 SUMMARY OF PREVIOUS ASSESSMENTS

Multiple Phase I and Phase II ESAs have occurred at the Site. During Phase I ESA investigations, the parcels comprising the Site were found to have previously hosted retail businesses including automobile service facilities, filling stations, and dry cleaners. Phase II ESA investigations have detected high concentrations in soil, soil gas, and groundwater of petroleum compounds and additives, and chlorinated solvents commonly associated with dry cleaning activities and their breakdown products. Tables summarizing results from previous quarterly sampling events are in [Appendix B](#).

Quarter 1, January 2022

The Toeroek Team performed the initial (Quarter 1) sampling event for this Phase II ESA from January 11 through 14, 2022 (Toeroek 2022a). Activities included sampling of subsurface soil, soil gas, and groundwater, and installation of three permanent groundwater monitoring wells. Monitoring wells MW-1

and MW-3 were screened from approximately 12 to 22 ft bgs, and MW-2 was screened from approximately 15 to 25 ft bgs, into the top of the shale bedrock layer.

Low to moderate concentrations of VOCs were detected in nearly all soil, soil-gas, and groundwater samples. Concentrations of multiple chemicals of concern (COCs) exceeded Missouri Risk-based Corrective Action (MRBCA) Lowest Default Target Levels (LDTLs) in all media, and EPA Maximum Contaminant Levels (MCLs) in groundwater (Toeroek 2022a). Data for analytes that exceeded LDTLs were then compared to MRBCA Tier 1 Risk-based Target Levels (RBTLs). The MRBCA RBTLs assumed residential land use and clayey soil. Tetrachloroethene (PCE) and trichloroethene (TCE) concentrations exceeded their respective EPA MCLs and MRBCA LDTLs in all three groundwater samples. The PCE concentration also exceeded the MRBCA RBTL in the groundwater sample collected from monitoring well MW-2, evaluating the risk from vapor intrusion. No constituent exceeded the MRBCA RBTL for soil vapor in any sample, based on an assumption of clayey soil. Even when compared to the more conservative RBTL for soil vapor assuming sandy soil, no concentration of PCE or its degradation products (TCE, 1,2-dichloroethene [DCE], and vinyl chloride) in soil gas exceeded the RBTL.

Quarter 2, April 2022

The Toeroek Team conducted the second quarterly (Quarter 2) sampling event on April 19, 2022 (Toeroek 2022b). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022. All groundwater samples collected at the Site during the Quarter 2 sampling event contained low to moderate concentrations of COCs. The PCE concentration exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. 1,1,2 Trichloroethane (TCA) concentrations exceeded the MRBCA LDTL but not the RBTL in groundwater samples from MW-2 and MW 3.

Quarter 3, July 2022

The Toeroek Team performed the third quarterly (Quarter 3) sampling event on July 8, 2022 (Toeroek 2022c). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022, as well as soil-gas sampling at eight locations previously sampled during the Quarter 1 sampling event. All groundwater samples collected at the Site during the Quarter 3 sampling event had low to moderate concentrations of COCs. PCE and TCE concentrations exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and

TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. The *cis*-1,2-dichloroethene (DCE) concentration exceeded the MRBCA LDTL but not the RBTL in the groundwater sample from MW-3. No soil-gas sample yielded a COC at a concentration exceeding the corresponding MRBCA RBTL for soil gas, assuming clayey soil. Again, even when compared to the more conservative RBTL for soil vapor assuming sandy soil, no concentration of PCE or its degradation products (TCE, 1,2-DCE, and vinyl chloride) in soil gas exceeded the RBTL.

Quarter 4, December 2022

The Toeroek Team performed the fourth quarterly (Quarter 4) sampling event on December 19, 2022 (Toeroek 2023a). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022. All groundwater samples collected at the Site during the Quarter 4 sampling event had low to moderate concentrations of COCs. The PCE concentration exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. The *cis*-1,2-DCE concentration exceeded the MRBCA LDTL but not the RBTL in the groundwater sample collected from MW-3.

Quarter 5, March 2023

The Toeroek Team performed the fifth quarterly (Quarter 5) sampling event on March 21, 2023 (Toeroek 2023b). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022. All groundwater samples collected at the Site during the Quarter 5 sampling event had low to moderate concentrations of COCs. The PCE concentration exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. The laboratory detected the following additional COCs in groundwater but at concentrations below MRBCA LDTLs: benzene; *cis*-1,2-DCE; *trans*-1,2 DCE; isopropylbenzene (cumene); and methylene chloride.

Quarter 6, June 2023

The Toeroek Team conducted the sixth quarterly (Quarter 6) sampling event on June 21, 2023 (Toeroek 2023c). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022. All groundwater samples collected at the Site during the Quarter 6 sampling event contained low to moderate concentrations of COCs. The PCE concentration exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and

TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. The *cis*-1,2-DCE concentration exceeded the MRBCA LDTL but not the RBTL in the groundwater sample collected from MW-3. The following additional COCs were detected in groundwater but at concentrations below MRBCA LDTLs: benzene; methylene chloride; and *trans*-1,2-DCE.

Quarter 7, September 2023

The Toeroek Team conducted the seventh quarterly (Quarter 7) sampling event on September 20, 2023 (Toeroek 2023d). Activities consisted of sampling the three groundwater monitoring wells previously installed during the Quarter 1 sampling event in January 2022. All groundwater samples collected at the Site during the Quarter 7 sampling event contained low to moderate concentrations of COCs. PCE and TCE concentrations exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. Benzene, carbon tetrachloride, and chloromethane levels also exceeded their EPA MCLs and MRBCA RBTLs in the groundwater sample collected from MW-2. The *cis*-1,2-DCE concentration exceeded its EPA MCL and MRBCA LDTL, but not the RBTL, in the groundwater sample collected from MW-3. The following additional COCs were detected in groundwater but at concentrations below MRBCA LDTLs: benzene; carbon tetrachloride; chloroform; chloromethane; ethylbenzene; isopropylbenzene (cumene); methylene chloride; *trans*-1,2-DCE; and toluene.

3.0 PHASE II ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES

The following subsections describe the scope, field exploration, and methods implemented during the Phase II ESA, Quarter 8 sampling event. This is the eighth of a minimum of eight planned quarterly sampling events. On December 20, 2023, Toeroek Team members Sarah Green and Clay Weiss sampled the three groundwater monitoring wells installed during the Quarter 1 sampling event in January 2022. Field activities were documented in the logbook ([Appendix C](#)).

3.1 SCOPE OF THE ASSESSMENT

The Toeroek Team performed environmental sampling to assess the current level of contamination in groundwater at the Site. Sampling was consistent with the Quality Assurance Project Plan (QAPP) approved by EPA on November 4, 2021 (Toeroek 2021).

3.1.1 Sampling Plan

The proposed sampling scheme for this project incorporated a combination of biased/judgmental sampling with definitive laboratory analysis, in accordance with procedures included in the *Guidance for Performing Site Inspections Under CERCLA* (Office of Solid Waste and Emergency Response [OSWER] Directive #9345.1-05, September 1992). The objective of the groundwater sampling was to characterize possible releases to the environment. [Figure 2](#) in [Appendix A](#) depicts sampling locations at the Site. Three groundwater samples were collected, one at each of the three permanent groundwater monitoring well locations, MW-1, MW-2, and MW-3.

3.1.2 Chemical Testing Plan

Laboratory analyses for chemical parameters were selected based on likely present contaminants associated with current and historical uses of the Site, and results from previous investigations. All groundwater samples were submitted to Pace Analytical (Pace) in Lenexa, Kansas, for VOCs analysis via EPA Method 8260.

3.1.3 Deviations from the QAPP

No deviations from the QAPP occurred during this quarterly sampling event.

3.2 FIELD ACTIVITIES

Quarter 8 field activities occurred at the Site on December 20, 2023. Groundwater samples were submitted to Pace the same day. The following subsections summarize groundwater sample collection activities. Sampling locations are depicted on [Figure 2](#) in [Appendix A](#).

3.2.1 Groundwater Sampling

The Toeroek Team collected groundwater samples from three groundwater monitoring wells installed during the Quarter 1 sampling event in January 2022 ([Appendix A](#), [Figure 2](#)).

Samples were collected after at least three well volumes of water had been purged from each well by use of a bailer. The Toeroek Team measured temperature, pH, specific conductivity, and turbidity using a Horiba U-52 Series water meter. Parameters were monitored during purging until stabilization (no greater than 10 percent change over three consecutive readings). Readings immediately preceding sample collection were documented in the logbook. Samples were collected into three 40 milliliter (mL) volatile organic analysis (VOA) vials preserved with hydrochloric acid. Samples were analyzed for VOCs via EPA Method 8260. [Table 1](#) summarizes groundwater levels and samples collected during this Phase II ESA, Quarter 8 sampling event.

TABLE 1
GROUNDWATER LEVEL AND SAMPLE SUMMARY, QUARTER 8
31st & PROSPECT DEVELOPMENT SITE

Location ID(s)	Depth to Groundwater (ft btoc)	Static Water Level (ft amsl)	Analysis Performed
MW-1	13.50	969.22	VOCs via EPA Method 8260
MW-2	15.90	968.15	
MW-3/DUP	14.05	968.93	

Notes:

DUP Duplicate
EPA U.S. Environmental Protection Agency
ft amsl Feet above mean sea level
ft btoc Feet below top of casing
ID Identification
MW Monitoring well
VOC Volatile organic compound

3.2.2 Quality Control Sampling

Field quality control (QC) samples for this investigation included one laboratory-supplied aqueous trip blank and one groundwater field duplicate (DUP) collected at MW-3. Pace analyzed the QC samples for VOCs. Analytical data from the trip blank were referenced to determine whether contamination had been introduced in the field and/or during transportation of containers and samples. The field duplicate was collected to determine total method precision. Analytical results from field duplicate samples were used to calculate the relative percent difference (RPD) between results from the duplicate and associated field sample for each reported analyte. The RPDs served informational purposes only; however, the higher

concentration of each analyte in the duplicate sample pair was compared to the associated screening level. Analytical accuracy was determined via analysis of laboratory prepared spikes and duplicates. RPDs are discussed with the applicable data validation reports in [Appendix D](#).

4.0 EVALUATION AND PRESENTATION OF RESULTS

The following subsections present analytical data from groundwater samples collected during the Phase II ESA, Quarter 8 sampling event. Groundwater sample results were compared to EPA MCLs or Regional Screening Levels (RSLs) for tap water, MRBCA LDTLs, and MRBCA Tier 1 residential RBTLS for Type 3 (clayey) soils (EPA 2023; MoDNR 2006). For RSLs, a total hazard quotient of 1.0 was assumed. The MRBCA RBTL assumed clayey soil and a primary risk from vapor inhalation (residential scenario). Copies of analytical data packages and data validation reports are in [Appendix D](#). [Table 2](#) below lists all detections of VOCs in groundwater. [Figure 3](#) in [Appendix A](#) shows detections of VOCs exceeding MRBCA screening levels and/or EPA MCLs/RSLs in groundwater. Tables summarizing results from previous quarterly sampling events are in [Appendix B](#).

4.1 GROUNDWATER SAMPLES

Three groundwater samples were collected, one from each monitoring well, MW 1, MW-2, and MW 3. The groundwater sample from MW-3 was sampled as a duplicate pair.

The laboratory detected the following COCs in groundwater samples collected from MW-1, MW-2, and MW 3 during the Quarter 8 sampling event: *cis*-1,2-DCE; *trans*-1,2-DCE; PCE; TCE; methylene chloride; benzene; and isopropyl benzene (cumene). COC exceedances included:

- MW-1: *cis*-1,2-DCE; PCE; and TCE were detected in the groundwater sample. PCE and TCE concentrations exceeded their respective EPA MCLs and MRBCA LDTLs. Neither exceeded the MRBCA RBTL.
- MW-2: PCE, TCE, *cis*-1,2-DCE, and methylene chloride were detected in the groundwater sample. The TCE and PCE concentration exceeded the respective EPA MCL and MRBCA LDTL. The PCE concentration also exceeded the corresponding MRBCA RBTL. Methylene chloride, a common laboratory contaminant, was detected at an estimated concentration of 23.4 micrograms per liter (µg/L) (J qualifier). The concentration of *cis*-1,2-DCE did not exceed the EPA MCL or other MRBCA screening level.
- MW-3: Benzene; *cis*-1,2-DCE; *trans*-1,2-DCE; isopropylbenzene (cumene); PCE; and TCE were detected in the groundwater sample. The concentrations of PCE and TCE exceeded their respective EPA MCLs and MRBCA LDTLs, however no result exceeded an MRBCA RBTL. Methylene chloride, a common laboratory contaminant, was detected at estimated concentration of 2.9 µg/L (J qualifier).

No other COC was detected at concentration exceeding a MRBCA screening level or EPA MCL.

TABLE 2
DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES, QUARTER 8
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	Isopropylbenzene (Cumene)	PCE	TCE
	EPA MCL/RSL					
	5	70	100	NE	5	5
	MRBCA LDTL (All Soil Types, All Pathways)					
	5	70	100	330	5	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)					
	2,880	19,400	17,800	10,600	928	4,490
MW-1	ND	2.0	ND	ND	42.9	14.0
MW-2 ^a	ND	21.1 J	ND	ND	7,670	136
MW-3 ^a	0.97 J	48.4	0.58 J	0.73 J	206	79.3
MW-3 (DUP)	1.2 J	51.2	0.62 J	0.97 J	206	81.2

Notes:

All values are in micrograms per liter (µg/L).

^a Methylene chloride, a common laboratory contaminant, was detected in samples MW-2 and MW-3/MW-3 (DUP) at concentrations of 23.4 and 2.9/3.1 µg/L (J qualifier), respectively.

Bold font indicates the concentration exceeds the MCL/RSL and/or LDTL.

Red text indicates the concentration exceeds the RBTL.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DUP	Duplicate
J	Estimated concentration.
LDTL	Lowest Default Target Level—regarding these analytes, all linked to protection for domestic groundwater use pathway.
MCL	Maximum Contaminant Level (EPA 2023)
MRBCA	Missouri Risk-based Corrective Action (Missouri Department of Natural Resources 2006)
MW	Monitoring well
ND	Not detected
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
VOC	Volatile organic compound

4.2 QUALITY CONTROL SAMPLES

A discussion of QC samples is in [Appendix D](#). Pace analyzed QC samples for VOCs. Acetone was detected at a concentration greater than the method detection limit (MDL) but less than the reporting limit (RL) in the field blank. Chloroform was detected in the trip blank at concentration greater than the MDL but less than the RL. Data were determined to be usable without additional qualifications, as described in [Appendix D](#); qualifications from the laboratory were applied to the results reported in [Table 2](#).

5.0 DISCUSSION OF SIGNIFICANT FINDINGS AND CONCLUSIONS

This section summarizes significant findings and offers conclusions regarding the Phase II ESA, Quarter 8 sampling event.

All groundwater samples collected at the Site contained low to moderate concentrations of COCs. The laboratory detected the following COCs: benzene; *cis*-1,2-DCE; *trans*-1,2-DCE; isopropylbenzene (cumene); PCE; and TCE. COC exceedances included:

- Only the PCE concentration in the groundwater sample from MW-2 exceeded an MRBCA RBTL.
- PCE and TCE concentrations exceeded their respective EPA MCLs and MRBCA LDTLs in all groundwater samples.
- *Cis*-1,2-DCE was detected in MW-2 but at concentration less than the EPA MCL and MRBCA LDTL.
- *Cis*-1,2-DCE; benzene, *trans*-1,2-DCE; and isopropylbenzene (cumene) were detected at concentrations less than their respective MCLs and MRBTLs in MW-3.

No other COC was detected at a concentration exceeding a MRBCA screening level or an EPA MCL.

Based on the results of the quarterly sampling performed at this site since January 2022, the Toeroek Team recommends establishing an environmental covenant to disallow the installation of water wells at the Site; justifications are listed below:

- VOC concentrations in groundwater exceed EPA MCLs and MRBCA RBTLs for drinking water. Detected VOCs in groundwater do not appear to correlate to any VOC detections in soil gas that exceed MRBCA residential RBTLs.
- Currently groundwater is not used as a drinking source at the Site.

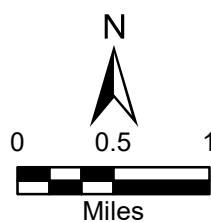
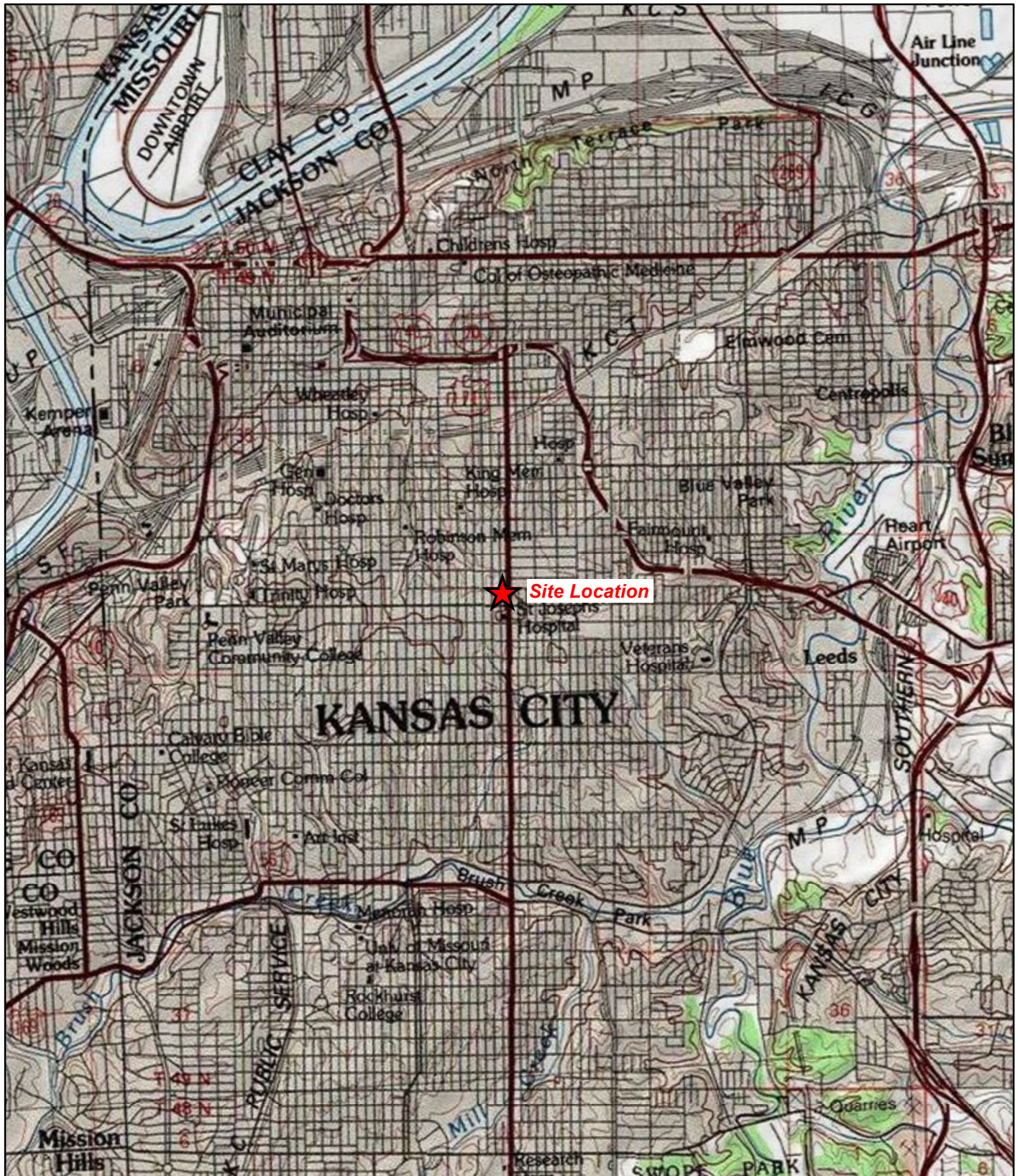
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APPENDIX A

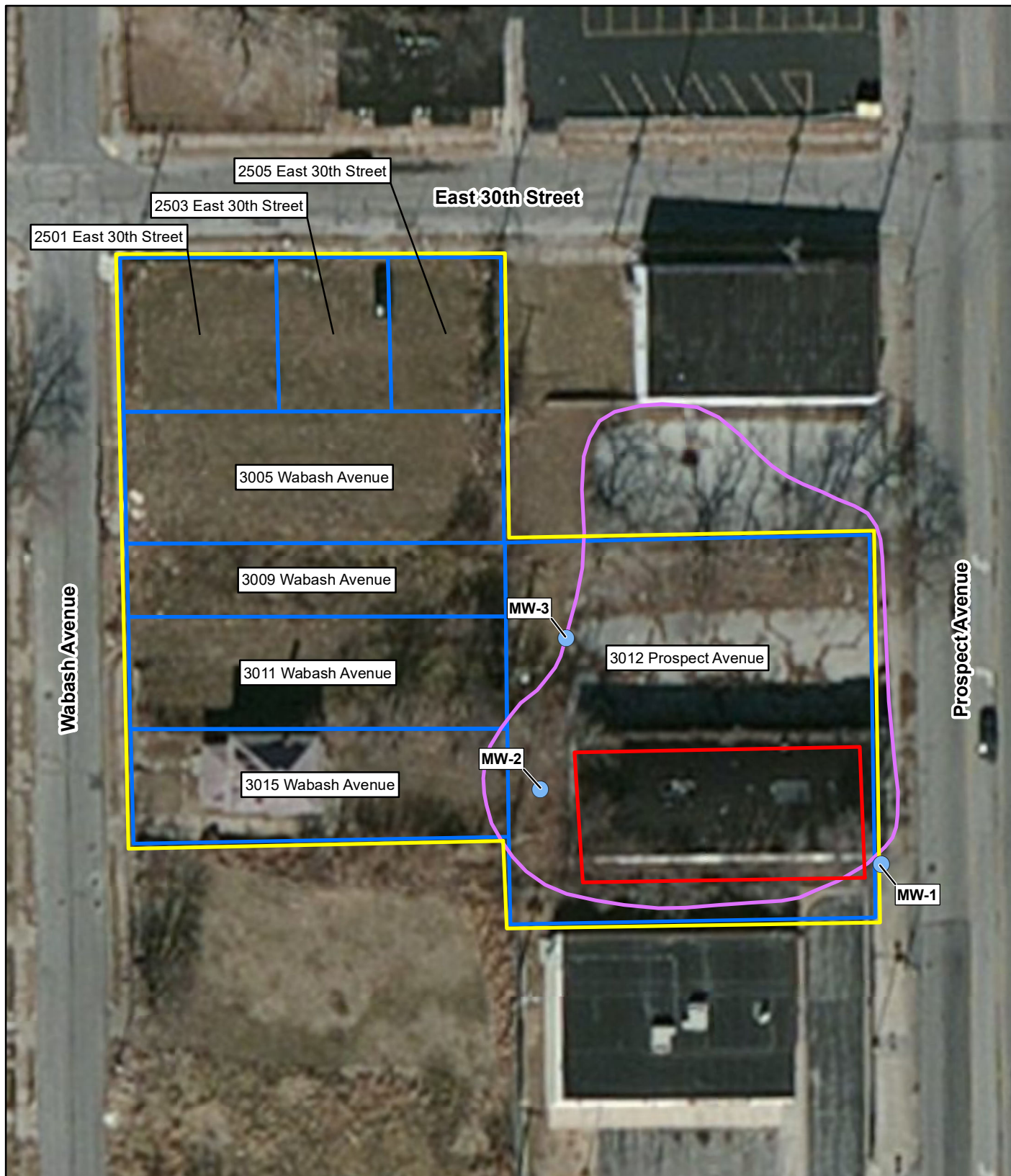
FIGURES



31st & Prospect Development Site
Kansas City, Missouri

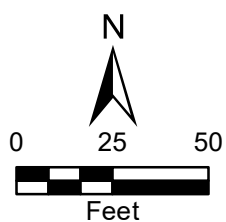
Figure 1
Site Location Map





Legend

- Monitoring well location
- Area of soil and groundwater contamination
- Former dry cleaning facility
- Site boundary
- Parcel



31st & Prospect Development Site
Kansas City, Missouri

Figure 2
Sample Location Map



Date: 2/9/2023

Drawn By: Rachel Page

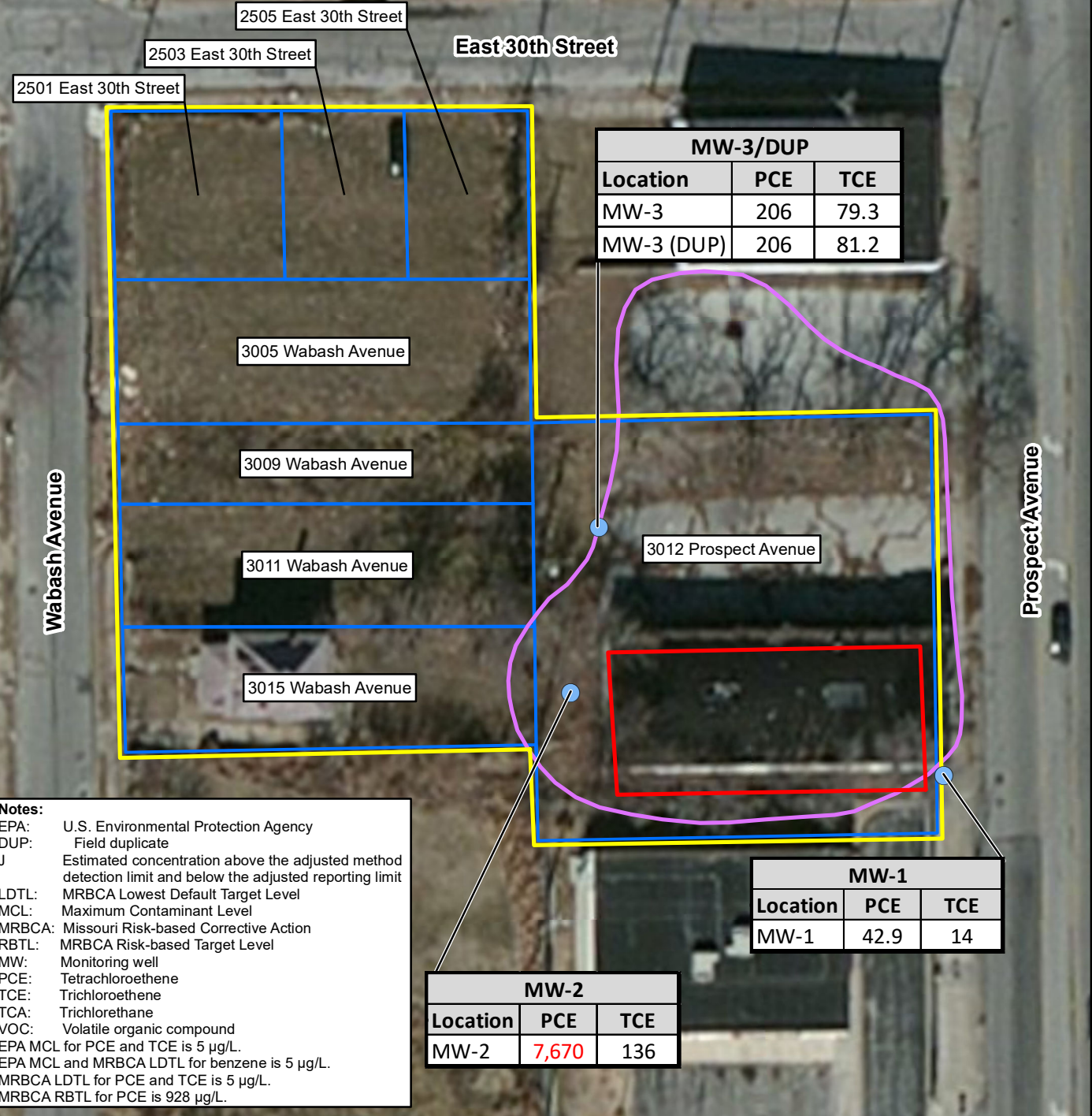
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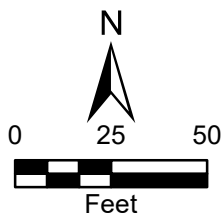
Source: Esri, ArcGIS Online, World Imagery (Clarity), 2015

Notes:

* Reporting limit is greater than EPA Action Levels.
All results shown exceed the MCL and LDTL.
A result in red text exceeds the RBTL.
All results are in micrograms per liter (µg/L).

**Legend**

- Monitoring well location
- Area of soil and groundwater contamination
- Former dry cleaning facility
- Site boundary
- Parcel



31st & Prospect Development Site
Kansas City, Missouri

Figure 3
VOC Exceedances in Groundwater
(Quarter 8 Sampling Event)



APPENDIX B

HISTORICAL ANALYTICAL RESULTS

QUARTER 1, JANUARY 2022

DETECTED VOC RESULTS FROM SOIL SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Acetone	Benzene	2-Butanone (Methyl Ethyl Ketone)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	cis-1,2-DCE	1,2-Dichloropropane	Ethylbenzene	Hexachloro-1,3- Butadiene
	MRBCA LDTL (All Soil Types, All Pathways, GWP and INH*)										
	4,200	561	7,300	41,600	35,200	34,1000	76.6*	521	42	39,900	NE
	MRBCA RBTL (Tier 1, Residential Land Use, Surface Soil, Outdoor Inhalation, Clayey)										
	487,000,000	3,500,000	772,000,000	21,600,000	21,600,000	21,600,000	783,000	5,410,000	618,000	157,000,000	NE
SB-1-(7-8)	<17.6	1.3 J	<3.7	<0.71	<0.79	<0.96	<0.54	<0.47	<1.1	<5.0	<0.92
SB-1-(7-8)-FD	<18.2	2.1 J	<3.8	<0.73	<0.82	<0.99	<0.55	<0.48	<1.1	<0.52	<0.96
SB-1-(21-22)	<18.5	0.57 J	<3.9	<0.74	<0.84	<1.0	<0.56	<0.49	<1.1	<0.53	<0.97
SB-2-(19-20)	<16.8	<0.51	<3.5	<0.67	<0.76	<0.91	<0.51	0.55 J	<1.0	<0.48	<0.88
SB-2-(24-25)	<15.7	0.86 J	<3.3	<0.63	<0.71	<0.85	<0.48	<0.42	<0.95	<0.45	<0.82
SB-3-(4-5)	<17.6	<0.54	<3.7	<0.71	<0.79	<0.96	<0.54	<0.47	<1.1	<0.50	<0.93
SB-3-(21-22)	<17.2	2.0 J	<3.6	18.4	12.6	1.2 J	5.4	1.3 J	<1.0	0.50 J	<0.90
SB-4-(11.5-12.5)	<16.2	<0.49	<3.4	<0.65	<0.73	<0.89	<0.49	113	<0.98	<0.46	<0.85
SB-4-(23-24)	<15.4	<0.47	<3.2	<0.62	<0.70	<0.84	<0.47	0.59 J	<0.93 J-	<0.44	<0.81
SB-5-(4-5)	56.5	0.59 J	7.1 J	<0.70	<0.79	<0.95	<0.53	<0.47	<1.1	<0.50	<0.92
SB-5-(19-20)	<21.6	<0.66	<4.6	<0.87	<0.98	<1.2	<0.66	<0.58	<1.3	<0.62	<1.1
SB-6-(19-20)	<16.2	<0.49	<3.4	<0.65	<0.73	<0.88	<0.49	<0.43	<0.98	<0.46	<0.85
SB-6-(22.5-23.5)	<15.8	<0.48	<3.3	<0.64	<0.72	<0.86	<0.48	<0.42	<0.96	<0.45	<0.83
SB-7-(13.5-14.5)	<17.0	0.55 J	<3.6	<0.77	<0.93	<0.67	<0.52	14.2	<1.0	<0.48	<0.89
SB-7-(19-20)	318 J	<23.2	<126	<50.4	47.3 J	<35.1	<22.2	62.0 J	<20.6	<28.8	85.7 J
SB-8-(19-20)	<1,400	66,300	<737	5,820	1,730	<205	383 J	<151	1,430 J	14,400	<411
SB-8-(23-24)	<251	17,300	521 J	<52.6	<43.9	<36.7	<23.2	<26.9	<21.5	144 J	<73.4

QUARTER 1, JANUARY 2022

DETECTED VOC RESULTS FROM SOIL SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	2-Hexanone	Isopropylbenzene (Cumene)	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	PCE	Toluene	TCE	1,2,4-TMB	1,3,5-TMB	Xylene
	MRBCA LDTL (All Soil Types, All Pathways, GWP and INH*)										
	NE	10,500*	NE	325	10,300	141	29,100	141	3,930	882	24,700*
	MRBCA RBTL (Tier 1, Residential Land Use, Surface Soil, Outdoor Inhalation, Clayey)										
	NE	61,800,000	NE	465,000	21,600,000	3,000,000	757,000,000	9,010,000	927,000	223,000,000,000	15,700,000
SB-1-(7-8)	<2.7	<6.2	<7.5	8.3 J	<0.87	<0.45	<0.38	<0.79	<0.73	<0.68	<1.2
SB-1-(7-8)-FD	<2.8	<0.64	<0.77	<0.92	<0.90	<0.46	<0.40	<0.81	<0.75	<0.70	<1.3
SB-1-(21-22)	<2.8	<0.65	<0.79	<0.94	<0.92	0.95 J	0.64 J	<0.83	<0.77	<0.72	<1.3
SB-2-(19-20)	<2.6	<0.59	<0.71	<0.85	<0.83	626	<0.36	4.6 J	<0.83	<0.65	<1.2
SB-2-(24-25)	<2.4	<0.55	<0.67	<0.79	<0.78	1,140	0.59 J	2.5 J	<0.65	<0.61	<1.1
SB-3-(4-5)	<2.7	<0.62	<0.75	<0389	<0.87	<0.45	<0.38	<0.79	<0.73	<0.68	<1.2
SB-3-(21-22)	84.7	32	<0.73	5.7 J	14.4	1.3 J	0.59 J	<0.77	<0.71	1.0 J	<1.2
SB-4-(11.5-12.5)	<2.5	<0.57	<0.69	<0.82	<0.81	10,100	<0.35	3,640	<0.67	<0.63	<1.1
SB-4-(23-24)	<2.4	<0.54	<0.66	<0.78	<0.76	3.7 J	0.61 J	2.8 J	<0.76	<0.60	<1.1
SB-5-(4-5)	<2.7	<0.62	<0.74	<0.89	<0.87	7.3	0.74 J	<0.78	<0.72	<0.68	<1.2
SB-5-(19-20)	<3.3	<0.76	<0.92	<1.1	<1.1	8.4	<0.47	<0.97	<0.89	<0.84	<1.5
SB-6-(19-20)	<2.5	<0.57	<0.69	<0.82	<0.80	<0.41	<0.35	<0.72	<0.67	<0.63	<1.1
SB-6-(22.5-23.5)	<2.4	<0.56	<0.67	<0.80	<0.79	<0.40	<0.34	<0.71	<0.66	<0.61	<1.1
SB-7-(13.5-14.5)	<2.6	<0.60	<0.72	<0.86	<0.84	2,470	<0.37	961	<0.70	<0.66	<1.2
SB-7-(19-20)	<107	39.0 J	<41.5	299 J	<40.3	371 J+	<25.4	149 J	40.3 J	<39.4	<90.7
SB-8-(19-20)	<628	4,030	4,210	14,000	6,200	<145	50,400	214 J	42,600	13,700	103,000
SB-8-(23-24)	<112	<40.3	<43.4	387 J	<42.1	<25.0	211 J	<25.3	277 J	94.1 J	800

Notes:

All values are in micrograms per kilogram (µg/kg).

Bold font indicates the concentration exceeds the reporting limit.
Italic font indicates the concentration exceeds the LDTL.

*The LDTL is based on the indoor inhalation pathway.

- DCEDichloroethene
- FDField duplicate
- GWPProtection of domestic groundwater use pathway
- INHIndoor inhalation pathway
- JEstimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- J+Estimated concentration with a possible high bias
- J-Estimated concentration with a possible low bias
- LDTLLowest Default Target Level
- MRBCAMissouri Risk-based Corrective Action
- NENot established
- PCETetrachloroethene
- RBTLRisk-based Target Level
- SBSoil boring
- TCETrichloroethene
- TMBTrimethylbenzene
- VOCVolatile organic compound

QUARTER 1, JANUARY 2022

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	1,1-DCE	1,2,4-TMB	1,2-DCA	1,3,5-TMB	1,3-Butadiene	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)									
	14,500,000	521,000	NE	521,000	NE	352,000,000	NE	NE	NE	159,000,000
SG-1-(7-7.5)	<1.98	6.69	<0.809	<2.46	0.819	4.07	<2.46	<2.46	4.87	34
SG-2-(4.5-5)	<79.3	<98.3	<32.4	<98.3	<17.7	<118	<98.3	<98.3	<164	<95
SG-3-(4.5-5)	<1.98	4.72	<0.809	<2.46	1.59	13.8	<2.46	<2.46	<2.46	98.6
SG-4-(7.5-8)	<79.3	<98.3	<32.4	<98.3	<17.7	<118	<98.3	<98.3	<164	<95
SG-4-(22.5-23)	<79.3	<98.3	<32.4	<98.3	<17.7	<118	<98.3	<98.3	<164	132
SG-5-(4.5-5)	<1.98	<2.46	<0.809	<2.46	1.13	<2.95	<2.46	<2.46	<2.46	32.8
SG-5-(16.5-17)	<1.98	<2.46	<0.809	<2.46	11.4	24.6	<2.46	<2.46	<4.10	102
SG-6-(4.5-5)	<1.98	<2.46	<0.809	<2.46	0.553	28.3	2.53	<2.46	<4.10	76
SG-7-(4.5-5)	<1.98	5.01	<0.809	<2.46	1.77	5.31	<2.46	<2.46	<4.10	56.6
SG-7-(16.5-17)	80.9	<98.3	<32.4	<98.3	<17.7	<118	<98.3	<98.3	<164	<95
SG-8-(4.5-5)	<1.98	6.64	15.8	2.61	1.04	6.02	12.8	2.65	<4.10	51.5
Sample Location	Benzene	Benzyl Chloride	Carbon Disulfide	Chloromethane	cis-1,2-DCE	Isopropylbenzene (Cumene)	Cyclohexane	Ethylbenzene	Heptane	Hexane
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)									
	618,000	NE	43,900,000	1,410,000	3,100,000	34,800,000	NE	88,200,000	22,800,000	22,800,000
SG-1-(7-7.5)	4.4	<5.18	2.83	<1.03	<1.98	<2.46	3.30	9.25	8.93	5.32
SG-2-(4.5-5)	<63.9	<207	<62.3	<41.3	<79.3	<98.3	<68.8	<86.8	<82	<70.5
SG-3-(4.5-5)	3.10	<5.18	20.9	<1.03	<1.98	<2.46	42.5	5.56	39.6	65.6
SG-4-(7.5-8)	<63.9	<207	<62.3	<41.3	1,210	<98.3	<68.8	<86.8	<82	<70.5
SG-4-(22.5-23)	<63.9	<207	<62.3	<41.3	2,740	<98.3	<68.8	<86.8	<82	<70.5
SG-5-(4.5-5)	2.91	<5.18	<1.56	<1.03	<1.98	<2.46	<1.72	<2.17	3.65	1.90
SG-5-(16.5-17)	12.7	<5.18	7.32	2.73	5.79	<2.46	3.41	3.39	11.4	12.3
SG-6-(4.5-5)	3.96	<5.18	<1.56	<1.03	<1.98	<2.46	<1.72	3.60	5.82	2.57
SG-7-(4.5-5)	4.82	<5.18	4.05	<1.03	3.81	<2.46	19.7	7.47	21.4	18.5
SG-7-(16.5-17)	731	358	<62.3	<41.3	3,790	108	72,100	109	86,300	226,000
SG-8-(4.5-5)	2,610	<5.18	3.64	<1.03	7.45	<2.46	30.3	15.5	333	202
Sample Location	m,p-Xylene	o-Xylene	Propene	Styrene	PCE	Tetrahydrofuran	Toluene	TCE	Vinyl Chloride	
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)									
	9,450,000	9,450,000	NE	91,700,000	648,000	1,430,000	367,000,000	1,770,000	300,000	
SG-1-(7-7.5)	26.6	9.99	11.2	3.54	8	<1.47	439	<1.07	<1.28	
SG-2-(4.5-5)	<86.8	<86.8	<34.4	<85.2	86,800	<59	<75.4	843	<51.1	
SG-3-(4.5-5)	19.3	6.51	29.7	<2.13	10.4	<1.47	410	1.77	<1.28	
SG-4-(7.5-8)	<86.8	<86.8	<34.4	<85.2	84,600	<59	297	31,300	<51.1	
SG-4-(22.5-23)	<86.8	<86.8	<34.4	<85.2	61,200	<59	1,040	50,400	<51.1	
SG-5-(4.5-5)	6.51	<2.17	18.8	<2.13	17.5	<1.47	180	<1.07	<1.28	
SG-5-(16.5-17)	10.7	3.13	291	<2.13	37.7	4.01	441	7.36	<1.28	
SG-6-(4.5-5)	11.5	3.52	26.1	<2.13	17.8	2.57	395	1.40	<1.28	
SG-7-(4.5-5)	24.3	8.12	15.9	<2.13	96.9	<1.47	550	52.3	<1.28	
SG-7-(16.5-17)	<86.8	<86.8	467	<85.2	13,600	166	983	19,900	317	
SG-8-(4.5-5)	52.5	15	13.4	<2.13	10.2	<1.47	708	11.6	<1.28	

QUARTER 1, JANUARY 2022

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Notes:

All values are in micrograms per cubic meter (µg/m³).

Bold font indicates the concentration exceeds the reporting limit.
Italic font indicates the concentration exceeds the RBTL.

DCE	Dichloroethene
DCA	Dichloroethane
MRBCA	Missouri Risk-based Corrective Action
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
SG	Soil gas
TCE	Trichloroethene
TMB	Trimethylbenzene
VOC	Volatile organic compound

QUARTER 1, JANUARY 2022

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Acetone	Benzene	2-Butanone (Methyl Ethyl Ketone)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Chloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE
	EPA MCL/RSL									
	NE	5	NE	NE	NE	NE	NE	7	70	100
	MRBCA LDTL (All Soil Types, All Pathways, DWG)									
	2,970	5	3,640	98.9	106	103	80	07	70	100
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)									
	101,000,000	2,880	153,000,000	24,300	17,100	26,200	814	14,700	19,400	17,800
MW-1	<2.5	<0.14	<0.98	<0.15	<0.11	<0.12	<0.22	<0.22	4.5	0.28 J
MW-1-FD	<2.5	<0.14	<0.98	<0.15	<0.11	<0.12	<0.22	<0.22	4.4	<0.18
MW-2	<2.5	0.38 J	<0.98	<0.15	<0.11	<0.12	0.36 J	0.37 J	19.8	0.83 J
MW-3	19.1 J+	2.4	<0.98	1.3	1.5	0.25 J	0.76 J	<0.22	20.6	0.49 J
Sample Location	1,2-Dichloropropane	Isopropylbenzene (Cumene)	n-Propylbenzene	PCE	Toluene	1,1,2-TCA	TCE	1,3,5-TMB	Vinyl Chloride	Xylene
	EPA MCL/RSL									
	5	NE	NE	5	1000	NE	5	NE	2	10,000
	MRBCA LDTL (All Soil Types, All Pathways, DWG)									
	5	330	115	5	1,000	5	5	7.05	2	10,000
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)									
	3,040	10,600	30,300	928	1,440,000	6,150	4,490	1,550	2.06	33,500
MW-1	<0.14	<0.097	<0.12	143	<0.25	<0.14	57	<0.090	<0.17	<0.28
MW-1-FD	<0.14	<0.097	<0.12	159	<0.25	<0.14	55.6	<0.090	<0.17	<0.28
MW-2	0.55 J	<0.097	<0.12	3,290	1.2	0.50 J	106	<0.090	0.41 J	0.38 J
MW-3	<0.14	5.7	1.8	166	0.87 J	0.45 J	47.9	0.12 J	0.85 J	0.43 J

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the reporting limit.
Italic font indicates the concentration exceeds the MCL/RSL and LDTL.
Red text indicates the concentration exceeds the RBTL.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DWG	Protection for domestic groundwater use pathway
FD	Field duplicate
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
J+	Estimated concentration with a possible high bias
LDTL	Lowest Default Target Level
MCL	Maximum Contaminant Level
MRBCA	Missouri Risk-based Corrective Action
MW	Monitoring well
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
TCA	Trichloroethane
TMB	Trimethylbenzene
VOC	Volatile organic compound

QUARTER 2, APRIL 2022

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Acetone	Benzene	Chloroform	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	1,2-Dichloropropane	Isopropylbenzene (Cumene)
	EPA MCL/RSL						
	NE	5	NE	70	100	5	NE
	MRBCA LDTL (All Soil Types, All Pathways, DWG)						
	2,970	5	80	70	100	5	330
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)						
	101,000,000	2,880	814	19,400	17,800	3,040	10,600
MW-1	<12.7	<0.68	<1.1	2.4 J	<5.1	<0.70	<0.48
MW-2	148 J	<6.8	<11.0	34.0 J	<5.1	<7.0	<4.8
MW-3	<12.7	2.5 J	<1.1	63.8	0.69 J	<0.70	<0.48
MW-3-FD	<2.5	2.5	0.34 J	66.5	0.91 J	0.38 J	0.31 J
Sample Location	Methylene Chloride	4-Methyl-2-Pentanone (MIBK)	PCE	1,1,2-TCA	TCE	1,3,5-TMB	
	EPA MCL/RSL						
	NE	NE	5	NE	5	NE	
	MRBCA LDTL (All Soil Types, All Pathways, DWG)						
	0.005	NE	5	5	5	7.05	
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)						
	68.3	NE	928	19,400	928	19,400	
MW-1	10	4.2 J+	83.5	<0.71	22	<0.45	
MW-2	96.7	<36.8	7,760	1,060	349	<4.5	
MW-3	10.3 J	<3.7	539	18.1 J	138	<0.45	
MW-3-FD	>0.39 J	<0.74	505	0.17 J	151	0.42 J	

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the reporting limit.
Italic font indicates the concentration exceeds the MCL/RSL and/or LDTL.
Red text indicates the concentration exceeds the RBTL.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DWG	Protection for domestic groundwater use pathway
FD	Field duplicate
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
J+	Estimated, possibly biased high
LDTL	Lowest Default Target Level
MCL	Maximum Contaminant Level
MRBCA	Missouri Risk-based Corrective Action
MW	Monitoring well
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
TCA	Trichloroethane
TMB	Trimethylbenzene
VOC	Volatile organic compound

QUARTER 3, JULY 2022

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	Cumene	PCE	TCE
	EPA MCL/RSL					
	5	70	100	NE	5	5
	MRBCA LDTL (All Soil Types, All Pathways, DWG)					
	5	70	100	330	5	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)					
	2,880	19,400	17,800	10,600	928	4,490
MW-1	<0.14	1.9	0.12 J	<0.097	61.9	17.7
MW-2	<13.6	45.9 J	<10.2	<9.7	7,670	123
MW-2-FD	<13.6	<12.9	<10.2	<9.7	8,290	86.8 J
MW-3	3.2 J	107	1.4 J	1.3 J	528	198

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the reporting limit.
Italic font indicates the concentration exceeds the MCL/RSL and/or LDTL.
Red text indicates the concentration exceeds the RBTL.

- EPAU.S. Environmental Protection Agency
- DCEDichloroethene
- DWGProtection for domestic groundwater use pathway
- FDField duplicate
- JEstimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- LDTLLowest Default Target Level
- MCLMaximum Contaminant Level
- MRBCAMissouri Risk-based Corrective Action
- MWMonitoring well
- NENot established
- PCETetrachloroethene
- RBTLRisk-based Target Level
- RSLRegional Screening Level (EPA 2023)
- TCETrichloroethene
- VOCVolatile organic compound

QUARTER 3, JULY 2022

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	1,1-DCE	1,2,4-TMB	1,3,5-TMB	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)								
	14,500,000	521,000	521,000	352,000,000	NE	NE	NE	159,000,000	618,000
SG-1-(4.5-5)	<0.28	26.9	7.4	44.2	16.4	8.5	7.2	576	5.6
SG-1-(15.5-16)	0.37 J	14.7	4.7	51.0	7.4	5.3	4.3 J	334	21.6
SG-2-(4.5-5)	<0.21	4.6	2.6	43.3	8.7	2.3 J	1.8 J	157	11.2 J+
SG-2-(23.5-24)	11.9	7.1	2.8	90.8	3.9 J	4.3	5.2 J	162	41.7
SG-3-(4.5-5)	<0.21	9.3	4.4	34.2	13.4	3.8	1.9 J	456	12.9
SG-3-(21.5-22)	19.6	15.9	5.4	149	6.7	6.0	5.4 J	416	30.5
SG-4-(7.5-8)	<7.4	24.0 J	<13.0	<20.8	<22.8	<21.1	<14.3	385	<5.1
SG-4-(11.5-12)	5.1	11.6	3.7	9.2	6.4	6.5	2.2 J	234	5.8
SG-5-(4.5-5)	<0.20	25.1	7.0	60.5	11.6	7.3	1.9 J	5.0	3.2
SG-5-(16.5-17)	0.63 J	15.8	5.2	64.0	5.6	5.8	3.2 J	302	18.0
SG-6-(4.5-5)	<0.41	51.2	14.4	27.6	24.7	12.6	2.6 J	645	4.1
SG-6-(22.5-23)	<0.27	16.4	6.6	99.9	5.4	6.3	<0.52	339	15.2
SG-7-(2-2.5)	<0.19	15.6	5.0	40.9	45.2	4.8	<0.45	723	57.9
SG-7-(16-16.5)	<6.4	<16.5	<13.5	<21.6	<23.7	<21.9	<14.9	227 J	98.4
SG-8-(4.5-5)	<6.0	29.1 J	<12.5	<20.1	<22.0	<20.4	<13.9	592	41.4
SG-8-(19.5-20)	17.3	41.1	17.3	<0.78	13.0	16.3	<0.54	381	12,800
Sample Location	Carbon Disulfide	Carbon Tetrachloride	Chloromethane	Cis-1,2-DCE	Trans-1,2-DCE	Cyclohexane	Ethylbenzene	n-Heptane	n-Hexane
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)								
	43,900,000	239,000	1,410,000	3,100,000	6,450,000	NE	88,200,000	22,800,000	22,800,000
SG-1-(4.5-5)	3.9	<0.47	2.3	<0.33	1.8	4.8	12.9	<0.30	13.6
SG-1-(15.5-16)	36.5	<0.47	3.8	<0.33	0.39 J	9.0	12.7	24.4	34.2
SG-2-(4.5-5)	11.3	<0.43	0.60 J	49.7 J+	2.2	37.3 J+	3.0	94.1	47.6 J+
SG-2-(23.5-24)	29.6	<0.47	2.7	33.2 J+	2.5	23.0	8.8	<0.30	53.6
SG-3-(4.5-5)	48.3	<0.42	0.83	71.6	10.6	56.9	4.7	66.3	53.6
SG-3-(21.5-22)	64.5	<0.49	2.4	1,110	36.1	<0.39	11.5	<0.32	90.3
SG-4-(7.5-8)	<5.8	<12.5	<3.8	48.5	<7.5	<9.9	<13.8	<8.1	<8.5
SG-4-(11.5-12)	3.2	<0.43	0.95	526	2.2	1.8 J	7.4	<0.28	4.5
SG-5-(4.5-5)	1.6	<0.41	0.31 J	0.42 J	<0.25	4.5	9.4	6.9	4.8
SG-5-(16.5-17)	11.7	<0.43	1.1	7.6	<0.26	20.4	10.5	<0.28	27.6
SG-6-(4.5-5)	1.2 J	<0.83	1.1 J	<0.58	<0.50	2.3 J	19.2	4.3	3.5
SG-6-(22.5-23)	10.7	<0.45	1.8	424	3.8	443	10.1	235	97.1
SG-7-(2-2.5)	16.7	0.51 J	1.2	8.5	0.65 J	52.5	5.4	26.6	39.7
SG-7-(16-16.5)	20.5 J	<13.0	<4.0	590	<7.8	64.5 J	<14.4	55.6	76.1
SG-8-(4.5-5)	<5.6	<12.1	40.0	<8.4	<7.3	<9.5	14.4 J	20.4 J	24.6 J
SG-8-(19.5-20)	9.8	<0.47	4.6	2,300	17.6	426 J	105	458 J	816 J

QUARTER 3, JULY 2022

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	m,p-Xylene	o-Xylene	Propylene	Styrene	PCE	Tetrahydrofuran	Toluene	TCE	Vinyl Chloride
	MRBCA RBTL (Tier 1, Residential Land Use, Soil Vapor, Indoor Inhalation, Clayey)								
	9,450,000	9,450,000	NE	91,700,000	648,000	1,430,000	367,000,000	1,770,000	300,000
SG-1-(4.5-5)	34.3	13.4	26.1	3.3	253	3.5	74.1	0.61 J	<0.15
SG-1-(15.5-16)	27.6	11.2	567 J	3.8	2.8	2.5	132	0.73 J	0.45
SG-2-(4.5-5)	8.5	3.8	67.9	4.3	127,000	<0.28	16.2	4,220	<0.13
SG-2-(23.5-24)	18.7	7.7	419 J	4.4	97,800	<0.30	87.5	913	1.8
SG-3-(4.5-5)	13.0	6.1	71.8	1.6	3,060	<0.27	22.0	186	<0.13
SG-3-(21.5-22)	26.8	10.7	628	3.4	11,500	<0.32	83.4	6,600	19.2
SG-4-(7.5-8)	46.3 J	16.7 J	30.1 J	<17.2	1,260	<8.0	136	1,070	<3.9
SG-4-(11.5-12)	19.8	7.7	25.0	3.3	15,100	<0.28	80.0	12,200	2.5
SG-5-(4.5-5)	26.3	10.9	38.2	2.3	2,900	2.5	36.9	6.7	<0.13
SG-5-(16.5-17)	28.0	11.5	215	4.0	1,700	<0.28	96.6	103	0.22 J
SG-6-(4.5-5)	70.1	27.3	40.6	4.5	287	4.5	123	3.4	<0.26
SG-6-(22.5-23)	24.2	9.8	313	3.7	3,010	<0.29	59.8	831	2.7
SG-7-(2-2.5)	15.8	5.8	66.1	5.1	1,280	3.8	25.2	99.0	<0.12
SG-7-(16-16.5)	<29.9	<12.6	104	<17.9	32,800	21.0 J	94.2	4,540	<4.0
SG-8-(4.5-5)	48.1 J	19.6 J	110	<16.6	1,560	<7.8	118	85.8	<3.7
SG-8-(19.5-20)	90.1	9.1	133 J	2.9	19,400	<0.30	95.1	16,700	6.2

Notes:

All values are in micrograms per cubic meter (µg/m³).

Bold font indicates concentration exceeds the reporting limit.

- DCEDichloroethene
- JEstimated concentration above the method detection limit and below the reporting limit
- MRBCAMissouri Risk-based Corrective Action
- NENot established
- PCETetrachloroethene
- RBTLRisk-based Target Level
- SGSoil gas
- TCETrichloroethene
- TMBTrimethylbenzene

QUARTER 4, DECEMBER 2022

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	Cumene	PCE	TCE
	EPA MCL/RSL					
	5	70	100	NE	5	5
	MRBCA LDTL (All Soil Types, All Pathways)					
	5	70	100	330	5	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)					
	2,880	19,400	17,800	10,600	928	4,490
MW-1	<0.14	1.7	<0.10	<0.097	28.9	8.9
MW-2	<13.6*	<12.9	<10.2	<9.7	6,170	68.6 J
MW-3	2.9 J	102	1.2 J	1.6 J	508	181
MW-3-DUP	3.1 J	101	1.2 J	1.5 J	530	182

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the MCL/RSL and/or LDTL.

Red text indicates the concentration exceeds the RBTL.

*Reporting limit is greater than EPA Action Level.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DUP	Field duplicate
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
LDTL	Lowest Default Target Level—regarding these analytes, all linked to protection for domestic groundwater use pathway
MCL	Maximum Contaminant Level (EPA 2022)
MRBCA	Missouri Risk-based Corrective Action (Missouri Department of Natural Resources 2006)
MW	Monitoring well
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
VOC	Volatile organic compound

QUARTER 5, MARCH 2023

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	Cumene	PCE	TCE
	EPA MCL/RSL					
	5	70	100	NE	5	5
	MRBCA LDTL (All Soil Types, All Pathways)					
	5	70	100	330	5	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)					
	2,880	19,400	17,800	10,600	928	4,490
MW-1	<0.14	1.7	<0.10	<0.097	28.9	8.9
MW-2	<13.6*	<12.9	<10.2	<9.7	6,170	68.6 J
MW-3	2.9 J	102	1.2 J	1.6 J	508	181
MW-3-DUP	3.1 J	101	1.2 J	1.5 J	530	182

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the MCL/RSL and/or LDTL.

Red text indicates the concentration exceeds the RBTL.

*Reporting limit is greater than EPA Action Level.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DUP	Field duplicate
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
LDTL	Lowest Default Target Level—regarding these analytes, all linked to protection for domestic groundwater use pathway
MCL	Maximum Contaminant Level (EPA 2022)
MRBCA	Missouri Risk-based Corrective Action (Missouri Department of Natural Resources 2006)
MW	Monitoring well
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
VOC	Volatile organic compound

QUARTER 6, JULY 2023

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	PCE	TCE
	EPA MCL/RSL				
	5	70	100	5	5
	MRBCA LDTL (All Soil Types, All Pathways)				
	5	70	100	5	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)				
	2,880	19,400	17,800	928	4,490
MW-1	ND UJ	2.5 J	ND UJ	44.8 J	12.2 J
DUP (MW-1)	ND UJ	3.7 J	ND UJ	53.3 J	15.5 J
MW-2 ^a	ND UJ	13.7 J	ND UJ	7,240 J	77.5 J
MW-3	0.57 J	71.4 J	0.81 J	187 J	111 J

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the MCL/RSL and/or LDTL.

Red text indicates the concentration exceeds the RBTL.

^a Methylene chloride, a common laboratory contaminant, was detected in sample MW-2 at a concentration of 26.8 µg/L (J qualifier).

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DUP	Duplicate
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
LDTL	Lowest Default Target Level—regarding these analytes, all linked to protection for domestic groundwater use pathway.
MCL	Maximum Contaminant Level (EPA 2022)
MRBCA	Missouri Risk-based Corrective Action (Missouri Department of Natural Resources 2006)
MW	Monitoring well
ND	Not detected
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
UJ	Estimated as a non-detect
VOC	Volatile organic compound

QUARTER 7, SEPTEMBER 2023

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	sec-Butylbenzene	Carbon tetrachloride	Chloroform	Chloromethane	cis-1,2-DCE	trans-1,2-DCE	1,2-Dichloropropane	Ethylbenzene	Isopropylbenzene (Cumene)	PCE	Toluene	TCE
	EPA MCL/RSL												
	5	NE	5	NE	NE	70	100	5	700	NE	5	1000	5
	MRBCA LDTL (All Soil Types, All Pathways)												
	5	106	103	80	18.3	70	100	5	70	330	5	1,000	5
	MRBCA RBTL (Tier 1, Residential Land Use, Groundwater, Indoor Inhalation of Vapor Encroachment, Clayey)												
	2,880	17,100	26,200	814	1570	19,400	17,800	3,040	292,000	10,600	928	1,440,000	4,490
MW-1	ND	ND	ND	0.23 J	ND	1.1 J+	ND	ND	ND	ND	20.4	ND	5.8
MW-2 ^a	15.6 J	ND	11.4 J	ND	24.9 J	ND U	ND	ND	6.3 J	ND	5,130	20.7 J	55.4
MW-3 ^a	1.7 J	ND	ND	ND	ND	67.6	0.76 J	ND	0.87 J	0.73 J	308 J	ND	107
MW-3 -DUP	0.85 J	0.12 J	ND	ND	ND	75.3	0.85 J	0.16 J	ND	0.47 J	229 J	ND	119

Notes:

All values are in micrograms per liter (µg/L).

Bold font indicates the concentration exceeds the MCL/RSL and/or LDTL.

Red text indicates the concentration exceeds the RBTL.

^a Methylene chloride, a common laboratory contaminant, was detected in samples MW-2 and MW-3 at concentrations of 34.6 and 3.4 µg/L (J qualifier), respectively.

EPA	U.S. Environmental Protection Agency
DCE	Dichloroethene
DUP	Duplicate
J	Estimated concentration.
J+	Estimated concentration, possibly biased high.
LDTL	Lowest Default Target Level—regarding these analytes, all linked to protection for domestic groundwater use pathway.
MCL	Maximum Contaminant Level (EPA 2023)
MRBCA	Missouri Risk-based Corrective Action (Missouri Department of Natural Resources 2006)
MW	Monitoring well
ND	Not detected
ND U	Not detected at the reporting limit
NE	Not established
PCE	Tetrachloroethene
RBTL	Risk-based Target Level
RSL	Regional Screening Level (EPA 2023)
TCE	Trichloroethene
VOC	Volatile organic compound

APPENDIX C

LOGBOOK

K51887



Rite in the Rain

ALL-WEATHER

LEVEL

Nº 311FX

31st + Prospect

103665210190.08.03

TACOMA, WA, USA

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PAGE

REFERENCE

DATE

1/11/2022

- 0800 Toeroel Team tasked with the installation of 3 monitoring wells, GW sampling, soil sampling, + soil-gas sampling. Reed Niernack (Toeroel) + Robert Tieman, Aaron Sams, + Brendan Hays (Dakota) — SC
On-site. Weather: Sunny, high 55°F.
- 0830 Site safety briefing. — SC
Reed + I marking locations.
- 0850 Drillers set up + beginning to drill at MW-1
GPS: N39.07078 W-94.55293
- 0914 TD: 22' bgs. Refusal. — SC
Double checked w/ drillers regarding MW installation materials. — SC
- 0922 Beginning boring log for MW-1 / SB-1. — SC
- 0950 Collected SB-1-(7-8) + a FD SB-1-(7-8)-FD.
- 1010 Collected SB-1-(21-22).
- 1026 IDW staged in former — SC
Dry Cleaner lot. MW-1 not yet complete, drillers need more potable water to

1/11/2022

- hydrate bentonite. Waiting for it to arrive. Setting up for MW-2 / SB-2. — SC
- 1040 Beginning to drill MW-2 / SB-2. GPS: N39.07116 W-94.55325.
- 1118 Beginning to drill out MW.
- 1120 Collected sample — SC
SB-2-(19-20). — SC
- 1130 Collected sample SB-2-(24-25).
Refusal at 25' bgs. — SC
- 1315 Drilling MW-3 / SB-3. — SC
GPS: N39.07127 W-94.55333
- 1355 Collected sample SB-3-(21-22). — SC
SB-3-(4-5). — SC
- 1400 Collected sample — SC
Drilling out MW-3. — SC
- 1520 Drilling at SB-4. — SC
GPS: N39.07117 W-94.55296
Spoke w/ Farhan Khan
816 - 817 - 3540 about access issues in the NE lot of this block where 2 SB/SG samples are planned. He said he / his dad did ~~not~~ *not*

1/11/22

consent for sampling on their property to occur. We gave him Lisa Donning's number to clarify. He has a bad relationship w/ Sheryl Vickers, the site property owner & thought we may be working for her. We explained we are here on behalf of KCMO/EPA & he said so long as he could clarify w/ a PM & have the opportunity to sign a consent form we could sample. We will wait to hear back from him / Lisa prior to sampling on his property. — SC

1550 Collected Sample — SC

SB-4-(11.5-12.5) — SC

1600 Collected sample — SC

SB-4-(23-24) — SC

1607 Wrapping up for the day to beat the sun. — SC

Field Blank - 1.

FB Added to cooler. 1/11/22 5

1610 We have agreed to meet on-site tomorrow at 8am. All wells hydrated & capped. SB-4 plugged. — SC

1615 End of day. — SC

Trip blank added to cooler.

1635 Headed to lab to drop samples.

1/11/22

1/12/22

- 0800 Arrived on-site. Today we will complete the wells, attempt to develop the wells, complete soil sampling, & do some/all of the soil-gas sampling. Weather today: Sunny, high 60°. Same crew on-site today.
- 0830 Set up on SB-5, — SC
GPS: N39.07105 W-94.55338
- 0902 Collected SB-5-(4-5)
- 0909 Collected SB-5-(19-20)
- 0918 Preparing to SG sample at ~~SB-5~~ SG-5 (SB-5). We ~~off~~ set a 2' from SB-5. Will go down to 5' bgs + 17' bgs.
- 0919 Canister # 109960, Gauge # 119233. Start pressure: -30. — SC
- 0925 Reed arrived on-site.
- 0937 SG-5-(4.5-5) Collecting.
- 0940 for SG-5-(14.5-17), Canister # 109502, Gauge # 109851. Start pressure: -30 — SC
- 1003 End time for SG-5-(4.5-5), End pressure: -6. — SC

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- 0955 Aaron beginning to develop MW-3. DTW: 16.5' bgs, TD: 22' bgs. Water volume (V-SC in gals) is $\approx 1 \text{ gal}$ (Gallons = water column (ft) \times 0.163 gal/ft) * SC — SC
- 1036 Purged $\approx 5 \text{ gal}$ so far. Recharging slow. Waiting $\approx 15 \text{ min}$ between purge/surge. — SC
- 1042 Purged only $\approx 1/4 \text{ gal}$. Will let well recharge for a while ($\approx 1 \text{ hour}$) before continuing. — SC
Setting up to develop MW-2. Beginning pumping. DTW: 20.08, ~~TD~~ TD: 25.29 TOC
Gals in well: $\approx 1 \text{ gal}$. — SC
- 1045 Drilling at SB-6. — SC
GPS: N39.07102 W-94.55321
- 1105 beginning to surget & purge (Develop) MW-2. — SC
- 1125 Collected sample SB-6-(19-20)
- 1130 Collected sample SB-6-(25-25)
- 1132 Purged MW-2 $\approx 3 \text{ gals}$ so far.

Rite in the Rain

8 1/12/22

- 1141 Beginning collection of SG-6-(4.5-5). Start pressure: -30, Canister # 120042, Regulator/Gauge # 119224. — SC
- 1214 End time. End pressure -6.
- 1218 Collecting SG-6-(22.5-23). Start pressure -30, Canister # 101799, Gauge # 109867.
- 1235 Drilling / Setting up SG sampling at ~~SG-1~~ SG-1 (MW-1)
- 1243 Approximately 3.1 gal purged from MW-2. Will let sit a while to recharge. Moving back to MW-1 to develop again. — SC
- 1314 Collecting SG-1-(7-7.5). Canister # 101815, Gauge: 109869, Start pressure: -25. — SC
- 1323 Collecting SG-1-(21-21.5) was unsuccessful. We could not develop a good vacuum, however we attempted to collect anyway. Once canister was connected & pulling

1/12/22 9

- air into it, we found water coming into the tubing. We stopped the sample before water could enter the canister.
- 1330 Setting up on SG-4 for SG sampling. — SC
- 1331 Canceling SG-6-(22.5-23) due to water in the line.
- 1334 MW-1 DTW: 13.57
TD: 21.53 WL: 13.57
WC: 7.96 Gals: 1.3
Beginning to develop. — SC
- 1350 End time, End pressure -5 for SG-1-(7-7.5). — SC
- 1413 We will need to redo the concrete pad & outer casing on MW-1 due to having been set incorrectly / poorly. — SC
- 1416 ~~Prep~~ Collecting Sample SG-4-(22.5-23). Start pressure: -29 — SC
Canister: 109941 — SC
Reg: 120022 — SC
Red in the rain.

11/12/22

- 1419 Collecting Sample # — SC
 [SG-4-(7.5-8)], Start
 pressure: -30 — SC
 Canister #: 10949 — SC
 Reg # : 120027 — SC
- 1438 12 gals extracted from
 MW-1 so far. — SC
- 1442 End time, -5 End pressure
 for SG-4-(21.5-23). — SC
- 1448 End time, End pressure: -6
 for SG-4-(7.5-8). — SC
 Setting up for SG sampling
 at SG-3. — SC
- 1537 Collecting [SG-3-(21.5-22)]
 Start pressure: -28
 Canister: 109218
 Regulator: 109850
- 1533 Collecting [SG-3-(4.5-5)]
 Start pressure: -30
 Canister: 109137
 Regulator: 119741
- 1534 ~~[SG-3-(21.5-22)] canceled~~
~~Could not get a good~~
~~pressure due to water.~~
 Setting up on SG-2
 for soil gas sampling.

11/17/22 11

- 1603 End time, End pressure: -6
 for SG-3-(4.5-5). — SC
- 1606 End time, End pressure: -6
 for SG-3-(21.5-22). — SC
- 1616 Collecting [SG-2-(19-15.5)]
 Start pressure: -30
 Canister #: ~~119437~~ 109965
 Regulator #: 119134
 Canceled due to water
 in line. — SC
- 1619 Collecting [SG-2-(4.5-5)]
 Start pressure: -28
 Canister #: 119825
 Regulator #: 120021
- 1643 Finished purging /
 development of MW-1,
 total Gals purged: 29
 total time: 2 hours.
 Little to no sediment.
- 1648 End time, End pressure: -5
 for SG-2-(4.5-5). — SC
- 1700 Will meet on-site — SC
 tomorrow at 0830. — SC
 End of day — SC
- SC

V13/22

- 0830 Arrived on site. Aaron is not here today. we will complete the mws, sample GW, & do the last two SB/SG locations on the subject property since we still haven't heard back from Farhan.
- 0845 Weather: Sunny, high of 100°
- 0900 Purging MW-3. Purged 0.25 gals. Dry. will wait 15 min to purge again. Setting up on MW-2 to develop. — SC
- 0909 Setting up on SB/SG-7. GPS: N39.07128 W-94.55321 Beginning to develop MW-2 again. Both MW-2 & MW-3 need 45 min more of development. — SC
- 0937 Collected SB-7-(13.5-14.5)
- 0940 collected SB-7-(14-20)
- 0946 Preparing to SG sample at SG-7. — SC
- 1004 Collecting SB-7-(16.5-17)
Start pressure: -27 — SC

1/23/22 13

- Canister #: 109485
Regulator #: 109123
- 1006 Collecting SG-7-(4.5-5)
Start Pressure: -30
Canister #: 109981
Regulator #: 119944
- 1011 Set up on SB-8. — SC
GPS: N39.07128 W-94.55321
- 1022 Beginning to pour the pad for MW-3. Well development complete. Purged a total of 1.5 gal today. — SC
- 1049 Collected SB-8-(19-20)
- 1053 collected SB-8-(23-24)
Setting up for SG sampling.
- 1055 ~~MW~~ SC MW-2 is finished developing. Produced an additional 3 gals today. Preparing to pour pad.
- 1126 Collecting SG-8-(20.5-21)
Start Pressure: -30
Canister: 109202
Regulator: 119227
- 1129 Collecting SG-8-(4.5-5)
Start Pressure: -26
Canister: 119834 Reg: 109550 *Not in the Rain*

7/13/22

- 1132 Preparing to collect a composite Soil IDW Sample.
- 1134 Canceled SG-8-(20.5-21) due to water coming up the tubing. ——— SC
- 1154 End time, End pressure: -4 for SG-8-(4.5-5). Drillers headed to get more concrete for MW-1. Taking lunch. ——— SC
- 1225 Removing the pad & outer casing from MW-1.
- 1324 MW-1 pad & outer casing complete. ——— SC
- 1330 All tubing removed & all borings sealed w/ bentonite from bottom of hole to ground surface. All IDW closed securely. All well vault lids tightened.
- 1340 Dakota Tech departed site. ——— SC
- 1345 Added Trip Blank - 2 to cooler. ——— SC
- 1416 All samples & soil samples ready to be sent to lab.

7/13/22

Reed dropping 588 samples at Pace & returning the PSD to Field Environmental. I will take the summaries to Sedex to be shipped to ALS. We will meet on-site tomorrow at 0800 to sample the 3 MWS. End of day. ——— SC

~~7/13/22~~

11/4/22

0850 On-Site. Weather:
Cloudy, High 58 45°F.
We will (Reed & myself),
gas the wells & sample again
today. ——— SC

0859 It would appear as though
several people stepped
on the MW-1 concrete
pad before it was fully
dried. It appears to
be unharmed overall,
& only has surface
damage (shoe prints).

0948 19.30 depth to GW btoc MW3
21.3 total depth btoc
1 well volume = $(21.3 - 19.3) 0.163 = 0.3$
gal

0952 Began bailing MW3

1008 1st well volume @ MW3

Temp °C 12.31 ORPmV 172

pH 8.61 DOmg/L 0.0

Spec Cond 1.87 ms/cm Turb. 1000+ NTU

1022 2nd well volume @ MW3

Temp °C 11.41 ORP 212

pH 7.94 DOmg/L 0.0

Spec Cond 1.90 Turb 1000+ NTU

3rd well volume @ MW3 11/4/22

Temp °C

ORPmV

pH

DOmg/L

Spec Cond

ms/cm

Turb

NTU

SC

1033 Leave MW3 to let recharge &
start on MW2

depth to GW 18.75 btoc

total depth 24.75 btoc

1 well volume = 0.978 gal

1040 Rinsate Blank collected

1050 Field Blank - 4 collected

1059 1st well volume @ MW2

Temp °C 13.56 ORPmV 213

pH 7.86 DOmg/L 0.0

Spec Cond 1.41 ms/cm Turb 1000+ NTU

1106 2nd well volume @ MW2

Temp °C 14.40 ORPmV 210

pH 7.57 DOmg/L 0.0

Spec Cond 1.40 ms/cm Turb 1000+ NTU

1110 3rd well volume @ MW2

Temp °C 14.24 ORPmV 213

pH 7.57 DOmg/L 0.0

Spec Cond 1.41 ms/cm Turb 1000+ NTU

1115 Sample Taken: MW-2 Granddarter

1125 Checked GW @ MW3. Still not enough to
purge. Moved to MW1.

Rite in the Rain.

1/14/07

Depth to GW 13.90 btoe

total depth 22.00 btoe

1132 began boiling

1 well volume = 1.320 gal

Temp °C 16.42 ORPmV 238

pH 7.46 DO mg/L 0.0

Spec Cond 2.60 ^{mg}/cm Turb. 1600+ NTU

1135 1st well volume

1138 2nd well volume

Temp °C 16.75 ORPmV 234

pH ~~7.46~~ ^{7.20} DO mg/L 0.0Spec Cond ~~2.60~~ ^{2.65} ^{mg}/cm Turb 1000+ NTU

1141 3rd well volume

Temp °C 16.61 ORPmV 227

pH 7.20 DO mg/L 0.0

Spec Cond 2.67 ^{mg}/cm Turb 1000+ NTU

1148 4th well volume

Temp °C 16.25 ORPmV 191

pH 7.06 DO mg/L 0.0

Spec Cond 2.67 ^{mg}/cm Turb 670 NTU

1155 5th well volume

Temp °C ~~16.39~~ ORPmV 187

pH 7.05 DO mg/L 0.0

Spec Cond 2.62 ^{mg}/cm Turb 835 NTU

1/14/22

1158 6th well volume

Temp °C 16.41 ORPmV 197

pH 7.08 DO mg/L 0.0

Spec Cond 2.61 ^{mg}/cm Turb 827 NTU

1204 7th well volume

Temp °C 16.69 ORPmV ~~206~~

pH 7.08 DO mg/L 0.0

Spec Cond 2.60 ^{mg}/cm Turb 810 NTU1212 Sample Taken: MLW-1Field Duplicate MLW-1-FD

1222 Moved back to MLW3 + took

sample MLW-3 → 2 vials

* Took sample prior to 3rd reading of parameters due to insufficient GW volume + prioritize sampling vs parameter readings
 * Only able to sample fill 2 vials for the sample

1238 Sample Taken: Groundwater-IDW1240 Added: Trip Blank-3 — SC

All IDW drums labeled & sealed. Total drums: 7. Soil: 6 Water: 1.

1307 Departing site to drop off samples/equipment. All wells securely closed. End of day.

Rite in the Rain

20 1/24/22

0900 On-site to perform
surveying of MWs.
Weather: 50°F, Overcast.
Personnel on-site: Stephanie
Cipiles, Nathan Edwards
(BHC Rhinos), Frank B. (BHC)
Baker. ——— x

0915 No benchmark available
(one was located at
31st & Prospect intersection
but must have been
removed at some point
because it could not be
found). A bench mark
~~was~~ has been established
near the curb on 31st
street near MW-1.
0.6 ft on the side-walk
west of edge + 21.75 ft
North of the corner of
sidewalk / curb / drive-
way east of MW-1.

0929 Elevation & GPS established
on each well from notched
N-side of inner casing,
top of casing (closed well),

1/24/22 21

around the sides of the
concrete pds in corners,
& on the ground surface
due north of the inner
casing notch. ——— x

0932 All the wells & IDW
drums appear to be
in good condition &
look like they have
not been tampered with.

0945 Exact elevations collected
for top of casing (inner)
for all 3 wells. ——— x

1002 All MWs bolted & ——— x
resecured. ——— x

1015 BHC prepared a figure
with distances to easily
identifiable landmarks.

1020 Departed site. ——— x
End of day. ——— x

John
1/24/22
Rite in the Rain

4/19/22

0930 Stephanie Caples & Zach
Usher on-site at 31st
& Prospect Side to perform
2nd Quarter GW Sampling.
1000 on-site. Opening MW-3.
MW-3:

TD: 21.14' bgs DTW: 12.71' bgs

1 well volume: 1.37 gal.

1st V: Temp: 14.88°C ORP: 80 mV

pH: 8.40 DO: 3.62 mg/L

SpCon: 2.33 mS/cm Turb: 910 NTU

2nd V: Temp: 14.18 ORP: 92

pH: 8.00 DO: 1.28

SC: 2.75 Tur: 900

3rd V: Temp: 13.90 ORP: 92

pH: 7.65 DO: 0.56

SC: 2.76 Tur: 1000

4th V: Temp: 14.15 ORP: 91

pH: 7.45 ~~DO~~ SC: 0.0

SC: 2.83 Tur: 1000

1020 Collected sample MW-3
+ a field duplicate MW3-FD.

1030 moved to MW-2.

1038 Collected Ringate blank

off of water level

meter. ——— SC.

4/19/22 23

1040 MW-2s

TD: 21.63' bgs DTW: 13.1' bgs

1 well volume: 1.88 gal

1st V: Temp: 14.31 ORP: 104

pH: 7.71 DO: 1.85

SC: 1.74 Tur: 880

2nd V: Temp: 14.26 ORP: 102

pH: 7.66 DO: 1.88

SC: 1.75 Tur: 880

3rd V: Temp: 14.41 ORP: 93

pH: 7.61 DO: 2.63

SC: 1.79 Tur: 700

1058 Collected MW-2 — SC

1105 moved to MW-1. — SC

MW-1:

TD: 21.76' bgs DTW: 12.9' bgs

1 well volume: 1.44 gal

1st V: Temp: 15.24 ORP: 114

pH: 7.46 DO: 4.05

SC: 3.28 Tur: 200

2nd V: Temp: 15.42 ORP: 112

pH: 7.31 DO: 1.44

SC: 3.28 Tur: 192

3rd V: Temp: 15.50 ORP: 109

pH: 7.22 DO: 3.80

SC: 3.26 Tur: 185

4/19/22

4th V: Temp 15.65 ORP: 106
 pH: 7.10 DO: 7.41
 SC 3.20 Turb: 143

- 1125 collected MW-3 - SC
 1134 Collected Field Blank - SC
 1138 Added Trip Blank to cooler
 All samples on ice
 1140 Returning to the office
 End of day. — SC

OK
 4/19/22

7/8/22

0730 Zach Usher, Thomas Kaley,
 and Macy Laramee on-site
 at 31st and Prospect site to
 perform 3rd Quarter
 GW sampling. — ML

0732 on site opening MW-3
 TP: 21.34' bgs DTW: 13.2' bgs
 opening MW-2
 TD: 24.94' bgs DTW: 13.75' bgs
 opening MW-1
 TD: 21.8' bgs DTW: 12.44' bgs

0815 MW-3:

1 well volume: 1.33 gal.

1st V: Temp: 19.38 ORP: 141
 pH: 8.73 DO: 90.2
 Sp Cond: 1.96 Turb: 719

2nd V: Temp: 17.71 ORP: 141
 pH: 7.47 DO: 10.95

3rd V: Temp: 20.68 ORP: 155
 pH: 7.19 DO: 10.93
 Sp Cond: 2.23 Turb: 1000

Bailed dry

0845

collected sample MW-3

0850

moved to MW-2 — ML

Rite in the Rain

MW-2

1 well volume: 1.83 gal

1st v: Temp: 17.91 ORP: 168
 pH: 7.48 DO: 9.65
 spcon: 1.51 Turb: 474

2nd v: Temp: 16.93 ORP: 175
 pH: 7.31 DO: 9.53
 spcon: 1.47 Turb: 713

3rd v: Temp: 16.39 ORP: 178
 pH: 7.17 DO: 8.15
 spcon: 1.47 Turb: 1000

4th v: Temp: 15.83 ORP: 179
 pH: 7.08 DO: 6.98
 spcon: 1.49 Turb: 961

0915 collected sample MW-2 and
 a field duplicate MW-2-FD

0945 Moved to MW-1 — ml
 MW-1

1 well volume: 1.53 gal

1st v: Temp: 21.82 ORP: 180
 pH: 6.81 DO: ~~8.48~~
 spcon: 2.66 Turb: 265

2nd v: Temp: 20.38 ORP: 190
 pH: 6.91 DO: 11.01
 spcon: 2.76 Turb: 378

3rd v: Temp: 18.95 ORP: 188

pH: 6.80 DO: 9.20

spcon: 2.84 Turb: 303

4th v: Temp: 18.67 ORP: 194

pH: 6.59 DO: 7.44

spcon: 2.87 Turb: 302

1000 collected sample MW-1 — ml

1010 collected rinsate blank — ml

1020 collected field blank — ml

1110 Added Trip blank to cooler

All samples on ice — ml

12/19/22

1205 T. Kaley arrived onsite

1215 Depth to water at MW-3 is
14.71 ft bgs. Total Depth is20.9 ft. 3 well volumes equal
approximately 3.05 gallons

1235 First Volume:

Temp: 16.4 °F

PH: 6.56

SpCon: 3.06 Turb: 3.75

Second volume

Temp: 15.3 Turb: 2.14

PH: 6.62

SpCon: 3.21

Third volume

Temp: 14.4 Turb: 1.87

PH: 6.60

SpCon: 2.68

1250 Collected sample MW-3 and
MW-3-DUP

1300 Depth to water at MW-2

16.6 ft. 5.95 ft total is

24.39 ft. 3 well volumes =

4.1 gallons approximately

1310 First volume:

Temp: 13.2 SpCon: 1530

PH: 6.97 Turb: 1.09

12/19/22

Second volume

Temp: 13.2 Turb: 1.10

PH: 6.95 SpCon: 1651

Third volume

Temp: 13.1 SpCon: 1515

PH: 6.99 Turb: 1.08

1320 Collected sample MW-2

1330 Depth to water at MW-1

is 13.18 ft. Total depth

is 21.53 ft. Three well

volumes is = 4.08 gallons

1340 First volume

Temp: 13.6 SpCon: 3.12

PH: 6.33 Turb: 2.21

Second volume

Temp: 14.3 SpCon: 3.20

PH: 6.36 Turb: 2.24

Third volume

Temp: 13.1 SpCon: 3.25

PH: 6.41 Turb: 2.34

1350 Collected sample MW-1

1400 Travel from site to KC office

1430 Collected sample Trip Blank

1435 Finished for the day

12/19/22

R. Kaley

Tuesday March 21st
hi 45°, rainy

10/8: TK + Str arrive on site,

MW1: DTW 13.08 toe
total 21.49
 $3.41 \times 0.163 \times 3 = 4.11 \text{ gal to purge}$

- 1) PH 6.41 Temp 14.6
Con 5.24 TDS 2.5
- 2) PH 6.36 Temp 14.3
Con 3.26 TDS 2.71
- 3) PH 6.38 Temp 11.3
Con 3.17 TDS 2.26

1105 Sampled 1105 MW-1
MW2 DTW 14.65 toe
total 24.36

- 1) PH: 7.04 Temp: 11.7
Cond: 1601 TDS: 1.11
- 2) PH: 6.97 Temp: 12.4
Cond: 1479 TDS: 1.05
- 3) PH: 6.97 Temp: 13.2
Cond: 1480 TDS: 1.05

5 Collected sample MW-2

1140 Make to MW-3
Depth to water: 11.71
Total Depth: 20.88
Purge Volume: 4.48 Gallons

1) PH: 6.88 Temp: 11.5
Cond: 2.68 TDS: 1.89

2) PH: 6.88 Temp: 12.1
Cond: 2.66 TDS: 1.89

3) PH: 6.83 Temp: 12.5
Cond: 2.72 TDS: 1.92

1155 Collected Samples MW-3
and MW-X

1205 Collected Field Blank F. Blank
1210 Returning to KC office

3/21/23

Wednesday June 21st

90° sunny

AJ Pugh + Fran Green arrive on
1000 Site

MW1 - DTW = 13.05 ft

1045 total depth = 21.49

purge vol = 4.12 gal

DUPLICATE

pH = 6.75 temperature 27.2°C

MW2 - DTW 14.70 ft

1115 total depth 24.36

purge vol = 4.72 gal

pH 7.21 temperature 23.7°C

MW3

1130

DTW = 13.92

total 20.88

purge vol = 3.4 gal

pH: 7.05, 6.95

temp 24.7, 26.5

Quality meter only read pH + temp
1200: Depart from site.

9-20-23

1030:

S. Green + G. Jay
gather supplies and leave
the office to head to
the site.

1100:

arrive at MW-1

dtw: 12.02 feet

total depth ~ 21.53 ft

1st well volume:

sp. con. 60 $\mu\text{S}/\text{cm}^2$

temp. 22.12°C

pH 6.58

TDS 0.030 g/L

2nd well volume

sp. con. 2525 $\mu\text{S}/\text{cm}^2$

temp 20.2°C

pH 6.55

TDS 1.638 g/L

3rd well volume

sp. con. 2532

temp 18.92

pH 6.55

TDS 1.446

1120

~~move to~~ collected sample MW-1

1130

move to MW-2

dtw: 16.31 total depth 24.99

Rite in the Rain

3180 + prospect

9-20-93

purge 4 gal

1st well volume

temp: 16.46

SpCon: 1324 $\mu S/cm$ (1.144 mS/cm)

pH: 7.16

TDS: 0.860

2nd well volume

temp: 15.52

SpCon: 1333 $\mu S/cm$ (1.090 mS/cm)

pH: 7.10

TDS: 0.865

3rd well volume

SpCon 1347 (1.102)

temp 15.37

pH 7.11

TDS 0.876 g/L

1145 collected sample MW-2

1150 move to MW-3

dtw: 15.21 ft

total depth 20.9 ft

purge - 2.3 gal

4th well volume

temp: 14.6

SpCon: 2028 (1.707)

pH: 6.84

TDS: 1.320

3180 + prospect 9-20-93

2nd well volume

temp: 15.68

SpCon: 2118 (1.740)

pH: 6.89

TDS: 1.377

3rd well volume

temp: 15.51

SpCon 2127 (1.747)

pH 6.86

TDS: 1.382

1200: collected MW-3

1205: collected Dup of MW-3

1238: collected field blank +
returned to the office.

SG

Rite in the Rain

Q8 Sampling 31st project
~~Wed~~ Wednesday Dec 20, 2023

0900: S. Green & C. Weiss leave
 TT office to head to the
 site

0915: water level depth at MW1

depth: 13.5 ft
 total depth: 22.3

1st well volume

pH: 6.39

spec conc: 2493

turb: 956 NTU

temp: 18.2 °C

2nd well volume

pH: 6.45

spec conc: 2661

turb: 1602

temp: 17.6 °C

3rd well volume:

pH: 6.47

spec conc: 2637

turb: 2535

Temp: 17.7 °C

0930: collect MW-1

0935 move to MW-2

31st + project

12-20-2023

depth to water: 15.9

total depth: 24.4

purge volume: ~4.5 gal

1st well volume

pH: 6.91

cond: 1356

turb: 3750

temp: 13.1 °C

2nd well volume

pH: 7.01

cond: 1362

turb: 3063

temp: 14.8 °C

3rd well volume

pH: 7.09

cond: 1374

turb: 3726

Temp: 14.7 °C

0955: collected MW-2 at ~~TT office~~
MW-2 (Dust) by

1000: move to MW-3

depth to water: 14.05 ft

total depth: 20.88

purge volume: 3.3 gal

1st well volume:

pH: 6.91

Rite in the Rain

31st + prospect

12-20-2023

Cond: 1758

turb: ~~15,80~~ 16,193

temp: 18.4°C

2nd well volume:

pH: 6.83

Cond: 1866

turb: 6687

temp: 18.6°C

3rd well volume:

pH: 7.33

Cond: 116

turb: 81

temp: 15.1°C

10:25 collected MW-3 + HS duplicate

MW-3 (DUP)

1041: S. Green + C. Weiss leave

Site + return

1050: S. Green labels trip blanks.

1055: Collected field blanks.

1100: Samples put on ice + taken to
Pace laboratories in Geneva, KS.

APPENDIX D

ANALYTICAL DATA PACKAGES AND DATA VALIDATION REPORTS



January 08, 2024

Emily Fisher
TETRA TECH EMI
415 Oak
Kansas City, MO 64106

RE: Project: 31ST & PROSPECT
Pace Project No.: 60444443

Dear Emily Fisher:

Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

REV-1, 1/8/24: False positive initially reported for dibromochloromethane for sample MW-3 (DUP). Result has been updated for this sample.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

Missouri Inorganic Drinking Water Certification #: 10090

Arkansas Drinking Water

Arkansas Certification #: 88-00679

Illinois Certification #: 2000302023-5

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212023-1

Oklahoma Certification #: 2022-057

Florida: Cert E871149 SEKS WET

Texas Certification #: T104704407-23-17

Utah Certification #: KS000212022-12

Illinois Certification #: 004592

Kansas Field Laboratory Accreditation: # E-92587

Missouri SEKS Micro Certification: 10070

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SAMPLE SUMMARY

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60444443001	MW-1	Water	12/20/23 09:30	12/20/23 12:46
60444443002	MW-2	Water	12/20/23 09:55	12/20/23 12:46
60444443003	MW-3	Water	12/20/23 10:25	12/20/23 12:46
60444443004	MW-3(DUP)	Water	12/20/23 10:25	12/20/23 12:46
60444443005	TRIP BLANK	Water	12/20/23 10:50	12/20/23 12:46
60444443006	FIELD BLANK	Water	12/20/23 10:55	12/20/23 12:46

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SAMPLE ANALYTE COUNT

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60444443001	MW-1	EPA 5030B/8260	PGH	69	PASI-K
60444443002	MW-2	EPA 5030B/8260	PGH	69	PASI-K
60444443003	MW-3	EPA 5030B/8260	PGH	69	PASI-K
60444443004	MW-3(DUP)	EPA 5030B/8260	PGH	69	PASI-K
60444443005	TRIP BLANK	EPA 5030B/8260	PGH	69	PASI-K
60444443006	FIELD BLANK	EPA 5030B/8260	PGH	69	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-1 Lab ID: 60444443001 Collected: 12/20/23 09:30 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		12/29/23 02:24	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		12/29/23 02:24	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		12/29/23 02:24	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 02:24	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:24	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		12/29/23 02:24	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		12/29/23 02:24	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		12/29/23 02:24	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		12/29/23 02:24	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		12/29/23 02:24	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		12/29/23 02:24	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		12/29/23 02:24	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		12/29/23 02:24	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		12/29/23 02:24	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		12/29/23 02:24	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		12/29/23 02:24	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		12/29/23 02:24	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		12/29/23 02:24	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		12/29/23 02:24	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		12/29/23 02:24	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		12/29/23 02:24	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		12/29/23 02:24	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:24	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:24	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 02:24	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		12/29/23 02:24	107-06-2	
1,2-Dichloroethene (Total)	2.0	ug/L	1.0	0.22	1		12/29/23 02:24	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		12/29/23 02:24	75-35-4	
cis-1,2-Dichloroethene	2.0	ug/L	1.0	0.13	1		12/29/23 02:24	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		12/29/23 02:24	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		12/29/23 02:24	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		12/29/23 02:24	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:24	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		12/29/23 02:24	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		12/29/23 02:24	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		12/29/23 02:24	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		12/29/23 02:24	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		12/29/23 02:24	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		12/29/23 02:24	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:24	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		12/29/23 02:24	75-09-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-1 Lab ID: 60444443001 Collected: 12/20/23 09:30 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		12/29/23 02:24	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		12/29/23 02:24	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		12/29/23 02:24	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:24	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		12/29/23 02:24	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		12/29/23 02:24	79-34-5	
Tetrachloroethene	42.9	ug/L	1.0	0.33	1		12/29/23 02:24	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		12/29/23 02:24	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		12/29/23 02:24	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		12/29/23 02:24	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		12/29/23 02:24	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		12/29/23 02:24	79-00-5	
Trichloroethene	14.0	ug/L	1.0	0.21	1		12/29/23 02:24	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:24	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		12/29/23 02:24	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		12/29/23 02:24	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		12/29/23 02:24	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		12/29/23 02:24	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		12/29/23 02:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		12/29/23 02:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		12/29/23 02:24	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		12/29/23 02:24	2037-26-5	
Preservation pH	1.0		0.10		1		12/29/23 02:24		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-2 Lab ID: 60444443002 Collected: 12/20/23 09:55 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<127	ug/L	500	127	50		12/29/23 03:05	67-64-1	
Benzene	<6.8	ug/L	50.0	6.8	50		12/29/23 03:05	71-43-2	
Bromobenzene	<4.4	ug/L	50.0	4.4	50		12/29/23 03:05	108-86-1	
Bromochloromethane	<10.1	ug/L	50.0	10.1	50		12/29/23 03:05	74-97-5	
Bromodichloromethane	<7.8	ug/L	50.0	7.8	50		12/29/23 03:05	75-27-4	
Bromoform	<33.8	ug/L	50.0	33.8	50		12/29/23 03:05	75-25-2	
Bromomethane	<23.0	ug/L	250	23.0	50		12/29/23 03:05	74-83-9	
2-Butanone (MEK)	<48.8	ug/L	500	48.8	50		12/29/23 03:05	78-93-3	
n-Butylbenzene	<7.6	ug/L	50.0	7.6	50		12/29/23 03:05	104-51-8	
sec-Butylbenzene	<5.5	ug/L	50.0	5.5	50		12/29/23 03:05	135-98-8	
tert-Butylbenzene	<6.0	ug/L	50.0	6.0	50		12/29/23 03:05	98-06-6	
Carbon disulfide	<48.9	ug/L	250	48.9	50		12/29/23 03:05	75-15-0	
Carbon tetrachloride	<8.6	ug/L	50.0	8.6	50		12/29/23 03:05	56-23-5	
Chlorobenzene	<4.4	ug/L	50.0	4.4	50		12/29/23 03:05	108-90-7	
Chloroethane	<18.7	ug/L	50.0	18.7	50		12/29/23 03:05	75-00-3	
Chloroform	<11.0	ug/L	50.0	11.0	50		12/29/23 03:05	67-66-3	
Chloromethane	<14.2	ug/L	50.0	14.2	50		12/29/23 03:05	74-87-3	
2-Chlorotoluene	<5.4	ug/L	50.0	5.4	50		12/29/23 03:05	95-49-8	
4-Chlorotoluene	<7.4	ug/L	50.0	7.4	50		12/29/23 03:05	106-43-4	
1,2-Dibromo-3-chloropropane	<39.0	ug/L	125	39.0	50		12/29/23 03:05	96-12-8	
Dibromochloromethane	<15.2	ug/L	50.0	15.2	50		12/29/23 03:05	124-48-1	
1,2-Dibromoethane (EDB)	<9.8	ug/L	50.0	9.8	50		12/29/23 03:05	106-93-4	
Dibromomethane	<5.4	ug/L	50.0	5.4	50		12/29/23 03:05	74-95-3	
1,2-Dichlorobenzene	<6.2	ug/L	50.0	6.2	50		12/29/23 03:05	95-50-1	
1,3-Dichlorobenzene	<6.6	ug/L	50.0	6.6	50		12/29/23 03:05	541-73-1	
1,4-Dichlorobenzene	<6.6	ug/L	50.0	6.6	50		12/29/23 03:05	106-46-7	
Dichlorodifluoromethane	<10	ug/L	50.0	10	50		12/29/23 03:05	75-71-8	
1,1-Dichloroethane	<6.1	ug/L	50.0	6.1	50		12/29/23 03:05	75-34-3	
1,2-Dichloroethane	<10.6	ug/L	50.0	10.6	50		12/29/23 03:05	107-06-2	
1,2-Dichloroethene (Total)	21.1J	ug/L	50.0	11.1	50		12/29/23 03:05	540-59-0	
1,1-Dichloroethene	<11.0	ug/L	50.0	11.0	50		12/29/23 03:05	75-35-4	
cis-1,2-Dichloroethene	21.1J	ug/L	50.0	6.4	50		12/29/23 03:05	156-59-2	
trans-1,2-Dichloroethene	<5.1	ug/L	50.0	5.1	50		12/29/23 03:05	156-60-5	
1,2-Dichloropropane	<7.0	ug/L	50.0	7.0	50		12/29/23 03:05	78-87-5	
1,3-Dichloropropane	<5.2	ug/L	50.0	5.2	50		12/29/23 03:05	142-28-9	
2,2-Dichloropropane	<8.1	ug/L	50.0	8.1	50		12/29/23 03:05	594-20-7	
1,1-Dichloropropene	<6.8	ug/L	50.0	6.8	50		12/29/23 03:05	563-58-6	
cis-1,3-Dichloropropene	<3.9	ug/L	50.0	3.9	50		12/29/23 03:05	10061-01-5	
trans-1,3-Dichloropropene	<9.1	ug/L	50.0	9.1	50		12/29/23 03:05	10061-02-6	
Ethylbenzene	<6.0	ug/L	50.0	6.0	50		12/29/23 03:05	100-41-4	
Hexachloro-1,3-butadiene	<20.8	ug/L	50.0	20.8	50		12/29/23 03:05	87-68-3	
2-Hexanone	<55.0	ug/L	500	55.0	50		12/29/23 03:05	591-78-6	
Isopropylbenzene (Cumene)	<4.8	ug/L	50.0	4.8	50		12/29/23 03:05	98-82-8	
p-Isopropyltoluene	<6.4	ug/L	50.0	6.4	50		12/29/23 03:05	99-87-6	
Methylene Chloride	23.4J	ug/L	50.0	19.6	50		12/29/23 03:05	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-2 Lab ID: 60444443002 Collected: 12/20/23 09:55 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<36.8	ug/L	500	36.8	50		12/29/23 03:05	108-10-1	
Methyl-tert-butyl ether	<6.4	ug/L	50.0	6.4	50		12/29/23 03:05	1634-04-4	
Naphthalene	<41.1	ug/L	500	41.1	50		12/29/23 03:05	91-20-3	
n-Propylbenzene	<6.0	ug/L	50.0	6.0	50		12/29/23 03:05	103-65-1	
Styrene	<6.2	ug/L	50.0	6.2	50		12/29/23 03:05	100-42-5	
1,1,1,2-Tetrachloroethane	<4.2	ug/L	50.0	4.2	50		12/29/23 03:05	630-20-6	
1,1,2,2-Tetrachloroethane	<7.7	ug/L	50.0	7.7	50		12/29/23 03:05	79-34-5	
Tetrachloroethene	7670	ug/L	50.0	16.5	50		12/29/23 03:05	127-18-4	
Toluene	<12.6	ug/L	50.0	12.6	50		12/29/23 03:05	108-88-3	
1,2,3-Trichlorobenzene	<46.4	ug/L	50.0	46.4	50		12/29/23 03:05	87-61-6	
1,2,4-Trichlorobenzene	<36.6	ug/L	50.0	36.6	50		12/29/23 03:05	120-82-1	
1,1,1-Trichloroethane	<5.4	ug/L	50.0	5.4	50		12/29/23 03:05	71-55-6	
1,1,2-Trichloroethane	<7.1	ug/L	50.0	7.1	50		12/29/23 03:05	79-00-5	
Trichloroethene	136	ug/L	50.0	10.5	50		12/29/23 03:05	79-01-6	
Trichlorofluoromethane	<8.2	ug/L	50.0	8.2	50		12/29/23 03:05	75-69-4	
1,2,3-Trichloropropane	<20.4	ug/L	125	20.4	50		12/29/23 03:05	96-18-4	
1,2,4-Trimethylbenzene	<16.2	ug/L	50.0	16.2	50		12/29/23 03:05	95-63-6	
1,3,5-Trimethylbenzene	<4.5	ug/L	50.0	4.5	50		12/29/23 03:05	108-67-8	
Vinyl chloride	<8.4	ug/L	50.0	8.4	50		12/29/23 03:05	75-01-4	
Xylene (Total)	<14.1	ug/L	150	14.1	50		12/29/23 03:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		50		12/29/23 03:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		50		12/29/23 03:05	2199-69-1	
Toluene-d8 (S)	97	%	80-120		50		12/29/23 03:05	2037-26-5	
Preservation pH	1.0		0.10		50		12/29/23 03:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-3 Lab ID: 60444443003 Collected: 12/20/23 10:25 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<12.7	ug/L	50.0	12.7	5		12/29/23 02:38	67-64-1	
Benzene	0.97J	ug/L	5.0	0.68	5		12/29/23 02:38	71-43-2	
Bromobenzene	<0.44	ug/L	5.0	0.44	5		12/29/23 02:38	108-86-1	
Bromochloromethane	<1.0	ug/L	5.0	1.0	5		12/29/23 02:38	74-97-5	
Bromodichloromethane	<0.78	ug/L	5.0	0.78	5		12/29/23 02:38	75-27-4	
Bromoform	<3.4	ug/L	5.0	3.4	5		12/29/23 02:38	75-25-2	
Bromomethane	<2.3	ug/L	25.0	2.3	5		12/29/23 02:38	74-83-9	
2-Butanone (MEK)	<4.9	ug/L	50.0	4.9	5		12/29/23 02:38	78-93-3	
n-Butylbenzene	<0.76	ug/L	5.0	0.76	5		12/29/23 02:38	104-51-8	
sec-Butylbenzene	<0.55	ug/L	5.0	0.55	5		12/29/23 02:38	135-98-8	
tert-Butylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:38	98-06-6	
Carbon disulfide	<4.9	ug/L	25.0	4.9	5		12/29/23 02:38	75-15-0	
Carbon tetrachloride	<0.86	ug/L	5.0	0.86	5		12/29/23 02:38	56-23-5	
Chlorobenzene	<0.44	ug/L	5.0	0.44	5		12/29/23 02:38	108-90-7	
Chloroethane	<1.9	ug/L	5.0	1.9	5		12/29/23 02:38	75-00-3	
Chloroform	<1.1	ug/L	5.0	1.1	5		12/29/23 02:38	67-66-3	
Chloromethane	<1.4	ug/L	5.0	1.4	5		12/29/23 02:38	74-87-3	
2-Chlorotoluene	<0.54	ug/L	5.0	0.54	5		12/29/23 02:38	95-49-8	
4-Chlorotoluene	<0.74	ug/L	5.0	0.74	5		12/29/23 02:38	106-43-4	
1,2-Dibromo-3-chloropropane	<3.9	ug/L	12.5	3.9	5		12/29/23 02:38	96-12-8	
Dibromochloromethane	<1.5	ug/L	5.0	1.5	5		12/29/23 02:38	124-48-1	
1,2-Dibromoethane (EDB)	<0.98	ug/L	5.0	0.98	5		12/29/23 02:38	106-93-4	
Dibromomethane	<0.54	ug/L	5.0	0.54	5		12/29/23 02:38	74-95-3	
1,2-Dichlorobenzene	<0.62	ug/L	5.0	0.62	5		12/29/23 02:38	95-50-1	
1,3-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		12/29/23 02:38	541-73-1	
1,4-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		12/29/23 02:38	106-46-7	
Dichlorodifluoromethane	<1.0	ug/L	5.0	1.0	5		12/29/23 02:38	75-71-8	
1,1-Dichloroethane	<0.61	ug/L	5.0	0.61	5		12/29/23 02:38	75-34-3	
1,2-Dichloroethane	<1.1	ug/L	5.0	1.1	5		12/29/23 02:38	107-06-2	
1,2-Dichloroethene (Total)	49.0	ug/L	5.0	1.1	5		12/29/23 02:38	540-59-0	
1,1-Dichloroethene	<1.1	ug/L	5.0	1.1	5		12/29/23 02:38	75-35-4	
cis-1,2-Dichloroethene	48.4	ug/L	5.0	0.64	5		12/29/23 02:38	156-59-2	
trans-1,2-Dichloroethene	0.58J	ug/L	5.0	0.51	5		12/29/23 02:38	156-60-5	
1,2-Dichloropropane	<0.70	ug/L	5.0	0.70	5		12/29/23 02:38	78-87-5	
1,3-Dichloropropane	<0.52	ug/L	5.0	0.52	5		12/29/23 02:38	142-28-9	
2,2-Dichloropropane	<0.81	ug/L	5.0	0.81	5		12/29/23 02:38	594-20-7	
1,1-Dichloropropene	<0.68	ug/L	5.0	0.68	5		12/29/23 02:38	563-58-6	
cis-1,3-Dichloropropene	<0.39	ug/L	5.0	0.39	5		12/29/23 02:38	10061-01-5	
trans-1,3-Dichloropropene	<0.91	ug/L	5.0	0.91	5		12/29/23 02:38	10061-02-6	
Ethylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:38	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	5		12/29/23 02:38	87-68-3	
2-Hexanone	<5.5	ug/L	50.0	5.5	5		12/29/23 02:38	591-78-6	
Isopropylbenzene (Cumene)	0.73J	ug/L	5.0	0.48	5		12/29/23 02:38	98-82-8	
p-Isopropyltoluene	<0.64	ug/L	5.0	0.64	5		12/29/23 02:38	99-87-6	
Methylene Chloride	2.9J	ug/L	5.0	2.0	5		12/29/23 02:38	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-3 Lab ID: 60444443003 Collected: 12/20/23 10:25 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<3.7	ug/L	50.0	3.7	5		12/29/23 02:38	108-10-1	
Methyl-tert-butyl ether	<0.64	ug/L	5.0	0.64	5		12/29/23 02:38	1634-04-4	
Naphthalene	<4.1	ug/L	50.0	4.1	5		12/29/23 02:38	91-20-3	
n-Propylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:38	103-65-1	
Styrene	<0.62	ug/L	5.0	0.62	5		12/29/23 02:38	100-42-5	
1,1,1,2-Tetrachloroethane	<0.42	ug/L	5.0	0.42	5		12/29/23 02:38	630-20-6	
1,1,2,2-Tetrachloroethane	<0.77	ug/L	5.0	0.77	5		12/29/23 02:38	79-34-5	
Tetrachloroethene	206	ug/L	5.0	1.6	5		12/29/23 02:38	127-18-4	
Toluene	<1.3	ug/L	5.0	1.3	5		12/29/23 02:38	108-88-3	
1,2,3-Trichlorobenzene	<4.6	ug/L	5.0	4.6	5		12/29/23 02:38	87-61-6	
1,2,4-Trichlorobenzene	<3.7	ug/L	5.0	3.7	5		12/29/23 02:38	120-82-1	
1,1,1-Trichloroethane	<0.54	ug/L	5.0	0.54	5		12/29/23 02:38	71-55-6	
1,1,2-Trichloroethane	<0.71	ug/L	5.0	0.71	5		12/29/23 02:38	79-00-5	
Trichloroethene	79.3	ug/L	5.0	1.0	5		12/29/23 02:38	79-01-6	
Trichlorofluoromethane	<0.82	ug/L	5.0	0.82	5		12/29/23 02:38	75-69-4	
1,2,3-Trichloropropane	<2.0	ug/L	12.5	2.0	5		12/29/23 02:38	96-18-4	
1,2,4-Trimethylbenzene	<1.6	ug/L	5.0	1.6	5		12/29/23 02:38	95-63-6	
1,3,5-Trimethylbenzene	<0.45	ug/L	5.0	0.45	5		12/29/23 02:38	108-67-8	
Vinyl chloride	<0.84	ug/L	5.0	0.84	5		12/29/23 02:38	75-01-4	
Xylene (Total)	<1.4	ug/L	15.0	1.4	5		12/29/23 02:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		5		12/29/23 02:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		5		12/29/23 02:38	2199-69-1	
Toluene-d8 (S)	98	%	80-120		5		12/29/23 02:38	2037-26-5	
Preservation pH	1.0		0.10		5		12/29/23 02:38		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-3(DUP) Lab ID: 60444443004 Collected: 12/20/23 10:25 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<12.7	ug/L	50.0	12.7	5		12/29/23 02:52	67-64-1	
Benzene	1.2J	ug/L	5.0	0.68	5		12/29/23 02:52	71-43-2	
Bromobenzene	<0.44	ug/L	5.0	0.44	5		12/29/23 02:52	108-86-1	
Bromochloromethane	<1.0	ug/L	5.0	1.0	5		12/29/23 02:52	74-97-5	
Bromodichloromethane	<0.78	ug/L	5.0	0.78	5		12/29/23 02:52	75-27-4	
Bromoform	<3.4	ug/L	5.0	3.4	5		12/29/23 02:52	75-25-2	
Bromomethane	<2.3	ug/L	25.0	2.3	5		12/29/23 02:52	74-83-9	
2-Butanone (MEK)	<4.9	ug/L	50.0	4.9	5		12/29/23 02:52	78-93-3	
n-Butylbenzene	<0.76	ug/L	5.0	0.76	5		12/29/23 02:52	104-51-8	
sec-Butylbenzene	<0.55	ug/L	5.0	0.55	5		12/29/23 02:52	135-98-8	
tert-Butylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:52	98-06-6	
Carbon disulfide	<4.9	ug/L	25.0	4.9	5		12/29/23 02:52	75-15-0	
Carbon tetrachloride	<0.86	ug/L	5.0	0.86	5		12/29/23 02:52	56-23-5	
Chlorobenzene	<0.44	ug/L	5.0	0.44	5		12/29/23 02:52	108-90-7	
Chloroethane	<1.9	ug/L	5.0	1.9	5		12/29/23 02:52	75-00-3	
Chloroform	<1.1	ug/L	5.0	1.1	5		12/29/23 02:52	67-66-3	
Chloromethane	<1.4	ug/L	5.0	1.4	5		12/29/23 02:52	74-87-3	
2-Chlorotoluene	<0.54	ug/L	5.0	0.54	5		12/29/23 02:52	95-49-8	
4-Chlorotoluene	<0.74	ug/L	5.0	0.74	5		12/29/23 02:52	106-43-4	
1,2-Dibromo-3-chloropropane	<3.9	ug/L	12.5	3.9	5		12/29/23 02:52	96-12-8	
Dibromochloromethane	<1.5	ug/L	5.0	1.5	5		12/29/23 02:52	124-48-1	
1,2-Dibromoethane (EDB)	<0.98	ug/L	5.0	0.98	5		12/29/23 02:52	106-93-4	
Dibromomethane	<0.54	ug/L	5.0	0.54	5		12/29/23 02:52	74-95-3	
1,2-Dichlorobenzene	<0.62	ug/L	5.0	0.62	5		12/29/23 02:52	95-50-1	
1,3-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		12/29/23 02:52	541-73-1	
1,4-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		12/29/23 02:52	106-46-7	
Dichlorodifluoromethane	<1.0	ug/L	5.0	1.0	5		12/29/23 02:52	75-71-8	
1,1-Dichloroethane	<0.61	ug/L	5.0	0.61	5		12/29/23 02:52	75-34-3	
1,2-Dichloroethane	<1.1	ug/L	5.0	1.1	5		12/29/23 02:52	107-06-2	
1,2-Dichloroethene (Total)	51.8	ug/L	5.0	1.1	5		12/29/23 02:52	540-59-0	
1,1-Dichloroethene	<1.1	ug/L	5.0	1.1	5		12/29/23 02:52	75-35-4	
cis-1,2-Dichloroethene	51.2	ug/L	5.0	0.64	5		12/29/23 02:52	156-59-2	
trans-1,2-Dichloroethene	0.62J	ug/L	5.0	0.51	5		12/29/23 02:52	156-60-5	
1,2-Dichloropropane	<0.70	ug/L	5.0	0.70	5		12/29/23 02:52	78-87-5	
1,3-Dichloropropane	<0.52	ug/L	5.0	0.52	5		12/29/23 02:52	142-28-9	
2,2-Dichloropropane	<0.81	ug/L	5.0	0.81	5		12/29/23 02:52	594-20-7	
1,1-Dichloropropene	<0.68	ug/L	5.0	0.68	5		12/29/23 02:52	563-58-6	
cis-1,3-Dichloropropene	<0.39	ug/L	5.0	0.39	5		12/29/23 02:52	10061-01-5	
trans-1,3-Dichloropropene	<0.91	ug/L	5.0	0.91	5		12/29/23 02:52	10061-02-6	
Ethylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:52	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	5		12/29/23 02:52	87-68-3	
2-Hexanone	<5.5	ug/L	50.0	5.5	5		12/29/23 02:52	591-78-6	
Isopropylbenzene (Cumene)	0.97J	ug/L	5.0	0.48	5		12/29/23 02:52	98-82-8	
p-Isopropyltoluene	<0.64	ug/L	5.0	0.64	5		12/29/23 02:52	99-87-6	
Methylene Chloride	3.1J	ug/L	5.0	2.0	5		12/29/23 02:52	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: MW-3(DUP) Lab ID: 60444443004 Collected: 12/20/23 10:25 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<3.7	ug/L	50.0	3.7	5		12/29/23 02:52	108-10-1	
Methyl-tert-butyl ether	<0.64	ug/L	5.0	0.64	5		12/29/23 02:52	1634-04-4	
Naphthalene	<4.1	ug/L	50.0	4.1	5		12/29/23 02:52	91-20-3	
n-Propylbenzene	<0.60	ug/L	5.0	0.60	5		12/29/23 02:52	103-65-1	
Styrene	<0.62	ug/L	5.0	0.62	5		12/29/23 02:52	100-42-5	
1,1,1,2-Tetrachloroethane	<0.42	ug/L	5.0	0.42	5		12/29/23 02:52	630-20-6	
1,1,2,2-Tetrachloroethane	<0.77	ug/L	5.0	0.77	5		12/29/23 02:52	79-34-5	
Tetrachloroethene	206	ug/L	5.0	1.6	5		12/29/23 02:52	127-18-4	
Toluene	<1.3	ug/L	5.0	1.3	5		12/29/23 02:52	108-88-3	
1,2,3-Trichlorobenzene	<4.6	ug/L	5.0	4.6	5		12/29/23 02:52	87-61-6	
1,2,4-Trichlorobenzene	<3.7	ug/L	5.0	3.7	5		12/29/23 02:52	120-82-1	
1,1,1-Trichloroethane	<0.54	ug/L	5.0	0.54	5		12/29/23 02:52	71-55-6	
1,1,2-Trichloroethane	<0.71	ug/L	5.0	0.71	5		12/29/23 02:52	79-00-5	
Trichloroethene	81.2	ug/L	5.0	1.0	5		12/29/23 02:52	79-01-6	
Trichlorofluoromethane	<0.82	ug/L	5.0	0.82	5		12/29/23 02:52	75-69-4	
1,2,3-Trichloropropane	<2.0	ug/L	12.5	2.0	5		12/29/23 02:52	96-18-4	
1,2,4-Trimethylbenzene	<1.6	ug/L	5.0	1.6	5		12/29/23 02:52	95-63-6	
1,3,5-Trimethylbenzene	<0.45	ug/L	5.0	0.45	5		12/29/23 02:52	108-67-8	
Vinyl chloride	<0.84	ug/L	5.0	0.84	5		12/29/23 02:52	75-01-4	
Xylene (Total)	<1.4	ug/L	15.0	1.4	5		12/29/23 02:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		5		12/29/23 02:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		5		12/29/23 02:52	2199-69-1	
Toluene-d8 (S)	98	%	80-120		5		12/29/23 02:52	2037-26-5	
Preservation pH	1.0		0.10		5		12/29/23 02:52		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: TRIP BLANK Lab ID: 60444443005 Collected: 12/20/23 10:50 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	<2.5	ug/L	10.0	2.5	1		12/29/23 01:30	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		12/29/23 01:30	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		12/29/23 01:30	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 01:30	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 01:30	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		12/29/23 01:30	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		12/29/23 01:30	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		12/29/23 01:30	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		12/29/23 01:30	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		12/29/23 01:30	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		12/29/23 01:30	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		12/29/23 01:30	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		12/29/23 01:30	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		12/29/23 01:30	75-00-3	
Chloroform	0.53J	ug/L	1.0	0.22	1		12/29/23 01:30	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		12/29/23 01:30	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		12/29/23 01:30	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		12/29/23 01:30	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		12/29/23 01:30	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		12/29/23 01:30	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		12/29/23 01:30	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		12/29/23 01:30	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 01:30	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 01:30	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 01:30	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		12/29/23 01:30	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		12/29/23 01:30	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		12/29/23 01:30	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		12/29/23 01:30	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		12/29/23 01:30	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		12/29/23 01:30	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		12/29/23 01:30	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		12/29/23 01:30	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		12/29/23 01:30	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		12/29/23 01:30	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		12/29/23 01:30	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		12/29/23 01:30	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		12/29/23 01:30	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		12/29/23 01:30	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		12/29/23 01:30	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		12/29/23 01:30	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: TRIP BLANK Lab ID: 60444443005 Collected: 12/20/23 10:50 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		12/29/23 01:30	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		12/29/23 01:30	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		12/29/23 01:30	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		12/29/23 01:30	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		12/29/23 01:30	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		12/29/23 01:30	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		12/29/23 01:30	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		12/29/23 01:30	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		12/29/23 01:30	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		12/29/23 01:30	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		12/29/23 01:30	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		12/29/23 01:30	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		12/29/23 01:30	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 01:30	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		12/29/23 01:30	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		12/29/23 01:30	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		12/29/23 01:30	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		12/29/23 01:30	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		12/29/23 01:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		12/29/23 01:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		12/29/23 01:30	2199-69-1	
Toluene-d8 (S)	101	%	80-120		1		12/29/23 01:30	2037-26-5	
Preservation pH	11.0		0.10		1		12/29/23 01:30		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: FIELD BLANK Lab ID: 60444443006 Collected: 12/20/23 10:55 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	3.2J	ug/L	10.0	2.5	1		12/29/23 02:11	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		12/29/23 02:11	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		12/29/23 02:11	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 02:11	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:11	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		12/29/23 02:11	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		12/29/23 02:11	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		12/29/23 02:11	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		12/29/23 02:11	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		12/29/23 02:11	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		12/29/23 02:11	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		12/29/23 02:11	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		12/29/23 02:11	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		12/29/23 02:11	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		12/29/23 02:11	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		12/29/23 02:11	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		12/29/23 02:11	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		12/29/23 02:11	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		12/29/23 02:11	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		12/29/23 02:11	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		12/29/23 02:11	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		12/29/23 02:11	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:11	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:11	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		12/29/23 02:11	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		12/29/23 02:11	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		12/29/23 02:11	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		12/29/23 02:11	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:11	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		12/29/23 02:11	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		12/29/23 02:11	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		12/29/23 02:11	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:11	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		12/29/23 02:11	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		12/29/23 02:11	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		12/29/23 02:11	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		12/29/23 02:11	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		12/29/23 02:11	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		12/29/23 02:11	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		12/29/23 02:11	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		12/29/23 02:11	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

Sample: FIELD BLANK Lab ID: 60444443006 Collected: 12/20/23 10:55 Received: 12/20/23 12:46 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	<0.74	ug/L	10.0	0.74	1		12/29/23 02:11	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		12/29/23 02:11	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		12/29/23 02:11	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		12/29/23 02:11	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		12/29/23 02:11	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		12/29/23 02:11	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		12/29/23 02:11	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		12/29/23 02:11	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		12/29/23 02:11	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		12/29/23 02:11	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		12/29/23 02:11	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		12/29/23 02:11	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		12/29/23 02:11	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		12/29/23 02:11	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		12/29/23 02:11	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		12/29/23 02:11	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		12/29/23 02:11	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		12/29/23 02:11	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		12/29/23 02:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		12/29/23 02:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		12/29/23 02:11	2199-69-1	
Toluene-d8 (S)	98	%	80-120		1		12/29/23 02:11	2037-26-5	
Preservation pH	1.0		0.10		1		12/29/23 02:11		

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60444443

QC Batch: 878619

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60444443001, 60444443002, 60444443003, 60444443004, 60444443005, 60444443006

METHOD BLANK: 3479937

Matrix: Water

Associated Lab Samples: 60444443001, 60444443002, 60444443003, 60444443004, 60444443005, 60444443006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	12/29/23 00:50	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	12/29/23 00:50	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	12/29/23 00:50	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	12/29/23 00:50	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	12/29/23 00:50	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	12/29/23 00:50	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	12/29/23 00:50	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	12/29/23 00:50	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	12/29/23 00:50	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	12/29/23 00:50	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	12/29/23 00:50	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	12/29/23 00:50	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	12/29/23 00:50	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	12/29/23 00:50	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	12/29/23 00:50	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	12/29/23 00:50	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	12/29/23 00:50	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	12/29/23 00:50	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	12/29/23 00:50	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	12/29/23 00:50	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	12/29/23 00:50	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	12/29/23 00:50	
2-Hexanone	ug/L	<1.1	10.0	1.1	12/29/23 00:50	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	12/29/23 00:50	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	12/29/23 00:50	
Acetone	ug/L	<2.5	10.0	2.5	12/29/23 00:50	
Benzene	ug/L	<0.14	1.0	0.14	12/29/23 00:50	
Bromobenzene	ug/L	<0.088	1.0	0.088	12/29/23 00:50	
Bromochloromethane	ug/L	<0.20	1.0	0.20	12/29/23 00:50	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	12/29/23 00:50	
Bromoform	ug/L	<0.68	1.0	0.68	12/29/23 00:50	
Bromomethane	ug/L	<0.46	5.0	0.46	12/29/23 00:50	
Carbon disulfide	ug/L	<0.98	5.0	0.98	12/29/23 00:50	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	12/29/23 00:50	
Chlorobenzene	ug/L	<0.089	1.0	0.089	12/29/23 00:50	
Chloroethane	ug/L	<0.37	1.0	0.37	12/29/23 00:50	
Chloroform	ug/L	<0.22	1.0	0.22	12/29/23 00:50	
Chloromethane	ug/L	<0.28	1.0	0.28	12/29/23 00:50	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60444443

METHOD BLANK: 3479937

Matrix: Water

Associated Lab Samples: 60444443001, 60444443002, 60444443003, 60444443004, 60444443005, 60444443006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	12/29/23 00:50	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	12/29/23 00:50	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	12/29/23 00:50	
Dibromomethane	ug/L	<0.11	1.0	0.11	12/29/23 00:50	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	12/29/23 00:50	
Ethylbenzene	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	12/29/23 00:50	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	12/29/23 00:50	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	12/29/23 00:50	
Methylene Chloride	ug/L	<0.39	1.0	0.39	12/29/23 00:50	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	12/29/23 00:50	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
Naphthalene	ug/L	<0.82	10.0	0.82	12/29/23 00:50	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	12/29/23 00:50	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	12/29/23 00:50	
Styrene	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	12/29/23 00:50	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	12/29/23 00:50	
Toluene	ug/L	<0.25	1.0	0.25	12/29/23 00:50	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	12/29/23 00:50	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	12/29/23 00:50	
Trichloroethene	ug/L	<0.21	1.0	0.21	12/29/23 00:50	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	12/29/23 00:50	
Vinyl chloride	ug/L	<0.17	1.0	0.17	12/29/23 00:50	
Xylene (Total)	ug/L	<0.28	3.0	0.28	12/29/23 00:50	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		12/29/23 00:50	
4-Bromofluorobenzene (S)	%	101	80-120		12/29/23 00:50	
Toluene-d8 (S)	%	99	80-120		12/29/23 00:50	

LABORATORY CONTROL SAMPLE: 3479938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	80-120	
1,1,1-Trichloroethane	ug/L	20	18.3	92	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	21.7	109	70-130	
1,1,2-Trichloroethane	ug/L	20	21.6	108	75-125	
1,1-Dichloroethane	ug/L	20	20.1	101	75-120	
1,1-Dichloroethene	ug/L	20	20.1	100	75-120	
1,1-Dichloropropene	ug/L	20	19.2	96	75-125	
1,2,3-Trichlorobenzene	ug/L	20	21.3	107	70-125	
1,2,3-Trichloropropane	ug/L	20	20.7	103	75-125	
1,2,4-Trichlorobenzene	ug/L	20	21.9	110	75-120	
1,2,4-Trimethylbenzene	ug/L	20	22.4	112	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	16.5	83	65-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60444443

LABORATORY CONTROL SAMPLE: 3479938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	20.7	103	80-120	
1,2-Dichlorobenzene	ug/L	20	23.5	117	80-120	
1,2-Dichloroethane	ug/L	20	19.4	97	80-120	
1,2-Dichloroethene (Total)	ug/L	40	40.2	101	80-120	
1,2-Dichloropropane	ug/L	20	22.9	115	80-120	
1,3,5-Trimethylbenzene	ug/L	20	22.4	112	75-120	
1,3-Dichlorobenzene	ug/L	20	22.7	113	80-120	
1,3-Dichloropropane	ug/L	20	22.4	112	80-120	
1,4-Dichlorobenzene	ug/L	20	22.8	114	80-120	
2,2-Dichloropropane	ug/L	20	15.2	76	60-130	
2-Butanone (MEK)	ug/L	100	105	105	60-140	
2-Chlorotoluene	ug/L	20	21.9	109	80-120	
2-Hexanone	ug/L	100	105	105	55-155	
4-Chlorotoluene	ug/L	20	21.3	106	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	116	116	70-135	
Acetone	ug/L	100	122	122	25-185	
Benzene	ug/L	20	20.4	102	80-120	
Bromobenzene	ug/L	20	22.0	110	80-120	
Bromochloromethane	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	20.4	102	80-120	
Bromoform	ug/L	20	15.2	76	70-135	
Bromomethane	ug/L	20	18.8	94	50-145	
Carbon disulfide	ug/L	20	17.6	88	70-130	
Carbon tetrachloride	ug/L	20	16.8	84	80-130	
Chlorobenzene	ug/L	20	22.2	111	80-120	
Chloroethane	ug/L	20	20.2	101	60-135	
Chloroform	ug/L	20	21.0	105	75-125	
Chloromethane	ug/L	20	18.8	94	60-130	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.0	105	75-125	
Dibromochloromethane	ug/L	20	17.1	86	80-120	
Dibromomethane	ug/L	20	20.2	101	75-125	
Dichlorodifluoromethane	ug/L	20	21.0	105	40-170	
Ethylbenzene	ug/L	20	22.3	112	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.7	93	70-125	
Isopropylbenzene (Cumene)	ug/L	20	21.5	108	80-130	
Methyl-tert-butyl ether	ug/L	20	20.1	101	75-125	
Methylene Chloride	ug/L	20	22.8	114	70-130	
n-Butylbenzene	ug/L	20	21.2	106	70-120	
n-Propylbenzene	ug/L	20	21.6	108	80-120	
Naphthalene	ug/L	20	21.2	106	60-140	
p-Isopropyltoluene	ug/L	20	21.8	109	80-120	
sec-Butylbenzene	ug/L	20	20.9	105	80-125	
Styrene	ug/L	20	23.0	115	80-155	
tert-Butylbenzene	ug/L	20	22.2	111	75-125	
Tetrachloroethene	ug/L	20	20.9	104	80-125	
Toluene	ug/L	20	21.4	107	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60444443

LABORATORY CONTROL SAMPLE: 3479938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	19.9	100	75-125	
trans-1,3-Dichloropropene	ug/L	20	20.0	100	70-125	
Trichloroethene	ug/L	20	20.7	104	80-125	
Trichlorofluoromethane	ug/L	20	20.4	102	65-140	
Vinyl chloride	ug/L	20	22.2	111	65-130	
Xylene (Total)	ug/L	60	67.4	112	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Toluene-d8 (S)	%			98	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 31ST & PROSPECT

Pace Project No.: 60444443

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 878619

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 31ST & PROSPECT
Pace Project No.: 60444443

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60444443001	MW-1	EPA 5030B/8260	878619		
60444443002	MW-2	EPA 5030B/8260	878619		
60444443003	MW-3	EPA 5030B/8260	878619		
60444443004	MW-3(DUP)	EPA 5030B/8260	878619		
60444443005	TRIP BLANK	EPA 5030B/8260	878619		
60444443006	FIELD BLANK	EPA 5030B/8260	878619		

REPORT OF LABORATORY ANALYSIS

WO#: 60444443



	DC#_Title: ENV-FRM-LENE-0009_Sample C		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Tetra Tech EMDCourier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐Packing Material: Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☐ Other ☐Thermometer Used: D418 Type of Ice: Wet Blue ☐ None ☐Cooler Temperature (°C): As-read 3.5 Corr. Factor -0.3 Corrected 3.2

Date and initials of person examining contents:

AF 12/21

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Client: Teta Tech FMI
Site: 31st & Prospect

Profile # 970

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JG9U	WG9U	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other
1	WT																												
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass			Plastic			Misc.		
DG9B	40mL bisulfate clear vial	WG9U	8oz clear soil jar	BP1C	1L NaOH plastic	I	Wipe/Swab	
DG9H	40mL HCl amber vial	WG9U	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate	
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag	
DG9Q	40mL TSP amber vial	JG9U	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter	
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes	
DG9T	40mL Na Th o amber vial	AG1H	1L HCl amber glass	BP2C	500mL NaOH plastic	R	Terracore Kit	
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can	
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic			
VG9T	40mL Na Th o. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic			
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate			
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic			
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water	
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid	
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid	
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	Oil	
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe	
				BP4U	125mL unpreserved plastic	DW	Drinking Water	
				BP4N	125mL HNO3 plastic			
				BP4S	125mL H2SO4 plastic			
				WPDU	16oz unpreserved plastic			

Work Order Number:

60444443

DATA VERIFICATION REPORT

Prepared by: Ellen McEntee
Date: January 9, 2024
Site Name/Task Order: 31st & Prospect Site / 103G65210190
Laboratory: Pace Analytical Services – Lenexa, Kansas

Data Package or SDG Number: 60444443

Sample Designations/Names:

MW-1

MW-2

MW-3

MW-3 (DUP)

FIELD BLANK

TRIP BLANK

Matrices: Groundwater

Analytical Parameters: Volatile Organic Compounds (VOCs) by EPA Method 5030B/8260

Data Package Element	Usable	Rejected	NA	Description of Affected Data (note specific samples and analytical parameters affected)
Chain-of-custody	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The collection date on the chain of custody form was incorrectly listed as 10/20/2023 instead of 12/20/2023. It was confirmed that the correct collection date is 12/20/2023.
Data package completeness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sample preservation, storage, and holding times	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The samples were received at a temperature of 3.2°C. All samples were analyzed within the required holding time.
Method and field blank contamination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trip Blank: Chloroform was detected at a concentration greater than the method detection limit (MDL) but less than the reporting limit (RL). The associated sample results for chloroform are nondetect and were not qualified. Field Blank: Acetone was detected at a concentration greater than the MDL but less than the RL. The associated sample results for acetone are nondetect and were not qualified.
Surrogate spikes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Matrix spikes/matrix spike duplicates (MS/MSD)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MS/MSDs were not reported with these samples.

Data Package Element	Usable	Rejected	NA	Description of Affected Data (note specific samples and analytical parameters affected)
Laboratory control samples/Laboratory control sample duplicates (LCS/LCSD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (field duplicates)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Summary Data is usable as reported by the laboratory. Results reported between the MDL and the RL were qualified as estimated (flagged J) by the laboratory.				