



October 23, 2023

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 7**

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 7 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 7**

**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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Subtask	: 08.03
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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 eight parcels within 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. Currently, the City and EPA are attempting to establish an access agreement and TBA application for the new owner of the Site.

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 is now conducting quarterly groundwater sampling of these monitoring wells. This report details the third sampling event of 2023 (Quarter 7) of eight (minimum) total quarterly sampling events planned at the Site.

This Phase II ESA, Quarter 7 report is consistent with ASTM International (ASTM) Standard E1903-19 for Phase II ESAs, and otherwise complies with EPA’s “All Appropriate Inquiries” Rule (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 7 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 located on the county line of most of the northern side of the 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. Benzene exceeded the MRBCA Tier 1 RBTL for indoor air in one soil-gas sample. Tetrachloroethene (PCE) and trichloroethene (TCE) exceeded their respective EPA MCLs and MRBCA LDTLs in all three groundwater samples. PCE also exceeded the MRBCA RBTL in the groundwater sample collected from monitoring well MW-2.

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. PCE exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. 1,1,2-Trichloroethane (TCA) 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 exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE exceeded

the EPA MCLs and MRBCA LDTLs in all groundwater samples. *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 indoor air.

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. PCE exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. *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. PCE exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE exceeded the EPA MCLs and MRBCA LDTLs in all groundwater samples. The laboratory detected the following additional COCs in groundwater but at concentrations below the MRBCA LDTL: 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. PCE exceeded the MRBCA RBTL in the groundwater sample collected from MW-2. PCE and TCE 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 the MRBCA LDTL: benzene; methylene chloride; and *trans*-1,2-DCE.

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 7 sampling event. This is the seventh of a minimum of eight planned quarterly sampling events. On September 20, 2023, Toeroek Team members Sarah Green and Geoffrey Jay conducted groundwater sampling of 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 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 7 field activities occurred at the Site on September 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 6 sampling event.

TABLE 1
GROUNDWATER LEVEL AND SAMPLE SUMMARY, QUARTER 7
31st & PROSPECT DEVELOPMENT SITE

Location ID(s)	Depth to Groundwater (ft btoc)	Static Water Level (ft amsl)	Analysis Performed
MW-1	12.02	970.70	VOCs via EPA Method 8260
MW-2	16.31	967.74	
MW-3/DUP	15.21	967.77	

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 7 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. A duplicate sample (DUP) was collected at MW-3.

The laboratory detected the following COCs in groundwater samples collected from MW-1, MW-2, and MW-3: benzene; *sec*-butylbenzene; carbon tetrachloride; chloroform; chloromethane; *cis*-1,2-DCE; *trans*-1,2-DCE; 1,2-dichloropropane; ethylbenzene; isopropylbenzene (cumene); PCE; toluene; and TCE. COC exceedances included:

- MW-1: Carbon tetrachloride; chloroform; *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: Benzene; carbon tetrachloride; chloromethane; ethylbenzene; PCE; toluene; and TCE were detected in the groundwater sample. Benzene; carbon tetrachloride; chloromethane; PCE; and TCE concentrations exceeded their respective EPA MCLs and MRBCA LDTLs. PCE also exceeded the corresponding MRBCA RBTL. Methylene chloride, a common laboratory contaminant, was also detected at an estimated concentration of 35.6 µg/L (J qualifier). 2-Butanone (methyl ethyl ketone) and *cis*-1,2-DCE were also detected. However, because of detections of these compounds in the field blank, they were qualified as non-detections at the reporting limit.
- MW-3: Benzene; *cis*-1,2-DCE; *trans*-1,2-DCE; ethylbenzene; isopropylbenzene (cumene); PCE; and TCE were detected in the groundwater sample. PCE and TCE concentrations exceeded their respective EPA MCLs and MRBCA LDTLs in both the original and duplicate sample. *cis*-1,2-DCE exceeded its EPA MCL and MRBCA LDTL in the duplicate sample. None exceeded an MRBCA RBTL. Methylene chloride, a common laboratory contaminant, was also detected at an estimated concentration of 3.4 µg/L (J qualifier).

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

TABLE 2
DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES, QUARTER 7
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												
	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:

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

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.

- 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
- PCE
- Tetrachloroethene
- RBTL
- Risk-based Target Level
- 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; methyl ethyl ketone; *cis*-1,2-DCE; and PCE were detected at concentrations greater than the method detection limit but less than the reporting limit (RL) in the field blank. Data were determined to be usable with the qualifications described in [Appendix D](#); qualifications were applied to the results reported in [Table 2](#).

Field duplicate precision was not met for PCE between the parent sample (MW-3) and the field duplicate (DUP). In addition, results for these analytes were qualified as estimated. All analyte concentrations were usable and reliable, with the qualifications applied.

5.0 DISCUSSION OF SIGNIFICANT FINDINGS AND CONCLUSIONS

This section summarizes significant findings and offers conclusions regarding the Phase II ESA, Quarter 7 sampling event.

All groundwater samples collected at the Site had low to moderate concentrations of COCs. The laboratory detected the following COCs: benzene; sec-butylbenzene; carbon tetrachloride; chloroform; chloromethane; *cis*-1,2-DCE; *trans*-1,2-DCE; 1,2-dichloropropane; ethylbenzene; isopropylbenzene (cumene); PCE; toluene; and TCE. COC exceedances included:

- Only the PCE concentration in the groundwater sample from MW-2 exceeded the MRBCA RBTL.
- PCE and TCE concentrations exceeded their respective EPA MCLs and MRBCA LDTLs in all groundwater samples.
- Benzene, carbon tetrachloride, and chloromethane were detected in MW-2 and exceeded their respective EPA MCLs and MRBCA LDTLs.
- In the MW-3 duplicate, *cis*-1,2-DCE concentration exceeded the EPA MCL and MRBCA LDTL. In the MW-3 parent sample, *cis*-1,2-DCE concentration did not exceed the EPA MCL or MRBCA LDTL.

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

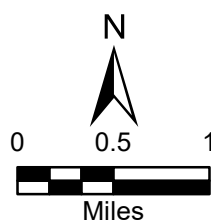
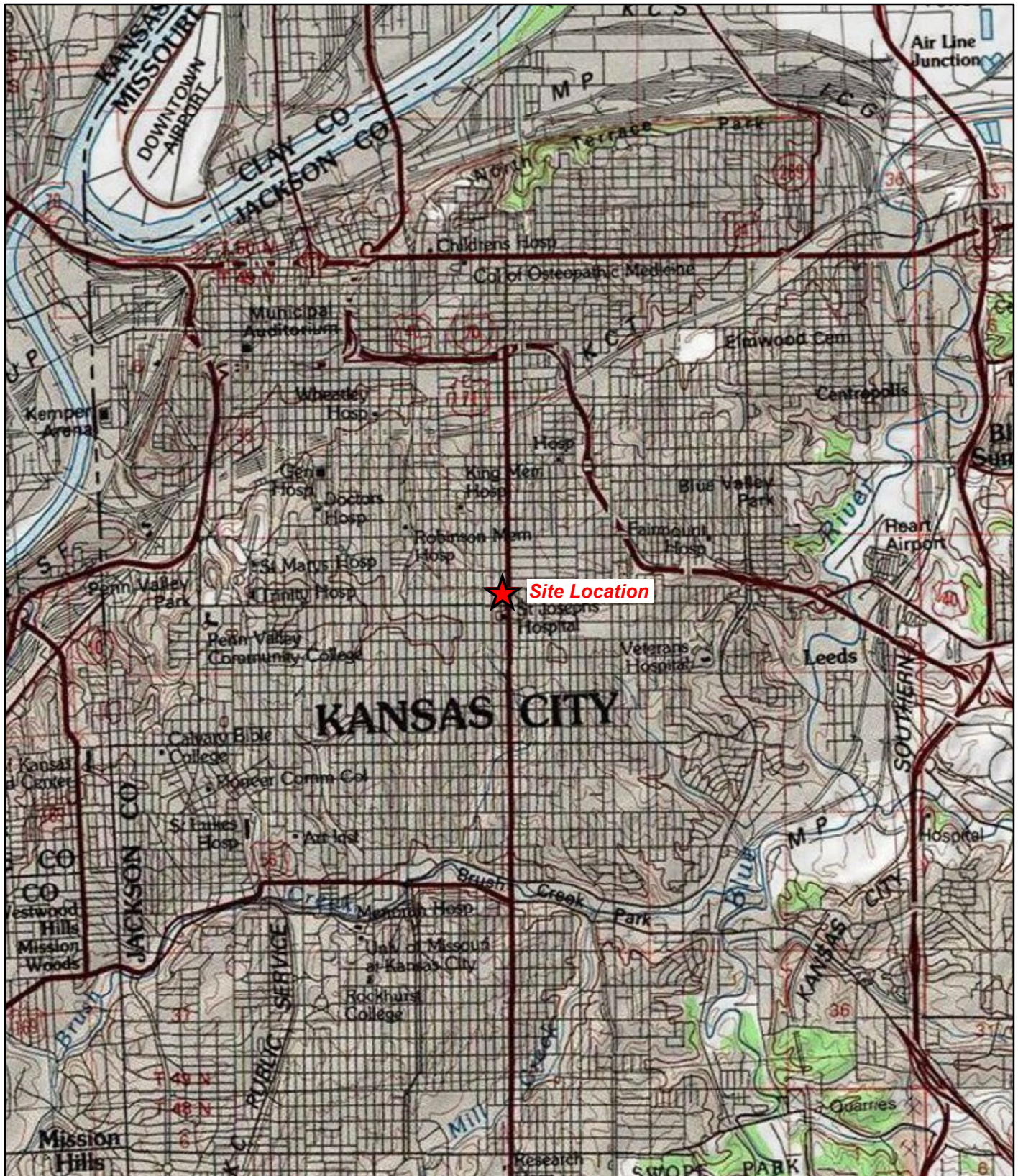
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APPENDIX A

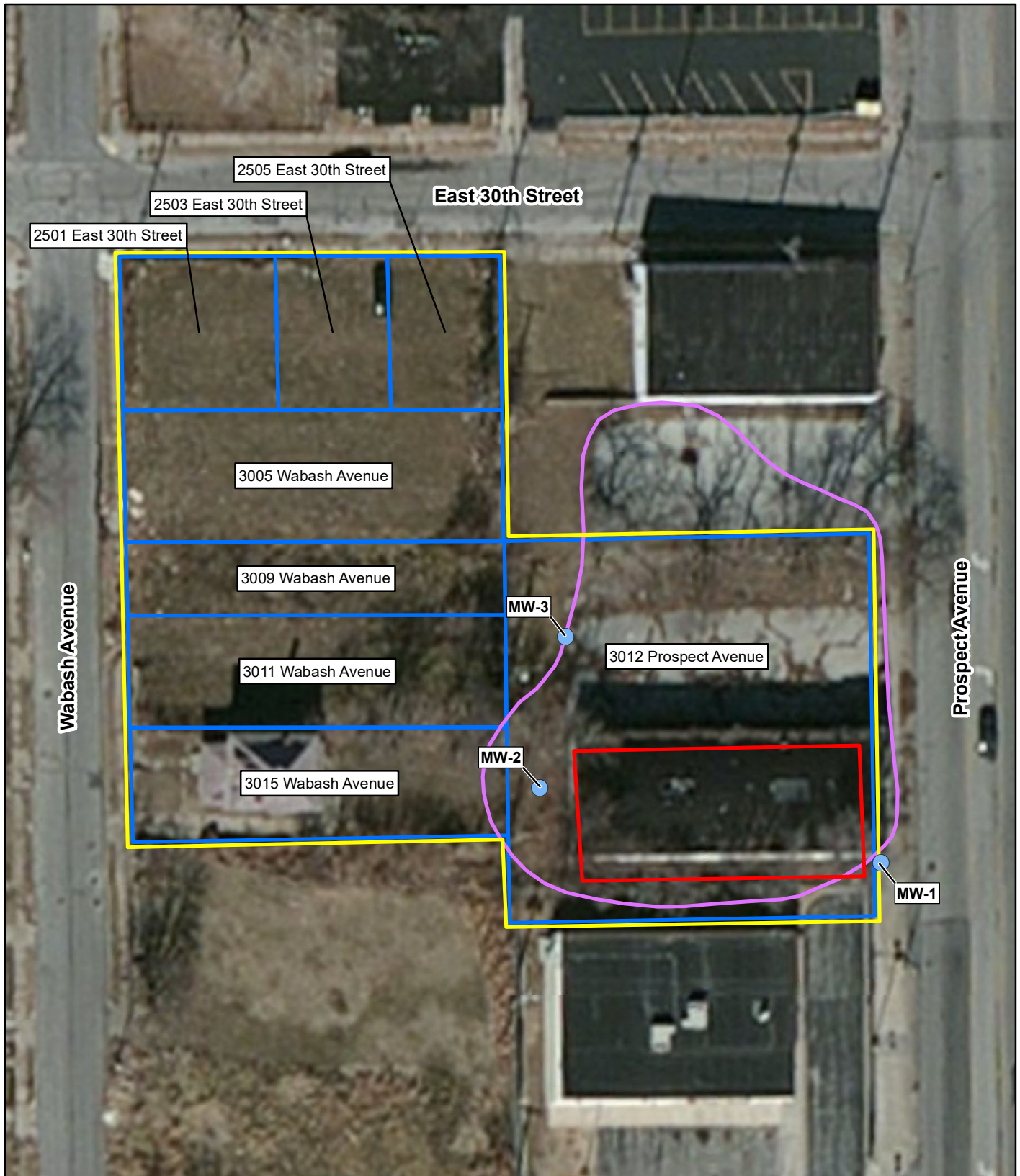
FIGURES



31st & Prospect Development Site
Kansas City, Missouri

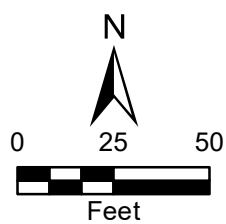
Figure 1
Site Location Map





Legend

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



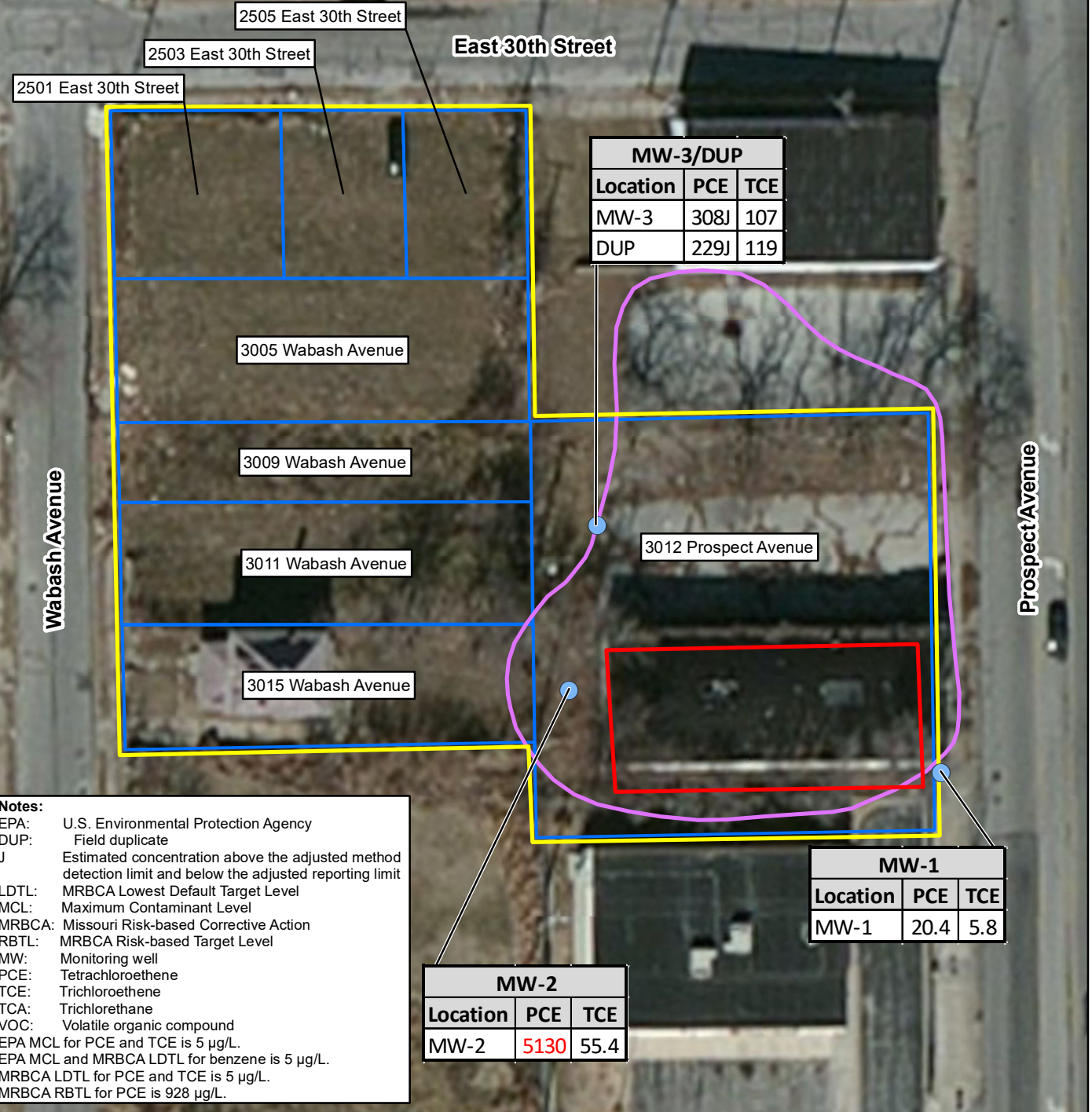
31st & Prospect Development Site
Kansas City, Missouri

Figure 2
Sample Location Map

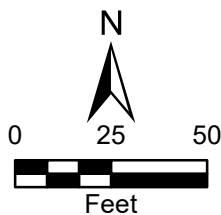


Notes:

* 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
PCE and TCE Exceedances in Groundwater
(Quarter 7 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
- 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	14,300,000
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)									
	1,430	NE	21,400	722	7,010	34,800,000	NE	646,000	NE	NE
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									
	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									
	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 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
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
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						
	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						
	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 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
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					
	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 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
- 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
- TCE
- Trichloroethene
- VOC
- Volatile organic compound

QUARTER 3, JULY 2022

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES, QUARTER 3
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	14,100,000	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, QUARTER 3
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					
	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 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
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					
	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 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
TCE	Trichloroethene
VOC	Volatile organic compound

QUARTER 6, JULY 2023

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES, QUARTER 6
31st & PROSPECT DEVELOPMENT SITE

Sample Location	Benzene	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	PCE	TCE
	EPA MCL				
	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:

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

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.

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
TCE	Trichloroethene
UJ	Estimated as a non-detect
VOC	Volatile organic compound

APPENDIX C

LOGBOOK

9-20-23

33

1030: S. Green & G. Jang
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 $\mu\text{S}/\text{cm}^3$

temp. 22.12 $^{\circ}\text{C}$

pH 6.58

TDS 0.030 g/L

2nd well volume

sp. Con. 2525 $\mu\text{S}/\text{cm}^3$

temp 20.2 $^{\circ}\text{C}$

pH 6.55

TDS 1.638 g/L

3rd well volume

sp. Con. 2532

temp 18.92

pH 4.55

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

purge 4 gal
 1st well volume
 temp: 16.46
 SpCon: 1324 $\mu\text{S}/\text{cm}^3$ (1.144 mS/cm)
 pH: 7.16
 TDS: 0.860

2nd well volume
 temp: 15.52
 SpCon: 1333 $\mu\text{S}/\text{cm}^3$ (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
 1150 collected sample MW-2
 move to MW-3

dtw: 15.21 ft
 total depth 210.9 ft

purge - 2.3 gal
 1st well volume

temp: 14.6
 SpCon: 2028 (1.707)
 pH: 6.84
 TDS: 1.320

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~~ 1.382

1200: collected MW-3
 1205 collected Dup of MW-3
 1238: collected field blank +
 returned to the office.

SGT

APPENDIX D

ANALYTICAL DATA PACKAGES AND DATA VALIDATION REPORTS

DATA VERIFICATION REPORT

Prepared by: Ellen McEntee
Date: October 4, 2023
Site Name/Task Order: 31st & Prospect Site / 103G65210190
Laboratory: Pace Analytical Services – Lenexa, Kansas

Data Package or SDG Number: 60437954

Sample Designations/Names:

MW-1

MW-2

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"/>	
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 4.2°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"/>	Field Blank: Acetone, 2-butanone (MEK), cis-1,2-dichloroethene, and tetrachloroethene were detected at concentrations greater than the method detection limit but less than the reporting limit (RL). The result for cis-1,2-dichloroethene in sample MW-1 is greater than the RL but less than ten times the field blank concentration and was qualified as estimated, with possible high bias (flagged J+). The results for 2-butanone (MEK) and cis-1,2-dichloroethene in sample MW-2 are detected at less than the RL and were qualified as non-detect (flagged U) at the RL. All other associated sample results are either greater than 10 times the blank concentration or nondetect and were not qualified.
Surrogate spikes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Data Package Element	Usable	Rejected	NA	Description of Affected Data (note specific samples and analytical parameters affected)
Matrix spikes/matrix spike duplicates (MS/MSD)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Matrix spikes from other data packages were not assessed.
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"/>	MW-3/DUP: Field duplicate precision was not met for tetrachloroethene. The parent sample and field duplicate results were qualified as estimated (flagged J).
Summary Data is usable with the qualifications applied. Results reported between the MDL and the RL were qualified as estimated (flagged J) by the laboratory.				



September 29, 2023

Kaitlyn Mitchell
Tetra Tech EMI
415 Oak
Kansas City, MO 64106

RE: Project: 31ST & PROSPECT
Pace Project No.: 60437954

Dear Kaitlyn Mitchell:

Enclosed are the analytical results for sample(s) received by the laboratory on September 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

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

Sincerely,

A handwritten signature in cursive script that reads "Jamie Church".

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

Enclosures

cc: Emily Fisher, TETRA TECH EMI
Sarah Green, Tetra Tech



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

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 #: T104704407-22-16

Utah Certification #: KS000212022-12

Illinois Certification #: 004592

Kansas Field Laboratory Accreditation: # E-92587

Missouri SEKS Micro Certification: 10070

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60437954001	MW-1	Water	09/20/23 11:20	09/20/23 15:26
60437954002	MW-2	Water	09/20/23 11:45	09/20/23 15:26
60437954003	MW-3	Water	09/20/23 12:00	09/20/23 15:26
60437954004	DUP	Water	09/20/23 12:05	09/20/23 15:26
60437954005	FIELD BLANK	Water	09/20/23 12:30	09/20/23 15:26
60437954006	TRIP BLANK	Water	09/20/23 12:30	09/20/23 15:26

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SAMPLE ANALYTE COUNT

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60437954001	MW-1	EPA 5030B/8260	HM1	69	PASI-K
60437954002	MW-2	EPA 5030B/8260	HM1	69	PASI-K
60437954003	MW-3	EPA 5030B/8260	HM1	69	PASI-K
60437954004	DUP	EPA 5030B/8260	HM1	69	PASI-K
60437954005	FIELD BLANK	EPA 5030B/8260	HM1	69	PASI-K
60437954006	TRIP BLANK	EPA 5030B/8260	HM1	69	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-1 Lab ID: 60437954001 Collected: 09/20/23 11:20 Received: 09/20/23 15:26 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		09/27/23 00:47	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		09/27/23 00:47	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		09/27/23 00:47	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 00:47	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 00:47	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		09/27/23 00:47	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		09/27/23 00:47	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		09/27/23 00:47	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		09/27/23 00:47	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		09/27/23 00:47	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		09/27/23 00:47	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		09/27/23 00:47	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		09/27/23 00:47	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/27/23 00:47	75-00-3	
Chloroform	0.23J	ug/L	1.0	0.22	1		09/27/23 00:47	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		09/27/23 00:47	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		09/27/23 00:47	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		09/27/23 00:47	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		09/27/23 00:47	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		09/27/23 00:47	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		09/27/23 00:47	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		09/27/23 00:47	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 00:47	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 00:47	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 00:47	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		09/27/23 00:47	107-06-2	
1,2-Dichloroethene (Total)	1.1	ug/L	1.0	0.22	1		09/27/23 00:47	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		09/27/23 00:47	75-35-4	
cis-1,2-Dichloroethene	1.1	ug/L	1.0	0.13	1		09/27/23 00:47	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		09/27/23 00:47	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		09/27/23 00:47	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		09/27/23 00:47	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		09/27/23 00:47	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		09/27/23 00:47	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		09/27/23 00:47	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		09/27/23 00:47	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		09/27/23 00:47	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		09/27/23 00:47	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		09/27/23 00:47	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		09/27/23 00:47	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		09/27/23 00:47	75-09-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-1 Lab ID: 60437954001 Collected: 09/20/23 11:20 Received: 09/20/23 15:26 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		09/27/23 00:47	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		09/27/23 00:47	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		09/27/23 00:47	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		09/27/23 00:47	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		09/27/23 00:47	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		09/27/23 00:47	79-34-5	
Tetrachloroethene	20.4	ug/L	1.0	0.33	1		09/27/23 00:47	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		09/27/23 00:47	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		09/27/23 00:47	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		09/27/23 00:47	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		09/27/23 00:47	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		09/27/23 00:47	79-00-5	
Trichloroethene	5.8	ug/L	1.0	0.21	1		09/27/23 00:47	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 00:47	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		09/27/23 00:47	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		09/27/23 00:47	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		09/27/23 00:47	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/27/23 00:47	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		09/27/23 00:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		09/27/23 00:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		09/27/23 00:47	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		09/27/23 00:47	2037-26-5	
Preservation pH	1.0		0.10		1		09/27/23 00:47		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-2 Lab ID: 60437954002 Collected: 09/20/23 11:45 Received: 09/20/23 15:26 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		09/27/23 03:41	67-64-1	
Benzene	15.6J	ug/L	50.0	6.8	50		09/27/23 03:41	71-43-2	
Bromobenzene	<4.4	ug/L	50.0	4.4	50		09/27/23 03:41	108-86-1	
Bromochloromethane	<10.1	ug/L	50.0	10.1	50		09/27/23 03:41	74-97-5	
Bromodichloromethane	<7.8	ug/L	50.0	7.8	50		09/27/23 03:41	75-27-4	
Bromoform	<33.8	ug/L	50.0	33.8	50		09/27/23 03:41	75-25-2	
Bromomethane	<23.0	ug/L	250	23.0	50		09/27/23 03:41	74-83-9	
2-Butanone (MEK)	49.2J	ug/L	500	48.8	50		09/27/23 03:41	78-93-3	
n-Butylbenzene	<7.6	ug/L	50.0	7.6	50		09/27/23 03:41	104-51-8	
sec-Butylbenzene	<5.5	ug/L	50.0	5.5	50		09/27/23 03:41	135-98-8	
tert-Butylbenzene	<6.0	ug/L	50.0	6.0	50		09/27/23 03:41	98-06-6	
Carbon disulfide	<48.9	ug/L	250	48.9	50		09/27/23 03:41	75-15-0	
Carbon tetrachloride	11.4J	ug/L	50.0	8.6	50		09/27/23 03:41	56-23-5	
Chlorobenzene	<4.4	ug/L	50.0	4.4	50		09/27/23 03:41	108-90-7	
Chloroethane	<18.7	ug/L	50.0	18.7	50		09/27/23 03:41	75-00-3	
Chloroform	<11.0	ug/L	50.0	11.0	50		09/27/23 03:41	67-66-3	
Chloromethane	24.9J	ug/L	50.0	14.2	50		09/27/23 03:41	74-87-3	
2-Chlorotoluene	<5.4	ug/L	50.0	5.4	50		09/27/23 03:41	95-49-8	
4-Chlorotoluene	<7.4	ug/L	50.0	7.4	50		09/27/23 03:41	106-43-4	
1,2-Dibromo-3-chloropropane	<39.0	ug/L	125	39.0	50		09/27/23 03:41	96-12-8	
Dibromochloromethane	<15.2	ug/L	50.0	15.2	50		09/27/23 03:41	124-48-1	
1,2-Dibromoethane (EDB)	<9.8	ug/L	50.0	9.8	50		09/27/23 03:41	106-93-4	
Dibromomethane	<5.4	ug/L	50.0	5.4	50		09/27/23 03:41	74-95-3	
1,2-Dichlorobenzene	<6.2	ug/L	50.0	6.2	50		09/27/23 03:41	95-50-1	
1,3-Dichlorobenzene	<6.6	ug/L	50.0	6.6	50		09/27/23 03:41	541-73-1	
1,4-Dichlorobenzene	<6.6	ug/L	50.0	6.6	50		09/27/23 03:41	106-46-7	
Dichlorodifluoromethane	<10	ug/L	50.0	10	50		09/27/23 03:41	75-71-8	
1,1-Dichloroethane	<6.1	ug/L	50.0	6.1	50		09/27/23 03:41	75-34-3	
1,2-Dichloroethane	<10.6	ug/L	50.0	10.6	50		09/27/23 03:41	107-06-2	
1,2-Dichloroethene (Total)	<11.1	ug/L	50.0	11.1	50		09/27/23 03:41	540-59-0	
1,1-Dichloroethene	<11.0	ug/L	50.0	11.0	50		09/27/23 03:41	75-35-4	
cis-1,2-Dichloroethene	7.2J	ug/L	50.0	6.4	50		09/27/23 03:41	156-59-2	
trans-1,2-Dichloroethene	<5.1	ug/L	50.0	5.1	50		09/27/23 03:41	156-60-5	
1,2-Dichloropropane	<7.0	ug/L	50.0	7.0	50		09/27/23 03:41	78-87-5	
1,3-Dichloropropane	<5.2	ug/L	50.0	5.2	50		09/27/23 03:41	142-28-9	
2,2-Dichloropropane	<8.1	ug/L	50.0	8.1	50		09/27/23 03:41	594-20-7	
1,1-Dichloropropene	<6.8	ug/L	50.0	6.8	50		09/27/23 03:41	563-58-6	
cis-1,3-Dichloropropene	<3.9	ug/L	50.0	3.9	50		09/27/23 03:41	10061-01-5	
trans-1,3-Dichloropropene	<9.1	ug/L	50.0	9.1	50		09/27/23 03:41	10061-02-6	
Ethylbenzene	6.3J	ug/L	50.0	6.0	50		09/27/23 03:41	100-41-4	
Hexachloro-1,3-butadiene	<20.8	ug/L	50.0	20.8	50		09/27/23 03:41	87-68-3	
2-Hexanone	<55.0	ug/L	500	55.0	50		09/27/23 03:41	591-78-6	
Isopropylbenzene (Cumene)	<4.8	ug/L	50.0	4.8	50		09/27/23 03:41	98-82-8	
p-Isopropyltoluene	<6.4	ug/L	50.0	6.4	50		09/27/23 03:41	99-87-6	
Methylene Chloride	34.6J	ug/L	50.0	19.6	50		09/27/23 03:41	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-2 Lab ID: 60437954002 Collected: 09/20/23 11:45 Received: 09/20/23 15:26 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		09/27/23 03:41	108-10-1	
Methyl-tert-butyl ether	<6.4	ug/L	50.0	6.4	50		09/27/23 03:41	1634-04-4	
Naphthalene	<41.1	ug/L	500	41.1	50		09/27/23 03:41	91-20-3	
n-Propylbenzene	<6.0	ug/L	50.0	6.0	50		09/27/23 03:41	103-65-1	
Styrene	<6.2	ug/L	50.0	6.2	50		09/27/23 03:41	100-42-5	
1,1,1,2-Tetrachloroethane	<4.2	ug/L	50.0	4.2	50		09/27/23 03:41	630-20-6	
1,1,2,2-Tetrachloroethane	<7.7	ug/L	50.0	7.7	50		09/27/23 03:41	79-34-5	
Tetrachloroethene	5130	ug/L	50.0	16.5	50		09/27/23 03:41	127-18-4	
Toluene	20.7J	ug/L	50.0	12.6	50		09/27/23 03:41	108-88-3	
1,2,3-Trichlorobenzene	<46.4	ug/L	50.0	46.4	50		09/27/23 03:41	87-61-6	
1,2,4-Trichlorobenzene	<36.6	ug/L	50.0	36.6	50		09/27/23 03:41	120-82-1	
1,1,1-Trichloroethane	<5.4	ug/L	50.0	5.4	50		09/27/23 03:41	71-55-6	
1,1,2-Trichloroethane	<7.1	ug/L	50.0	7.1	50		09/27/23 03:41	79-00-5	
Trichloroethene	55.4	ug/L	50.0	10.5	50		09/27/23 03:41	79-01-6	
Trichlorofluoromethane	<8.2	ug/L	50.0	8.2	50		09/27/23 03:41	75-69-4	
1,2,3-Trichloropropane	<20.4	ug/L	125	20.4	50		09/27/23 03:41	96-18-4	
1,2,4-Trimethylbenzene	<16.2	ug/L	50.0	16.2	50		09/27/23 03:41	95-63-6	
1,3,5-Trimethylbenzene	<4.5	ug/L	50.0	4.5	50		09/27/23 03:41	108-67-8	
Vinyl chloride	<8.4	ug/L	50.0	8.4	50		09/27/23 03:41	75-01-4	
Xylene (Total)	<14.1	ug/L	150	14.1	50		09/27/23 03:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		50		09/27/23 03:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		50		09/27/23 03:41	2199-69-1	
Toluene-d8 (S)	100	%	80-120		50		09/27/23 03:41	2037-26-5	
Preservation pH	1.0		0.10		50		09/27/23 03:41		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-3 Lab ID: 60437954003 Collected: 09/20/23 12:00 Received: 09/20/23 15:26 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		09/27/23 03:55	67-64-1	
Benzene	1.7J	ug/L	5.0	0.68	5		09/27/23 03:55	71-43-2	
Bromobenzene	<0.44	ug/L	5.0	0.44	5		09/27/23 03:55	108-86-1	
Bromochloromethane	<1.0	ug/L	5.0	1.0	5		09/27/23 03:55	74-97-5	
Bromodichloromethane	<0.78	ug/L	5.0	0.78	5		09/27/23 03:55	75-27-4	
Bromoform	<3.4	ug/L	5.0	3.4	5		09/27/23 03:55	75-25-2	
Bromomethane	<2.3	ug/L	25.0	2.3	5		09/27/23 03:55	74-83-9	
2-Butanone (MEK)	<4.9	ug/L	50.0	4.9	5		09/27/23 03:55	78-93-3	
n-Butylbenzene	<0.76	ug/L	5.0	0.76	5		09/27/23 03:55	104-51-8	
sec-Butylbenzene	<0.55	ug/L	5.0	0.55	5		09/27/23 03:55	135-98-8	
tert-Butylbenzene	<0.60	ug/L	5.0	0.60	5		09/27/23 03:55	98-06-6	
Carbon disulfide	<4.9	ug/L	25.0	4.9	5		09/27/23 03:55	75-15-0	
Carbon tetrachloride	<0.86	ug/L	5.0	0.86	5		09/27/23 03:55	56-23-5	
Chlorobenzene	<0.44	ug/L	5.0	0.44	5		09/27/23 03:55	108-90-7	
Chloroethane	<1.9	ug/L	5.0	1.9	5		09/27/23 03:55	75-00-3	
Chloroform	<1.1	ug/L	5.0	1.1	5		09/27/23 03:55	67-66-3	
Chloromethane	<1.4	ug/L	5.0	1.4	5		09/27/23 03:55	74-87-3	
2-Chlorotoluene	<0.54	ug/L	5.0	0.54	5		09/27/23 03:55	95-49-8	
4-Chlorotoluene	<0.74	ug/L	5.0	0.74	5		09/27/23 03:55	106-43-4	
1,2-Dibromo-3-chloropropane	<3.9	ug/L	12.5	3.9	5		09/27/23 03:55	96-12-8	
Dibromochloromethane	<1.5	ug/L	5.0	1.5	5		09/27/23 03:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.98	ug/L	5.0	0.98	5		09/27/23 03:55	106-93-4	
Dibromomethane	<0.54	ug/L	5.0	0.54	5		09/27/23 03:55	74-95-3	
1,2-Dichlorobenzene	<0.62	ug/L	5.0	0.62	5		09/27/23 03:55	95-50-1	
1,3-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		09/27/23 03:55	541-73-1	
1,4-Dichlorobenzene	<0.66	ug/L	5.0	0.66	5		09/27/23 03:55	106-46-7	
Dichlorodifluoromethane	<1.0	ug/L	5.0	1.0	5		09/27/23 03:55	75-71-8	
1,1-Dichloroethane	<0.61	ug/L	5.0	0.61	5		09/27/23 03:55	75-34-3	
1,2-Dichloroethane	<1.1	ug/L	5.0	1.1	5		09/27/23 03:55	107-06-2	
1,2-Dichloroethene (Total)	68.4	ug/L	5.0	1.1	5		09/27/23 03:55	540-59-0	
1,1-Dichloroethene	<1.1	ug/L	5.0	1.1	5		09/27/23 03:55	75-35-4	
cis-1,2-Dichloroethene	67.6	ug/L	5.0	0.64	5		09/27/23 03:55	156-59-2	
trans-1,2-Dichloroethene	0.76J	ug/L	5.0	0.51	5		09/27/23 03:55	156-60-5	
1,2-Dichloropropane	<0.70	ug/L	5.0	0.70	5		09/27/23 03:55	78-87-5	
1,3-Dichloropropane	<0.52	ug/L	5.0	0.52	5		09/27/23 03:55	142-28-9	
2,2-Dichloropropane	<0.81	ug/L	5.0	0.81	5		09/27/23 03:55	594-20-7	
1,1-Dichloropropene	<0.68	ug/L	5.0	0.68	5		09/27/23 03:55	563-58-6	
cis-1,3-Dichloropropene	<0.39	ug/L	5.0	0.39	5		09/27/23 03:55	10061-01-5	
trans-1,3-Dichloropropene	<0.91	ug/L	5.0	0.91	5		09/27/23 03:55	10061-02-6	
Ethylbenzene	0.87J	ug/L	5.0	0.60	5		09/27/23 03:55	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	5		09/27/23 03:55	87-68-3	
2-Hexanone	<5.5	ug/L	50.0	5.5	5		09/27/23 03:55	591-78-6	
Isopropylbenzene (Cumene)	0.73J	ug/L	5.0	0.48	5		09/27/23 03:55	98-82-8	
p-Isopropyltoluene	<0.64	ug/L	5.0	0.64	5		09/27/23 03:55	99-87-6	
Methylene Chloride	3.4J	ug/L	5.0	2.0	5		09/27/23 03:55	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: MW-3 Lab ID: 60437954003 Collected: 09/20/23 12:00 Received: 09/20/23 15:26 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		09/27/23 03:55	108-10-1	
Methyl-tert-butyl ether	<0.64	ug/L	5.0	0.64	5		09/27/23 03:55	1634-04-4	
Naphthalene	<4.1	ug/L	50.0	4.1	5		09/27/23 03:55	91-20-3	
n-Propylbenzene	<0.60	ug/L	5.0	0.60	5		09/27/23 03:55	103-65-1	
Styrene	<0.62	ug/L	5.0	0.62	5		09/27/23 03:55	100-42-5	
1,1,1,2-Tetrachloroethane	<0.42	ug/L	5.0	0.42	5		09/27/23 03:55	630-20-6	
1,1,2,2-Tetrachloroethane	<0.77	ug/L	5.0	0.77	5		09/27/23 03:55	79-34-5	
Tetrachloroethene	308	ug/L	5.0	1.6	5		09/27/23 03:55	127-18-4	
Toluene	<1.3	ug/L	5.0	1.3	5		09/27/23 03:55	108-88-3	
1,2,3-Trichlorobenzene	<4.6	ug/L	5.0	4.6	5		09/27/23 03:55	87-61-6	
1,2,4-Trichlorobenzene	<3.7	ug/L	5.0	3.7	5		09/27/23 03:55	120-82-1	
1,1,1-Trichloroethane	<0.54	ug/L	5.0	0.54	5		09/27/23 03:55	71-55-6	
1,1,2-Trichloroethane	<0.71	ug/L	5.0	0.71	5		09/27/23 03:55	79-00-5	
Trichloroethene	107	ug/L	5.0	1.0	5		09/27/23 03:55	79-01-6	
Trichlorofluoromethane	<0.82	ug/L	5.0	0.82	5		09/27/23 03:55	75-69-4	
1,2,3-Trichloropropane	<2.0	ug/L	12.5	2.0	5		09/27/23 03:55	96-18-4	
1,2,4-Trimethylbenzene	<1.6	ug/L	5.0	1.6	5		09/27/23 03:55	95-63-6	
1,3,5-Trimethylbenzene	<0.45	ug/L	5.0	0.45	5		09/27/23 03:55	108-67-8	
Vinyl chloride	<0.84	ug/L	5.0	0.84	5		09/27/23 03:55	75-01-4	
Xylene (Total)	<1.4	ug/L	15.0	1.4	5		09/27/23 03:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		5		09/27/23 03:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		5		09/27/23 03:55	2199-69-1	
Toluene-d8 (S)	101	%	80-120		5		09/27/23 03:55	2037-26-5	
Preservation pH	1.0		0.10		5		09/27/23 03:55		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: DUP Lab ID: 60437954004 Collected: 09/20/23 12:05 Received: 09/20/23 15:26 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		09/27/23 01:02	67-64-1	
Benzene	0.85J	ug/L	1.0	0.14	1		09/27/23 01:02	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		09/27/23 01:02	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 01:02	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:02	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		09/27/23 01:02	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		09/27/23 01:02	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		09/27/23 01:02	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		09/27/23 01:02	104-51-8	
sec-Butylbenzene	0.12J	ug/L	1.0	0.11	1		09/27/23 01:02	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		09/27/23 01:02	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		09/27/23 01:02	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		09/27/23 01:02	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/27/23 01:02	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		09/27/23 01:02	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		09/27/23 01:02	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		09/27/23 01:02	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		09/27/23 01:02	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		09/27/23 01:02	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		09/27/23 01:02	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		09/27/23 01:02	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		09/27/23 01:02	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:02	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:02	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 01:02	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		09/27/23 01:02	107-06-2	
1,2-Dichloroethene (Total)	76.1	ug/L	1.0	0.22	1		09/27/23 01:02	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		09/27/23 01:02	75-35-4	
cis-1,2-Dichloroethene	75.3	ug/L	1.0	0.13	1		09/27/23 01:02	156-59-2	
trans-1,2-Dichloroethene	0.85J	ug/L	1.0	0.10	1		09/27/23 01:02	156-60-5	
1,2-Dichloropropane	0.16J	ug/L	1.0	0.14	1		09/27/23 01:02	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		09/27/23 01:02	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:02	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		09/27/23 01:02	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		09/27/23 01:02	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		09/27/23 01:02	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		09/27/23 01:02	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		09/27/23 01:02	591-78-6	
Isopropylbenzene (Cumene)	0.47J	ug/L	1.0	0.097	1		09/27/23 01:02	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:02	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		09/27/23 01:02	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: DUP Lab ID: 60437954004 Collected: 09/20/23 12:05 Received: 09/20/23 15:26 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		09/27/23 01:02	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		09/27/23 01:02	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		09/27/23 01:02	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:02	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		09/27/23 01:02	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		09/27/23 01:02	79-34-5	
Tetrachloroethene	229	ug/L	5.0	1.6	5		09/27/23 22:35	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		09/27/23 01:02	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		09/27/23 01:02	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		09/27/23 01:02	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		09/27/23 01:02	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		09/27/23 01:02	79-00-5	
Trichloroethene	119	ug/L	1.0	0.21	1		09/27/23 01:02	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:02	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		09/27/23 01:02	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		09/27/23 01:02	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		09/27/23 01:02	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/27/23 01:02	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		09/27/23 01:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		09/27/23 01:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		09/27/23 01:02	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		09/27/23 01:02	2037-26-5	
Preservation pH	1.0		0.10		1		09/27/23 01:02		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: FIELD BLANK Lab ID: 60437954005 Collected: 09/20/23 12:30 Received: 09/20/23 15:26 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	2.7J	ug/L	10.0	2.5	1		09/27/23 01:16	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		09/27/23 01:16	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		09/27/23 01:16	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 01:16	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:16	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		09/27/23 01:16	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		09/27/23 01:16	74-83-9	
2-Butanone (MEK)	1.1J	ug/L	10.0	0.98	1		09/27/23 01:16	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		09/27/23 01:16	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		09/27/23 01:16	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		09/27/23 01:16	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		09/27/23 01:16	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		09/27/23 01:16	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/27/23 01:16	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		09/27/23 01:16	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		09/27/23 01:16	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		09/27/23 01:16	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		09/27/23 01:16	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		09/27/23 01:16	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		09/27/23 01:16	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		09/27/23 01:16	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		09/27/23 01:16	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:16	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:16	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		09/27/23 01:16	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		09/27/23 01:16	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		09/27/23 01:16	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		09/27/23 01:16	75-35-4	
cis-1,2-Dichloroethene	0.14J	ug/L	1.0	0.13	1		09/27/23 01:16	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		09/27/23 01:16	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		09/27/23 01:16	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		09/27/23 01:16	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:16	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		09/27/23 01:16	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		09/27/23 01:16	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		09/27/23 01:16	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		09/27/23 01:16	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		09/27/23 01:16	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		09/27/23 01:16	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		09/27/23 01:16	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		09/27/23 01:16	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: FIELD BLANK Lab ID: 60437954005 Collected: 09/20/23 12:30 Received: 09/20/23 15:26 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		09/27/23 01:16	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		09/27/23 01:16	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		09/27/23 01:16	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		09/27/23 01:16	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		09/27/23 01:16	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		09/27/23 01:16	79-34-5	
Tetrachloroethene	0.84J	ug/L	1.0	0.33	1		09/27/23 01:16	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		09/27/23 01:16	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		09/27/23 01:16	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		09/27/23 01:16	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		09/27/23 01:16	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		09/27/23 01:16	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		09/27/23 01:16	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		09/27/23 01:16	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		09/27/23 01:16	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		09/27/23 01:16	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		09/27/23 01:16	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/27/23 01:16	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		09/27/23 01:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		09/27/23 01:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		09/27/23 01:16	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		09/27/23 01:16	2037-26-5	
Preservation pH	1.0		0.10		1		09/27/23 01:16		

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: TRIP BLANK Lab ID: 60437954006 Collected: 09/20/23 12:30 Received: 09/20/23 15:26 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		09/26/23 23:21	67-64-1	
Benzene	<0.14	ug/L	1.0	0.14	1		09/26/23 23:21	71-43-2	
Bromobenzene	<0.088	ug/L	1.0	0.088	1		09/26/23 23:21	108-86-1	
Bromochloromethane	<0.20	ug/L	1.0	0.20	1		09/26/23 23:21	74-97-5	
Bromodichloromethane	<0.16	ug/L	1.0	0.16	1		09/26/23 23:21	75-27-4	
Bromoform	<0.68	ug/L	1.0	0.68	1		09/26/23 23:21	75-25-2	
Bromomethane	<0.46	ug/L	5.0	0.46	1		09/26/23 23:21	74-83-9	
2-Butanone (MEK)	<0.98	ug/L	10.0	0.98	1		09/26/23 23:21	78-93-3	
n-Butylbenzene	<0.15	ug/L	1.0	0.15	1		09/26/23 23:21	104-51-8	
sec-Butylbenzene	<0.11	ug/L	1.0	0.11	1		09/26/23 23:21	135-98-8	
tert-Butylbenzene	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	98-06-6	
Carbon disulfide	<0.98	ug/L	5.0	0.98	1		09/26/23 23:21	75-15-0	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		09/26/23 23:21	56-23-5	
Chlorobenzene	<0.089	ug/L	1.0	0.089	1		09/26/23 23:21	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		09/26/23 23:21	75-00-3	
Chloroform	<0.22	ug/L	1.0	0.22	1		09/26/23 23:21	67-66-3	
Chloromethane	<0.28	ug/L	1.0	0.28	1		09/26/23 23:21	74-87-3	
2-Chlorotoluene	<0.11	ug/L	1.0	0.11	1		09/26/23 23:21	95-49-8	
4-Chlorotoluene	<0.15	ug/L	1.0	0.15	1		09/26/23 23:21	106-43-4	
1,2-Dibromo-3-chloropropane	<0.78	ug/L	2.5	0.78	1		09/26/23 23:21	96-12-8	
Dibromochloromethane	<0.30	ug/L	1.0	0.30	1		09/26/23 23:21	124-48-1	
1,2-Dibromoethane (EDB)	<0.20	ug/L	1.0	0.20	1		09/26/23 23:21	106-93-4	
Dibromomethane	<0.11	ug/L	1.0	0.11	1		09/26/23 23:21	74-95-3	
1,2-Dichlorobenzene	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	95-50-1	
1,3-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/26/23 23:21	541-73-1	
1,4-Dichlorobenzene	<0.13	ug/L	1.0	0.13	1		09/26/23 23:21	106-46-7	
Dichlorodifluoromethane	<0.20	ug/L	1.0	0.20	1		09/26/23 23:21	75-71-8	
1,1-Dichloroethane	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	75-34-3	
1,2-Dichloroethane	<0.21	ug/L	1.0	0.21	1		09/26/23 23:21	107-06-2	
1,2-Dichloroethene (Total)	<0.22	ug/L	1.0	0.22	1		09/26/23 23:21	540-59-0	
1,1-Dichloroethene	<0.22	ug/L	1.0	0.22	1		09/26/23 23:21	75-35-4	
cis-1,2-Dichloroethene	<0.13	ug/L	1.0	0.13	1		09/26/23 23:21	156-59-2	
trans-1,2-Dichloroethene	<0.10	ug/L	1.0	0.10	1		09/26/23 23:21	156-60-5	
1,2-Dichloropropane	<0.14	ug/L	1.0	0.14	1		09/26/23 23:21	78-87-5	
1,3-Dichloropropane	<0.10	ug/L	1.0	0.10	1		09/26/23 23:21	142-28-9	
2,2-Dichloropropane	<0.16	ug/L	1.0	0.16	1		09/26/23 23:21	594-20-7	
1,1-Dichloropropene	<0.14	ug/L	1.0	0.14	1		09/26/23 23:21	563-58-6	
cis-1,3-Dichloropropene	<0.078	ug/L	1.0	0.078	1		09/26/23 23:21	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	1.0	0.18	1		09/26/23 23:21	10061-02-6	
Ethylbenzene	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	100-41-4	
Hexachloro-1,3-butadiene	<0.42	ug/L	1.0	0.42	1		09/26/23 23:21	87-68-3	
2-Hexanone	<1.1	ug/L	10.0	1.1	1		09/26/23 23:21	591-78-6	
Isopropylbenzene (Cumene)	<0.097	ug/L	1.0	0.097	1		09/26/23 23:21	98-82-8	
p-Isopropyltoluene	<0.13	ug/L	1.0	0.13	1		09/26/23 23:21	99-87-6	
Methylene Chloride	<0.39	ug/L	1.0	0.39	1		09/26/23 23:21	75-09-2	

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ANALYTICAL RESULTS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Sample: TRIP BLANK Lab ID: 60437954006 Collected: 09/20/23 12:30 Received: 09/20/23 15:26 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		09/26/23 23:21	108-10-1	
Methyl-tert-butyl ether	<0.13	ug/L	1.0	0.13	1		09/26/23 23:21	1634-04-4	
Naphthalene	<0.82	ug/L	10.0	0.82	1		09/26/23 23:21	91-20-3	
n-Propylbenzene	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	103-65-1	
Styrene	<0.12	ug/L	1.0	0.12	1		09/26/23 23:21	100-42-5	
1,1,1,2-Tetrachloroethane	<0.084	ug/L	1.0	0.084	1		09/26/23 23:21	630-20-6	
1,1,2,2-Tetrachloroethane	<0.15	ug/L	1.0	0.15	1		09/26/23 23:21	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.0	0.33	1		09/26/23 23:21	127-18-4	
Toluene	<0.25	ug/L	1.0	0.25	1		09/26/23 23:21	108-88-3	
1,2,3-Trichlorobenzene	<0.93	ug/L	1.0	0.93	1		09/26/23 23:21	87-61-6	
1,2,4-Trichlorobenzene	<0.73	ug/L	1.0	0.73	1		09/26/23 23:21	120-82-1	
1,1,1-Trichloroethane	<0.11	ug/L	1.0	0.11	1		09/26/23 23:21	71-55-6	
1,1,2-Trichloroethane	<0.14	ug/L	1.0	0.14	1		09/26/23 23:21	79-00-5	
Trichloroethene	<0.21	ug/L	1.0	0.21	1		09/26/23 23:21	79-01-6	
Trichlorofluoromethane	<0.16	ug/L	1.0	0.16	1		09/26/23 23:21	75-69-4	
1,2,3-Trichloropropane	<0.41	ug/L	2.5	0.41	1		09/26/23 23:21	96-18-4	
1,2,4-Trimethylbenzene	<0.32	ug/L	1.0	0.32	1		09/26/23 23:21	95-63-6	
1,3,5-Trimethylbenzene	<0.090	ug/L	1.0	0.090	1		09/26/23 23:21	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/26/23 23:21	75-01-4	
Xylene (Total)	<0.28	ug/L	3.0	0.28	1		09/26/23 23:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		09/26/23 23:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		09/26/23 23:21	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		09/26/23 23:21	2037-26-5	
Preservation pH	1.0		0.10		1		09/26/23 23:21		

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60437954

QC Batch: 866195 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: 60437954001, 60437954002, 60437954003, 60437954004, 60437954005, 60437954006

METHOD BLANK: 3430145 Matrix: Water
Associated Lab Samples: 60437954001, 60437954002, 60437954003, 60437954004, 60437954005, 60437954006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.084	1.0	0.084	09/26/23 23:06	
1,1,1-Trichloroethane	ug/L	<0.11	1.0	0.11	09/26/23 23:06	
1,1,2,2-Tetrachloroethane	ug/L	<0.15	1.0	0.15	09/26/23 23:06	
1,1,2-Trichloroethane	ug/L	<0.14	1.0	0.14	09/26/23 23:06	
1,1-Dichloroethane	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
1,1-Dichloroethene	ug/L	<0.22	1.0	0.22	09/26/23 23:06	
1,1-Dichloropropene	ug/L	<0.14	1.0	0.14	09/26/23 23:06	
1,2,3-Trichlorobenzene	ug/L	<0.93	1.0	0.93	09/26/23 23:06	
1,2,3-Trichloropropane	ug/L	<0.41	2.5	0.41	09/26/23 23:06	
1,2,4-Trichlorobenzene	ug/L	<0.73	1.0	0.73	09/26/23 23:06	
1,2,4-Trimethylbenzene	ug/L	<0.32	1.0	0.32	09/26/23 23:06	
1,2-Dibromo-3-chloropropane	ug/L	<0.78	2.5	0.78	09/26/23 23:06	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	0.20	09/26/23 23:06	
1,2-Dichlorobenzene	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
1,2-Dichloroethane	ug/L	<0.21	1.0	0.21	09/26/23 23:06	
1,2-Dichloroethene (Total)	ug/L	<0.22	1.0	0.22	09/26/23 23:06	
1,2-Dichloropropane	ug/L	<0.14	1.0	0.14	09/26/23 23:06	
1,3,5-Trimethylbenzene	ug/L	<0.090	1.0	0.090	09/26/23 23:06	
1,3-Dichlorobenzene	ug/L	<0.13	1.0	0.13	09/26/23 23:06	
1,3-Dichloropropane	ug/L	<0.10	1.0	0.10	09/26/23 23:06	
1,4-Dichlorobenzene	ug/L	<0.13	1.0	0.13	09/26/23 23:06	
2,2-Dichloropropane	ug/L	<0.16	1.0	0.16	09/26/23 23:06	
2-Butanone (MEK)	ug/L	<0.98	10.0	0.98	09/26/23 23:06	
2-Chlorotoluene	ug/L	<0.11	1.0	0.11	09/26/23 23:06	
2-Hexanone	ug/L	<1.1	10.0	1.1	09/26/23 23:06	
4-Chlorotoluene	ug/L	<0.15	1.0	0.15	09/26/23 23:06	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.74	10.0	0.74	09/26/23 23:06	
Acetone	ug/L	<2.5	10.0	2.5	09/26/23 23:06	
Benzene	ug/L	<0.14	1.0	0.14	09/26/23 23:06	
Bromobenzene	ug/L	<0.088	1.0	0.088	09/26/23 23:06	
Bromochloromethane	ug/L	<0.20	1.0	0.20	09/26/23 23:06	
Bromodichloromethane	ug/L	<0.16	1.0	0.16	09/26/23 23:06	
Bromoform	ug/L	<0.68	1.0	0.68	09/26/23 23:06	
Bromomethane	ug/L	<0.46	5.0	0.46	09/26/23 23:06	
Carbon disulfide	ug/L	<0.98	5.0	0.98	09/26/23 23:06	
Carbon tetrachloride	ug/L	<0.17	1.0	0.17	09/26/23 23:06	
Chlorobenzene	ug/L	<0.089	1.0	0.089	09/26/23 23:06	
Chloroethane	ug/L	<0.37	1.0	0.37	09/26/23 23:06	
Chloroform	ug/L	<0.22	1.0	0.22	09/26/23 23:06	
Chloromethane	ug/L	<0.28	1.0	0.28	09/26/23 23:06	

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.: 60437954

METHOD BLANK: 3430145

Matrix: Water

Associated Lab Samples: 60437954001, 60437954002, 60437954003, 60437954004, 60437954005, 60437954006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	<0.13	1.0	0.13	09/26/23 23:06	
cis-1,3-Dichloropropene	ug/L	<0.078	1.0	0.078	09/26/23 23:06	
Dibromochloromethane	ug/L	<0.30	1.0	0.30	09/26/23 23:06	
Dibromomethane	ug/L	<0.11	1.0	0.11	09/26/23 23:06	
Dichlorodifluoromethane	ug/L	<0.20	1.0	0.20	09/26/23 23:06	
Ethylbenzene	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
Hexachloro-1,3-butadiene	ug/L	<0.42	1.0	0.42	09/26/23 23:06	
Isopropylbenzene (Cumene)	ug/L	<0.097	1.0	0.097	09/26/23 23:06	
Methyl-tert-butyl ether	ug/L	<0.13	1.0	0.13	09/26/23 23:06	
Methylene Chloride	ug/L	<0.39	1.0	0.39	09/26/23 23:06	
n-Butylbenzene	ug/L	<0.15	1.0	0.15	09/26/23 23:06	
n-Propylbenzene	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
Naphthalene	ug/L	<0.82	10.0	0.82	09/26/23 23:06	
p-Isopropyltoluene	ug/L	<0.13	1.0	0.13	09/26/23 23:06	
sec-Butylbenzene	ug/L	<0.11	1.0	0.11	09/26/23 23:06	
Styrene	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
tert-Butylbenzene	ug/L	<0.12	1.0	0.12	09/26/23 23:06	
Tetrachloroethene	ug/L	<0.33	1.0	0.33	09/26/23 23:06	
Toluene	ug/L	<0.25	1.0	0.25	09/26/23 23:06	
trans-1,2-Dichloroethene	ug/L	<0.10	1.0	0.10	09/26/23 23:06	
trans-1,3-Dichloropropene	ug/L	<0.18	1.0	0.18	09/26/23 23:06	
Trichloroethene	ug/L	<0.21	1.0	0.21	09/26/23 23:06	
Trichlorofluoromethane	ug/L	<0.16	1.0	0.16	09/26/23 23:06	
Vinyl chloride	ug/L	<0.17	1.0	0.17	09/26/23 23:06	
Xylene (Total)	ug/L	<0.28	3.0	0.28	09/26/23 23:06	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		09/26/23 23:06	
4-Bromofluorobenzene (S)	%	98	80-120		09/26/23 23:06	
Toluene-d8 (S)	%	100	80-120		09/26/23 23:06	

LABORATORY CONTROL SAMPLE: 3430146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	22.3	112	80-120	
1,1,1-Trichloroethane	ug/L	20	19.6	98	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	70-130	
1,1,2-Trichloroethane	ug/L	20	21.9	110	75-125	
1,1-Dichloroethane	ug/L	20	20.5	102	75-120	
1,1-Dichloroethene	ug/L	20	21.6	108	75-120	
1,1-Dichloropropene	ug/L	20	21.1	105	75-125	
1,2,3-Trichlorobenzene	ug/L	20	23.4	117	70-125	
1,2,3-Trichloropropane	ug/L	20	21.3	107	75-125	
1,2,4-Trichlorobenzene	ug/L	20	23.0	115	75-120	
1,2,4-Trimethylbenzene	ug/L	20	21.8	109	75-120	
1,2-Dibromo-3-chloropropane	ug/L	20	18.9	94	65-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60437954

LABORATORY CONTROL SAMPLE: 3430146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	21.6	108	80-120	
1,2-Dichlorobenzene	ug/L	20	22.4	112	80-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloroethene (Total)	ug/L	40	43.1	108	80-120	
1,2-Dichloropropane	ug/L	20	21.4	107	80-120	
1,3,5-Trimethylbenzene	ug/L	20	22.3	111	75-120	
1,3-Dichlorobenzene	ug/L	20	22.4	112	80-120	
1,3-Dichloropropane	ug/L	20	22.0	110	80-120	
1,4-Dichlorobenzene	ug/L	20	22.4	112	80-120	
2,2-Dichloropropane	ug/L	20	17.1	86	60-130	
2-Butanone (MEK)	ug/L	100	92.5	92	60-140	
2-Chlorotoluene	ug/L	20	20.8	104	80-120	
2-Hexanone	ug/L	100	99.3	99	55-155	
4-Chlorotoluene	ug/L	20	22.1	111	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.5	94	70-135	
Acetone	ug/L	100	83.2	83	25-185	
Benzene	ug/L	20	21.5	108	80-120	
Bromobenzene	ug/L	20	22.8	114	80-120	
Bromochloromethane	ug/L	20	21.8	109	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	21.4	107	70-135	
Bromomethane	ug/L	20	18.4	92	50-145	
Carbon disulfide	ug/L	20	21.0	105	70-130	
Carbon tetrachloride	ug/L	20	20.9	105	80-130	
Chlorobenzene	ug/L	20	23.2	116	80-120	
Chloroethane	ug/L	20	19.2	96	60-135	
Chloroform	ug/L	20	20.3	101	75-125	
Chloromethane	ug/L	20	17.8	89	60-130	
cis-1,2-Dichloroethene	ug/L	20	21.7	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	105	75-125	
Dibromochloromethane	ug/L	20	21.1	106	80-120	
Dibromomethane	ug/L	20	20.6	103	75-125	
Dichlorodifluoromethane	ug/L	20	18.7	93	40-170	
Ethylbenzene	ug/L	20	23.5	118	80-120	
Hexachloro-1,3-butadiene	ug/L	20	23.2	116	70-125	
Isopropylbenzene (Cumene)	ug/L	20	23.0	115	80-130	
Methyl-tert-butyl ether	ug/L	20	20.0	100	75-125	
Methylene Chloride	ug/L	20	20.3	102	70-130	
n-Butylbenzene	ug/L	20	20.1	100	70-120	
n-Propylbenzene	ug/L	20	22.0	110	80-120	
Naphthalene	ug/L	20	22.6	113	60-140	
p-Isopropyltoluene	ug/L	20	22.3	112	80-120	
sec-Butylbenzene	ug/L	20	22.1	111	80-125	
Styrene	ug/L	20	22.9	114	80-155	
tert-Butylbenzene	ug/L	20	22.8	114	75-125	
Tetrachloroethene	ug/L	20	24.4	122	80-125	
Toluene	ug/L	20	22.2	111	80-120	

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60437954

LABORATORY CONTROL SAMPLE: 3430146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	21.5	107	75-125	
trans-1,3-Dichloropropene	ug/L	20	20.8	104	70-125	
Trichloroethene	ug/L	20	21.9	110	80-125	
Trichlorofluoromethane	ug/L	20	18.8	94	65-140	
Vinyl chloride	ug/L	20	21.0	105	65-130	
Xylene (Total)	ug/L	60	70.1	117	80-120	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3430147 3430148

Parameter	Units	60438196034 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20000	20000	24500	23500	123	117	80-120	4	15	M1
1,1,1-Trichloroethane	ug/L	ND	20000	20000	21200	21700	106	108	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20000	20000	20900	20400	104	102	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	20000	20000	23100	23000	116	115	80-120	1	20	
1,1-Dichloroethane	ug/L	ND	20000	20000	22200	21500	111	107	75-120	3	15	
1,1-Dichloroethene	ug/L	ND	20000	20000	24800	23900	124	119	75-120	4	25	M1
1,1-Dichloropropene	ug/L	ND	20000	20000	23000	22600	115	113	75-125	2	20	
1,2,3-Trichlorobenzene	ug/L	ND	20000	20000	22400	23100	112	115	60-135	3	25	
1,2,3-Trichloropropane	ug/L	ND	20000	20000	20500	20500	102	103	75-120	0	20	
1,2,4-Trichlorobenzene	ug/L	ND	20000	20000	22800	23100	114	116	65-130	1	25	
1,2,4-Trimethylbenzene	ug/L	ND	20000	20000	22600	22600	112	112	80-120	0	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	20000	20000	18300	19000	92	95	65-130	4	25	
1,2-Dibromoethane (EDB)	ug/L	ND	20000	20000	23200	23200	116	116	80-120	0	20	
1,2-Dichlorobenzene	ug/L	ND	20000	20000	22900	22900	115	115	80-120	0	20	
1,2-Dichloroethane	ug/L	ND	20000	20000	19400	18900	97	94	80-120	3	25	
1,2-Dichloroethene (Total)	ug/L	ND	40000	40000	46500	46100	115	114	80-120	1	20	
1,2-Dichloropropane	ug/L	ND	20000	20000	22800	23400	114	117	80-120	3	20	
1,3,5-Trimethylbenzene	ug/L	ND	20000	20000	23400	23100	116	115	75-120	2	20	
1,3-Dichlorobenzene	ug/L	ND	20000	20000	23600	23500	118	117	80-120	0	20	
1,3-Dichloropropane	ug/L	ND	20000	20000	23600	23500	118	117	80-120	0	20	
1,4-Dichlorobenzene	ug/L	ND	20000	20000	23400	23100	117	115	80-120	1	20	
2,2-Dichloropropane	ug/L	ND	20000	20000	16600	15900	83	80	55-135	4	30	
2-Butanone (MEK)	ug/L	ND	100000	100000	60000	56100	59	55	50-155	7	25	
2-Chlorotoluene	ug/L	ND	20000	20000	21000	21000	104	104	80-120	0	20	
2-Hexanone	ug/L	ND	100000	100000	71700	72400	72	72	55-145	1	20	
4-Chlorotoluene	ug/L	ND	20000	20000	23100	22700	115	113	80-120	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100000	100000	93200	96300	93	96	70-130	3	20	
Acetone	ug/L	ND	100000	100000	36800	35500	36	35	35-160	4	25	
Benzene	ug/L	1260	20000	20000	24100	23200	114	110	80-120	4	25	
Bromobenzene	ug/L	ND	20000	20000	23400	23000	117	115	80-120	2	15	

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60437954

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			3430147	3430148								
		60438196034	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Parameter	Units	Result										
Bromochloromethane	ug/L	ND	20000	20000	23300	23600	117	118	80-120	1	20	
Bromodichloromethane	ug/L	ND	20000	20000	22300	22800	112	114	80-120	2	15	
Bromoform	ug/L	ND	20000	20000	23000	21700	115	109	60-130	6	20	
Bromomethane	ug/L	ND	20000	20000	20200	22400	101	112	50-140	10	45	
Carbon disulfide	ug/L	ND	20000	20000	23000	22100	115	110	75-125	4	25	
Carbon tetrachloride	ug/L	5870	20000	20000	29300	28800	117	115	70-130	2	20	
Chlorobenzene	ug/L	ND	20000	20000	24700	24300	124	122	80-120	2	20	M1
Chloroethane	ug/L	ND	20000	20000	20900	21500	104	108	70-130	3	20	
Chloroform	ug/L	ND	20000	20000	21200	21400	105	106	75-120	1	20	
Chloromethane	ug/L	ND	20000	20000	19600	19700	97	98	45-145	1	30	
cis-1,2-Dichloroethene	ug/L	ND	20000	20000	23600	23400	116	116	80-120	1	20	
cis-1,3-Dichloropropene	ug/L	ND	20000	20000	21700	22000	108	110	75-125	1	20	
Dibromochloromethane	ug/L	ND	20000	20000	22900	22800	114	114	75-125	0	20	
Dibromomethane	ug/L	ND	20000	20000	21100	21800	105	109	80-120	3	20	
Dichlorodifluoromethane	ug/L	ND	20000	20000	18900	18800	94	94	25-180	1	25	
Ethylbenzene	ug/L	ND	20000	20000	25700	25900	127	129	80-120	1	25	M1
Hexachloro-1,3-butadiene	ug/L	ND	20000	20000	22000	22400	110	112	65-125	2	30	
Isopropylbenzene (Cumene)	ug/L	ND	20000	20000	25000	25200	125	126	80-125	1	20	M1
Methyl-tert-butyl ether	ug/L	ND	20000	20000	20300	19900	102	100	75-125	2	30	
Methylene Chloride	ug/L	ND	20000	20000	22100	21800	108	106	70-140	1	25	
n-Butylbenzene	ug/L	ND	20000	20000	20800	20600	104	103	70-125	1	25	
n-Propylbenzene	ug/L	ND	20000	20000	23300	23000	116	114	80-120	1	20	
Naphthalene	ug/L	ND	20000	20000	22100	22400	104	105	60-140	1	25	
p-Isopropyltoluene	ug/L	ND	20000	20000	23200	23500	116	117	80-120	1	20	
sec-Butylbenzene	ug/L	ND	20000	20000	23300	23200	116	116	80-120	0	20	
Styrene	ug/L	ND	20000	20000	24800	24900	124	124	80-120	0	30	M1
tert-Butylbenzene	ug/L	ND	20000	20000	24000	23600	120	118	80-120	2	20	
Tetrachloroethene	ug/L	ND	20000	20000	27000	27000	135	135	80-125	0	25	M1
Toluene	ug/L	ND	20000	20000	24500	23800	123	119	80-120	3	25	M1
trans-1,2-Dichloroethene	ug/L	ND	20000	20000	22900	22700	115	113	80-120	1	20	
trans-1,3-Dichloropropene	ug/L	ND	20000	20000	21900	21800	109	109	75-125	0	15	
Trichloroethene	ug/L	ND	20000	20000	22600	22900	113	115	80-125	1	20	
Trichlorofluoromethane	ug/L	ND	20000	20000	21100	21800	105	109	75-125	4	20	
Vinyl chloride	ug/L	ND	20000	20000	24000	23700	120	118	65-140	1	25	
Xylene (Total)	ug/L	ND	60000	60000	77600	76900	129	127	80-120	1	30	MS
1,2-Dichlorobenzene-d4 (S)	%						100	99	80-120			
4-Bromofluorobenzene (S)	%						97	98	80-120			
Toluene-d8 (S)	%						101	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: 31ST & PROSPECT

Pace Project No.: 60437954

QC Batch: 866419

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: 60437954004

METHOD BLANK: 3430983

Matrix: Water

Associated Lab Samples: 60437954004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	<0.33	1.0	0.33	09/27/23 19:07	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		09/27/23 19:07	
4-Bromofluorobenzene (S)	%	109	80-120		09/27/23 19:07	
Toluene-d8 (S)	%	98	80-120		09/27/23 19:07	

LABORATORY CONTROL SAMPLE: 3430984

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	18.0	90	80-125	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			109	80-120	
Toluene-d8 (S)	%			98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3430985 3430986

Parameter	Units	60438043005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Tetrachloroethene	ug/L	ND	200	200	154	171	77	85	80-125	10	25	M1
1,2-Dichlorobenzene-d4 (S)	%						100	102	80-120			
4-Bromofluorobenzene (S)	%						107	107	80-120			
Toluene-d8 (S)	%						97	98	80-120			

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QUALIFIERS

Project: 31ST & PROSPECT

Pace Project No.: 60437954

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.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MS Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 31ST & PROSPECT

Pace Project No.: 60437954

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60437954001	MW-1	EPA 5030B/8260	866195		
60437954002	MW-2	EPA 5030B/8260	866195		
60437954003	MW-3	EPA 5030B/8260	866195		
60437954004	DUP	EPA 5030B/8260	866195		
60437954004	DUP	EPA 5030B/8260	866419		
60437954005	FIELD BLANK	EPA 5030B/8260	866195		
60437954006	TRIP BLANK	EPA 5030B/8260	866195		

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WO#: 60437954



DC#_Title: ENV-FRM-LENE-0009_Sample Con

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name:

Tetra TechCourier: 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: 12118 Type of Ice: Wet Blue ☐ None ☐Cooler Temperature (°C): As-read 4.5 Corr. Factor 0.3 Corrected 4.2

Date and initials of person examining contents:

AF 9/20

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:

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[illegible]

Container Codes

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

Work Order Number:

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